Ephilog: An Art and Design Directed Website Prototype that contains Visual and Participatory Learning to use as an Education Tool to discuss River Aquatic Environment in Metro Manila

Danica Mae D. Soledad

Co-Author
Agustin Salvador Fontanilla, II

Abstract

The youth are often overlooked when relaying the problems of climate change, as it is a complex topic for them. In the Philippines, Filipino youth lack informative resources regarding current environmental events, even when we are on the verge of saving the earth from climate catastrophe. The government admits it falls short of focusing on water-based problems and prioritizes land reforms. With these at hand, I aim to address the problems by creating a prototype informative website categorized as a digital library with a brand that will provide modules of stories and interactive features to impart information through the art of motion graphics in visual and participatory learning. It will take on the topic of environmental preservation, specifically on the conditions that surround and within the river aquatic environment of Metro Manila, which will be the initial topic location. My project will use Consequentialism, specifically Daniel Holbrook's theories, as the theoretical framework that will guide the context and artistic aspects of the project. Using consequences will be the consistent concept to apply into the theme and modular content, allowing readers to foster a connection with nature and recognize their role in the environment. The project will focus on providing content harmonized through art and design direction. The beta release of the prototype website will be the medium that will hold the content altogether, to create websites that will stick to the audience and allow continuous user engagement to catch the youth's attention, especially for critical topics like climate change. Through the two (2) data gathering methods of Usability testing and Competitive Analysis, it is determined that the 'Ephilog' website is effective across the three (3) target respondents of the study, students, teachers and parents; There are problems with the technicalities of the site. This project output is bound to improve in future operations as it is an iterative process output.

Keywords

Climate Change, Digital Library, Modules, River Environment, Consequences, User Interface and User Experience Design, and Art and Design Direction.

Introduction

Our neighboring countries are currently mitigating climate change per the Paris Agreement. In contrast, environmental affairs in the Philippines have been accounted for being treated poorly for the past few years. In an article by Rassel Rodriguez in 2022, the article points out that Filipinos top a survey conducted on ASEAN countries, saying that we are most concerned about climate change yet have little knowledge of mitigating the matter regarding our country's situation.

According to an article in July 2023 by J. Mantaring, the condition of the environment in the Philippines under Marcos' hands has yet to achieve progressive actions that would be advantageous in the future. In April 2023, an oil spill in Oriental Mindoro waters that took months to clean up caused a disfigurement of the area's aquatic environment. It compromised the production of marine shore fish biodiversity, even after rehabilitation. Even so, the disaster management program remains "land-focused" after the catastrophe. The lack of urgency in the case can cause a generational problem among Filipinos. Even a bigger body of water is being neglected. It is also concerning the conditions of smaller ones.

I grew up having few resources and lacking a mentor who would discuss the environment back in junior high school. Only during college did I start to understand the complex problems of climate change because I could explore and understand resources on my own. A study by Christoper Punzalan (2020) found that students fairly have climate awareness yet participate in environmentally involved activities. In retrospect of Filipino university students during their secondary level, climate change is being taught to students. Still, local policies and present conditions are unaddressed (Rodriguez, 2022) and let alone the country has placed the lowest on an assessment for reading comprehension among 79 countries (San Juan, 2019). These issues observed can interpret climate change as a topic that is not readily available for the youth, and people need to recognize contextual issues at a young age to establish character and advocacies early, especially in the Filipino setting.

It is seen that Filipinos, notably Filipino youth, need a platform that will allow them to discover the conditions of the overlooked aquatic biodiversity in the Philippines. I plan to create informative material for our youth that will provide resources that point out the conditions within and around the aquatic environment of the rivers within Metro Manila and offer ways of action for matters to get better. I aim to produce a website that will have a unique approach to spreading awareness, using Graphic design, Illustration, Motion design, and User Interface & User Experience design to form a dynamic website brand and serve as an educational tool.

The output is decided to be bound as a prototype for the project. It is because a conventional brand output is standardized as a progressive enterprise, which may continue to improve even during running operations. The importance of my project's decision is taking the first step and launching it as an operating beta release, which will help the brand acquire an outlook to achieve its best version in succeeding times if it will continue.

The current topic concerning aquatic life falls on climate change, which is usually a complex subject (Perkins et al., 2018) and may even be more for the youth. I intend to implement a contemporary form of visually delivering information, allowing the audience to easily understand the content and importance of decision-making through the motivation of art & design direction, using the theory of Consequentialism by Daniel Holbrook to point out the consequences of an action. The project output will be about creating a digital content brand consisting of stories and trivia modules with illustrated motion graphics and interactive elements. Each will have its research, including the brand identity, web design interface, user experience, and even the content of the stories and trivia, as the basis for putting the brand's materials in harmony for its usability.

I chose the project's medium to be conducted as a website for a digital library for Filipino youth to use, in contrast to infographic videos and informational websites, which may take time to listen to and get tired of reading tedious text, respectively. The content will be accompanied by visual aids to enhance the storytelling experience for the target audience. The design and system of the website will cater to the users'

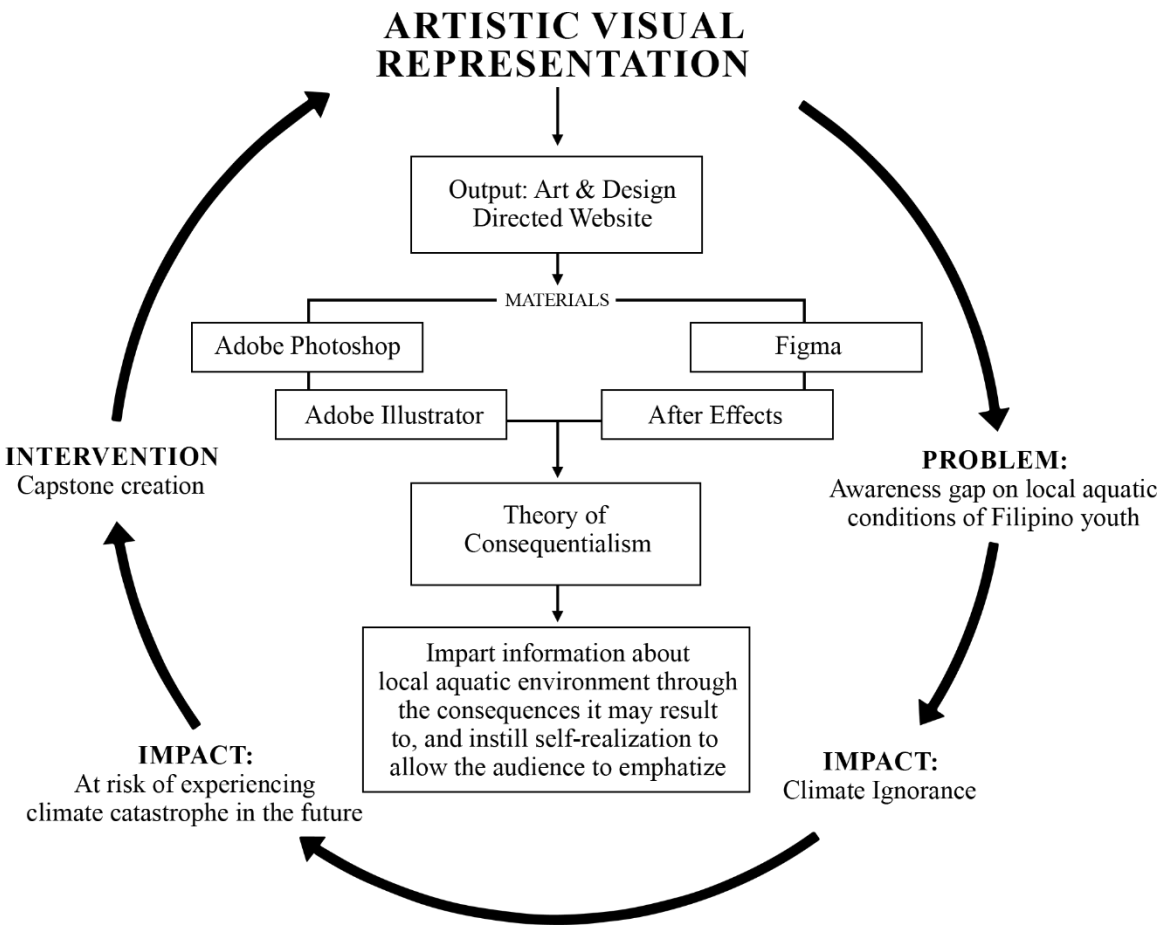
choice to browse the information to be read in their phasing. My project aims to impart information by using these approaches that allow them to engage with content in the most creative way possible.

Thesis Statement

There is a lack of resources about the conditions of local aquatic life for Filipino Youth, which includes the challenge of catching their attention; an informative website brand will help relay the topic with the use of motion graphics and interactive elements inside an art directed design interface.

Figure 1

A visual representation illustrating the framework by concepts and methods of the thesis project: Web Design



The framework presented provides the concepts and practices to be executed for the thesis project. The structured illustration presents a summarized interpretation of the core details of the project output. Through the diagram, the progressive factors for the development of the concept were able to be clarified,

from the noticed problem to the anticipated initial and future impacts, the cause of involvement, and finally, the execution of the multimedia product with the specific plans to tackle the challenges found.

Concerning the topic, I chose the environment and sought current environmental issues in the Philippines to create a concrete connection with my intentions. My research found a resource deficiency for educating young people about the present environmental conditions, particularly in a reading-stunted country. While the environment is a broad topic, my project will specifically focus on an aspect currently neglected in the Philippines: Aquatic Environment. To be more precise, I narrowed it down to rivers within Metro Manila, serving as a starting point for the beta prototype website.

In creating the initial concept for my thesis output, I wanted to create a project that could encompass my set of skills. At the same time, I wanted to take up web design as my next design venture. I was sure that I was looking for an idea for a unique and timely topic, with the intention of making an impact and a matter that I was passionate about talking about, that was also aligned with my advocacy.

A concept is needed to compile everything when wanting to use multiple mediums. With this in mind, I have decided to sum up my output into one comprehensive medium through art and design direction for a website. The website will consist of digital illustrations, graphic design, and motion design, which will be used together to create the site's content.

By these means, the art and design-directed website will consist of various art that convey a message. In particular, it will focus on addressing the problems of pollution and injustice that humankind has made towards river ecosystems. This message is targeted to be conveyed to a demographic of Filipino youth, aged from nine to seventeen (9-17) years old, who are the primary audience of the project, since they are the affected age group wherein climate change issues are not being taught in schools (Cabico & Chi, 2023). My project aims to combat generational ignorance of climate change and cultivate positive behavior from a young age to serve as a potential approach that will be able to mitigate harmful actions against our surroundings.

Since my thesis output will be a website, it will need a specific website category to fall into. Based on the intention to convey the topic, an Informative website serving as a Digital Library brand is the perfect category for it to fall into. The brand will provide two module groups: Modular Stories, which will be a fictional graphic novel-like portion referencing real-life issues, and Modular Trivia called Quizzes, which will be a quick way to learn and test knowledge. As my thesis output will be for testing a beta prototype, it will only consist of limited products for each of the two module groups: The Modular Stories will consist of two (2) stories. At the same time, Modular Triva will have five (5) quiz questions. These modules will serve as the main products that the brand will provide.

To build the website's assets, I will carry out a workflow among four (4) software: Adobe Photoshop for digital illustrations, Adobe Illustrator for vector graphics, Adobe After Effects for animating motion graphics, and Figma for compiling assets and serving as a reference for the design interface, which will then all be transferred by a Website Developer to domain through WordPress website builder. This strategy aims to be consistent in the creation of assets for a smooth production process.

To have harmony within the website, the art, designs, and text content will be produced through a framework that can effectively explain the messages of the modules. As aligned to the topic, where our people’s actions significantly affect the environment, I chose Consequentialism as the theoretical framework. Based on the theories of Daniel Holbrook, in observation of what is good or bad by depending

on its outcome, on the preservation and restoration of the environment; With his take on self-realization, in developing an attitude for humans, in having to find their place in the natural world in this day (Holbrook, 1997). In this way, the content of the project will allow the audience to ponder the consequences of actions taken towards the environment, which can also damage other lives and species, hence giving thought to biocentrism or the behavior of focusing on both humans and nature preservation.

The overall concept that the project will be supported by is also from the concept of Consequentialism, with the notion that the theories will concentrate more on the environmental difficulties that are aimed to be resolved. In this way, the inclusion of self-realization will be for building a relationship between humans and nature through the project's output. Through this, the content will be based on one idea to help the target audience become familiar with the website's experiences and modules. To describe its general context covering all the output mediums, the good or bad outcomes will represent the positive and negative actions occurring towards the environment. At the same time, the self-realization factor will convey the actions that should be taken to encourage empathic sentiments from the target audience.

My project will attempt to determine the effectiveness of the output. Through the factors of art and design, direction is to be made for all the aspects of the output. The design will be used to establish the concept and create a connection with the target audience, while the art technique will focus on the emotional factors that the compositions can bring to bear.

Research Design

The project will use three research design methods: Desk Analysis, Design Thinking, and Interview. These two methods will allow the project to integrate the factors of creativity and reasoning for the foundation of the capstone project. In this way, the project can be held to these two perspectives of exploration as the introducing foundations to give way for the iterative process it will conduct in future terms.

Subject Matter Framework

The research design based on the subject matter is Desk Analysis Method. This relied on the fast-paced process of creating the different aspects of the project, both through design and informative aspects. The topic of environmental preservation, specifically on the aquatic environment, which will be discussed through art & design direction for the sake of awareness of Filipino Youth, is understood through the context surrounding the project's objectives.

This design must comply with a manifold of practices in garnering the resources that will be the backbone of the study. This involves studying literature, reports, articles, and studies related to each of the topics and combining everything together in one resolution. It is important to rely on details of the different facets of topics that the project contains by observing the prevalent themes, challenges, and gaps seen through today's events about youth awareness of aquatic environmental issues.

Design Process Creative Framework

The research design process for my project will be developed based on its nature. Since the thesis output is a website, the research design for this project will be Design Thinking, a method that relies on the user's needs involved in the brainstorming process (Dam, 2023). This is a user-centric approach that will allow me to explore and come up with different ideas from present studies and work, apply them through my project's production process, then present them to an audience to conduct a test to absorb their potential, and finally, be able to know what needs to be improved in the future. Additionally, the design method of Interview will be applied to confirm the Design Thinking method through the perspective of the target audience of the project, by gathering the insights of the respondents

The research will predominantly revolve around using art & design direction on the iterative project website's Branding Identity, User Experience, and User Interface Design. With this, there will be two (2) analyses research strategies: Observational and Competitive Analysis, through Usability testing as the data gathering method, to establish the foundations of the website:

The first analysis is Observational Analysis, which will be conducted before designing the experiences and interface of the website. This analysis will be based solely on my observations of the websites that can provide similar services. This is because significantly insufficient websites have the same intentions as my project. Due to this matter, looking for existing websites that contain the services needed separately is faultlessly considerable. In this way, the project can still focus on its objectives and environmental problems discussed among the youth to be observed and analyzed. This part of the research will be used as a reference for the initial service of the beta prototype website, to have testimonies of different experiences that can be used as is or changed in the goal of having a better experience that my website will be able to provide.

The Competitive Analysis will be the second analysis, administered after the website is made and published. To avoid possible appeals of bias because of using my observations (George T., 2022), this time, I will conduct hands-on experiences with the target audience that the website brand aims to address. This part of the research will test the website's usability through the interviewees. It will observe the findings discovered during the first analysis and the stance of the created website among the other competitor websites. This is to observe, determine, and confirm if the goals were met or if there are alterations to improve the site's usability.

The **primary target audience** will be aimed at student groups in **both private and public schools.** Both student groups will come from the age bracket that the brand has established, between **nine to seventeen-year-olds (9-17) who reside** in **Metro Manila.** To serve the significance of the **secondary audience,** these youth aimed to be contacted through the **administration or teaching department advisers,** as well as **adults or guardians** of the youth/children, to inform them about the concept of the project, which is discussing the current conditions of the aquatic environment to the youth, whom are under their guidance being that the needed age group are minors, and request for their help in supporting the capstone project.

Consequently, the research will be followed by branding identity, illustrations, motion graphics, and informational content. This is because the interface's effectiveness will be operable from the visual identity that the website will provide. Hence, it must cater to the ideal educational content experience through visual learning. This website will be created with art & design direction, distributed from the usability and aesthetics to immerse the audience through the content and design interface. This project

aims to establish a product that can allow the target audience, which is the Filipino Youth, to be aware of and empathize with our neglected aquatic environment.

Data Gathering Method

For my thesis output, I will use two methods to gather data: an Interview Survey for User Persona Validation and Usability Testing for prototype assessment. These methods, used side-by-side, will allow me to substantiate the research conducted in the early phase of the project. The approaches will ensure a comprehensive evaluation of the project's development process and alignment with its objectives.

Since I will be starting to build this website from scratch, I will be basing the existing projects, studies, and articles to prepare the structure and content of the website. In this way, I can be familiar with the decisions of other website creators. To analyze and determine if the practices can be used or avoided, I can modify the system, devise it with possible capabilities, and make a decision that will be best for the thesis output. These observations will be confirmed for the following data-gathering methods:

The first method is the **Observational Analysis,** this method is a type of Design Thinking data gathering process based on own observations. This shall be conducted during the pre-production phase, will allow me to explore and explain the viewed resources and apply inspirations or innovations onto the product (George T., 2022). This will be revolving around the exploration of content, design elements, and own experiences in being a user of the websites as categories of the analysis.

The first method, the **Interview Survey**, will involve direct engagement with potential users, inducing valuable insights into their preferences and needs to track what has been made in making the User Persona with the Persona Method through Design Thinking. Through this method, the project's development can rely on designing the product through an empathetic lens and breaking through the developer’s perception of the audience. (Karen, 2020)

The second method, **Usability Testing**, is a Data Gathering Method commonly used in website creations because it is user-centric and works around a website's functionality. This method involves testing the prototype created with the end users (Harsha, 2019), which will have the data gathered through a hands-on website testing followed by a face-to-face interview. Through this research method, I will discover the website's effectiveness among the target audience assigned for the project from application to assessment.

The third and last method, **Competitive Analysis,** is a data gathering method that is often used in business for knowing their position in the market. For the comparison of websites, it is called “Benchmarking” to understand your product’s position and determine the success against competitors in the industry (Gordon, 2022). This analysis will be revolving around the same categories used in the Observation Analysis, in order to remain focused on the factors being introduced in the project. Gathering the data

The final assessments will be conducted after finishing the prototype. This is the part where I will gather the observations and recommendations to determine the website's effect on the audience and inspect what works and what needs to be changed in the future. I will conduct these data gathering methods with the target audience's through real-time participation to gain accurate insight into the experiences that the website will provide.

These methods are compliant with the conclusive output, which is a beta prototype website that serves in the form of an **Iterative** project. This helps the plan to release it as an opening move to establish the brand and give off samples of its products. By providing this website as a model, my project will be able to provide and exhibit the potential of an art and design-directed website as an educational factor, to use as a reference or as itself to expand and make use in the future.

Pre-production Stage

The pre-production stage is the part where I gathered the principal foundations of the thesis output. These foundations are the initial strategies that can allow the website to operate as an effective website at the early onset. The foundations will be created through five (5) consecutive stages: User Experience Design, Branding, Site Visit, and Observational Analysis; these will help the website find its identity and outlook to be used as a reference in making the website products and services which will be made during the production stage.

User Experience Design

For the thesis output to achieve its goal of informing a critical topic, I created a User Experience design that defines the conditions needed to establish an effectively engaging platform for the target audience, Filipino youth. This part is about creating a system that will enhance the experience for the audience. This includes user persona, goals, scope, site roadmap, and surface, considering the framework within the information architecture. This will help determine the system that will work with a sensible flow and easy navigation to gain a positive experience throughout the website (Vinney, 2022).

Persona Method

The creation of the User Persona will rely on the Persona Method, wherein fictional characteristics are used to create a project's target audience. This type of persona creation involves putting oneself in one's audience's shoes and allowing the users to be an archetype based on the project’s objectives (Pérez–Montoro, M. & Codina, L., 2017).

In this way, the output will achieve its goal through the framework to build a new relationship between humans and nature. This approach seeks to create a sustainable and engaged community that values and actively participates in environmental preservation efforts.

Branding Identity

The brand's identity is important for the audience to understand what is happening in the output at first glance. I created a brand for the whole project output to be concentrated into a single

theme that can present all of the website's concepts. This includes the project's intention, topic, and location whereas the branding theme revolves around both concepts of consequences in the river aquatic environment setting in the Philippines. The result of this exploration will help the audience recognize the purpose of the website they will be using; that is all due to the creation of a strong and effective brand presence.

Observation Analysis

The observational analysis was used to determine the different quality of services on websites with almost the same intention as my thesis project output. I created an analysis revolving around Navigation and Layout, Visual Design, Interactive Elements, and Content Quality because these aspects are crucial for engaging users and delivering information effectively. The data gathered here was also used in evaluating the competitive analysis in the post-production stage as a means to look into the results in a user-centric approach to verify if my assessments corresponded to the responses that were found for the second analysis.

Site Visit

This part of the pre-production phase gathered references for the visual assets. The project had a topic that is present in the real world. A site visit was conducted at the locations where the stories were discussed. These references were for the Modular Stories. This was based on a coined rule by Liz Blazer in "Animated Storytelling" (2016), which was to have inspiration in your nature, specifically on the matter of "Your World's Visual Laws." This rule was about putting real-life appearances as references for your compositions to improve the narrative of the stories. My project used this rule to provide visuals that could be recognized as real subjects or objects. This allowed me to have knowledge and awareness of the spatial factors of the environment and confirm the information that I had read and analyzed through online research. Through this visit, I used my experience in creating the visuals by seeing them first-hand, and I gave the audience a touch of the reality of the topics.

These foundations will allow my thesis output to initially ensure a website with the potential to stand out among other websites by using Design Thinking Research Design to analyze the design decisions made by the present resources. These processes will also set a standard for my website, especially catering to a young audience interacting with the product. My thesis output aims to prioritize how this project will fit the target audience's preferences. In this way, I can innovate more factors that can help inform the message through the framework.

Production Stage

The production stage consists of creating the artistic aspects of my thesis output. Since the website is aimed to be aesthetically pleasing in a way that serves my project's aim of implementing a way to

induce visual and participatory learning from the audience, I created the visuals considering the branding and demographics in terms of the art style. The visuals appear as playful renderings of realism and comic-like art style, allowing for an engaging and approachable visual narrative. The visuals are motion-designed in Adobe After Effects, and within the software the visuals adhere to the availability of simple transitional animations in JavaScript programming. The visuals are illustrated, animated, and arranged for the website's three (3) group of artworks: Design Interface, Story Modules, and Trivia Modules. The assets are organized into a mock-up in *Figma*, and, afterwards, passed onto a website developer to build the website and publish it for usability testing.

Content Writing

The website aims to relay informative content to the audience, which will hold modules explaining and discussing the conditions of a specific river within Metro Manila. The style of writing made significantly considered the general problem that the project is tackling: Environmental problems of river environment that are catered to the younger audience. The written content for the modules are created based on the project's theoretical framework, Environmental Ethics in Consequentialism, to point out the importance of spreading awareness about the topic by indicating the consequences of actions taken towards the environment. In this way, the content will correspond to the theme of the art and design direction plan created for the website.

Content for Story Module

The stories are based on the conditions of the Pasig and Marikina Rivers, and both rivers have their respective stories discussed. These are created by combining a short story and informative graphics which conforms to the design of a graphic novel to present the information.

The structure of the stories are planned to come in three (3) parts:

1. A brief story introducing the problem of the given topic.
2. A summary report on where the story was based on.
3. An epilogue that assess the story- to discuss the effects that will happen next, and finally give a conclusion

The aim for the stories is planned to be adjacent to the Environmental Ethics framework regarding the design and interactivity found throughout the reading process. At the same time, the structure is also aligned with the concepts found in Consequentialism by Daniel Holbrook’s theories, wherein the factors of good and bad outcomes play through the first and second phases, while in contrast, the self-realization factor is enacted through the third phase.

Content for Trivia Module

This part allows the plan to induce participatory learning to play a big role by making the users answer the questions.

Users will encounter two types of questions: factual and situational. The factual content takes on the quiz as a direct way to pre-dominantly impart information, while the situational content will lean on relaying awareness to realize and observe their actions by laying out the circumstances that they can recognize when encountered in the real world.

The website will have five (5) questions to initiate the prototype and signify the type of questions that can appear after the usability testing for future operations.

These textual contents are created using reliable resources found in articles, studies, news, and professional opinions of experts in the field. These are formulated and curated in a manner that will be comprehendible for the younger audience with the presence of non-existing characters but not depriving them of the realities of our environment. On the other hand, the questions are formulated to align the facts and situations we can learn from and encounter. Through this, the text content encapsulates the Consequentialism basis of the project and may allow the audience to observe and reflect on their behaviors. Through this content, the audience will be able to recognize the conditions of our environment and situations that may arise from their contribution by seeing the outcomes from the visuals the module will provide, even with the proper sources it is based on.

Storyboarding

All the visual assets for the brand's stories and trivia modules needed an initial visual representation to plan out the sequences that would take place in each panel. In the same manner as how an animation starts, this part of the pre-production phase was pre-visualized on what the short motion graphics would portray (Liz Blazer, 2016). This part used the written content as a reference to create the visual assets. Most of the actions were planned through pencil sketches, which were transferred to Adobe Photoshop to clean up the visuals. The storyboards created for the graphic-novel-like story modules were aimed to provide clear and engaging narratives, based on Liz Blazer's principles.

I focused on creating detailed storyboards that allowed me to understand and visualize the spatial factors of the environment. By confirming the information, I had read and analyzed through online research, I was able to create more accurate and believable visual sequences. The storyboarding process involved carefully planning each action and sequence, ensuring that every panel contributed to the overall narrative flow.

The storyboarding process for the graphic-novel-like story modules was an essential step in the project's development. It provided a clear blueprint for creating the visual sequences, ensuring they were well-planned and cohesive. This thorough planning allowed me to give the audience a touch of reality through the visuals, making the content more engaging and visually appealing. This process was crucial for achieving the project's goal of delivering clear, impactful, and relatable narratives.

Wireframing

The project takes its place in the medium of a website, so it is important to plan the decisions that will be made and ensure they are doable for the final design interface. Through wireframing, the system of the website's functionality, space, content, and behaviors will be the first to be planned out. This process was taken under two phases: Low-fidelity and Medium-fidelity Wireframing; The former consists of sketches of the desired look and basic structures of the layout, and the latter was made with the refined visual elements and interactions within the site. In this way, the project focused on conforming to a standardized system that aims to cater to the project's intentions with the art & design direction, even in the early stages of the production process. This will also allow the mock-up process to be created quickly later on.

User Interface Design

The website is created through art & design direction. The website needs to correspond to the brand and the products it will provide (Stevens, 2022). This should allow the brand's products to be distinct from the interfaces of other brands. A sense of consistency is prioritized all-throughout the process of the creation of the design's interface, for the users to be familiarized with the system and navigation of the website.

The interface is created as a mockup through Figma software, taken from the reference of the task made prior to this stage – through the conversion of the Medium-fidelity wireframes by the goal of being more accurate and on-track with the design decisions. By this phase, the visual elements were enhanced and finalized, yet this part of the visuals moderately simplified than the styles designed for the story and trivia modules for the sake of the alignment of the branding.

It is important to always consider the website's speed when creating the design interface, so this part of the artwork has the least animated visuals to optimize the website's usability. Moderation is also considered for the rendition of containers, buttons, and website backgrounds as assets by relying on the standards of branding identity. In this way, the design interface to be made for the website can stand alone as a factor of the that will be distinct, among others.

Illustration of Story Modules

The story module is one of the two products that the brand provides. This part of the project provides educational content to users in . The modules consist of graphic read horizontally. These initially represent the line of work the website can provide more after usability testing for future operations.

The animations for this product comes in two (2) kinds: The first kind is stand-alone clips, which are animations that will serve as a passive form that can provide the narrative through descriptive means. Second is Participative clips, where several pages are animated wherein the users can interact with the unfolding events happening in the narrative – to provide an immersive experience to the audience. These visuals are aligned with the text content that comes alongside them. The audience can easily understand the situations and ponder the consequences of the

stories. These illustrations' style is aligned with the brand's colors for familiarization with its product.

Illustration of Trivia Modules

The trivia will be presented as quiz questions to test students' knowledge. My project will use this concept for the brand's product in a way that will introduce information to the target audience quickly.

The animations for each of these products are transitions of different clips, which either present the consequences of their choices among the answers or the event of what comes next, which all depends on the answer given by the user. This is to apply the framework of consequentialist concepts of self-realization while participating in these website elements. The visual content for the Trivia modules is the same as practice, as visuals are coordinated with the textual content it provides. These visuals also use the same colors to represent the brand efficiently.

Motion Graphics

The visuals are then be turned into motion graphics or the assets as the contextual visuals. The illustrations are placed, and motion design through Adobe After Effects. These assets are composed of short loops or repeating movements representing the text content beside them. Content writing and storyboarding works are recalled while creating the motion graphics. The approach of creating these assets are in three (4) phases: Planning, Layering, 3D Blocking (with or without, only if needed), and then Animating. The phases are carried out progressively to have an organized workflow where it can be easy to retrieve and redo different parts and materials of the composition. There are also own testing for the videos in JavaScript through Visual Studio Code software to know the behaviors of the WebM files in HTML programming.

Prototyping

A prototype website will be needed to test the experience through a hands-on demonstration of the operability of the visuals and the website's experience without the struggle of writing codes. This will help identify certain issues in the website's visuals and quickly revise them through this first look.

The prototype is also created through Figma software, where the mockup of the design interface is converted to a working and usable version. A prototype can also make the work for the web developer easier, as they can experience my intentions as a designer for the website I want to produce. Prototypes can also be easily made when you have a mockup. In this way, the interface discussion can be an iterative process if more elements should be added to the web development phase. Also, when ideas are not being met, communicating only verbally can speed up the process and avoid unwanted miscommunications.

Although the Figma software does not support specifications, like most of the interactive features needed for the project theme, the prototype will only be based on the website's usability

through the site system map that was made. The web developer will be making such specifications in a much more flexible way, which can be more aligned with the intentions that I need for the website, as prototype builders cannot provide the customization needed.

Website Development

A developer has been found to create the website, and proper discussions and negotiations have been exchanged for the intentions and objectives of the website. A contract has also been formulated to align with the conditions and prices that we have agreed to.

As the visual assets are finished, they will be organized through file management and passed onto a web developer who will convert the user interface design into a live website. The web developer will implement the guidelines I created throughout the pre-production and production phases. My task in this stage was to supervise and regulate how the system is being built, especially in following my intention of what the website's function will correspond to. My role in this aspect is to retain the whole purpose of the project for its art and design direction. It is important for this part of the project to follow the research, system, and design as much as necessary.

The commission for the development worked under a contract and payment for a Freelance Developer, who also works full-time. It is considered that not all visual elements given will be achieved. Hence, there are drawbacks and negotiations made during this stage as part of the process of website building, such as:

1. Cropped Visual Elements on Story Modules
2. Cropped Visual Elements on Quiz Modules
3. Structure of Quiz Modules are programmed differently; Not as designer has desired.
4. Scrolling is too complicated
5. Usage of MP4 video format instead of the desired WebM format
6. A few visual effects are not applied to the graphics

Although, it was expected that the website would not completely follow the design of the prototype, since this is an entirely different production and may not be able to comply to every single direction. The timeline of the development did reach out of the allotted time assigned for the production.

Website development is another in-depth process that needs to be monitored to follow everything that is needed for the output to operate. It is critical to hire a developer that produces quality work and is precise to every factor being instructed to them, while it is also vital to be open for negotiations in order to meet the desired output for the director. This stage will also be going improving in future terms of the project.

These stages in my project's phase are aimed at catering to the concept of the framework. By constantly recollecting what was found during the pre-production and making it the fundamental basis for this phase, the assets can embody the foundation and framework of the project. In this way, the support that the production phase took from the research part will allow the project to align to effectively communicate the content provided to the audience.

Post-production Stage

As the web developer builds the website, my project will continue to prepare and conduct the second assessment for the website, and I will proceed to test and evaluate its function and effectiveness. This part of the project is important for discovering the audience's perception of the brand and its product. This is the part where the Design Thinking and Usability Testing method will be performed through the response of the target audience, and finally, the Competitive Analysis to verify data findings.

User Validation Survey

To affirm the persona made during the pre-production phase, a user validation survey is conducted onto potential target audiences from different societal groups based on the project's demographics. The data gathered are identified through this method through an oline survey form, created through Microsoft forms. The forms distributed to the respondents that fall under the age and demographics that are defined for the project’s target audience.

Preparation for Testing

The preparation involves gathering the materials and research proponents for conducting the final assessment of the capstone project. The first step is to develop assessment questions that are aligned to answer the how effective the website is as well as to answer the same analysis assessment made in the observation analysis during the pre-production phase. This is followed by finding the respondents who correspond to the brand's target audiences which consists of sending out emails to schools, searching for teachers or instructors online, and also visiting schools, and residential houses, all while presenting a proposal letter to conduct a testing and interview, especially for ones that are done within an establishment. A lot of schools have declined the proposal. Within the area of Las Piñas City, only one (1) out of nine (9) schools, which is Las Piñas National Science High School, have accepted the proposal.

Test Conduction

For this stage, there are two (2) tests conducted: Usability Testing & Competitive Analysis Test. These tests are done by visiting school ground or going house-to-house to reach the respondents, it was all depending on the availability of the proponents. The testing and assessment are conducted within thirty to forty-five minutes, wherein the proponents are given the autonomy to browse through the site(s) and will be completed within ten (10) minutes, which is defined as a time for browsing, and enough to engage with the materials.

Usability Testing

This testing only revolves around the product of the project, Ephilog, is given to the proponents, navigated through the site, completed various tasks, and utilized the key products such as Story Modules and Trivia Modules. The testing was then followed by an interview that consists of questioning the respondents through the website's navigation, interactive elements, content, and visual design, which provides critical insights as it is given at hand to point out the cases where it shall need improvement, especially to monitor and ensure that the website meets the needs and expectations of the users effectively.

Competitive Analysis Testing

For the Competitive Analysis test, was conducted to test out other websites that can come in the same form and intention but not necessarily have whole similarities, as there are scarce websites that fall under the same purpose as my project's website. Three websites will be compared for the conduction: Website #1 is Ephilog, Website #2 is CANVAS.PH, and Website #3 is Save the Philippine Seas Organization Website. This analysis is formed through an interview of the responding proponents and are designed to answer the questions in a format that will be comprehendible by depending on their age groups but all in the same content. This analysis will help the project procure the final raw data from actual target users of the created website, aligned by intention in using the Usability Testing method.

Test Evaluation

This part is focused on finalizing the observations of the data gathered from the initial assessment and finally comparing them to the final assessment, which includes the created website. This is to recognize the changes that have been made and validate the improvements that it has generated. By this time, a Usability Testing Report will be formulated to determine the positive and negative feedback and formulate the factors needed for future endeavors to officially use the product in real operations.

As the project concludes its final stage, these consecutive processes will be able, through the support of Design Thinking and Usability Testing, to sum up the plan of affirming the effectiveness and understanding the perception of the target demographics of the capstone project. This plan aims for the project's completion by determining the factors of using visual and participative learning as educational tools through websites as a medium.

Review of Related Literature & Related Creative Works

This chapter includes the related studies and works reviewed that helped to formulate the ideas for this project. It is divided into two sections: Related Literature and Related Creative Works.

Related Literature

This section will discuss the literature related to the project's concept to identify the ideas from which the study is derived. It contains six (6) related pieces of literature organized in chronological order, in ascendant order of publication dates.

Environmental Brand Identity for the Youth

It is important for a branding identity to have potential even if it is only what it appears to be. Building a brand is to construct the perception that the target audience will have (Kenton, 2023).

According to Killian (2015), environmental conservation brands should adapt about their target audience. It has been pointed out that Endangered Wildlife Trust is a brand that failed to meet a strategy and identity for a young market, and the product could not be memorable content for them to consume. With the results, it is recommended that a brand should build a personality for its product to effectively impart consciousness through brand and audience engagement.

This makes it evident that techniques should be incorporated into the personality and content that youth should be consuming; otherwise, there would not be any effective connection. My project shall take this recommendation into account and find techniques that will enhance the effectiveness of the brand and product operation.

Philippine Media's Use of Motion Design and Interactive Elements to Teach Culture

Domestic representations are essential for people to consume materials familiar to their language and culture. The Philippines also accommodates animation in creating shows for children. The local media industry focuses on educational content using motion design and targets toddlers as the audience of the shows.

Batibot TV is a television show for kids in the Philippines that uses puppets, short story animations, and films with cultural references (Guillergan-Schott, 2017). Aside from posting narrated show segments and holding a combination of traditional and animated motion graphics on YouTube, the show's new era has also used modern technology devices as a medium of the program. The Batibot Mobile allows kids to browse through an interactive learning application that they created for an up-to-trend method of storytelling (Antonio & Roa, 2016)

Through this, it is noted that Filipino Youth are familiar with the concept of motion design and the integration of interactive elements in modern technology as educational tools. My project will expand the cognizance of the target audience with the medium and be able to apply these techniques to a similar target audience that will also be based on matters of the country's culture, but specifically on the life of rivers in the capital region, and produce them through a radical set of content or the matter of its environment.

Art Direction in Web Design

Browsing through different websites will make one notice that the design and system have great similarities. This could cause a high bounce rate, a case where people immediately leave on the first few seconds of a website.

The use of art direction in building a website can improve engagement and allow the audience to connect with the brand. Art direction in websites will give off an effective experience with the brand's objective to sell, persuade, or communicate (Andy Clarke, 2019).

With the aim of making my project's output stand out and cater to its objective of being efficiently impactful, the concept of integrating Art Direction in websites has provided the idea and set the course of the project to create a platform that builds a connection with the target audience, which is significant in the project's framework. Web design will be the primary medium of the project, which will hold together the written content and created visual assets.

Learning About Climate Problems with Interactive Activities of Visual Art for Youth

Climate problems are a topic that is seen as abstract; because of all the issues that it branches out into, it is difficult for young people to comprehend these types of matters.

A study pointed out that although visual art has always been considered a teaching technique, the effectiveness of using it to impart problems of climate change has not been discussed or refined. It has been seen that within the student's creative works, they are aware of the problems of the environment but lack the factor of their selves in the problem. One of the suggestions of the study is that the factor of experience is a great tool to impart the problem of Climate Change, that through active participation, it can motivate the use of mind, motor, and emotions to instill the topic in their way of life (Bentz, 2020).

This study used evidence of the effectiveness of interactive activities as motivation to integrate them into the output. Although this study used traditional visual art and on-site learning, my project will approach this activity through technology in an online form.

Motion Design as Visual Elements on Websites

Graphic materials are essential for informational websites. Writers, designers, and developers apply graphic materials adjacent to the written works initially provided to explain the context better. Transforming static to motion-designed materials will improve how the audience perceives them.

Some elements can be used to create websites more effectively and improve web traffic. Animation is referred to as an efficient factor. It is beneficial in attracting attention, but it can also be distracting (Vu, 2021).

As the operability of the animated visual aids will be a concern, the website will use the drawback. The use of short or loop animations will allow the display of summarization of the written work, which will allow the audience to turn to the context either way.

Visual Storytelling through Animation

Children are often associated with animation, particularly in cartoons. Watching animation is a common experience for people, where our younger selves have started comprehending stories first-hand.

A study on the impact of animation on catching the attention of viewers, results found that the factor of motion graphics is included to have expressed more influence on the viewer and has managed to make the viewer comprehend the context more than other materials (Praveen & Srinivasan (2022)

My project settles on using motion graphics, a form of animation, as visual aids for the output to maintain the audience's interest in the content. This will ensure that the topic is communicated to the audience.

This review has allowed me to absorb different circumstances that revolve around the desired mediums to be used in the output and initially produce techniques that the project can use to avoid difficulties that have already occurred in the studies and events found.

Since the project will be composed through art & design direction, this review accommodated an extensive range of mediums that will take inspiration and motivation to produce the output. The literature collection contains notably specific intentions and techniques that revolve around their respective mediums. From this review, the plans for the project will be taken note of to execute the output with the application of the project's framework as an output of the combined founded and analyzed studies altogether.

Related Creative Works

This section discussed creative works similar to the project's concept. It contains five (6) related works organized in chronological order, in ascendant order of publication dates.

Artworks in the Philippines

Art is used to raise awareness of movements, including Climate Justice. This method has been used in the Philippines to address climate problems since 1992.

Figure 2
Lyrics of "Anak ng Pasig"

Anak ng pasig naman kayo
Kalat doon kalat dito
Natakpan na ang langit kong ito
Nilason din ang ilog ko

Akala ko'y ganoon talaga ang mundo
Hanggang nakakita ako ng lumang litrato
'Di maniwalang pasig din ang tinitignan ko (oh)
Kaibigan ano ang nangyari dito (anong nangyari anong nangyari)

A song called “Anak ng Pasig” by Geneva Cruz is a song that calls out to the public for not taking care of the nature in the area, which leaves the future of the city's biodiversity in ruins. The approach used a song to tell a story about a child who grew up experiencing the cruelty of the public towards the Pasig River. This has been perceived as a moral responsibility. The art form has been founded to be more effective for people and the government to act on the problem. Thus, the support and rehabilitation for the river took its course (De Leon, 2021).

This work is taken as evidence that art is a matter that the public in the Philippines takes serious consideration, most importantly, the government. In this way, my project can be assured that it will operate in a manner that will make the target audience feel empathy for the content provided.

Illustration and Story Style of Local Climate Educational Content for Youth

Adarna House is a Children’s Book Publication. One of their books revolves around a climate problem, specifically on aquatic life.

Figure 3 and 4
Visuals of ‘Bayan ng Basura’ Book Pages

A book illustrated by Jill Arteche and written by Augie Rivera called “Bayan ng Basura” is a Storybook about a *Pawikan* who ended up in a place full of trash. This book tackles the problem of plastic waste problem in the Philippine seas. The style of artwork revolves around dynamical elements for mundane to lighthearted compositions (Jill Arteche, 2022). The written text demonstrates storytelling in describing the circumstances that occurred around the main character of the story, inspired by animals as a topic from the show “*Ang Pinaka*,” an infotainment show, with cases of sea animals who are victims of pollution (Gagatiga, 2020).

The combination of these lines of work is similar to the aim of my project in creating story pieces as the products of the brand with the inclusion of the portion of the framework. In addition to this review, I will integrate the rest of the factors of the project’s framework by adding a section that would note the need for a self-realization factor to be taken from the story.

Integration of technology in discussing climate awareness

Art has a place in technology, and people interact with art wherever it is.

Figure 5
RisingEMOTIONS Art Installation

Figure 6
Collaterals Audience Participation

RisingEMOTIONS is an installation art piece that describes the rising sea levels in Boston. With the initial concern of inclusivity, the use of Digital Civic has allowed the art installation to gather emotions from the target audience to spread awareness of the rising sea levels.

It is clear that both this work and my own have similarities in spreading awareness on aquatic life topics, for the information to be more accessible to people, but particularly for children to be able to easily browse around the interface created for them. It is for my project to provide continuous awareness about the topics that surround the marine life of rivers (Aragon et al., 2021).

Visual Storybook Series Brand

Creating a brand is important once the product you will release consists of different variants of the same goal.

Figure 7
Little People, BIG DREAMS Logo and Book Covers

Little People, Big Dreams is a brand created by Maria Isabel Sánchez Vegara for a book series revolving around notable people as children in the venture of their achievements. The take in producing their products revolves around the same concept: to align the stories with one goal to inform their audience. The journey and achievements of their characters are the symbols that allow the audience to feel encouraged and believe in themselves (M. Vergara, 2023).

My project has taken this as a prompt to create a brand in the same manner as providing products or content that are aligned with the same goal. My project's framework will provide the factors needed to address its own goal of communicating the problem. It is also appreciated how the brand's name and logo were combined to comply with the concept in text form.

Graphic Novel on Climate Change for Children

Little People, Big Dreams' custom is to tell a story of actual people, which is one of their approaches to incite encouragement for the audience.

Figure 8

Little People, BIG DREAMS Greta Thunberg Edition

This is the story of an ordinary kid who is an activist named Greta Thunberg. The writer creates a fictional style of how Greta has lived through her life fighting for Climate Justice. With these events occurring in real life, the writer sets facts and actual images of the book's main character (M. Vergara, 2022).

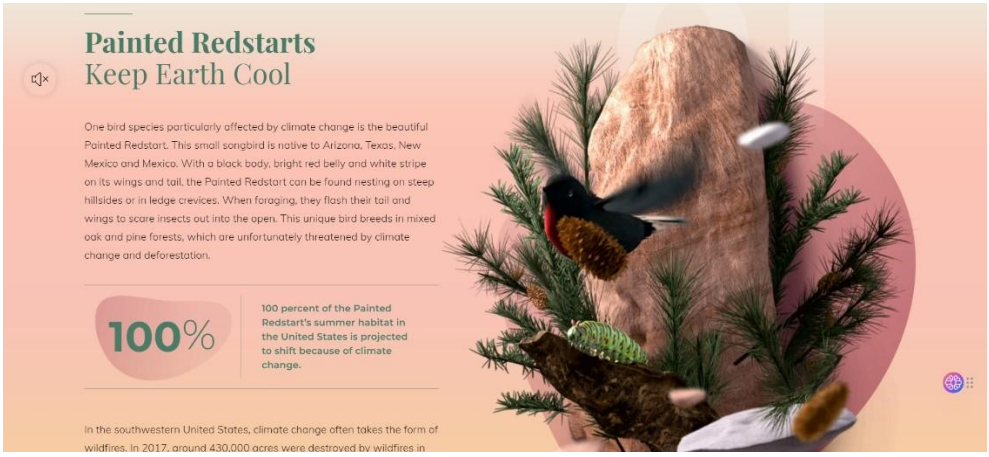
Providing proof at the end of the book is similar to telling facts and events that occurred in the project's topic story pieces. In this way, the audience will understand the reality of circumstances revolving around the story to incite empathy.

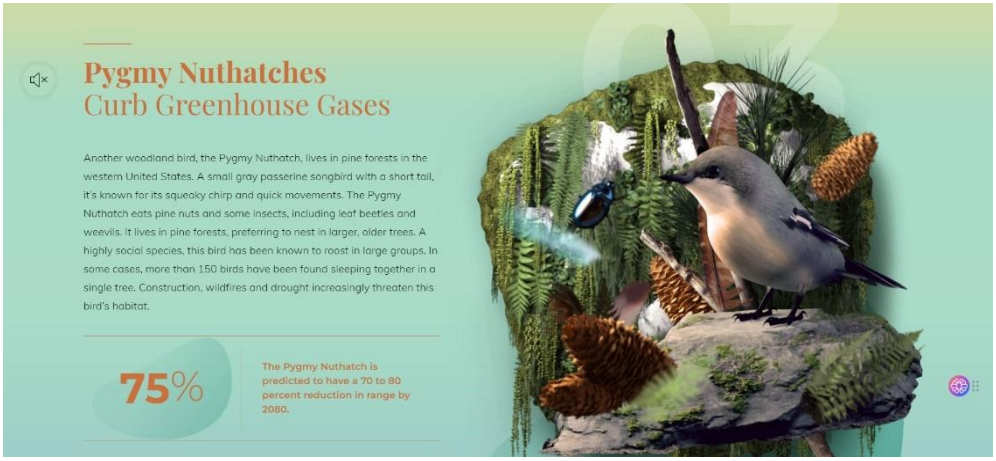
Websites with Art Direction, Motion Graphics, and Interactive Features

Websites at present have integrated motion design and, or both interactive elements; the following websites of other brands and concepts that use these mediums in their sites:

Allbirds, a New York Times post

Figures 9 and 10
Allbirds Web Sections



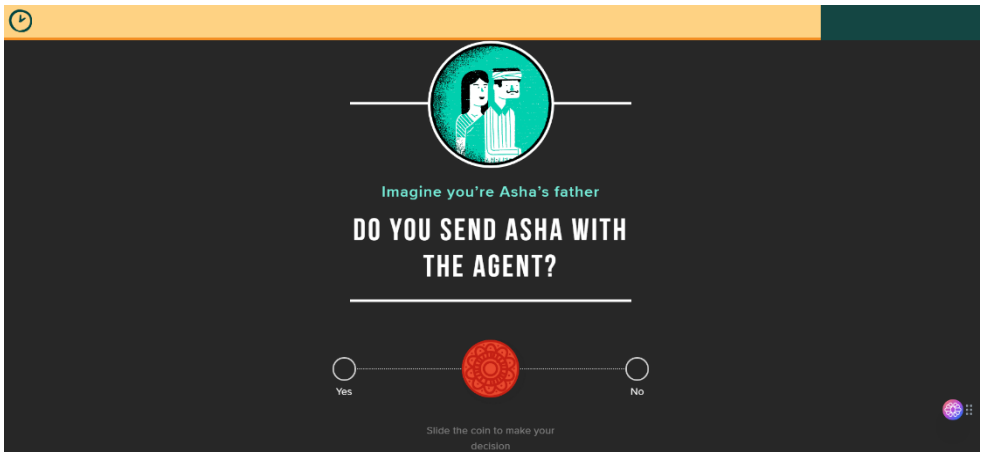


This page is from the New York Times, a paid collaboration of an article post for Allbirds Brand. The page contains motion graphics in three-dimensional compositions, alongside the history of the brand's symbol that they represent, as well as the facts and reports about the brand's credentials to inform the readers about their brand transformation (Lindberg, 2021).

The placement of the motion-designed assets in the interface will be considered for my project's output. This type of arrangement appears to be more organized and clearer. The content for my output will contain less content. The use of colors in the related work can also be made to set the tone for the interface and content, which can be used to integrate the framework.

Untrafficked

Figures 11, 12, and 13
Untrafficked Web Pages



This website addresses the prevalent human trafficking cases in India, with an interactive digital story about a young Indian girl's experience being trafficked as the website users make decisions about what can happen next in the story. Leaving the fate of the girl in the hands of the audience allows the story and conflict to be more impactful (Anna Fitzgerald, 2022)

My project will be inspired by the concept of interactive activities. This is to integrate situational circumstances that can allow the audience to establish situational awareness. This participatory activity can evoke reflections from the audience's decisions.

SBS's The Boat

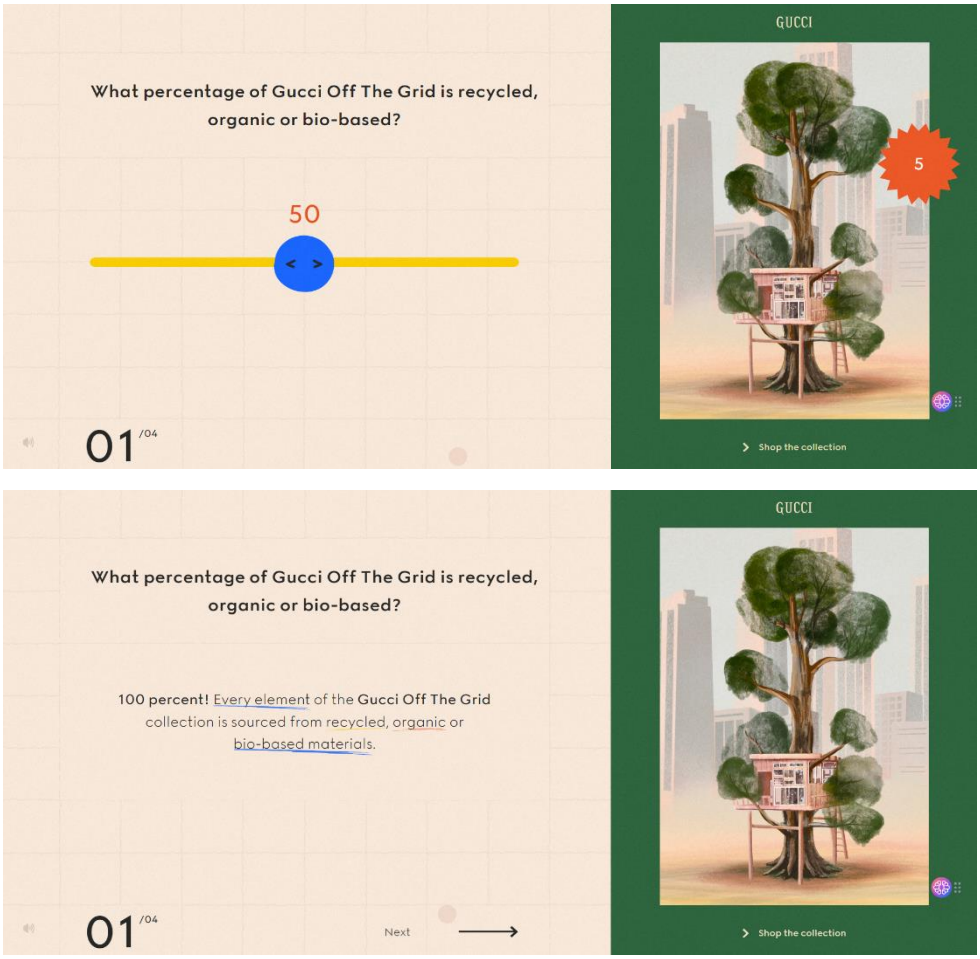
Figure 14
The Boat Website

This is an interactive online graphic novel website that works as a Scrollytelling, a type of storytelling that involves scrolling through a web page, with different series of stories held by a single web page. The visual assets are illustrations converted into motion graphic animations to portray the narrative in a very dramatic style to allow the audience to evoke emotions (DesignRush, 2023).

This website will have a design close to what my project intends to integrate into the website's background but will be less stylized in terms of the speed and operability of the site.

Gucci Off the Grid

Figures 15 and 16
Gucci Off-the-Grid Web Pages



As Gucci has set out its new product line, which is made of sustainable materials, the company has released a website to relay facts and information. The website contains an interactive activity that involves participating in a quiz with a series of questions to gain details about the new concept (Popovic, 2023)

The insight from the work will correspond to the content of the questions, wherein the target content will be factual events and figures surrounding the project's topic.

These websites have influenced the distinct types of content that the mediums can work with. This is a vantage point for the project's output in terms of producing content about the problem and determining if it is executable, as well as having a reference for the own initiative content and approach where the framework can be interpolated in the interface.

These creative works have recognized the different types of mediums, styles, and techniques that revolve around the planned art and design concepts of my project's output, as well as how the majority of the topics found correspond to the project's topic.

This review has allowed me to expand my preferences on the different content and assets for the output, along with how I could set out tasks that can be integrated into the production phases. This section has also motivated how the framework can be inserted into the medium and how the interface will be directed as opposed to its factors. This has allowed me to foresee directions that are aligned to communicate the information to the audience in an effective way.

Results and Discussions

This project aims to recognize the effectiveness of an art and design-directed website integrated with visual and participatory learning as educational tools for discussing the aquatic environment of the river in Metro Manila. The research is focused on determining the kind of experiences the audience can induce when using a website designed to encourage their involvement.

This chapter will discuss two (2) fields of focus of this project: Subject Matter and Design Process. These domains of the project are used to build its background of mediums while discussing the topics at the front. Thus, the research conducted will determine the foundation of the capstone project output.

Research Results about Subject Matter

This section discusses research results for the subject selected for the capstone project to represent. The project holds the topic of environment, specifically on river aquatic focus, as the area of the subject to be exhibited to the audience to spread information about the matter.

The findings for the subject matter are gathered from the Desk Analysis Method, which is used in the research design of this project. The topic will revolve around the aquatic environment and the awareness of the youth by the case in point. This will explore the chosen topic's themes, patterns, and key findings derived from available resources about the subject matter.

Findings

The project is represented through five (5) different key themes that contribute to the correlation of climate change awareness among Filipino Youth in the nature of Art and design with technology as a medium. These highlights of topics surrounding the subject matter are the insights that guide finding the gaps that the capstone project can fill.

1. **Climate Change Education for Youth Engagement**

   There is a lack of supporting information on teachers' practices when discussing environmental matters with students. In a study by E. Marpa (2020), teachers are less likely to discuss the environment from different perspectives, allowing the students to understand the matter more deeply. As a result, the discussions showed that teachers weren’t as enthusiastic about the

topic for the students to comprehend thoroughly. Yet, the teachers themselves were willing to learn more but had insufficient resources to learn about.

2. **Youth need more encouragement when acting upon the environment**

A study about how environmental matters should be integrated into the teaching curriculum has been conducted by a group of researchers in the Philippines, with respondents of different proponents that are working under the educational system, such as deans, chairmen, teachers, and students, have been administered to test for the data gathering. According to A. Corpuz et al. (2022) state that the youth have a positive attitude about caring for the environment. Although there is insufficient use for their knowledge and skills in actual environmental practice, it has been evident that youth behavior needs improvement to achieve successful environmental action.

3. **River Aquatic Environment Issues in the Philippines**

Environmental issues in the Philippines are critical, with millions relying on unsafe water sources and rampant plastic pollution contributing to ocean contamination. The massive oil spill from the MT Princess Empress in Oriental Mindoro caused severe damage to marine biodiversity and disrupted the livelihoods of thousands of anglers. The country is one of the leading contributors to ocean plastic pollution, with about 3.30 kilos of plastic per person entering the oceans annually. Despite initiatives by the Department of Environment and Natural Resources (DENR) to address these problems, critics highlight slow responses to environmental disasters and inadequate mining and waste management policies. The administration of President Ferdinand Marcos Jr. has shown interest in tackling climate change. Still, significant work remains to meet the United Nations Sustainable Development Goals and ensure a sustainable future for the Philippines.

4. **Role of Aquatic Environment in the Philippines**

The health of Philippine rivers is under severe threat due to pollution, deforestation, and unchecked quarrying, with 180 out of 421 rivers at risk of becoming biologically dead. Rivers like the Pampanga, crucial for biodiversity and supporting livelihoods, suffer from garbage, untreated wastewater, and agricultural runoff. The Agno River is heavily polluted due to mining and toxic pesticides, affecting food security and public health. Environmentalists emphasize the need for sustainable practices and stronger government action to combat these issues. Initiatives like the Manila Bay rehabilitation program aim to address river pollution. Still, significant changes are required to prevent further degradation and ensure the sustainability of ecosystems and the communities that rely on them.

5. **Prototype Website Development**

Integrating technological tools into art education outside of school significantly expands the learning opportunities for children and youth. These tools, such as tablets, digital drawing software, and 3D modeling applications, provide innovative ways to explore artistic concepts, enabling students to create unique works that blend digital and traditional art forms. This approach fosters increased engagement among digital natives, enriching their art learning experience while maintaining a balance with traditional media. The study also reveals that using technology alongside conventional art methods offers a comprehensive educational environment, promoting a deeper appreciation for digital and traditional art. These findings suggest that integrating technology into art education can lead to more dynamic and engaging experiences for the next generation of artists.

This research have shown gaps in youth engagement in climate change education. According to E. Marpa (2020), teachers in the Philippines have often lack the resources and training to effectively discuss environmental issues with students, which results in less engaging classroom discussions when it comes to the matter. As a result, students are only partially aware to environmental issues, which reduces their understanding and enthusiasm for environmental action.

Another study by A. Corpuz et al. (2022) point out that although youth generally have a positive attitude towards environmental protection, their skills and knowledge are not used to apply onto real-word activities. It also shows that youth are able to understand the importance of environmental problems, yet they do not have opportunities to conduct them. Through this, it shows the need for more interactive and engaging learning tools to encourage them to participate in environmental preservation.

Through this analysis, it is decided that there is a need for a material that is engaging youth in a way that is relevant and sticks to them. A product is needed to deepen understanding of environmental issues and encourage proactive behavior toward climate action, especially in the Philippines' critical river pollution and water environment issues.

Research Results about Design Process

In this section, we delve into the research findings regarding Branding Identity, User Research, UX Design Evaluation, and UI Design Evaluation. These elements are crucial for understanding the impact of a digital platform designed for educational purposes. The study reveals that a strong branding identity helps create a unique and recognizable image, fostering a sense of connection and trust among users. User research provides insights into user behavior, preferences, and needs, which inform the design process to ensure the platform aligns with user expectations.

Observational Analysis

Table 1

Phase 1: Observational Analysis

1.	**Save the Philippine Seas**	
	https://www.savephilippineseas.org	
	Navigation and Layout:	• Clear and intuitive navigation with prominent menus. • Easy access in various sections, including campaigns, events, and educational resources.
	Visual Design:	• Vibrant color scheme and engaging imagery related to marine conservation. • Well-balanced design elements, visually appealing to a broad audience.

	Interactive Elements:	• Limited interactive features observed; potential for enhanced engagement.
	Content Quality:	• Comprehensive content covering a wide range of marine conservation topics. • In-depth articles, but the level of interactivity could be improved.
2.	**DENR Kids Corner**	
	https://www.denr.gov.ph/index.php/news-events/62-kid-s-corner	
	Navigation and Layout:	• Government-affiliated design with straightforward navigation. • Direct links to news, events, and kid-specific environmental content.
	Visual Design:	• Minimal design, aligning with government standard. • Possibly lacking vibrant visuals; may need more appeal for younger users.
	Interactive Elements:	• Limited interactive features observed; focus on informational content. • Potential for increased engagement through gamified elements.
	Content Quality:	• Authority in environmental content, providing reliable information. • Educational resources suitable for children, but interactivity may need enhancement.
3.	**Haribon Foundation**	
	https://haribon.org.ph	
	Navigation and Layout:	• NGO-affiliated design with a focus on biodiversity conservation. • Intuitive navigation with sections dedicated to campaigns, projects, and educational content.

	Visual Design:	• Professional design aligning with the NGO's credibility. • Limited use of vibrant visuals; potential for increased engagement.
	Interactive Elements:	• Observations of limited interactive features; opportunity for more engagement. • Primarily focused on informational content.
	Content Quality:	• High-quality content covering biodiversity and conservation. • Educational resources suitable for a wide audience.
4.	**CANVAS**	
	https://www.canvas.ph/art-and-stories	
	Navigation and Layout:	• Navigating through the site is clear and direct to links. • No unnecessary advertisements.
	Visual Design:	• The design is clean, modern, and edgy. • Design clearly focuses on emphasizing their products.
	Interactive Elements:	• Limited interactive elements, opportunity for more engagement • Lacks interactive elements; Primarily focused in providing products and information.
	Content Quality:	• Excellent quality of resources of various topic. • Timely, provides and recommends the current best books in the market. • Provides free and downloadable reading resources.

Observations

- Through creating the website, it should prioritize quality of visuals elements. While other websites do consider this, informative organization/government websites may not (e.g., DENR Kids Corner Website Page). The visuals should also be aligned with one style in use.
- The website is planned to operate as a digital library, canvas.ph is an excellent example in curating the design style of the website. Although, their practice of letting users download the resources could cause harm for the clients or creators. The project will refine this through embedding the assets in the website's system, while also allowing the users to easily access the modules.
- The branding identity of the website is essential to be aligned through the recognition, relation, and consistency of the intentions of the project, this includes the logos, buttons, styles of visual elements, and typography. The HARIBON website encapsulates the theme of their project with appealing and well curated visuals, alongside their informative content, which allows the audience to be easily familiarized with the purpose of the brand.
- Running through a website can be a bore when the visuals are not much interesting, although Save the Philippine Seas and HARIBON websites, provide curated visuals, it can lack interactivities. Including interactive elements can help the website to gather traffic and interest of the audiences, which can be captivating if the content and visuals can be used together collectively.

User Persona Validation Survey

A user validation survey was conducted to assess the alignment of the User Personas for both the Primary audience and the Secondary audience. The survey aimed to validate the personas by comparing their characteristics, goals, and challenges with the actual preferences and behaviors of the target demographic.

The target audience for the project has a Primary and Secondary audience. Each of the Group Personas are validated through five (5) respondents through an online survey form used for the data gathering. For this time, the Primary audience will be divided into two (2) groups, to recognize the wide age gap and behavior of the audience. This process ensures that the developed personas accurately reflect the needs and expectations of the intended users, thereby guiding the design and development of the prototype informative website.

Survey Findings

A. User Persona Validation for Primary Audience #1 – Iñigo Lopez

Table 1

Survey Respondents for Iñigo Lopez User Persona Validation

1	**Category**	Interest in Science	
	Question	“How interested are you in learning about science?”	
	Responses	Very Interested	20%
		Interested	60%
		Neutral	20%
		Not very Interested	0%
		Not Interested at all	0%
2	**Category**	Learning Resources	
	Question	"How often do you use online learning materials (Like: videos, websites, games) to learn more about science?”	
	Responses	Always	0%
		Often	40%
		Sometimes	60%
		Rarely	0%
		Never	0%
3	**Category**	Reading Independence	
	Question	How confident are you in understanding science reading materials on your own?	
	Responses	Very Confident	0%
		Confident	60%
		Neutral	40%
		Not very Confident	0%
		Not Confident at all	0%
4	**Category**	Engaging Materials	
	Question	"When learning about science, how important is it for you to learn with fun and interesting activities?”	
	Responses	Very Important	60%
		Important	40%
		Neutral	0%
		Not Very Important	0%
		Not Important at All	0%
5	**Category**	Challenge in Focusing	
	Question	"Do you find it hard to focus when learning about science or nature, in schools or through online reading materials?”	
	Responses	Always	0%
		Often	20%
		Sometimes	80%

		Rarely	0%
		Never	0%
6	**Category**	Availability of Resources	
	Question	"Do you think that there are enough lessons and reading materials about climate change that you can easily understand for your age?	
	Responses	Yes, plenty	40%
		Yes, but could be more	40%
		Neutral	0%
		Not enough	20%
		None at all	0%
7	**Category**	Understanding Language	
	Question	"Do you have any trouble in understanding reading materials in Filipino/Tagalog?	
	Responses	Always	0%
		Often	20%
		Sometimes	40%
		Rarely	0%
		Never	40%
8	**Category**	Learning Preferences	
	Question	"What is your preferred way to learn about science?"	
	Responses	Watching Videos	80%
		Reading Articles or Stories	0%
		Playing Interactive Games	20%
		Doing Hands-on Experiments	0%
		Other	0%
9	**Category**	Job Preferences in the Future	
	Question	"Would you like to have a job related to science when you grow up?"	
	Responses	Yes	0%
		No	0%
		Maybe	100%
10	**Category**	Climate Change Discussion in Schools	
	Question	"Are current climate issues in the Philippines, and ways to avoid these problems, being talked about in lessons in your schools?"	
	Responses	Always	0%
		Often	20%

		Sometimes	60%
		Rarely	20%
		Never	0%

Focusing on the fictional character of Iñigo Lopez, with each question formed to validate the user persona, the following data are analyzed: The survey presents that there is a strong interest in the subject of science. Respondents typically use online materials, though some respondents, while most only make use of it for some time. Most have confidence in learning about science, while some are neutral. All respondents highlight that learning through fun and interesting activities are important for them. The challenge in focusing on science is troubling for some of the respondents. Opinions on the availability of resources are mixed. Understanding the language of resources are difficult for some. The learning source are preferred to be videos for most of the respondents, while some enjoy learning interactive games. The interest in taking science in their careers are possible for all respondents. And Lastly, Climate Change topics are inconsistent to every school of the respondents.

B. User Persona Validation for Primary Audience #2 – Isabelle Dela Cruz
C.

Table 2

Survey Respondents for Isabella Dela Cruz User Persona Validation

1	**Category**	Interest in Advocating for the Environment	
	Question	“How interested are you in advocating for the environment?”	
	Responses	Very Interested	60%
		Interested	0%
		Neutral	40%
		Not very Interested	0%
		Not Interested at all	0%
2	**Category**	Awareness of Surroundings	
	Question	"How informed do you feel about current climate issues in your local area or city?”	
	Responses	Very Informed	20%
		Informed	60%
		Neutral	20%
		Not very Informed	0%
		Not Informed at all	0%
3	**Category**	Availability of Resources	

	Question	"How easy is it to find resources or reading materials that talks about local climate problems that are understandable for your age?"	
	Responses	Very easy	0%
		Easy	60%
		Neutral	20%
		Difficult	20%
		Very difficult	0%
4	**Category**	Awareness of Practices	
	Question	"How aware are you of the specific actions needed to care for the environment, based on our country's conditions?	
	Responses	Very Aware	40%
		Aware	20%
		Neutral	0%
		Not very Aware	40%
		Not Aware at all	0%
5	**Category**	Importance of Resources about Environmental Action	
	Question	"How important is it for you to have access to resources that help you contribute to improving our local environment?"	
	Responses	Very Important	40%
		Important	40%
		Neutral	20%
		Not very Important	0%
		Not Important at all	0%
6	**Category**	Availability of Resources	
	Question	"Do you think that there are enough lessons and reading materials about climate change that you can easily understand for your age?	
	Responses	Yes, plenty	0%
		Yes, but could be more	80%
		Neutral	0%
		Not enough	20%
		None at all	0%
7	**Category**	Frequency of Join Environmental Activities	
	Question	"How often do you participate in science or nature-involved activities held by your school?"	
	Responses	Always	20%
		Often	40%

		Sometimes	0%
		Rarely	20%
		Never	20%
8	**Category**	Learning Preferences	
	Question	"What is your preferred way to learn about science?"	
	Responses	Watching Videos	20%
		Reading Articles or Stories	40%
		Playing Interactive Games	20%
		Doing Hands-on Experiments	20%
		Other	0%
9	**Category**	Important of Raising Environmental Awareness	
	Question	"How important is it for you to raise awareness among yourself and your friends to make a positive difference for the environment's future?	
	Responses	Very Important	40%
		Important	40%
		Neutral	20%
		Not very Important	0%
		Not Important at all	0%
10	**Category**	Climate Change Discussion in Schools	
	Question	"Are current climate issues in the Philippines, and ways to avoid these problems, being talked about in lessons in your schools?"	
	Responses	Always	20%
		Often	0%
		Sometimes	0%
		Rarely	40%
		Never	40%

For the 'Isabella Dela Cruz' Fictional User Persona, the survey responses gathered presents: There is a high interest in advocating for the environment, though some respondents are neutral. Regarding awareness of local climate issues, most feel informed or very informed, while some are neutral. Searching for resources is typically easy for some, and some find it difficult. Awareness on specific environmental actions are mixed, with varying levels of awareness. Access to resources that contributes to learning about the environment are important or very important by most respondents. The availability of age-appropriate climate change resources is seen as lacking, with most believing more resources are needed. Participation in environmental activities varies, with some participating often or always, but others rarely or never. Learning preferences are diverse,

with reading articles being the most preferred. Raising environmental awareness is important to most respondents. Climate change discussions in schools are inconsistent, with many saying these are rarely or never talked about.

D. User Persona Validation for Secondary Audience #1 – Gerald Santos

Table 3

Survey Respondents for Gerald Santos User Persona Validation

1	**Category**	Involvement of Environment in Lesson Plans	
	Question	"Do you teach or integrate environmental issues in your lesson plans?“	
	Responses	Yes	100%
		No	0%
2	**Category**	Importance of teaching environmental problems	
	Question	“How important is it for you to teach your students environmental problems?”	
	Responses	Very Important	80%
		Important	20%
		Neutral	0%
		Not very Important	0%
		Not Important at all	0%
3	**Category**	Cultivating empathy & compassion through teaching	
	Question	“How important is it for you to cultivate empathy and compassion among your students through your lessons?”	
	Responses	Very Important	80%
		Important	20%
		Neutral	0%
		Not very Important	0%
		Not Important at all	0%
4	**Category**	Importance of spreading awareness regarding the environment	
	Question	“How important is it for you to spread awareness about ongoing environmental events to your students?”	
	Responses	Very Important	60%
		Important	40%
		Neutral	0%
		Not very Important	0%
		Not Important at all	0%
5	**Category**	Effort of collecting resources	

	Question	"How much effort does it take for you to gather and prepare resources about current environmental events for your lesson plans?"	
	Responses	Very High Effort	60%
		High Effort	40%
		Neutral	0%
		Low Effort	0%
		Very Low Effort	0%
6	**Category**	Time Consumption in Creating Resources	
	Question	"How time-consuming do you find it to create your own teaching resources about current environmental events?"	
	Responses	Very time-consuming	0%
		Time-consuming	80%
		Neutral	20%
		Not very time-consuming	0%
		Not time-consuming at all	0%
7	**Category**	Need for More Resources	
	Question	"How much do you feel there is a need for more accessible, up-to-date, and ready-to-teach resources on environmental issues for primary and secondary levels of education?"	
	Responses	Very high need	80%
		High need	20%
		Neutral	0%
		Low need	0%
		Very low need	0%
8	**Category**	Willingness to Use New Resources	
	Question	"How willing are you to integrate new and easy to understand resources about environmental events into your teaching if they are made available?"	
	Responses	Very willing	80%
		Willing	20%
		Neutral	0%
		Not very willing	0%
		Not willing at all	0%

For the User Persona Validation involving the teaching staff – in the fictional character of Gerald Santos, the data presents: All of the respondents involve the

environment into their lesson plans. The majority recognize that there is a vital importance of teaching environmental problems, while some find it important. On prioritizing the cultivation of empathy and compassion among students as a teaching style, most of the respondents have a consensus that it is essentially important, whereas others determine that it is very important. Most of the respondents find that it is very important to spread awareness about the environment and others find it important. In preparation of the resources, most of the respondents said that they put very high effort whereas some put high effort. In terms of the time in creating resources about environmental events, respondents have found it time-consuming. Most respondents have said that there is a vital need for accessible resources on environmental use and others say that there is a high need. Lastly, most of the respondents are very willing to use a new resource into their work while some say they are willing.

E. User Persona Validation for Secondary Audience #2 – Anna Torres

Table 4

Survey Respondents for Gerald Santos User Persona Validation

1	**Category**	Discussion Frequency	
	Question	"How often do you discuss current events with your children?"	
	Responses	Always	40%
		Often	40%
		Sometimes	0%
		Rarely	20%
		Never	0%
2	**Category**	Importance of Discussing Issues	
	Question	"How important is it for you to discuss current events and environmental issues with your children?"	
	Responses	Very important	0%
		Important	100%
		Neutral	0%
		Not very important	0%
		Not important at all	0%
3	**Category**	Difficulty in Explaining Environmental Issues	
	Question	"How challenging do you find it to explain environmental issues to your children in a way that they can grasp?"	
	Responses	Very challenging	40%
		Challenging	40%
		Neutral	20%

		Not very challenging	0%
		Not challenging at all	0%
4	**Category**	Need for Accessible Resources	
	Question	"How much do you feel there is a need for accessible and easy-to-understand resources to help you discuss current events with your children?"	
	Responses	Strong need	60%
		Some need	20%
		Neutral	20%
		Little need	0%
		No need	0%
5	**Category**	Timeliness of Discussions	
	Question	"How much time do you typically have to discuss current events with your children?"	
	Responses	More than 5 hours	0%
		3-5 hours	0%
		1-3 hours	40%
		Less than 1 hour	40%
		None at All	20%
6	**Category**	Effectiveness of Current Platforms	
	Question	"How effective do you find the current platforms and resources available for discussing current events with your children?"	
	Responses	Very Effective	0%
		Somewhat Effective	80%
		Neutral	20%
		Not very Effective	0%
		Not Effective at all	0%
7	**Category**	Reliance on Digital Platforms	
	Question	"How much do you rely on digital platforms (websites, apps) to provide information for discussing current events with your children?"	
	Responses	Always	60%
		Often	0%
		Sometimes	40%
		Rarely	0%
		Never	0%
8	**Category**	Access to Reliable Resources	

	Question	"How difficult do you find it to access reliable and age-appropriate resources that discuss current events and environmental issues for discussions with your children?"	
	Responses	Very difficult	0%
		Difficult	40%
		Neutral	20%
		Not very difficult	40%
		Not difficult at all	0%
9	**Category**	Interest for New and Ready-to-Use Resources	
	Question	"How interested would you be in a platform that offers ready-to-use, up-to-date resources for discussing current events and environmental issues that is fit for the comprehension your children?"	
	Responses	Very interested	40%
		Interested	60%
		Neutral	0%
		Not very interested	0%
		Not interested at all	0%

For the fictional character of Anna Torres' User Validation Survey, the data presents: Most of the parents' frequently and constantly discuss current events with their children, and some rarely do. When asked how important it is for them for their children to know current events, it is indicated that it is important for everyone. In the difficulty of explaining environmental issues, most say that they find it challenging while a few are neutral on the matter. On the timeliness of discussing current events with their children, most have responded less than three (3) hours, and some would never. With regards to the effectiveness of current platforms, most say that they are working while few are neutral. When asked on the usage frequency of digital platforms as references to discuss with their children, most emphasize the use while others would only use it at some times. For the difficulty in finding appropriate resources for children, the results vary in difficult to not very difficult, while a few say that it is fair. Finally, on their interest in new and ready-to-use platforms, the majority of the respondents lean on being interested in it.

This data gathering process is for understanding the user needs further from the creation of the Fictional User Personas during the pre-production phase. Through this survey, it is indicated that the User Personas there is a significant alignment between the survey results and the fictional personas of Iñigo Lopez, Isabella Dela Cruz, Gerald Santos and Anna Torres. Although there are some partial differences and variations of responses based on each of their own experiences, the survey highlights the majority of responses that is inclined to acknowledgement that there is importance in interest in science, environmental awareness, and preferences for interactive and engaging learning practices. Overall, the

results supports and validates the traits and needs of the personas and can serve as the foundation for user-centric solutions for the created website.

Usability Testing

The usability testing for the website was conducted by engaging a total of nine (9) respondents across the three demographics: Students, Teachers, and Parents, with three participants from each group. This testing aimed to evaluate the website's functionality, navigation, design and overall user experience, gathering insights to refine and improve the platform. The feedback received from diverse user perspectives provided valuable data to enhance usability and ensure the site meets the needs of its intended users effectively.

These interview questions relies on the different components of the website by the combination of experience and interface. These are categorized into five (5) factors: First Impression, Navigation Layout, Content Quality, Visual Design, and Overall Experience. In this way, the evaluation can be focused on prioritizing knowing the audience's preferences in terms of the usability of the website. Each set of questions are made to be fitting to the target demographics comprehension but will have similar content.

Student Usability Testing Respondents

Table 5

Student Usability Testing Questions and Responses

Question #1: What did you think when you first saw the Ephilog website? How would you describe how it looks and feels?	
Respondent #1	I was amused by the elements, it's very interactive making it more interesting, it peaks the reader's attention into reading the storyboard.
Respondent #2	It's captivating, really interactive. We don't really care for these issues, but for the fact na interactive, and with all the colors and games it helped me stay focus and pay attention to the test and story. I would visit this again.
Respondent #3	I like the design and different tabs. The design really fits the theme – the rivers, water and problems we have about it.
Question #2: Was it easy to find your way around the Ephilog website?	

Respondent #1	It was easy, pero sa last part after I finished the story wala yung tab para bumalik sa story. Pero easy to understand naman for students.
Respondent #2	There were only a few sets of buttons so it was easy. Stuff was clear and concise.
Respondent #3	A bit of struggle in scrolling at first.
Question #3: Did you click on any buttons or menus in the Ephilog website? How did it go?	
Respondent #1	The buttons are part ng pagiging interactive. After the quiz, I clicked the stories from the menu to go back. It was accessible naman po.
Respondent #2	Clicked a lot of buttons and it was fun. Colors, interactive it was fun.
Respondent #3	Very easy to navigate and access the different features.
Question #4: How much did you learn from the information on the Ephilog website?	
Respondent #1	Since about sa environment, marami naman ako natutunan since puro statistical and since inincorporate story of a legend kaya it was more understandable for students.
Respondent #2	It gave me motivation to learn more. It made me want to learn more.
Respondent #3	I learned a lot, especially in the quiz. I learned about the story about Marikina and the next express way.
Question #5: Did you have any trouble finishing tasks on the Ephilog website? Can you explain?	

Respondent #1	Hindi naman po, siguro medyo matagal lang siya mag next ng question.
Respondent #2	No issues. Animation was perfect, didn't impact how the website loads.
Respondent #3	Aside from the scrolling part, I didn't have any problems. Very easy to use.
Question #6: What do you think about how the Ephilog website is set up? Do the colors, layout, and text style look good to you?	
Respondent #1	Pleasing siya sa eyes, Readable texts and designs are well coordinated with each other.
Respondent #2	I love it. I like the bright interesting colors, the animations were captivating. Pick up trash idea was brilliant. Not that many places to go yet there's still so much to explore.
Respondent #3	Typography is very good, readable, concise. Design is on point. The scrolling part maybe can be fixed.
Question #7: On a scale from 1 to 10, how likely are you to visit the Ephilog website again?	
Respondent #1	9/10
Respondent #2	10/10
Respondent #3	10/10

For the Usability Testing Interview for the Student demographic, the results present these data: The first impressions across all the respondents are positive – they show appreciation onto the material in terms of the design, theme and concept, which have allowed them to engage more with the site. In terms of the navigation, most respondents

found it simplistic and clear. However, there are issues in finding a way back to the story upon completion, as well as the initial struggle in scrolling through the site. The respondents found the interactive buttons and menus enjoyable due to their purposes due to the design along with the ease of navigation. The respondents expresses that they are engaged into learning from the content and interactive features – moreover from the storytelling and quiz factor that motivates them to explore deeper into the content to understand local environmental issues. Respondents implies that there are minor difficulties from loading between the questions and initial scrolling on the site; Aside from that, the rest of the elements were easy to use even with the number of animations. Generally, they found the site visually appealing, there is positive feedback with regards to the principles used for the text, design, and other elements through their coordination; There is only a request for changes in the scrolling function. Finally, all of the respondents express a high likelihood that they would revisit the site in its running operations.

Teacher Usability Testing Respondents

Table 6

Teacher Usability Testing Questions and Responses

Question #1: What are your first impressions of the Ephilog website? How would you describe the overall look and feel of the website?	
Respondent #1	First impression, Pang-kids and pwede din sa mga young at heart pero possibly impatient sila so mas maganda for kids
Respondent #2	Very entertaining sa mga bata, when it comes to me, pagdating sa content medyo hindi ako mai-in sa ganitong klaseng content.
Respondent #3	Feel mo na story is about rivers. Mga text hindi ganun kahaba, hindi nakakabore basahin. May instructions agad. Feel mo na nasa river ka talaga
Question #2: Were you able to easily navigate through the website?	
Respondent #1	Yes, it’s easy to navigate. Except for the scrolling part where need ng instruction na pa-side ang horizontal scrolling
Respondent #2	Okay naman navigation, user friendly. Hindi siya mahirap gamitin.

Respondent #3	Madali ma-navigate.
Question #3: Did you interact with any specific features (buttons, menus, search bar, etc.) on the Ephilog website? Please describe your experience.	
Respondent #1	Mga buttons…
Respondent #2	Sa quiz in-access ko siya. Interaction. Itong part na 'to, ito in-access ko. Hindi pansinin yung pwede siya madrag or slide
Respondent #3	Nakakasurprise when you click the button, very informative din ang buttons. Alam mo na clickable siya.
Question #4: How informative was the content seen on the website?	
Respondent #1	Limited yung information, ok siguro if more than 2 mas ok para sa mga bata
Respondent #2	Informative siya lalo na yung stories and quiz
Respondent #3	Very informative. Values-oriented. Ito mga need ngayon na materials.
Question #5: Did you encounter any difficulties while trying to complete tasks on the Ephilog website? Please describe.	
Respondent #1	Scrolling
Respondent #2	Bawat button naman nag rerespond naman siya. Ok naman, accessible naman buttons. Wala ako nagging problem sa navigation.

Respondent #3	Sa scrolling, pero madidiscover mo naman.
Question #6: What are your thoughts on the visual design (layout, colors, typography) of the Ephilog website?	
Respondent #1	I like the concept, it's very nice, as well as the visuals and pasok siya sa mga bata, the elements are symbolic just like the mascot.
Respondent #2	Ok siya since naka-relate kulay sa content mo. Ok naman colors, nag cocompliment sa kung ano content mo. Maganda blending ng colors.
Respondent #3	Readable, okay size. Length ng paragraphs okay siya. Maganda color niya, hindi masakit sa mata, tama font size, and images/graphics appropriate.
Question #7: Would you use or recommend this website for teaching- e.g. as introductions or ice breakers for the class? Why?	
Respondent #1	Yes, I would make use of this for the for kids although would be better if you would add more materials for the stories and quiz.
Respondent #2	Pwede pero syempre content na tinuturo ko, iibahin ko na lang content ng tinuturo ko. Matutuwa students kasi interactive, pero different content.
Respondent #3	Yes, especially since I'm a father, I would want my child to use this as well. Since mukhang di pa siya finished prototype siya, mas lagyan pa sana ng laman

For the gathering of data in the Teacher's usability testing interview, the results indicates: The initial impressions are mostly appreciations of the visuals and engagement factor of the site for children or students, explaining a clear concept; They also point out the varying interests of age groups and saying it would be suitable for a younger audience. The respondents find that the navigation was straightforward but would need improvement in terms of the scrolling. The buttons were said to be engaging and are even informative but could be improved if they could easily recognize the instructions for the buttons, particularly for the quiz portion. The content is found to be informative but would be better if more materials can be added; It is also implied that the dynamic of stories and quizzes are good for enhancing the educational experience. It is stated that there is a problem with the scrolling functionality but could be learned, while the other say that they did not have

much problems. The respondents states that the visuals complies well with the topic and content of the site as well as the target audience for being a child-friendly interface. The readability of the text is appreciated with balance of the visual design elements. The teachers said that they are willing to use the material in the future but may need to vary based on the content they are teaching, although they would recommend this to colleagues; It is also suggested that more content like the present ones should be added.

Parent Usability Testing Respondents

Table 7

Parent Usability Testing Questions and Responses

Question #1: What are your first impressions of the Ephilog website? How would you describe the overall look and feel of the website?	
Respondent #1	Maganda, kuhang-kuha niya yung concept ng mga rivers parang feel mo nasa loob ka din ng tubig
Respondent #2	Pwedeng-pwede siya mga kids na audience, very cartoony siya and ganun din naman ang mga gusto nila so bagay na sila ang gagamit nito.
Respondent #3	First impression, pang kids talaga parang hindi siya for me. Kung anak ko makakakita nito baka ma-hook siya.
Question #2: Were you able to easily navigate through the website?	
Respondent #1	Oo, madali lang siya i-browse. Simple lang yung mga buttons and di sila mahirap makita.
Respondent #2	Yes, madali siya. Very simple lang yung mga tabs niya.
Respondent #3	Madali yung paglipat-lipat. Minsan lang mabagal yung scroll.
Question #3: Did you interact with any specific features (buttons, menus, search bar, etc.) on the Ephilog website? Please describe your experience.	

Respondent #1	Oo, ang galing na merong mga interactive na buttons na pag-pinindot mo may mangyayari after – di siya yung simpleng button lang.
Respondent #2	Oo, marami ding buttons na interactive and bawat isa sakanila ay may purpose kahit ung mga nasa loob ng stories.
Respondent #3	Oo, tumatak sa akin yung pupulutin mo yung mga basura tapos mag-change bigla yung drawing. Magaling yung kung paano siya gumagana.
Question #4: How informative was the content seen on the website?	
Respondent #1	Madali lang naman intindihin, medyo may kahabaan lang. For me, medyo na-bbore ako. pero kung sa mga bata ‘to for sure may matuto-tunan sila dito.
Respondent #2	Yes, very informative siya and comprehendible yung style nila for kids so maiintindihan nila ito.
Respondent #3	Marami kang malalaman, yung dating niya parang Children’s book pero mas marami ‘tong information compared doon. Mukhang malalim mga information na binibigay niya.
Question #5: Did you encounter any difficulties while trying to complete tasks on the Ephilog website? Please describe.	
Respondent #1	Nahirapan lang ako sa scrolling, pero naka-galaw din naman ako ng maayos. Madali lang din yung mga buttons.
Respondent #2	Wala naman, minsan medyo mabagal lang mag-load. Pero ok naman siya.
Respondent #3	Yung sa scroll lang talaga, yung kailangan mo pa siya gamayin.
Question #6: What are your thoughts on the visual design (layout, colors, typography) of the Ephilog website?	

Respondent #1	Ang ganda. Ayun nga, para kang nasa tubig. Yung mga design di siya masakit sa mata, at yung di mahirap basahin.
Respondent #2	I like the design, perfect siya for kids and gets mo agad kung about saan siya. Sa typography, malinaw siya at mabilis mabasa.
Respondent #3	Maganda bagay yung mga design dun sa topic niya na tubig, Pero ayun nga, pang-bata talaga siya.
Question #7: "Would you use or recommend this website for helping your child learn or as an engaging and interesting activity at home? Why?"	
Respondent #1	Oo naman, bagong concept din siya ‘no? Tapos para sakin madali matututo yung mga bata about sa paligid natin. Ok talaga siya for me.
Respondent #2	Yes, I would love to! Feel ko mas magiging informed ang mga bata pag ganito ang mga bino-browse nila sa internet.
Respondent #3	Sakto lang, hindi ko masiyado dini-discuss talaga mga problema sa mga anak ko. ‘Lam mo na, baka ma-stress sila – parang ganun. Pero ok yung website, magging interesado mga teenagers or young adults dito,

For this Usability Testing Interview, based on the demographic of Parents, the data presents: At first hand, the respondents admires the visual appearance of the site, and emphasizes that it is highly suitable for children because of its immersive experience and style of illustration that fits them. Generally, the respondents found the navigation to be simple because of the layout and buttons, though there are times wherein they would have trouble scrolling. In terms of the interactive features of the site, they emphasized the engaging and well-executed designs and purposes of each buttons, the interactions found in the stories, and the changes of visual elements from the features. Generally, the content on the site is found to be informative, well-made, and can be effective for the youth. The respondents found that the site is functional but with minor difficulties, mainly from scrolling and loading of some features; Yet the buttons were easy to see use and overall can still be manageable. Coming back to the visual design, the respondents confirms that the website is appealing, fits the theme well, and are good for children; Every text are clear readable. The majority of the respondents agrees that they are interested in using the material in the future through the appreciation of how it can be effective and engaging for children on environmental topics. Although one refuses because of personal preferences on the experiences that they allowed their child to consume.

These results from the Usability Testing Interview across the three group demographics have highlighted the effectiveness of the project output. The Student demographic have generally appreciated the engaging design and thematic relevance of the website, it is also found that the experience with the interactive features of the site is enjoyable and educational. Teachers valued the site's visual appearance as well and sees that it has the potential to be educational content to a younger audience. Parents have also admired the youth-friendly usability of the website and it's informative content. Across the three demographics, it is noted that there is an issue on the navigation, specifically on scrolling. Overall, most of the respondents have expressed a positive perspective onto the project and appreciates its use for the purpose of educating the younger audience about the conditions of our aquatic environment.

Competitive Analysis

This data gathering method is used to follow up for the Observation Analysis that was done during the pre-production phase of the project, to come to the terms of recognizing and confirming the design decisions taken from the initial analysis and see if the target demographics have acknowledged them. The competitors are reduced to two (2), which are the websites that may serve as near competitors, since the product does not have a direct competitor itself.

The questions are categorized into four (4) factors: Navigation and Layout, Visual Design, Interactive Elements, and Content Quality; which are the same factors that was used in the Observation Analysis.

Students Competitor Analysis Respondents

Table 8

Student Competitor Analysis Questions and Responses

Question #1: Was it easy to find your way around the Website #1, Website #2, and Website #3 websites? How do they compare in terms of browsing?	
Respondent #1	Website #1 was very organized, madaling i-navigate, as well as Website #3. Website #2 was too complex. Masyado maraming need i-click and maximalist style siya.
Respondent #2	I find the Website #1 the easiest to use. Website #3 would be the second one, then last is the Website #2

Respondent #3	For browsing, for me si Website #3 ang madali, tapos Website #2 and #1 medyo mahirap because of many tabs opening (Website #2) and scrolling (Website #1)
Question #2: What do you think about how the Website #1, Website #2, and Website #3 websites are designed? How do they look different to you?	
Respondent #1	I like Website #1, ang ganda ng animations, stories, and overall look is enticing. Website #2 is minimalistic in design but its still good along with the animations. For Website #3, very simple din siya.
Respondent #2	Website #1 looks really nice, I like the colors and the Fish character. There's nothing like that in Website #3 which is a little plain. Then Website #2 is also colorful but not like Website #1.
Respondent #3	I think Website #1 is designed very well, if you will compare it to the 2 others.
Question #3: How well did the buttons, animations, and other engaging stuff on the Website #1, Website #2, and Website #3 websites? Which ones did you like best?	
Respondent #1	I think yung Website #1 lang talaga ang applicable for this. It's also the one that I like the best.
Respondent #2	The buttons are working, I like the ones in Website #1
Respondent #3	I like the buttons on the Website #1, like the quiz part, it's very informative and easy to understand what's happening. Website #2 has these sliding effects when you click them which is nice, and there's also something like that in Website #3.
Question #4: How much did you learn from the information on the Website #1, Website #2, and Website #3 websites? Which one had the best info and why?	
Respondent #1	I feel like yung Website #2 yung mas maraming information, yung mayroong videos din. For Website #3 din, lahat ng gusto ko malaman nandun na agad, and very easy to understand.
Respondent #2	I like yung stories and quiz for Website #1, and also the story from Website #2. I didn't read much for the Website #3

Respondent #3	For the 3 websites, all information looks very important, mostly for Websites #1 and #3. Website #2 are for children I think.
Question #5: After using the Website #1, Website #2, and Website #3 websites, which one do you think you'll use in the future and why?	
Respondent #1	Yung Website #1, I like na may interactive stories and quizzes siya, and I also like the animations.
Respondent #2	Website #1, it has the best animations and drawings among the 3 of the websites.
Respondent #3	I want to use Website #1 in the future, I think it's going to be great for kids.

These data from the Competitive Analysis Interview for the demographic of students presents: For navigation, Website #1 and #3 are preferred by the majority because of their similarity for the easy of browsing through the site, while #2 was too complex; Scrolling is also mentioned as a difficulty for Website #1. In terms of design, the respondents simultaneously prefers Website #1's design, Website #2 was viewed to be plain, but better in design for Website #3, which lacks uniformity in presentations. Each respondent prefers the functionality of buttons in Website #1, standing out among the rest, while Website #2 is also commended for interactive animated effects, which can also be seen in Website #3 minimally. The responses are varying for determining how informative the websites are, Website #2 is commended for a material having the most amount of information, Website #3 is clear and straight to the point, yet wasn't engaging, while Website #1 is commended for its share of products with stories and quiz. Lastly, all of the respondents prefer to use Website #1 in the future because of its design and potential content in the future.

Teachers Competitor Analysis Respondents

Table 9

Teacher Competitor Analysis Questions and Responses

Question #1: How easy was it to navigate through (Website #1/Website #2/Website #3)? Please compare the navigation experiences across all three websites.

Respondent #1	W#1 - It was easy to navigate all 3 websites. Though most of it focused on environmental issues, except for the canvas – more on resources. Easy navigation, however, the first website is very simple. W#2 - The second one there's a lot of buttons and functional tabs. W#3 - is also easy to navigate, very simple as well like the first website. Pinaka simple – less buttons and navigation. Content is also few/limited.
Respondent #2	Madali lang siya kasi may mga buttons naman, Madali din siya makita, so alam kung papaano siya i-navigate kasi may mga buttons naman
Respondent #3	For website 1, ok naman Madali if madiscover yung scrolling. Website 2, madali rin naman as well as Website 3, easy to navigate.
Question #2: What are your thoughts on the design of (Website #1/Website #2/Website #3)? How do you perceive the differences in visual design among these three websites?	
Respondent #1	W#2 - The second website mainly focus on simpler, minimalist because of the services/products/purpose they offer. Colors are limited. W#3 - Whereas the 2 websites, they used bright colors. Between the two, the third website used real scenarios, W#1 - Compared to the first they used animations and is more cartoon-y (preferred for students)
Respondent #2	When it comes to the design, (Website #1) nasunod naman ang mga principles ng designing a website, nandyang ang mga contrast, readability. Para sakin, (Website #1) yung mga highlight, mga texts, readable naman, then yung deign background niya hindi naman niya natatakpan yung content. Compatible and nag cocompliment background sa content, (Website #1) lalo na dito sa books kasi na-highlight mo mga books. Pinakanagustuhan ko yung sa mga books kasi simple lang at madaling i-navigate. Hindi ganung ka-extravagant ang design. Website #3 ang design ay angkop sa content. Simple lang, may mga point lang na dito madilim… text medyo na-overpower ng background. Siguro medyo lagyan mo ng highlight dito para mas Mabasa. Overall okay naman design, pero mas gusto ko Website #2.
Respondent #3	Gusto yung ephilog website 1 kasi interactive, and gusto ko color combinations niya, Maganda. Naseserve niya purpose na nagbibigay information. Madali siyang tandan. Website 2 is very plain. Website 3 maganda din, hindi pa ganun karami info. Walang uniformity.

Question #3: How effective were the interactive elements (e.g., buttons, animations) on (Website #1/Website #2/Website #3)? Please compare the interactivity across these websites.	
Respondent #1	Website #2 buttons and references are in the website, meaning there are a lot of content available. Website #3 is better with the number of content. Website #1 Target audience is youth, can cater elementary students – due to simple designs and animation. Limited content. Content (quizzes, stories) – friendly to users, will gain interest.
Respondent #2	Sa quiz okay naman kasi pwedeng sumagot. With regards sa pangalawang website, okay naman kasi makakapili ng books, pwede rin magdownload. Sa third naman more on informative lang yung purpose.
Respondent #3	Website #1 very effective, it's clickable. Na-enjoy ko. Website 2 okay naman, Madali naman ang clickable din. Website 3 wala masyado, ayos lang din.
Question #4: How informative did you find the content on (Website #1/Website #2/Website #3)? Compare the quality and depth of content among these three websites.	
Respondent #1	I assume each websites have different audiences W#2 – Kids to or mostly adults since it's informative. W#1 – I really appreciate the quiz and stories part. W# - What is the target audience for this one? Adults? Yeah, I think it is for adults so each sakanila is may purpose.
Respondent #2	Ang information naman ay depende sa user, kagaya ng mga books. Dapat siguro content is diverse, ibig sabihin content hindi lang for kids, pwede for teens or for adults. Sa website nito, ang magiging viewers mo ay probably kids. Bihira adult viewers. Pagdating sa website and mga computer (as for his field) users ay hindi na masyado sa ganitong klaseng content. Gusto na nila more on technology. Kailangan updated ka sa kung ano napapanahon pagdating sa content. Gusto kong content is more on technology talaga.
Respondent #3	Website 1 sa quiz may ma-reretain na idea/facts/information and mas Madali tandan. Sa stories Maganda rin. Website 2 okay naman content kaso kailangan mo idownload ehsame with website 3. Maganda dito mga blogs, marami mabibigay info.
Question #5: Based on your experience with (Website #1/Website #2/Website #3), which website would you prefer to use in the future and why?	

Respondent #1	I think each website has a purpose, no preference.
Respondent #2	I prefer Website #2, simple lang at madali intindihin. Mahilig kasi ako sa books.
Respondent #3	I prefer Website #1. Aside from design, interactive siya and kung ito papagamit sa bata, may makukuga na values and may retention skills, hindi siya makakalimutan agad ng bata. And colors nakadagdag design, may wow factor.

This Competitor Analysis Interview's data for Teacher demographics presents: The respondents emphasizes that every website was easy to navigate, yet one points out that Website #2 had a lot of links, but it can be functional. With regards to the visual appearance of the site, the respondents emphasized how the Website #1 stood out from the other websites; one respondents points out that each purpose are different which is coherent to the designs. Regarding the interactivity, Website #1 have also stood out, being the most engaging through the animation and quizzes and caters the younger audience. On the other hand, Website #2 is more interactive on its practical side which is straightforward to the purpose of the material of providing resources, while Website #3 was more on simplistic and had fewer interactive features. The respondents stated that the information for each site are naturally informative depending on their respective target audiences, with most implications that Website #1 had a different take on informing the content. Lastly, each respondent had varying statements, one had no preference because of differing purposes of the websites, the next preferred Website #2 which held more content materials of story books, and the last preferred Website #1 because of its interactive features and the treatment of providing information with retention and engagement.

Parents Competitor Analysis Respondents

Table 10

Parent Competitor Analysis Questions and Responses

Question #1: How easy was it to navigate through (Website #1/Website #2/Website #3)? Please compare the navigation experiences across all three websites.	
Respondent #1	Ok naman, madali naman bawat isa sakanila. Sa Website #1 siguro pinaka-simple. Yung Website #2 medyo magulo kasi iba't ibang tab binubuksan pero ok naman din. Website #3 simple lang din.
Respondent #2	Madali lang silang lahat, may mga troubles lang pero malalaman mo naman kung pano later on. Website #1 most of it madali lang i-

	browse medyo hirap lang sa pag-scroll sa stories. Yung Website #2 yun ok siya madali. Tapos yung Website #3, madali lang rin.
Respondent #3	Everything is easy to use, although for me ang easiest is Website #1. Ang Website #2 and #3 I think complex siya.

Question #2: What are your thoughts on the design of (Website #1/Website #2/Website #3)? How do you perceive the differences in visual design among these three websites?	
Respondent #1	Magkakaiba sila eh. Yung Website #2 pinaka-malinis and simple, yung Website #1 naman pang-bata yung dating niya cute, tapos yung Website #3 parang pang-company or parang formal ba yung dating.
Respondent #2	Iba iba sila eh, parang yung pinaka-marami na design yung sa Website #1, kasi bata yung mga gumagamit. Tapos yung Website #2, parang pang-bata rin pero clean siya, minimalistic. Yung Website #3, medyo magulo nag nag-mimix yung mga designs.
Respondent #3	The designs for each websites are all good, may different styles lang sila, but for me mas gusto ko yung design ng Website #1 as compared to the other two.
Question #3: How effective were the interactive elements (e.g., buttons, animations) on (Website #1/Website #2/Website #3)? Please compare the interactivity across these websites.	
Respondent #1	Yung sa Website #2 and #3 simple lang parang yung usual lang na buttons and animations, pero yung Website #1 dun siya nai-iba mas interesting yung mga buttons niya.
Respondent #2	Yung sa Website #2 and Website #3, parang usual na websites lang sila yung normal lang na pindut-pindot. Pero yung Website #1 maganda yung pag-utilize niya ng mga buttons yung may meaning bawat isa.
Respondent #3	Mas lamang yung for Website #1, more on animations ang focus ng designs niya, as compared to Website #2 and #3 which are simple lang for the both of them.
Question #4: How informative did you find the content on (Website #1/Website #2/Website #3)? Compare the quality and depth of content among these three websites.	

Respondent #1	Maganda yung details ng lahat, para dun sa dalawa (Website #1 and #3) nakita ko na parehas yung topic nila, yung Website #2 lang yung medyo naiiba, lahat naman sila informative pero medyo naiba lang din sa content yung sa Website #3 parang di siya pang kids.
Respondent #2	Informative naman lahat. Yung Website #1 for kids yung style niya, naka-align ba yung style sa comprehension nila, same din with Website #2 pero parang professional type yung designs. Tapos yung Website #3 naman pang adults na since organization type siya.
Respondent #3	For me mas diverse yung content ng Website #2, marami siyang stories of different topics for the story books, mahilig din kasi ako mag-basa so mas nagl-lean ako sakaniya. Yung Website #1 naman konti pa kasi and parang focusing lang siya on one thing which is water pollution. Website #3 ok naman din, informative but mas nakakaakit yung 2 others (Website #2 and #1).
Question #5: Based on your experience with (Website #1/Website #2/Website #3), which website would you prefer you or your child to use in the future and why?	
Respondent #1	Para sa akin yung Website #1, mas bagay nga siya for kids and feeling ko matutuwa dito mga bata pag ginamit nila tapos makakapag-aral pa sila, kumbaga sabay.
Respondent #2	For me very interested ako sa Website #1, bago siya tapos feel ko marami pa siyang mapopost in the future na matutotunan ng mga bata.
Respondent #3	I think yung Websites #2 and #1, but mostly siguro #2, I like how accessible yung mga resources nila na maramihan, although same sila ng vibes sa Website #1, for me mas simple lang yung (Website) #2.

For the last Competitive Analysis Interview, which are from the Parent demographics, the data indicates: The respondents emphasized that Website #1 was the easiest to navigate which can be understandable for a younger audience, which is also the case with Website #3, while Website #2 is complex. The respondents prefer the visual appearance of Website #1 among the group, with the effective use of the features, while Website #2 was more on simple and professional that could be less appealing to children, and Website #3 is formal and somewhat cluttered. For the interactive elements, Website #1 excels in terms how they respond to interactions, while the other websites are programmed to a usual style. The informative content are stated to be varying of audiences, especially for Website #3. Finally, the respondents prefer to use Website #1 for future use because of its engaging educational content and interactive design, which are suitable for children; One respondent prefers #2 because it holds more content as compared to other websites as well as how simple it looks.

Conclusion

The project output has highlighted the effectiveness of art direction through the medium of User Interface and User Experience, along with the topic of environmental problems. The findings of the study through the three (3) data gathering methods conducted have revealed that there is significant engagement onto the material upon being used by the Primary target audience of the study, while there is also support coming from the Secondary audience, bearing the implications of agreeing with how this material will help the Primary audience comprehend the topic. The User Interface of the website were generally perceived positively, in terms of how visually appealing and empathetic the illustrations and designs made, while the User Experience were also commended for a unique approach of how the buttons are being interacted with by the end-users, from allowing the aspects to lean onto the theme and framework of the foundations of Art Direction. Conversely, there are also suggestions for improvement of the experience yet were only based on the technical aspects of the site which can be improved by the website developer, along with the desires of the respondents to procure more content from the website in actual operations. Overall, the Ephilog beta prototype website excels as an effective educational tool in its early phase research, with a strong potential for future use and content expansion

Recommendations

This capstone creation project holds a timeline of versatile stages. As a Multimedia Project, it encompasses different mediums put into one, catering to different roles in the field. With this, the project has faced a very fast-paced process as it revolves around a requirement for an academic institution, by this means, there have been several decisions made that restricted the foundations of the output at the early onset of the capstone project creation, along with the demand of logistics.

Research Topic

The Persona Method, in part of the User Experience Research, will not be employed if the project were conducted outside the constraints of the academic institution's timeline, primarily due to the time-intensive nature of this method. Developing personas requires substantial research, which can be a disadvantage under tight deadlines. The process of gathering data encountered significant drawbacks, notably the limited number of respondents. This limitation stemmed from the extended duration required for website development, which constrained the availability of participants willing to engage over a prolonged period.

Creative Process

Website design and building should be executed by a dedicated team rather than by an individual. A collaborative approach leverages the different skill sets and expertise of professionals, such as for UI/UX designers, front-end and back-end developers, content creators, and project managers. A team will be more effective for the complexities and scale of website development, allowing for more robust problem-solving and innovation. Likewise, these kinds of projects shall require a rigorous website developer, one that can stay dedicated to the craft and idea that the designer is trying to convey through their artworks.

These recommendations focus on improving the project's planning. Working under tight academic deadlines means making smart choices early on. Designing and building a website should be a team effort, combining different skills to create a better final product.

By following these recommendations, future projects that involves the concepts of User Interface, User Experience and Art Direction shall become more effective.

Appendices

Appendix A

Project Links

- Website: https://ephilog.site
- Prototype: https://www.figma.com/proto/Y7rb1Fh2zTXq7fctpmdqG1/Ephilog-Web-Design-Prototyping?page-id=0%3A1&type=design&node-id=1-609&viewport=597%2C653%2C0.03&t=EVrEUw0UguZAdCWH-1&scaling=scale-down&starting-point-node-id=1%3A423&mode=design

Appendix B

Question for Student-focused Interview

- **Competitive Analysis Questions:**

1. Was it easy to find your way around the Website #1, Website #2, and Website #3 websites? How do they compare in terms of browsing?
2. What do you think about how the Website #1, Website #2, and Website #3 websites are designed? How do they look different to you?
3. How well did the buttons, animations, and other engaging stuff on the Website #1, Website #2, and Website #3 websites? Which ones did you like best?
4. How much did you learn from the information on the Website #1, Website #2, and Website #3 websites? Which one had the best info and why?
5. After using the Website #1, Website #2, and Website #3 websites, which one do you think you'll use in the future and why?

- **Usability Testing Questions**

1. What did you think when you first saw the Ephilog website? How would you describe how it looks and feels?
2. Was it easy to find your way around the Ephilog website?
3. Did you click on any buttons or menus in the Ephilog website? How did it go?
4. How much did you learn from the information on the Ephilog website?
5. Did you have any trouble finishing tasks on the Ephilog website? Can you explain?
6. What do you think about how the Ephilog website is set up? Do the colors, layout, and text style look good to you?
7. On a scale from 1 to 10, how likely are you to visit the Ephilog website again?

Questions for Teacher-focused Interview

- **Competitive Analysis Questions**

1. How easy was it to navigate through (Website #1/Website #2/Website #3)? Please compare the navigation experiences across all three websites.
2. What are your thoughts on the design of (Website #1/Website #2/Website #3)? How do you perceive the differences in visual design among these three websites?
3. How effective were the interactive elements (e.g., buttons, animations) on (Website #1/Website #2/Website #3)? Please compare the interactivity across these websites.
4. How informative did you find the content on [Website #1/Website #2/Website #3]? Compare the quality and depth of content among these three websites.
5. Based on your experience with (Website #1/Website #2/Website #3), which website would you prefer to use in the future and why?

- **Usability Testing Questions**

1. What are your first impressions of the Ephilog website? How would you describe the overall look and feel of the website?
2. Were you able to easily navigate through the website?
3. Did you interact with any specific features (buttons, menus, search bar, etc.) on the Ephilog website? Please describe your experience.
4. How informative ?
5. Did you encounter any difficulties while trying to complete tasks on the Ephilog website? Please describe.
6. What are your thoughts on the visual design (layout, colors, typography) of the Ephilog website?
7. Would you use or recommend this website for teaching- e.g. as introductions or ice breakers for the class? Why?

Questions for Parents-focused Interview

- **Competitive Analysis Questions**

1. How easy was it to navigate through (Website #1/Website #2/Website #3)? Please compare the navigation experiences across all three websites.
2. What are your thoughts on the design of (Website #1/Website #2/Website #3)? How do you perceive the differences in visual design among these three websites?
3. How effective were the interactive elements (e.g., buttons, animations) on (Website #1/Website #2/Website #3)? Please compare the interactivity across these websites.
4. How informative did you find the content on [Website #1/Website #2/Website #3]? Compare the quality and depth of content among these three websites.
5. Based on your experience with (Website #1/Website #2/Website #3), which website would you prefer to use in the future and why?

- **Usability Testing Questions**

1. What are your first impressions of the Ephilog website? How would you describe the overall look and feel of the website?
2. Were you able to easily navigate through the website?
3. Did you interact with any specific features (buttons, menus, search bar, etc.) on the Ephilog website? Please describe your experience.
4. How informative ?
5. Did you encounter any difficulties while trying to complete tasks on the Ephilog website? Please describe.
6. What are your thoughts on the visual design (layout, colors, typography) of the Ephilog website?
7. Would you or allow your child to use this website? Why?

Appendix C

Project Assets

Branding Identity

Title	Information
Brand Personality	The brand should convey local, aquatic, and educational factors to its presence. The brand should feel familiar, friendly, and playful. It should look accessible and have a sense that it can be able to connect with the audience culturally and timely.
Brand Logo	

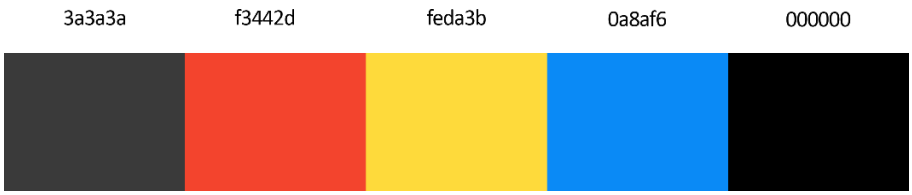
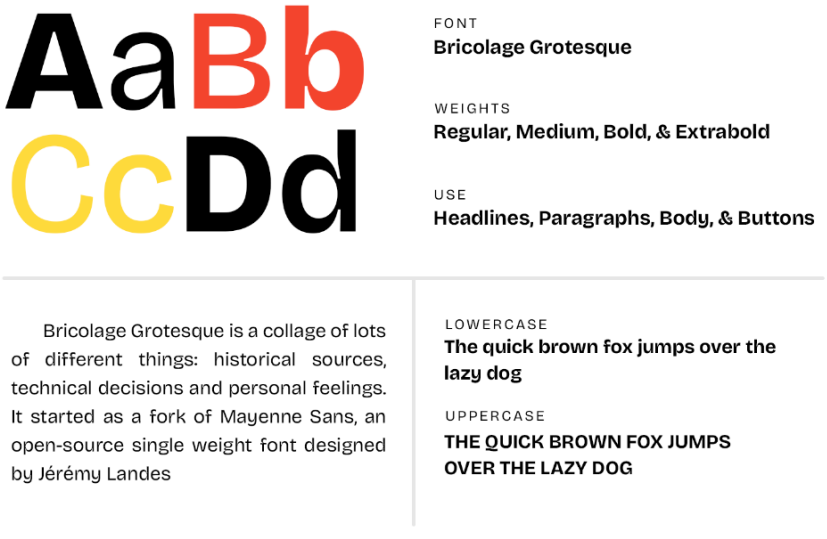
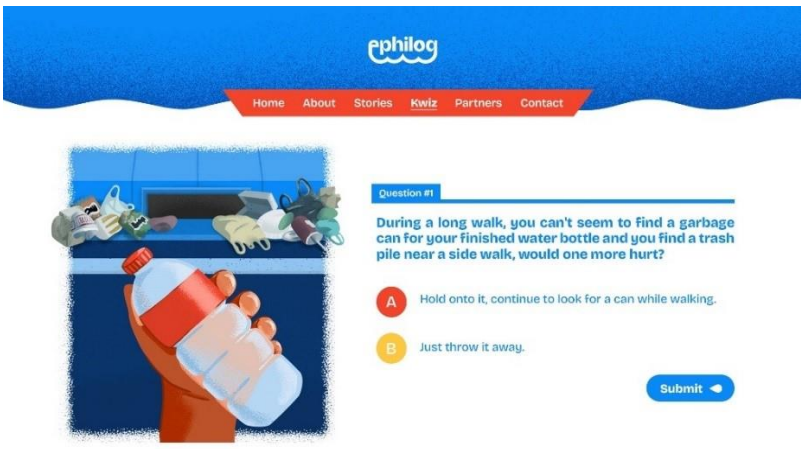
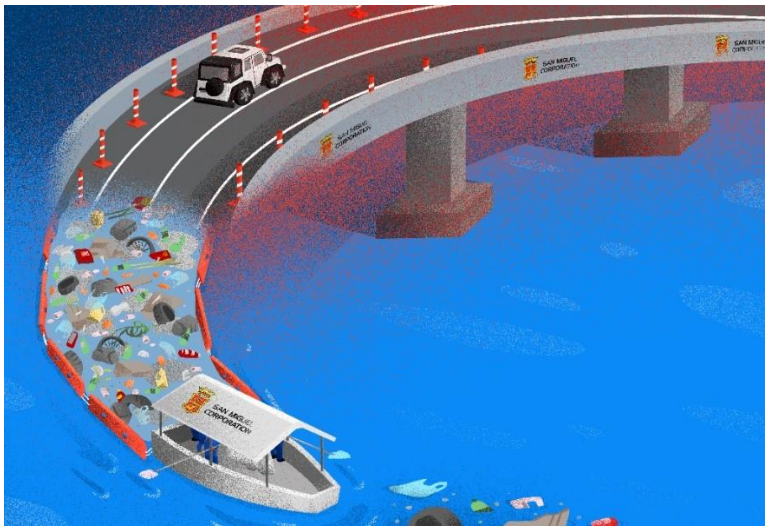
<table>
<tr><td>Brand Description</td><td>The brand name ephilog is formed to present the topic and setting of the capstone project. The letters “p” and “h” are highlighted to point out the setting where the project is taking place. The word “-ilog” is inserted to inform the topic of the brand’s product. While altogether, it is a unique take on the word “Epilogue” that will sum up the concept of project that is supported by the theory of Consequentialism; The brand will present its products through a consistent focus on the consequences of actions, and will highlight what will come after, hence, ephilog.</td></tr>
<tr><td rowspan="2">Color Palette</td><td> 

Fig. 9 – Ephilog Color Palette</td></tr>
<tr><td>The color palette is made as correspond to the setting of the brand, the Philippines. As the country’s flag is presented with the primary colors, this will allow the audience to be familiar with the brand’s identity even with just the colors that they can see.</td></tr>
<tr><td>Typography</td><td> 
</td></tr>
</table>

	The typography was chosen to appear as modern, and people oriented. The 'Bricolage Grotesque' is a free for commercial use font from Google Fonts. This is a requirement for the project to make use of the font family in the website development.
Visual Samples	
	

<table>
<tr><td rowspan="2"></td><td colspan="3">  </td></tr>
<tr><td colspan="3">The visuals shall consist of digital and graphic illustrations, these visuals should aim to look appealing to pre-adolescence and teenagers alike that has a comic and surreal style of digital illustrations.</td></tr>
<tr><td>Brand Mascot (3 Versions)</td><td> </td><td> </td><td> </td></tr>
</table>

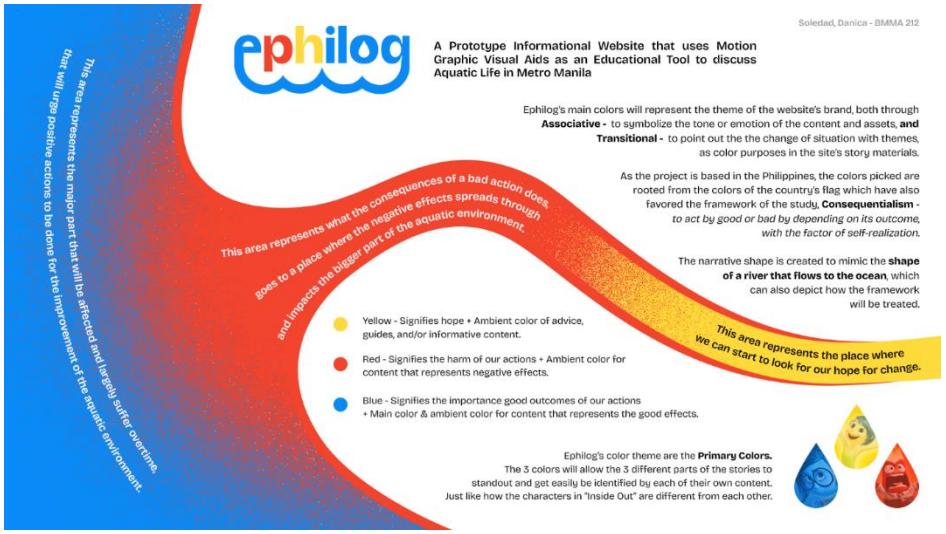
	• **Name:** Janjan • **Species:** *Pterygoplichthys disjunctivus, or Plecos,* but famously known as the Janitor Fish • **Symbol:** The Janitor Fish is named after being a fish that consumes and cleans almost anything. This fish incidentally is introduced and survives through the rivers of Metro Manila, although invasive, but does not harm other fish species (Fernandez, 2003). It potentially symbolizes the act of improving our behavior towards the aquatic environment, which has a long and prevalent problem of water pollution – The accessory is a hat made of rubbish straws, which presents the colors of the brand that symbolizes the characteristic of a Janitor Fish being a natural scavenger, as if mended and recycled to form a new object. Janjan can be model for the growth of potential to achieve climate justice.
Color Direction	

Table 3

Phase 1: Observational Analysis

	Save the Philippine Seas	
	https://www.savephilippineseas.org	
	Navigation and Layout:	• Clear and intuitive navigation with prominent menus. • Easy access in various sections, including campaigns, events, and educational resources.

	Visual Design:	• Vibrant color scheme and engaging imagery related to marine conservation. • Well-balanced design elements, visually appealing to a broad audience.
	Interactive Elements:	• Limited interactive features observed, potential for enhanced engagement.
	Content Quality:	• Comprehensive content covering a wide range of marine conservation topics. • In-depth articles, but the level of interactivity could be improved.
	DENR Kids Corner	
	https://www.denr.gov.ph/index.php/news-events/62-kid-s-corner	
	Navigation and Layout:	• Government-affiliated design with straightforward navigation. • Direct links to news, events, and kid-specific environmental content.
	Visual Design:	• Minimal design, aligning with government standard. • Possibly lacking vibrant visuals; may need more appeal for younger users.
	Interactive Elements:	• Limited interactive features observed; focus on informational content. • Potential for increased engagement through gamified elements.
	Content Quality:	• Authority in environmental content, providing reliable information. • Educational resources suitable for children, but interactivity may need enhancement.

	Haribon Foundation	
	https://haribon.org.ph	
	Navigation and Layout:	• NGO-affiliated design with a focus on biodiversity conservation. • Intuitive navigation with sections dedicated to campaigns, projects, and educational content.
	Visual Design:	• Professional design aligning with the NGO's credibility. • Limited use of vibrant visuals; potential for increased engagement.
	Interactive Elements:	• Observations of limited interactive features; opportunity for more engagement. • Primarily focused on informational content.
	Content Quality:	• High-quality content covering biodiversity and conservation. • Educational resources suitable for a wide audience.
	CANVAS	
	https://www.canvas.ph/art-and-stories	
	Navigation and Layout:	• Navigating through the site is clear and direct to links. • No unnecessary advertisements.
	Visual Design:	• The design is clean, modern, and edgy. • Design clearly focuses on emphasizing their products.

	Interactive Elements:	• Limited interactive elements, opportunity for more engagement • Lacks interactive elements; Primarily focused in providing products and information.
	Content Quality:	• Excellent quality of resources of various topic. • Timely, provides and recommends the current best books in the market. • Provides free and downloadable reading resources.

Observations

- Through creating the website, it should prioritize quality of visuals elements. While other websites do consider this, informative organization/government websites may not (e.g., DENR Kids Corner Website Page). The visuals should also be aligned with one style in use.
- The website is planned to operate as a digital library, canvas.ph is an excellent example in curating the design style of the website. Although, their practice of letting users download the resources could cause harm for the clients or creators. The project will refine this through embedding the assets in the website's system, while also allowing the users to easily access the modules.
- The branding identity of the website is essential to be aligned through the recognition, relation, and consistency of the intentions of the project, this includes the logos, buttons, styles of visual elements, and typography. The HARIBON website encapsulates the theme of their project with appealing and well curated visuals, alongside their informative content, which allows the audience to be easily familiarized with the purpose of the brand.
- Running through a website can be a bore when the visuals are not much interesting, although Save the Philippine Seas and HARIBON websites, provide curated visuals, it can lack interactivities. Including interactive elements can help the website to gather traffic and interest of the audiences, which can be captivating if the content and visuals can be used together collectively.

User Experience Design

	Objective of the Project

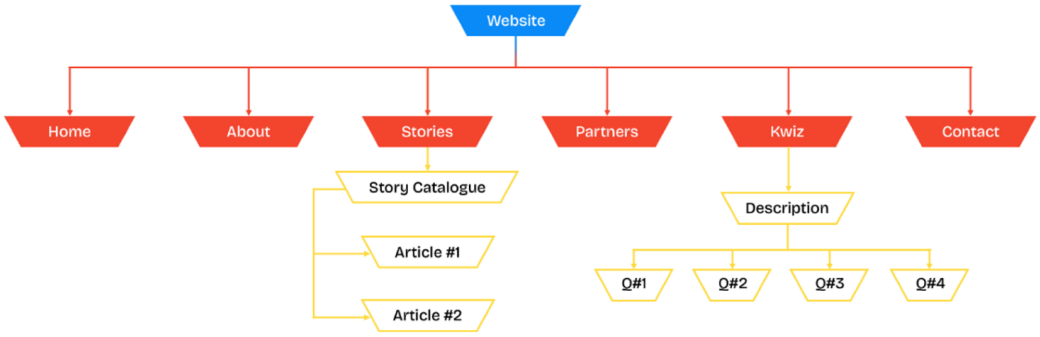
	A prototype website that will hold stories and interactive features that explains the conditions of the aquatic environment of rivers within metro manila, but unlike other informative websites, ephilog will be a digital library website and will take on storytelling in a new form – e.g. stories will be accompanied with visual aids, but instead of seeing still pictures, the paragraphs will be demonstrated with loops of motion designs to explain them further. The website will be composed of dynamic visuals and interactive elements in the aim to garner more web traffic and content engagement.
	Goals
	Based on the objective of the project to effectively inform the Filipino youth about the current problems of aquatic biodiversity within a locality, the objective of the site will therefore revolve around the user engagement factor of the website in terms of . These specific goals are formulated: 1. To enlighten the users about the current conditions of local river biodiversity. 2. To have the users engage and learn from interactive quiz features. 3. To be able to easily recognize what the interface's design is representing. 4. To entice users with the visuals on the website. 5. To maintain attention onto the content of the website.
	Problems & Solutions
	Problem #1: There are no platforms that are discussing biodiversity of aquatic environment in the Philippines that are targeted to the youth. **Solution:** To establish a website that will allow to give out information about the biodiversity of aquatic life, initially focusing on the rivers within metro manila, as an introduction to propose for a wider scope of content in future works. **Problem #2**: Existing resources are complex and tedious for a younger audience to comprehend. **Solution:** Compose stories that will let the younger audience understand the content more that are applicable in their level of comprehension. **Problem #3:** Present visual aids are too limiting and does not engage the audience well with the content. **Solution:** Produce visual elements like motion graphics and interactive elements that will allow to enhance the storytelling experience for the younger audience.
	Target Audience & User Persona

<table>
<tr><td></td><td>Target Audience</td><td colspan="2">Ephilog's primary audience are the youth, aging from 9 to 17 years old, in this way younger Filipinos can build character, love for culture, and find their advocacies in an early age.</td></tr>
<tr><td></td><td>User Persona</td><td>Primary Audience</td><td><u>Iñigo Lopez</u>
Age: 10 y/o
Occupation: 5th Grade Private School Student
General Information: I'm a very curious kid and I love playing online games! But hear me out, I love science, it's my favorite subject in school! I want to be scientist when I grow up because I want to learn more about our surroundings!
Goals:
• Expand knowledge about science
• Understanding reading materials independently
• To have access to engaging learning resources
Challenges:
• Turn away from focus
• Insufficiency of current informative materials for his age range
• Trouble with understanding native language

<u>Isabelle Dela Cruz</u>
Age: 16 y/o
Occupation: 12th Grade School Student – Science Club Officer
General Information:
I love the environment! My club members and I would like to hold environmental activities for our school, but we don't know what policies and goals we should follow. I'd like to have more awareness as well as my peers, for us to make a change for a better future for our environment.
Goals:
• To be an environmental advocate
• To Improve and extend knowledge about the environment
• To contribute to healing the environment
Challenges:</td></tr>
</table>

			• Insufficient resources that talks about local climate problems • Local environmental policies are too complex to read for their age • Hard to find resources about what they can do to contribute to improve the state of the environment
		Secondary Audience	**Gerald Santos** **Age:** 27 y/o **Occupation:** (Science or Araling Panlipunan) Public School Teacher **General Information:** I teach Science to kids in the Primary Level Education. Aside from teaching general lessons to my students, I also want them to learn more about the current circumstances that happen around the environment. **Goals:** • To teach current scientific involved events to their students • To deliberately cultivate the act of having empathy and compassion among the students • To spread awareness and inform the youth about ongoing events **Challenges:** • The lack of accessible teaching resources with recent topics and that are easy for the youth to understand • Gathering resources alone requires much effort for a short portion to put in lesson plans. • Creating resources about current events are requires time consuming **<u>Anna Torres:</u>** **Age:** 38 y/o **Occupation:** Working Mom **General Information:** Being too busy at work makes me have less time to discuss things with my child, aside from what happens in school and in their life, I want to be able discuss with

			them more about news, make them aware of what's going on around us. **Goals:** • To discuss current events of the surroundings with their children • To strengthen their children's character with empathy and compassion • To make their child aware of the problems of their surroundings **Challenges:** • Lack of time to thoroughly convey current problems to their children • Difficulty of discussing complex real-world problems to their children • Platforms at present that children may use, provides varieties of information that will be hard to monitor.
	Scope		
	The website will be revolving around the arts and design qualities, with the support of the study's framework regarding Environmental Ethics on Consequentialism, to use them as my project's strategy to meet the goal of enhancing user engagement. As the website will be used by children as an educational tool, the product will be limiting the functions of the website to focus on content provision and how it can be presented visually. The main features that the project will highlight for the brand's product are the stories, quizzes, background of the brand, and moreover, the design interface direction. In this way, my project can solely emphasize its main objective of forming effective communication with arts and design integration.		
	Flowchart of Pages		



Surface

The interface of the website is an important factor in maintaining the interest of the consumer onto the website as well as allowing them to easily run through the site without complications.

In relevance of the usability, the system interface should be created based on the capacity to use by the target audience, which should consist of straightforward navigations and interactions within the site. With regards to the artistic approach, the website is aimed to be compliant to the environment of the topic, which will consist of dynamic visuals that can enhance audience's engagement.

These factors will be planned out through wireframing, the process that will lay out the website's navigation and flow, initially constructed in a skeleton form as the basis of the whole functionality and design system of website's interface.

Content Writing

Story Content Writing

Story Title	Part	Content

Pasig Story: "Sinag Pasig"	Short Story	**Meet Janjan, a Janitor Fish living in the infamous Pasig River, the biologically dead river.** Janjan is no ordinary fish, **he's a natural scavenger, clean-freak for algae, as much as he is also a collector**, gathering stuff from the river to build a home. Most of the time, Janjan explores through the river and spots these bright and lightweight objects scattered all around. Looking for things that are great foundations for his house and light enough to carr around. **Little did he know, these were actually pieces of trash that are crumbling and making his hom weak.** He wishes he had chosen sturdier foundations. As time passes, **Janjan notices that something is changing, the riverbed becomes clearer!** He can see his friends, and discovered rocks on the river floor, perfect for a strong and cozy home! **He looks up and see humans cleaning the river.** He becomes inspired, so he puts in the same effort to build a new home. After so much hard work, Janjan's house finally stands proudly, made of these solid rocks that are even covered of his favorite algae! **But suddenly, darkness falls, lasting not just for a night but weeks.** He swims up and investigates but only to find a **massive rectangular rock above the river blocking the sun.** As Janjan is swimming back to his spot, he sees a deserted and lifeless scene. It was lonely, as many fish have left in search of a better home, and his once lively river is now quiet. **The joy was short-lived, and Janjan is left with nothing to do in the once-again lifeless river.**
	Report	**The Pasig River is known as 'dead' for many years**, which is why it is good to know that in 2021 it started a **clean-up project** for the **25 kilometer-long river**. Let's ask why just now? **Two reasons:** First is to **improve the economy**, or the country's **"money system"**. Second, and surprising as it sounds, **heavy traffic!** It's tricky, but let's make it make sense. The government let a **big company** to clean the Pasig River, **but there may be a catch.** After the clean-up project, the company is **planning to build a big roadway above the river,** that will be **19 kilometers long.** To make it easier for people to travel between cities quickly. **But rivers need sunlight, it helps plants grow in the water. Plants** are **food** for fish species like the **Janitor Fish.** But when something big, like this giant road, blocks the sunlight, **it's like the river loses its energy.** The **plants can't grow** and even as mighty and independent as a **Janitor Fish, can't survive whe they can't eat their food. The whole river ecosystem suffers once again.** **Now, they haven't started building the roadway yet,** but It's important to know that it is **proved that more roads are not the solution to traffic.** Other countries used to have the same roads that are above water, like **Cheonggyecheon in South Korea**, but now they **restored the old river** and turned it into a **new livelihood park for people to enjoy.**

	Epilogue	The **Pasig River** was **neglected** for a **long time,** and look at where it's gotten. Now that it's healing, **what will happen if it were neglected once again?** **If there will be big roadway to stand above the river, it will ruin the life of the river, again.** The Philippines is in love with cars, traffic will catch up later on. Soon in time, this roadway will be another pain with heavy traffic. This shouldn't have to be a problem when there are other ways of transportatio **But if we fight to improve the Pasig River,** we can have **hope** for its **good recovery and even make humans and aquatic species enjoy its life.** A park can be built beside it so we can have a good view of th waters, and aquatic species can come back and flourish to the new Pasig River, **just like the in Cheonggyecheon!** **You see, we have lots of similarities with the animals we co-live within our earth.** Janjan does not only represent fishes in Pasig River, **these problems also happen to a lot of our fellow Filipinos.** With project like these, **people could also leave there homes** to make way of building the roadway, or eventually leav because of its unhealthy aura. What we **humans** have is the **upper hand** to **either care for or abuse our nature,** while our **fellow helpless species** have **no other choice but to just watch and survive.**
Marikina Story: "Kamusta Ka, Marikina?"	Short Story	There is a **legend** about the **statue of a woman beside the Marikina River.** Her name was **Maria Quina,** and she was so ***pretty*** that she just loved looking at herself. **She lived in a town divide by a clear, lively, and rich of native fish river.** One day, as she sailed to cross the river on a boat, she dropped her small mirror through the water. She tried to reach out as it sank, but stopped when she saw her reflection in the enchanting waters. Maria stayed on the boat, and stared at herself in long and deep fascination. But suddenly a big storm came, and s got washed away by strong winds and waves. **That is the story on how she tragically drowned.** But many years later, a statue called **"Marikit-Na"** was built and it stood by the river. Maria awakens in a new worl but now tall, still, and stone. Somehow, **she feels connected to the water, but it's gray, muddy, and doesn't feel well.** Still, Maria is happy to see the lively town again. People visits the park to enjoy the area, the Marikina River, and the attractions, including Maria. But at some point, **the park disappears, literally. During strong storms, the river rises and causes the park to sink.** Maria saw **people suffering in the flood.** What could have happened to the river she used to know? As the water rose, she can see her reflection once again, but instead of being fascinated, she becomes terrified, **because even when she's now 40 feet tall, the water surges up to her waist.** Over time, **storms got worse,** and the **water rose even higher, reaching Maria's chest,** but that's the highest it cou reach for now. After the recent storm, she saw people **building walls** and **removing mud from the river.** She feels glad, as it seems that the **people** and **local leaders** are **fixing the cause of brutal flooding in the city.** **But the digging made Maria worried.** She felt the **river's life getting distressed,** there are less fish and not even th ones she's familiar of. As it **rains more and more these days,** Maria ponders, that even if this solution works for now, will it work for a long run? **She hopes for better plans to come, because if not, the river, town, and herself could once again face the same fate.**

	Report	**In Marikina City, typhoons bring big challenges,** especially with flooding since it located in a **valley.** Cutting too many trees, cities growing fast, bad drainage, and more rain from climate change **make things worse.** To measure how high the water gets, they use the Marikina Bridge, and during big typhoons in 2009 and 2020, it reached 21 meters and 22 meters, respectively. **To picture it, the first would reach a statue's waist, while the recent one reached her chest.** The local government and a Japanese agency are working together on a **'Master Plan' to fix the floodin issue.** They are doing things like **digging the river** and **building walls** to control floodwater. However, these are **temporary solutions and might not work if the climate behavior keeps on changing.** Experts say we need more solutions, like having **green land areas in flood-prone spots.** **A study points out that 75.25% of Marikina City are at moderate to high risk of flooding.** A city has lot of **concrete**, so when it rains. **Floodwater doesn't get absorbed by soil, and it rises too quickly.** Buildin walls could make floods worse in other places, so it's crucial to also have green spaces. China solved thi by creating 'Sponge Cities,' which are places with lots of green parks that **soak up water and stop flooding.** **Locals say Marikina River used to be clear and home to diverse fish species,** but its current state is not as healthy. **People** have thrown **plastic** and **chemicals into the river**, and being dominated by **foreign invasive fishes** that were dumped by locals who got tired of taking care of them as pets. This type of phenomenon causes many **fish** to go **extinct.** Constant dredging could further **hurt aquatic life** and **chase away fish species even more.** Today, only **one out of five remains, *Kanduli*** is the native species that still swims in the waters of the Marikina River.
	Epilogue	**Climate Change is like a wound. If you don't take care of it, it will get worse over time.** Now, imagine that **flood walls** and **river dredging** are like **bandages** for a wound, it wears off quickly, so you will have to change it again and again. **Let's look at two scenarios:** **In one scenario,** healing the wound with **bandages alone** didn't help it. The wound got infected and spread out, causing other parts to suffer. This is where the **flood walls couldn't control the rising wate** that it **started flooding in other areas.** While the **continuous digging, wasn't enough** to hold all the **water** and **wasted many aquatic life.** **In another scenario,** the wound was **carefully cleaned, medicated, and bandaged altogether,** to avoid from getting infected. Where the **flood walls** are built with **natural soiled lands,** to **sip** the **water befor going to other areas.** There's also **controlled digging**, that **saves** a **part of the aquatic life** in the river. Saving towns from high-rise floods while protecting the river aquatic environment. Climate Change may be Earth's wound, but ignore it, **it will wound all of us.** There's this saying where **Filipinos** easily **bounce-back** from **hardships,** it's the quote: **"Filipino people are resilient". We have been resilient for too long.** And maybe **like China,** this time we should try and make **Filipino places to be resilient.** **Maria is like a lot of humans, who tend to turn away from our surroundings,** and it caused her life. When she wakes as a statue, she saw her town in the new world **being ignored by the people,** and **nov it's slowly taking the life of aquatic species, people, and the even world.** So wouldn't the second scenario be more fitting for our future?

Trivia Content Writing

Question No.	Content
Question #1	"Guess the number of polluted rivers in the Philippines" **Interaction:** Intensity bar - from 0 to 50 and to 100 Answer: 42 According to the Ocean Cleanup's Map for River Plastic Pollution Sources, the Philippines has 42 river bodies that contributes about 1 to 3 million kilograms of plastic per year.
Question #2	"During a long walk, you can't seem to find a garbage can, and you find a trash pile near a sidewalk, would one more hurt?" **Interaction:** Choices a.) Just hold onto it, wait until you find a garbage can. b.) Throw it away **Answer: A** Trash thrown in canals end up in river and also ocean bodies, from being carried by the rain, wind, and other natural phenomena.
Question #3	What objects pollute rivers the most? **Interaction:** Choices a.) Plastic Waste b.) Glass Bottles c.) Metal Cans **Answer: A** According to Our World in Data, the group of plastic waste contribute most in water pollution.
Question #4	Is sunlight important to rivers? **Interaction:** Sun hovers to choices: True or False **Answer: True** Rivers have living ecosystems and require sunlight to allow aquatic species to survive

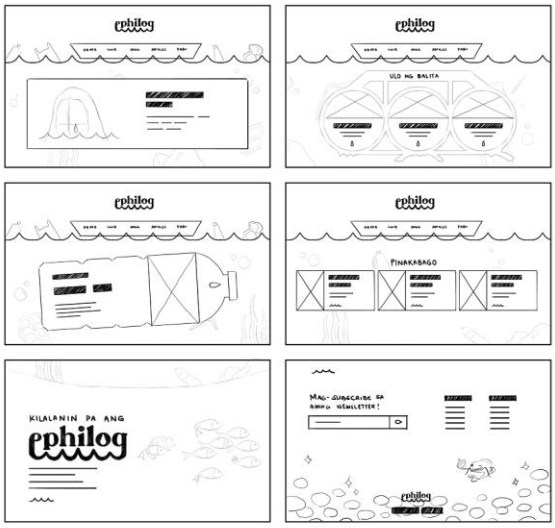
Question #5	You've just finished cooking and you're left with a small amount of leftover cooking oil. How will you dispose of it? **Interaction:** Choices a.) Pour into a container and throw it in the trash b.) Pour it down the kitchen sink drain. c.) Mix in with hot water and let it flow down the drain. **Answer: A** Oil is a key ingredient in shaping Fatbergs! These are soft blobs or can also be rock-solid blockers our drains, and lead to our rivers that can also cause water pollution.

Storyboarding

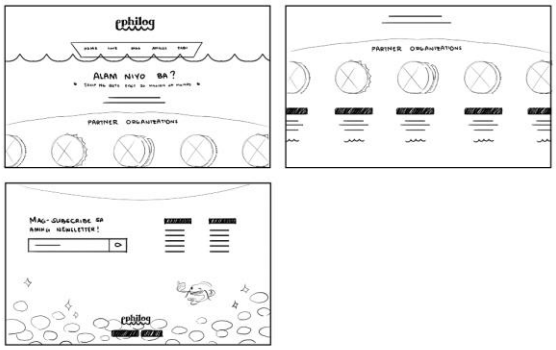
No.	Image
1.	**User Interface – Low-fidelity Wireframe Layout**

Ephilog Website Storyboard

- Home Page

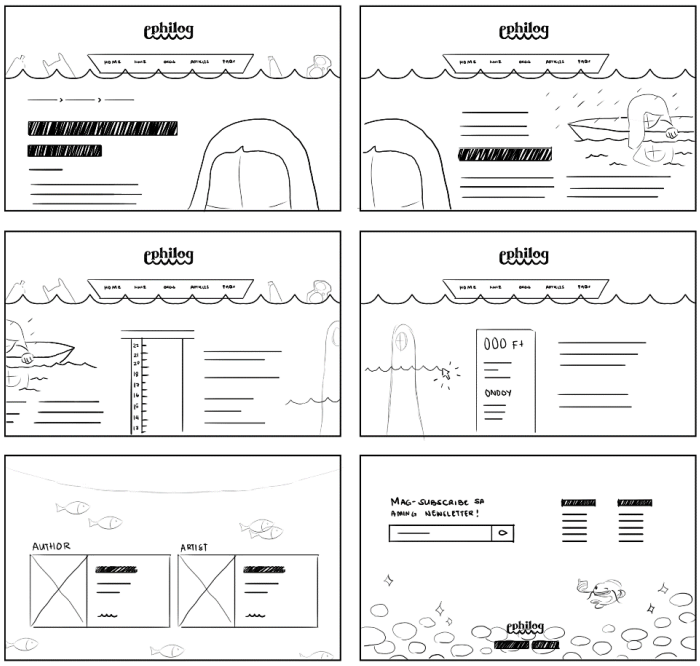


- Organizations/Partners Page

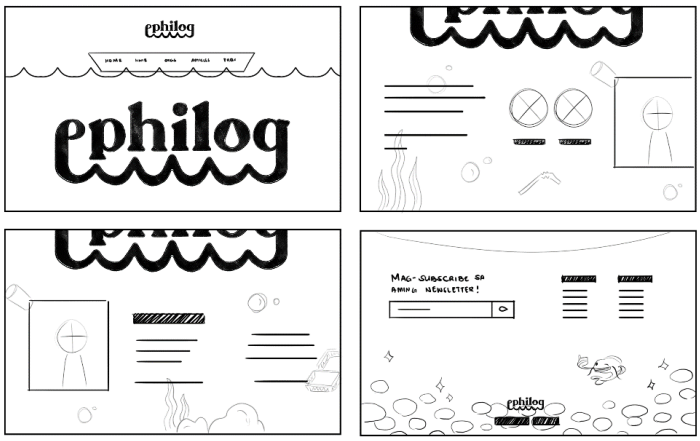


Ephilog Website Storyboard

- Articles Page

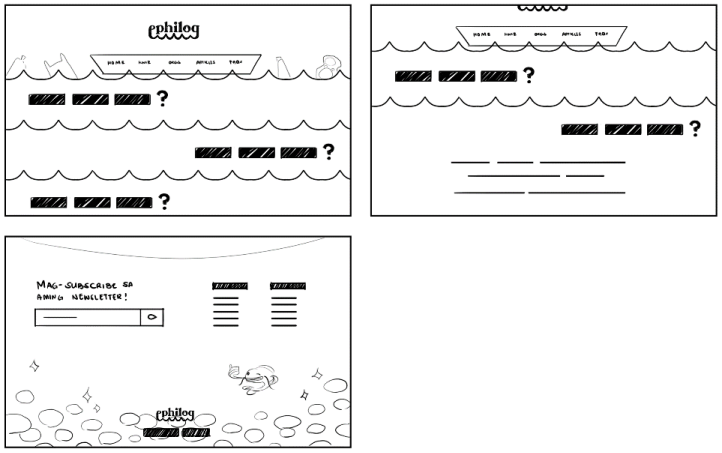


- About Page

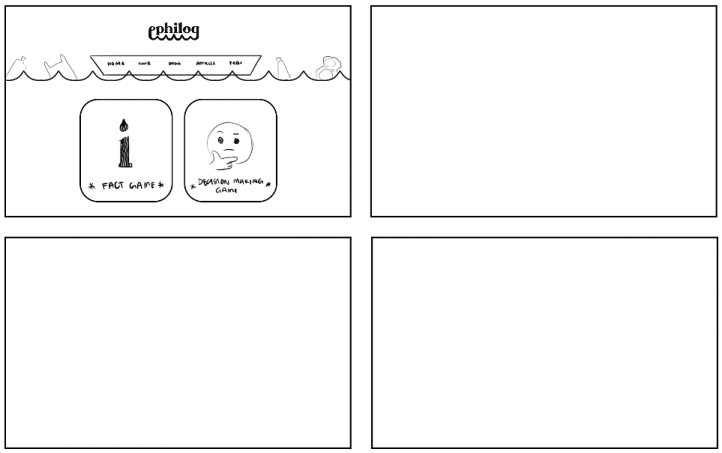


Ephilog Website Storyboard

- FAQs



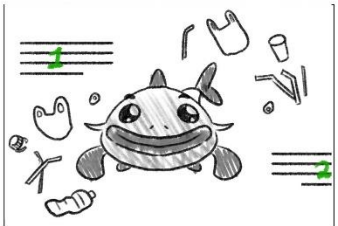
- Kwiz



2.	**Storyboards for Motion Graphics – "Sinag Pasig"**

Sinag Pasig - Motion Graphics Storyboard 1

Page 1



No. of Sequences: 2

Action

(1)
- Floating trash
- Janjan - Swimming
- Eyes Blinking

(2)
- Janjan - Swims away
- Straws and Cup taken away

Notes

Page 2

No. of Sequences: 1

Action
- Floating trash
- Parallax Foreground

Notes

Parallax will be done in web developing

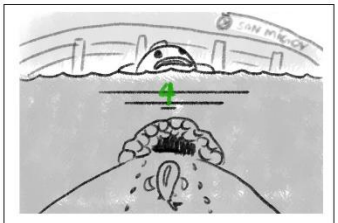
Page 3

No. of Sequences: 1

Action
- Swaying plants and trash
- Fishes floating
- Janjan Eyes Flashing
- Boat floating/waving

Notes

Page 4



No. of Sequences: 2

Action

(1)
- Janjan floating
- Red Shadow hovers over house (Right to Left)

(2)
- Janjan - Swims Up and appears in the surface
- Roadway appears (Rising up)

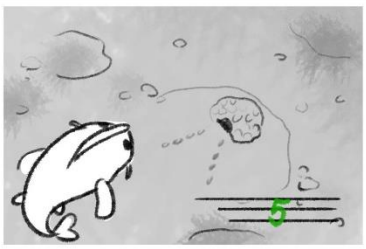
Notes

Transition:

- 1st Sequence - Water (Lower Part) is dominant the dominant Area
- 2nd Sequence - Surface and Water appears as held in the screen

Sinag Pasig - Motion Graphics Storyboard 2

Page 5



No. of Sequences: 1

Action
- Janjan Floating
- Green bits fading upwards (algae/plants)

Notes

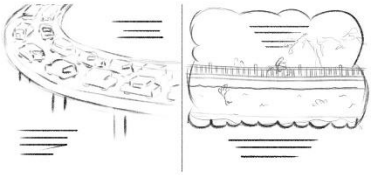
Page 6

No. of Sequences: 1

Action
- Middle Graphic - Boat & trash floating
- Vibrating Cars
- Small movements from other graphics

Notes

Page 7



No. of Transitions: 1

Action
- Vibrating Cars
- Fish jumping from water
- Shining Effect on water surface
- Bikers moving

Notes

Page 8

No. of Sequences: 1

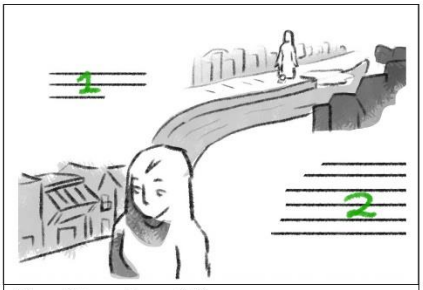
Action
- Janjan Floating
- River water flowing

Notes

3.	**Storyboards for Motion Graphics – "Kamusta Ka, Marikina?"**

Kamusta Ka, Marikina? - Motion Graphics Storyboard 1

Page 1 v.1



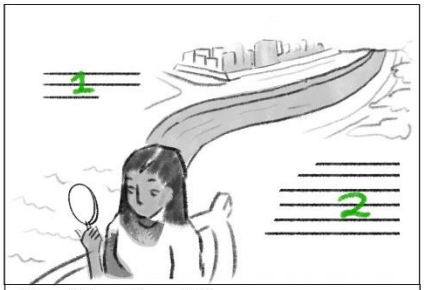
No. of Transitions: 1/2

Action

- River Water Flowing
- Floating Clouds

Notes

Page 1 v.2



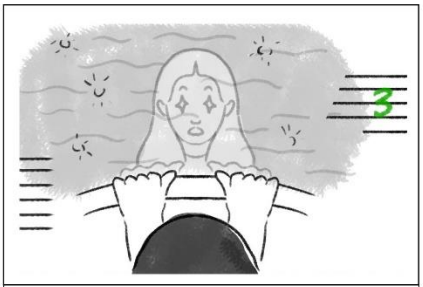
No. of Transitions: 2/2

Action

- River water flowing
- Maria - Head movement (looking/angle mirror)
- Mirror slips from Maria's hand (towards water)

Notes

Page 2



No. of Transitions: 2

Action

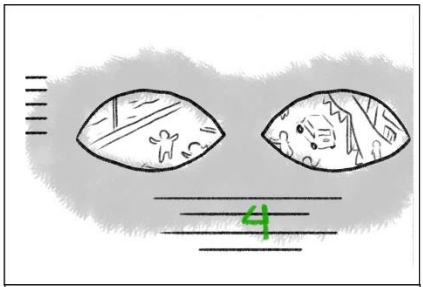
(1) Lighter environment
- Rain drops/drizzle on water surface
- River water flowing
- Boat rocking (w/ Maria)

(2) Darker environment
- Rain drops/drizzle on water surface
- River water flowing
- Boat tips

Notes

Matchcut transition will be used in 'boat tip' action

Page 3



No. of Transitions: 2

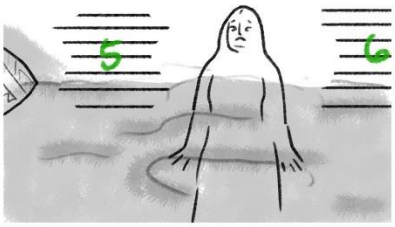
Action

- Parallax eye movement
- Warp people for movement

Notes

Kamusta Ka, Marikina? - Motion Graphics Storyboard 2

Page 4 v.1

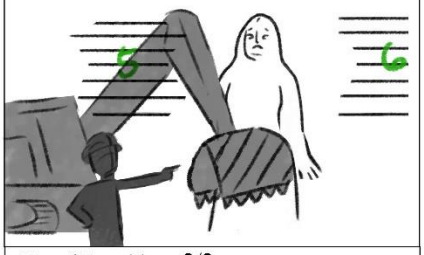


No. of Transitions: 1/2

Action
- High flood water flowing
- Underwater objects floating
- Strong Rainfall

Notes

Page 4 v.2

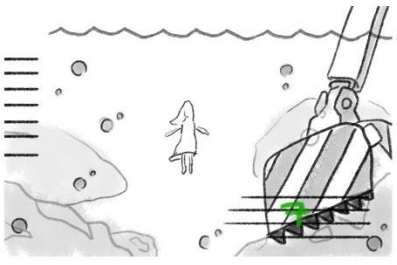


No. of Transitions: 2/2

Action
- Flood water drops
- Sky clears out
- Man enters frame (Rising Up)
- Excavator enters frame and moves off-screen (Left to Right)

Notes

Page 5

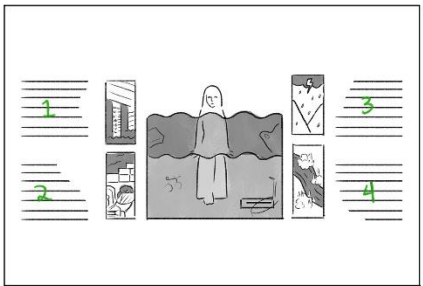


No. of Transitions: 2

Action
(1) Lighter environment
- Rain drops/drizzle on water surface
- River water flowing
- Boat rocking (w/ Maria)

Notes
Matchcut transition will be used in 'boat tip' action

Page 6



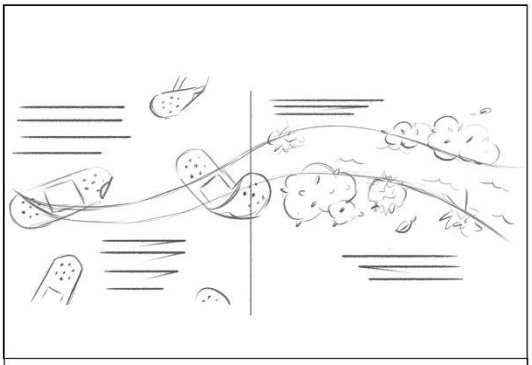
No. of Transitions: 2

Action
- Middle Graphic - Water Rises
- Object/Trash floatingt
- Small movements from other graphics

Notes

Kamusta Ka, Marikina? - Motion Graphics Storyboard 3

Page 7

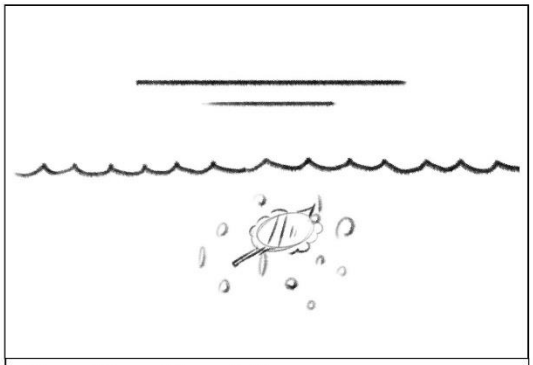


No. of Transitions: 1/2

Action
- Bandages folding and unfolding
- River water flowing
- Trees Swaying
- Leaves Flying

Notes

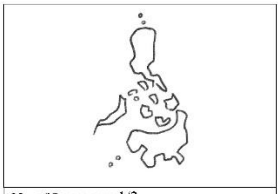
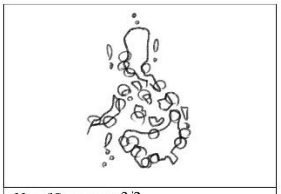
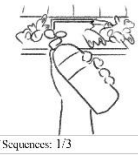
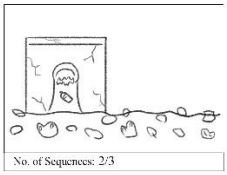
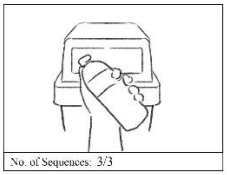
Page 8



No. of Transitions: 2/2

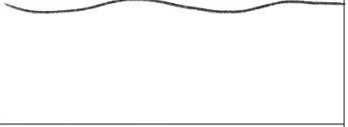
Action
- Mirror Floating
- Bubbles appears and disappears (Fade effect)

Notes

4.	**Storyboard for Motion Graphic – Trivia Modules**
	Quiz Questions - Motion Graphics Storyboard 1 Question #1  No. of Sequences: 1/2 Action - No Movement - Plain PH Map Notes  No. of Sequences: 2/2 Action - Red Spots/Pins appearing - "?" shaking Notes Quiz Questions - Motion Graphics Storyboard 2 Question #2  No. of Sequences: 1/3 Action - Hand manual movement Notes  No. of Sequences: 2/3 Action - Water flowing - Bottle falling down, flowing on surface Notes  No. of Sequences: 3/3 Action - Hand Camera roller [illegible] Notes

Quiz Questions - Motion Graphics Storyboard 3

Question #3



No. of Sequences: 1/2

Action
- Water flowing

Notes

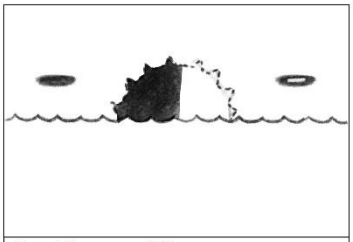
No. of Sequences: 2/2

Action
- Trash falling down
- Trash flows on surface
- Water flowing

Notes

Quiz Questions - Motion Graphics Storyboard 4

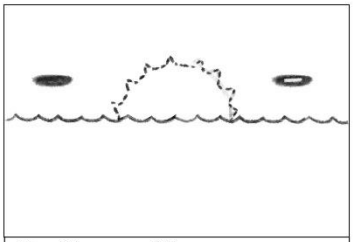
Question #4



No. of Sequences: 1/2

Action
- Sun rotating left and right

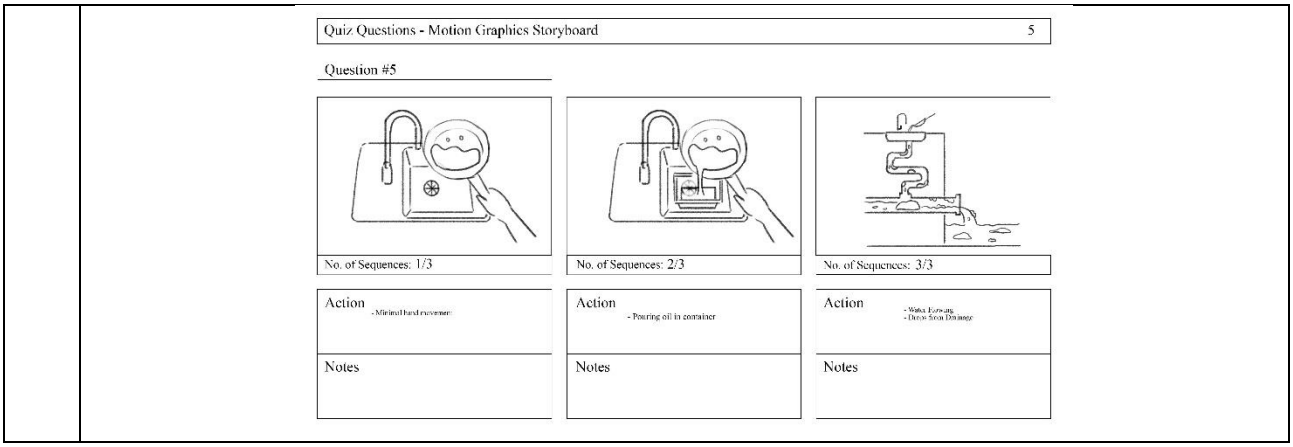
Notes



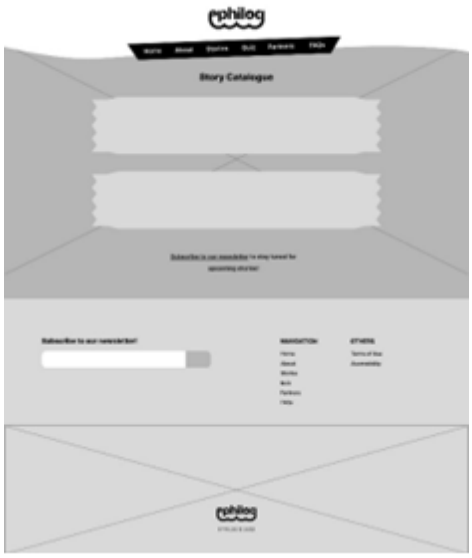
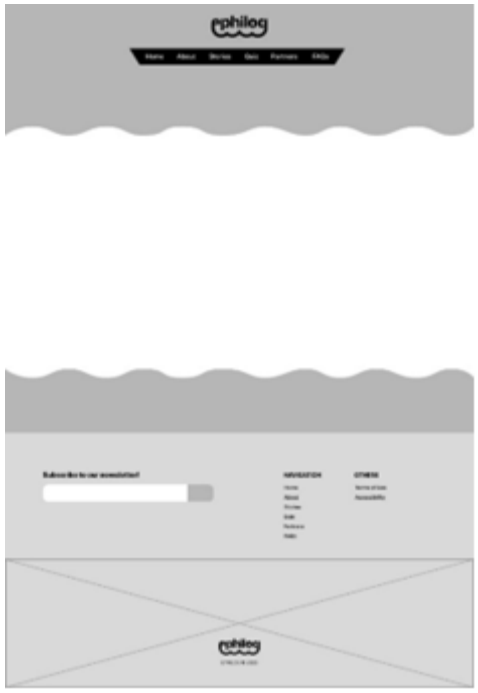
No. of Sequences: 2/2

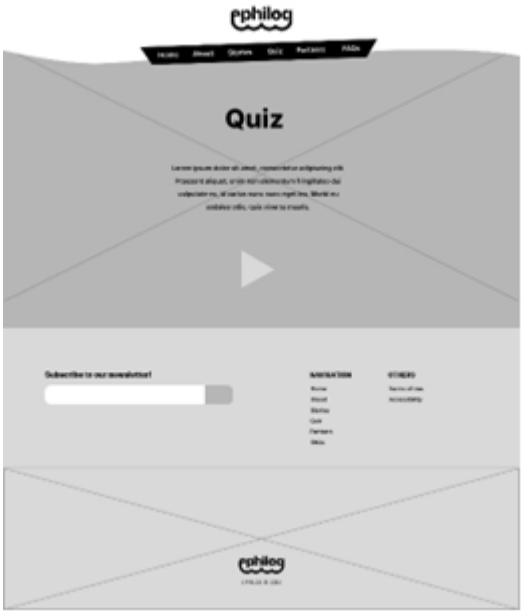
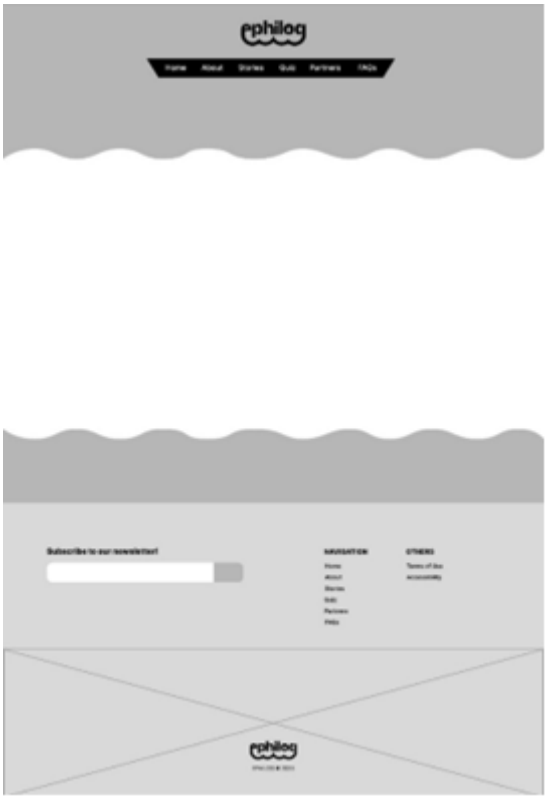
Action
- Static sun (visual version depends on user's choice)

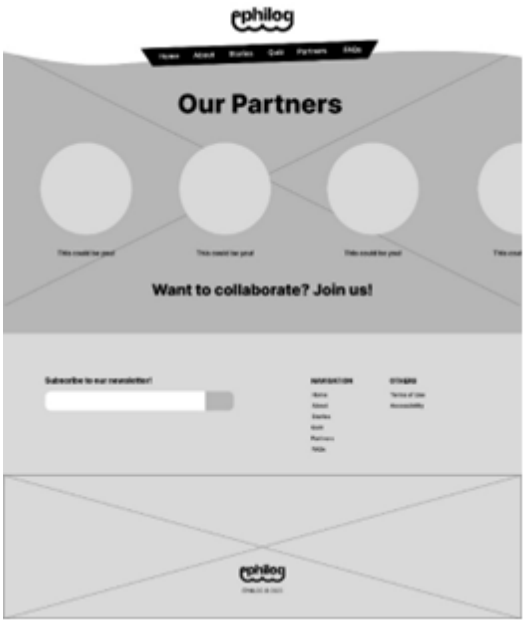
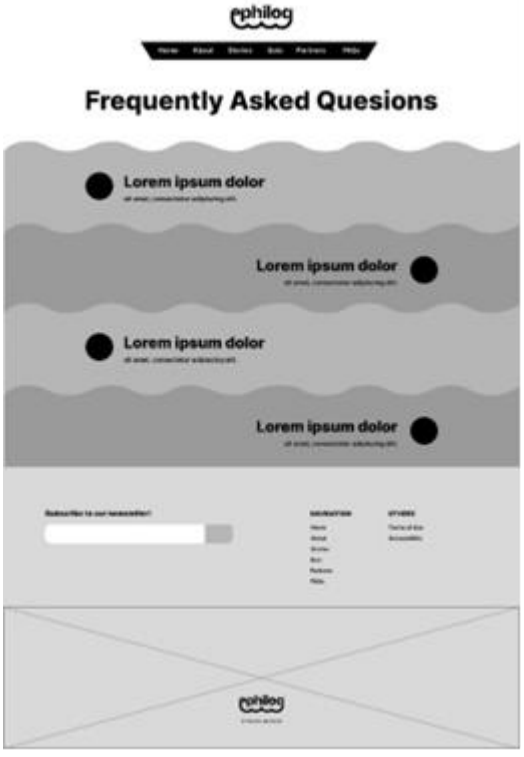
Notes



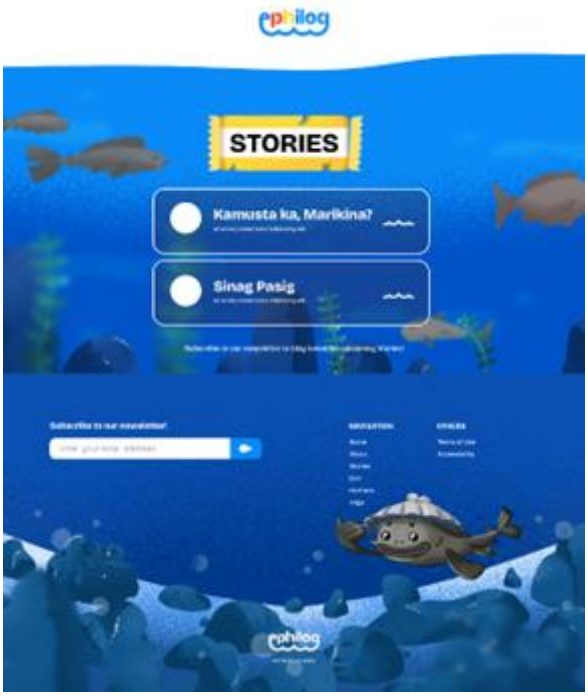
Wireframes created in Figma Software	
Page Title	Image
1. Home Page	
2. About Page	

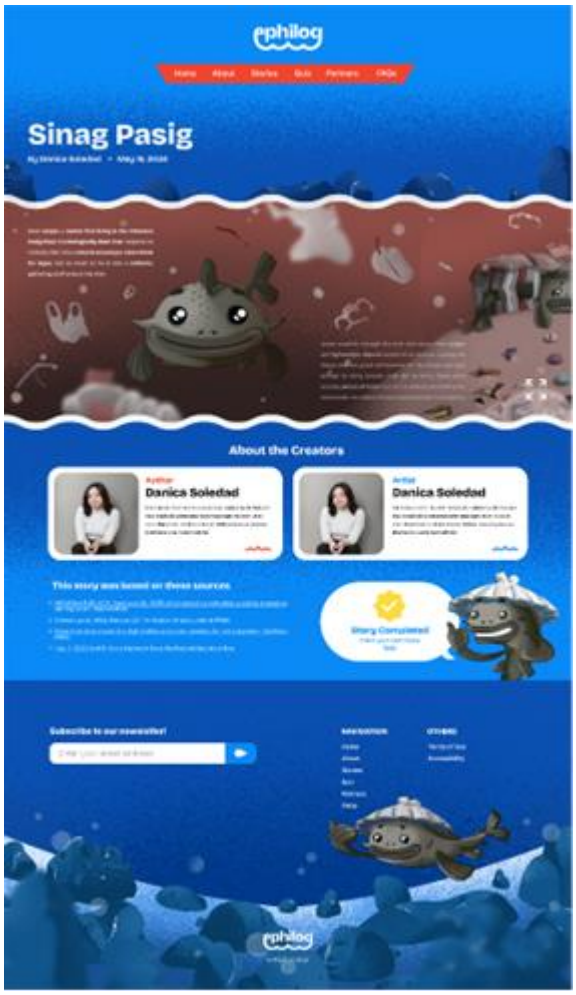
3. Stories Page (Catalog)	
4. Story Page Sample	

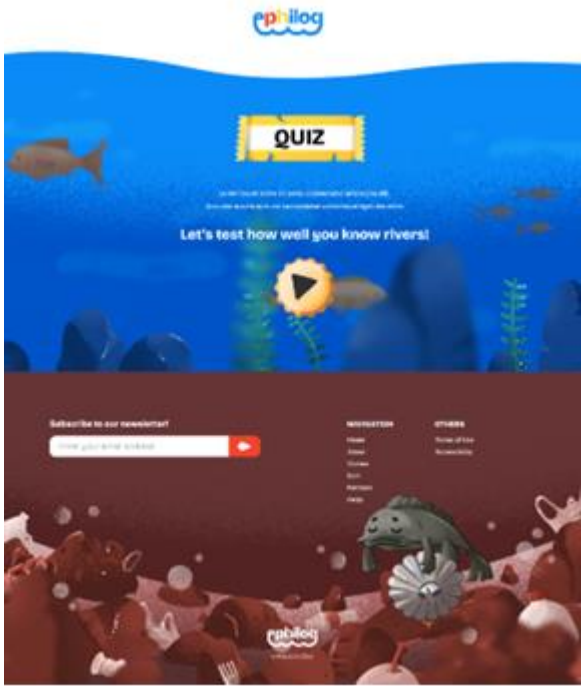
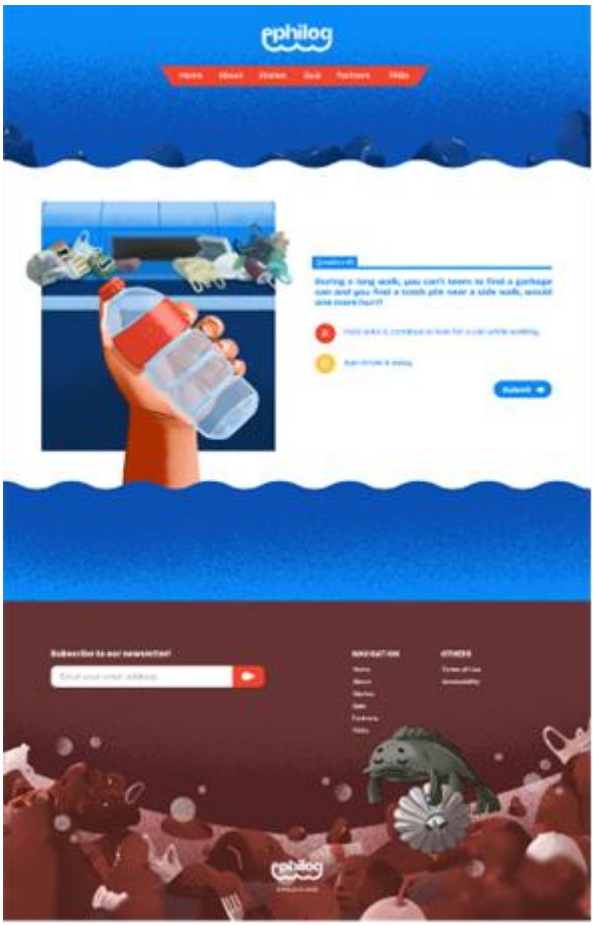
5. Quiz Page (Description)	
6. Quiz Page Sample	

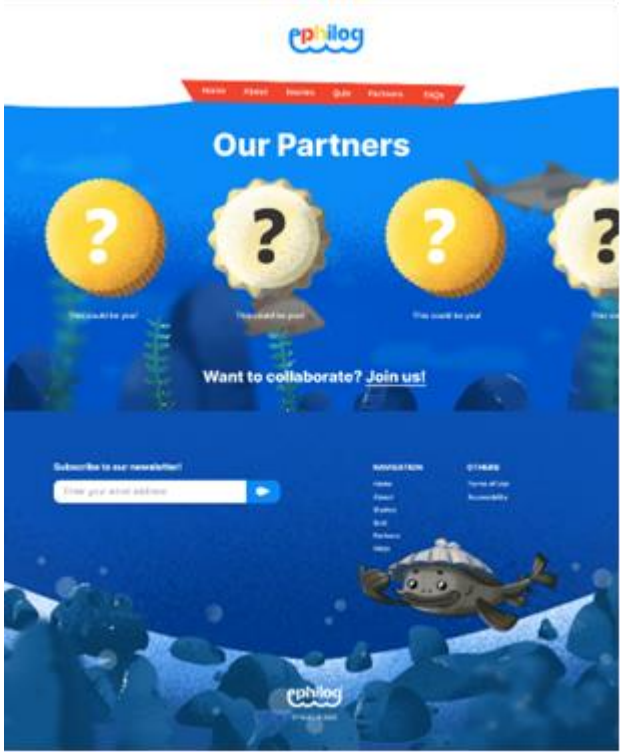
7. Partners Page	
8. FAQs/Frequently Asked Questions Page	

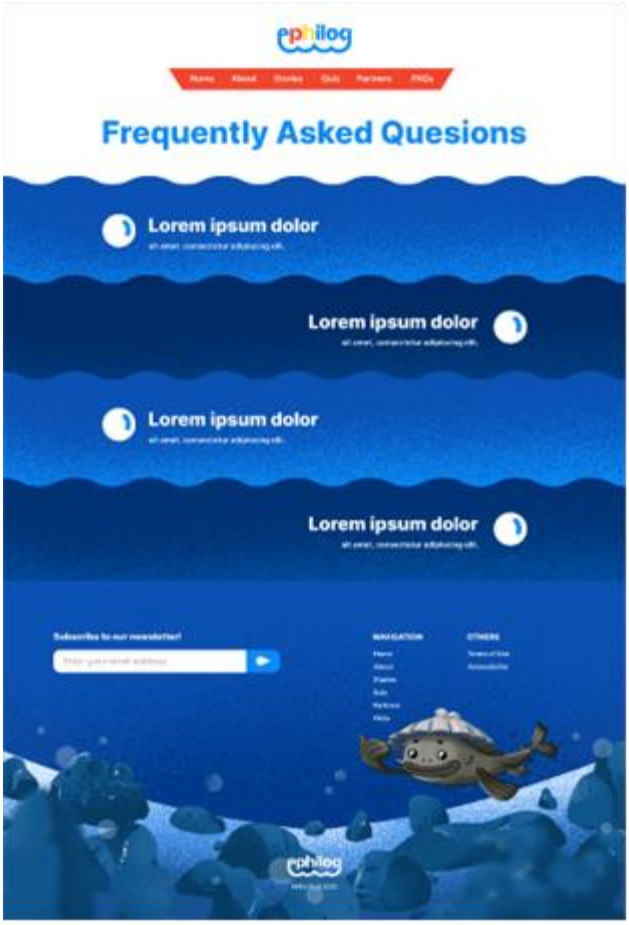
Mockups created in Figma Software

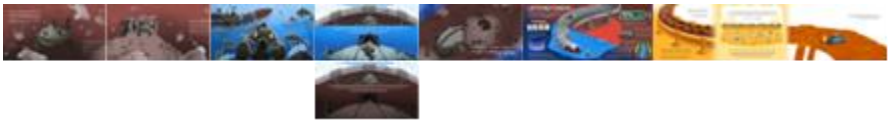
Page Title	Image
1. Home Page	
2. About Page	
3. Stories Page (Catalog)	

4. Story Page Sample	

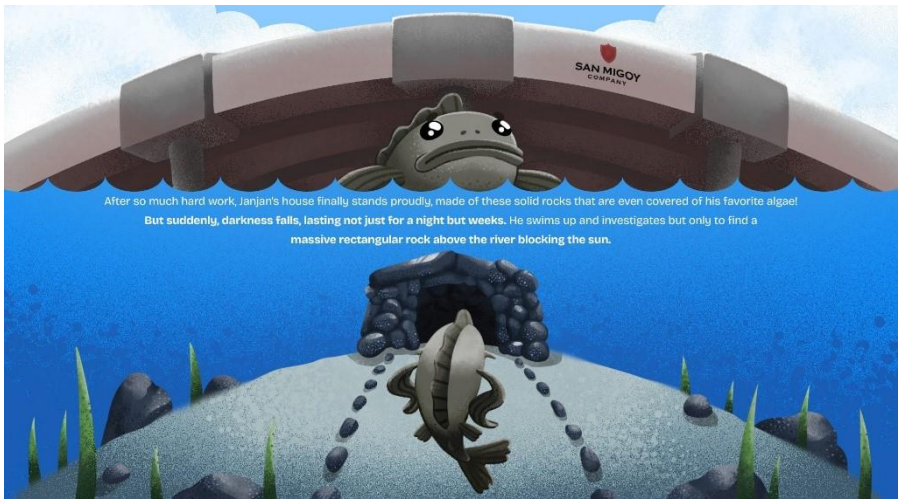
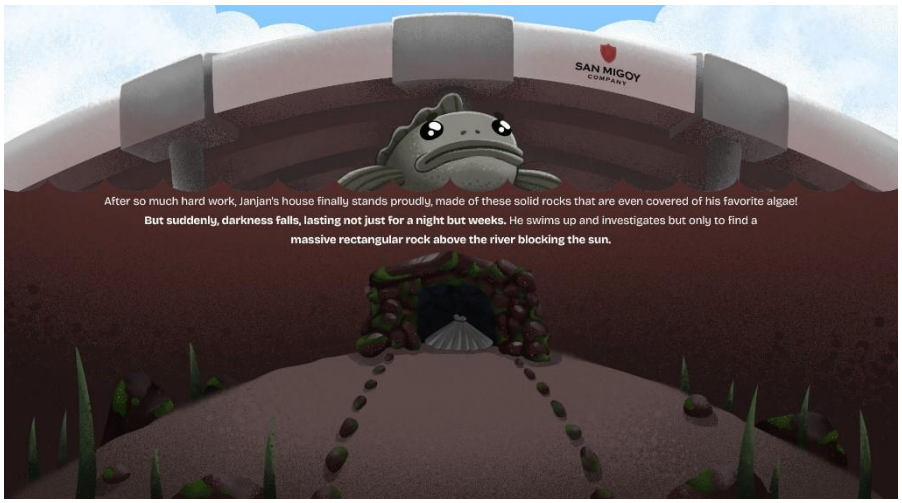
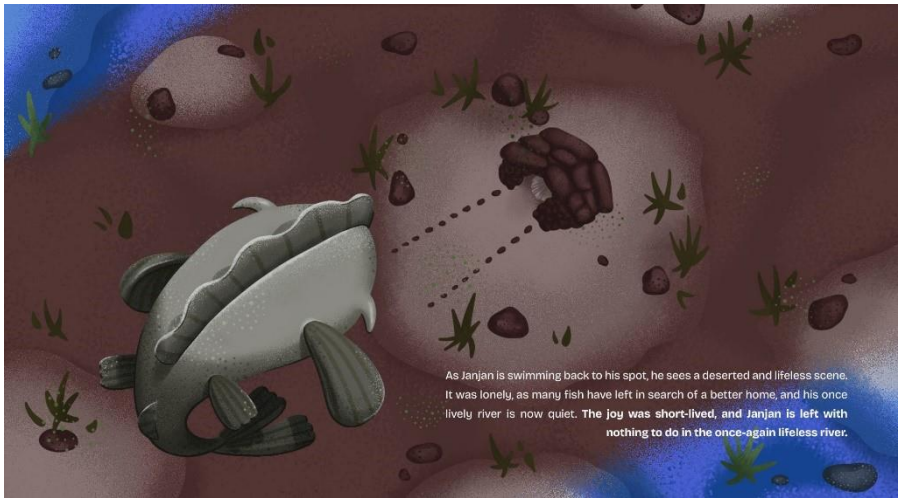
5. Quiz Page (Description)	
6. Quiz Page Sample	

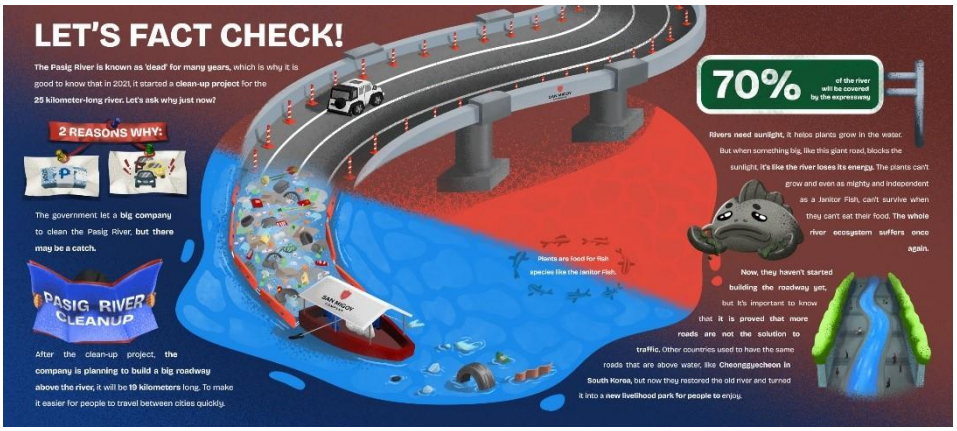
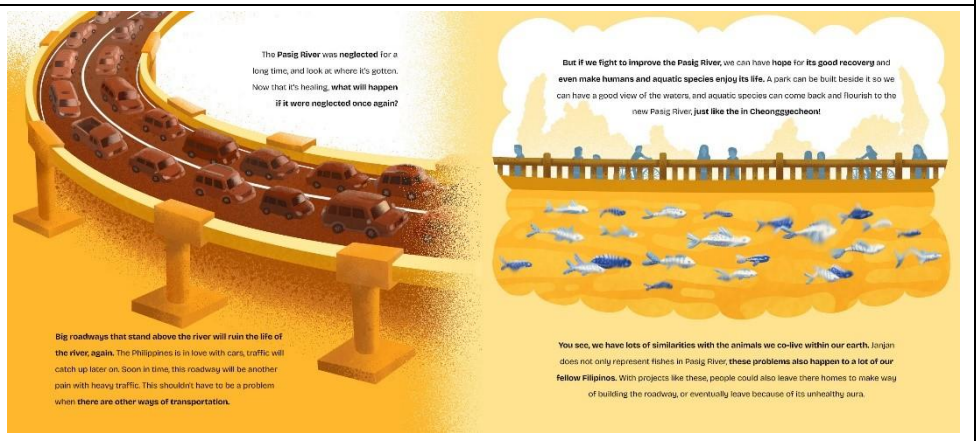
7. Partners Page	

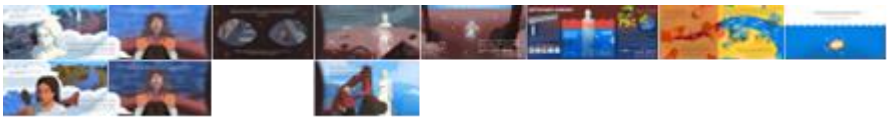
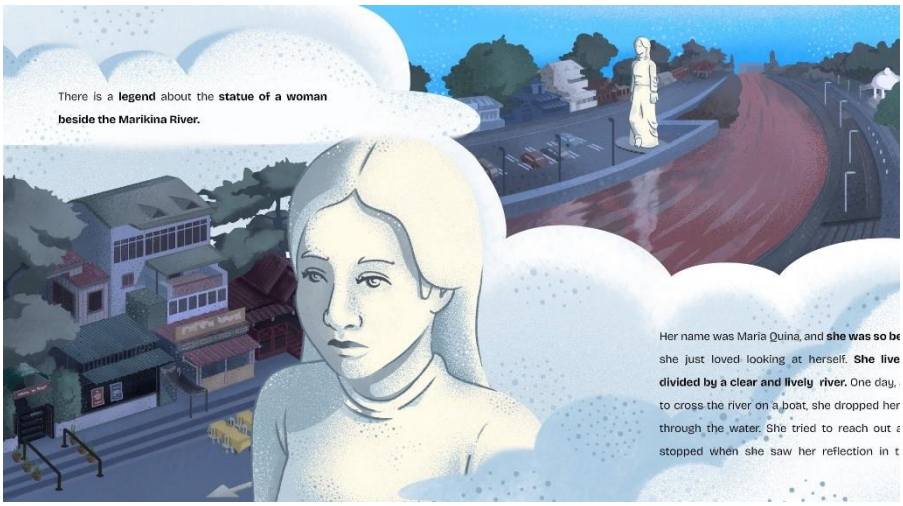
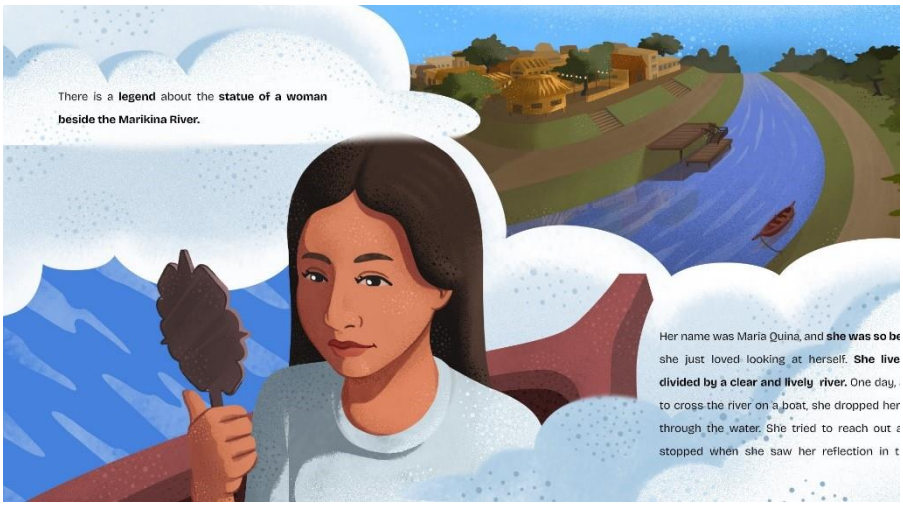
8. FAQs/ Frequently Asked Questions Page	

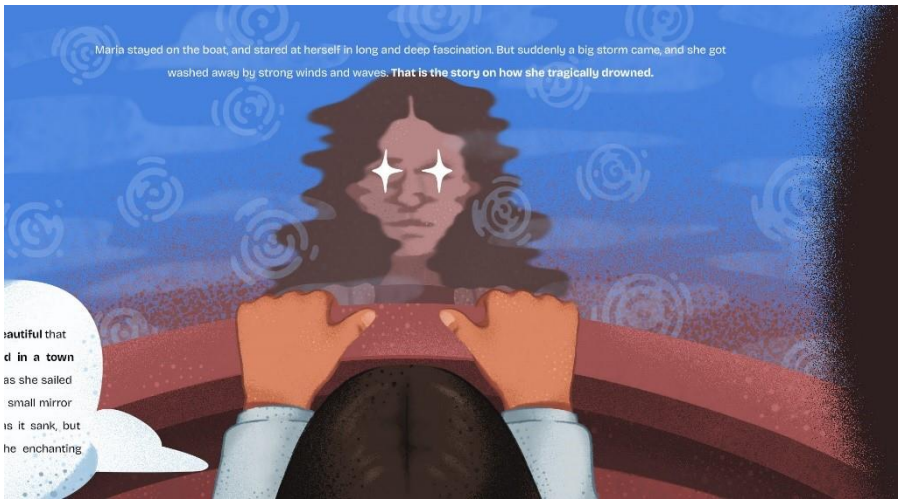
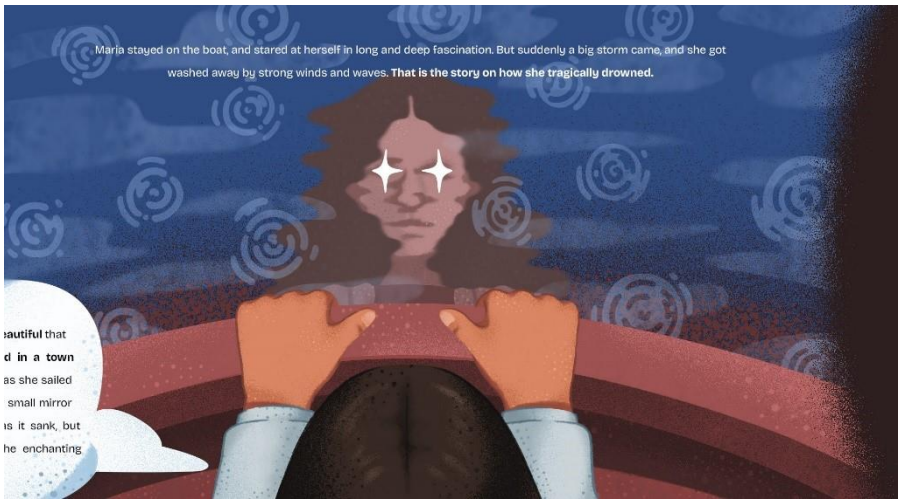
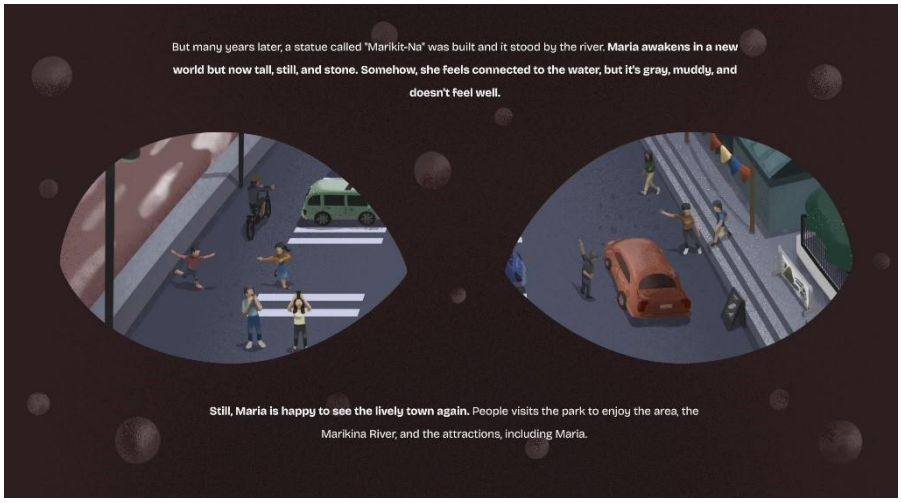
Page Title	Image
Page Breakdown	

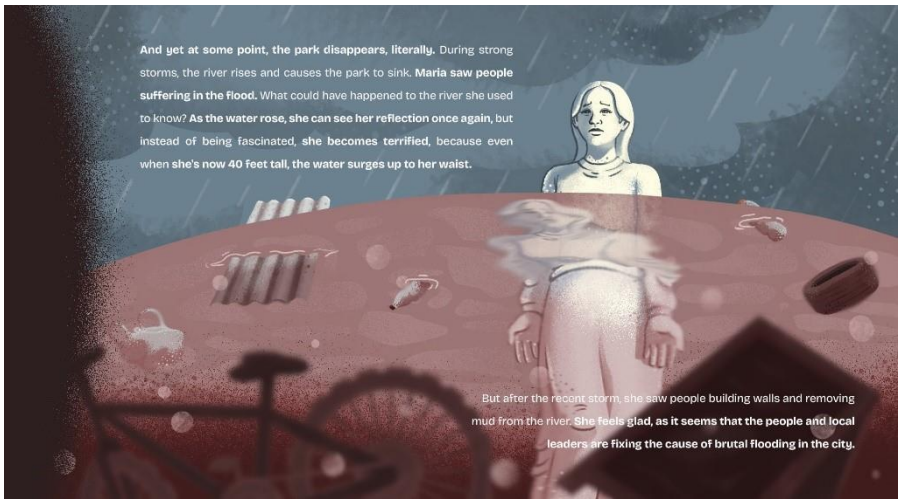
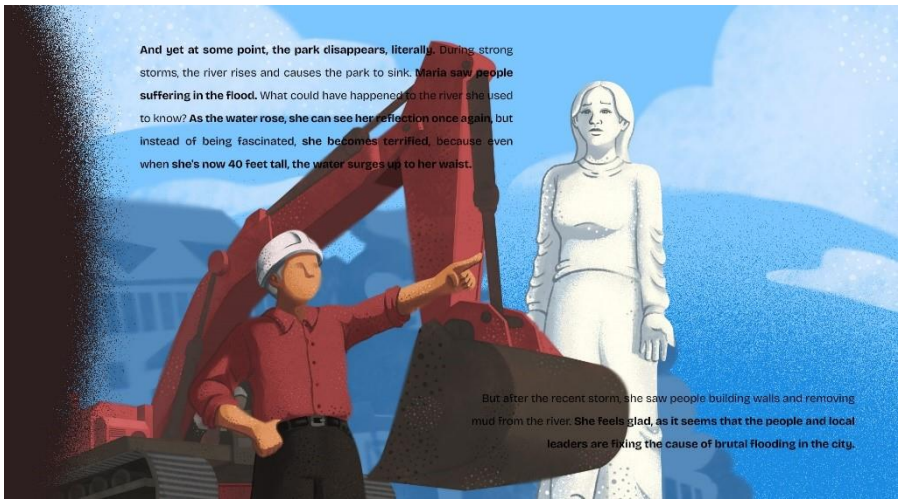
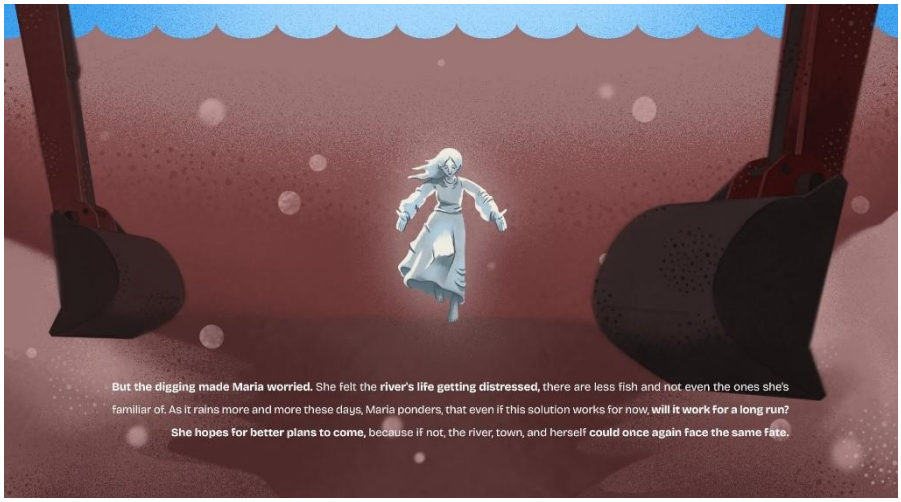
Page 1	
Page 2	
Page 3	

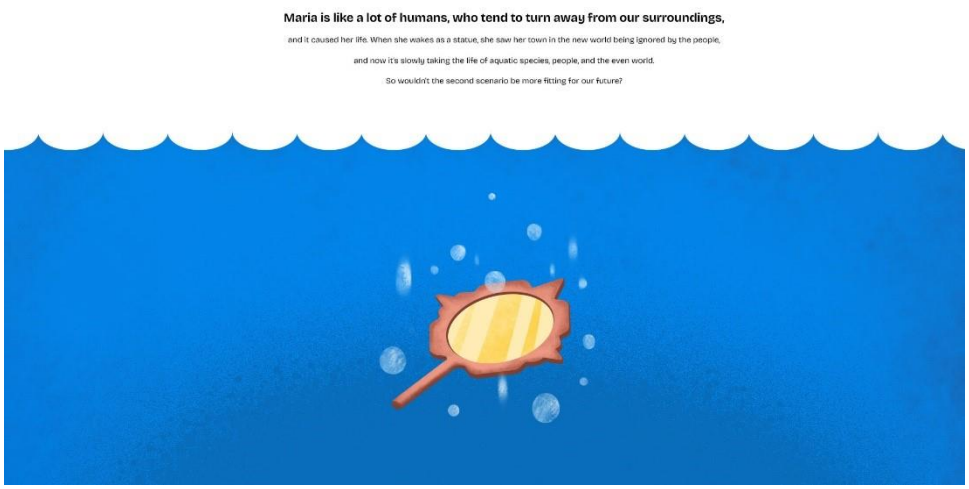
Page 4 (2 Versions)	 
Page 5	

Page 6	
Page 7	
Page 8	

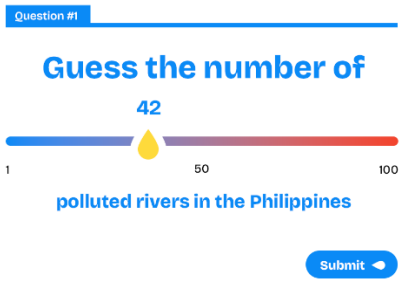
Page Title	Image
Page Breakdown	
Page 1 (2 Versions)	 

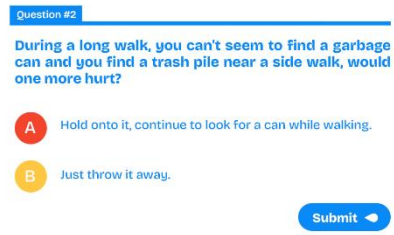
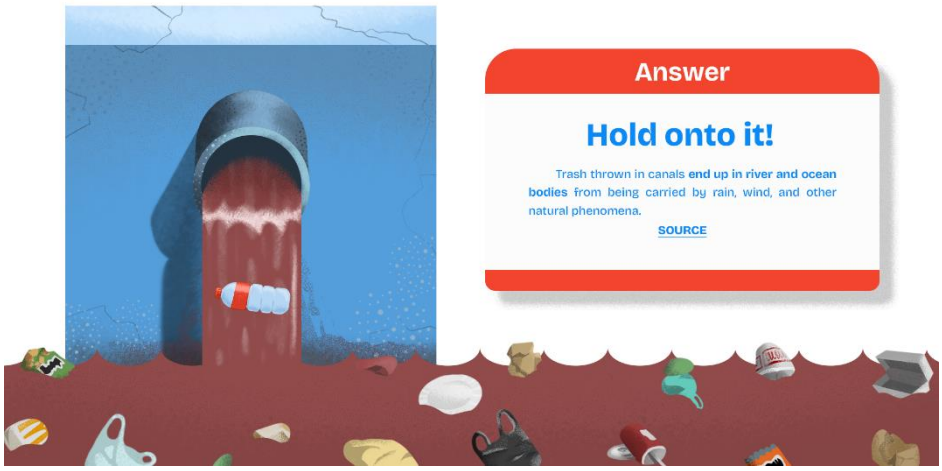
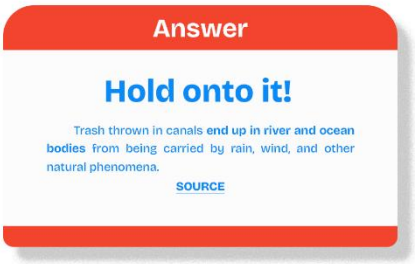
Page 2 (2 versions)	 
Page 3	

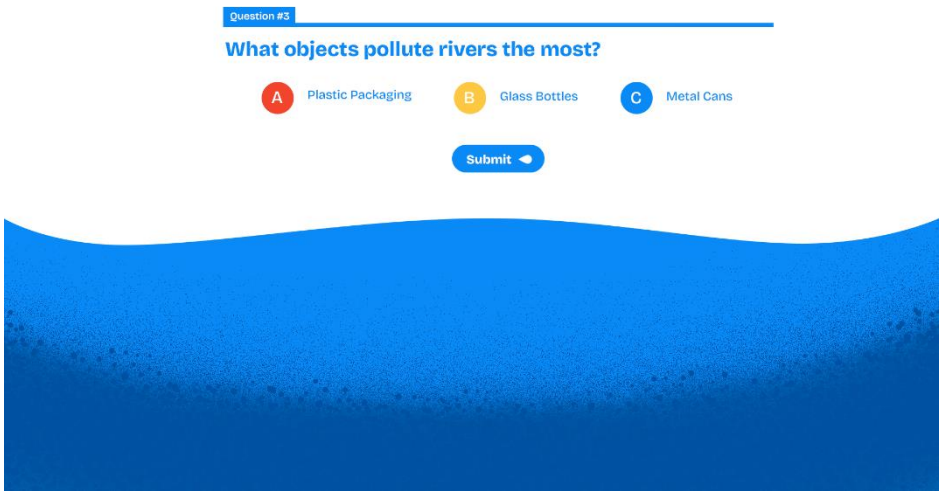
Page 4 (2 Versions)	 
Page 5	

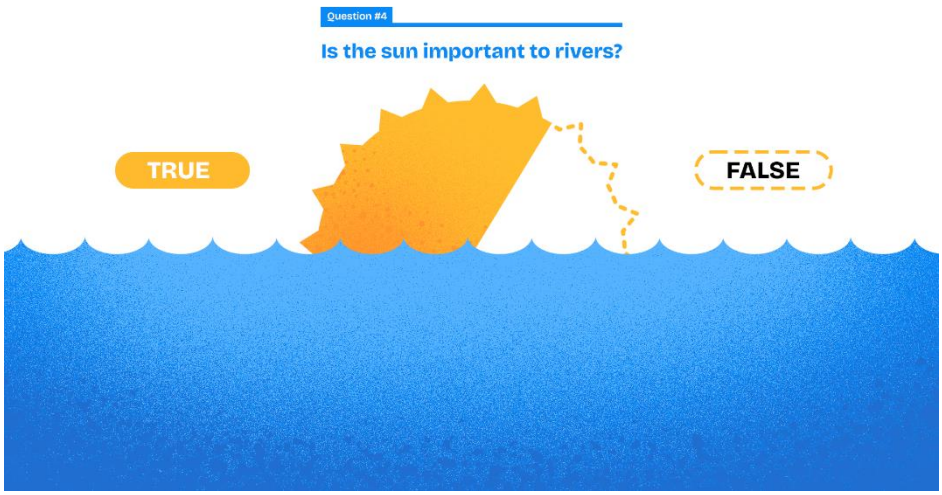
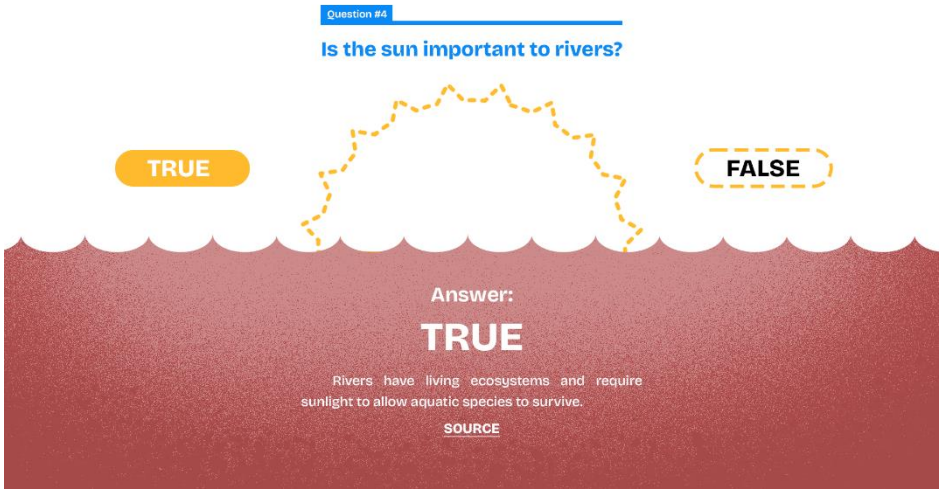
Page 6	
Page 7	
Page 8	

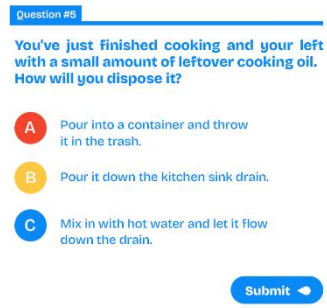
Trivia Modules

Story #1: Pasig River Story	
Page Title	Image
Question #1	

Question #2	   

Question #3	

Question #4	 

Question #5	 Question #5 You've just finished cooking and your left with a small amount of leftover cooking oil. How will you dispose it? A Pour into a container and throw it in the trash. B Pour it down the kitchen sink drain. C Mix in with hot water and let it flow down the drain. Submit Answer Pour into a container and dispose. Oil is a key ingredient in shaping Fatbergs! These are soft blobs or can also be rock-solid blockers of our drains, and lead to our rivers that can also cause water pollution. SOURCE

References

Antonio & Roa (2016, Jan. 26). *"Batibot," iconic kids' show, returns at Read-Along*. (2016, January 23). Lifestyle.INQ. https://lifestyle.inquirer.net/220158/batibot-iconic-kids-show-returns-at-read-along/

Aragon, C., Jasim, M., & Mahyar, N. (2021). RisingEMOTIONS: Bridging Art and Technology to Visualize Public's Emotions about Climate Change | *Proceedings of the 13th Conference on Creativity and Cognition*. (2021). ACM Conferences. https://dl.acm.org/doi/10.1145/3450741.3465259

Arteche, J. (2013). Jill Arteche — Art & Illustration. Retrieved October 25, 2023, from Jill Arteche — Art & Illustration website: https://www.jillarteche.com/about

Bayan ng Basura. (2017). Retrieved October 25, 2023, from Adarna House website: https://adarna.com.ph/products/bayan-ng-basura

Bentz, J. (2020). Learning about climate change in, with and through art. *Climatic Change*, *162*(3), 1595–1612. https://doi.org/10.1007/s10584-020-02804-4

Cabico, Chi, C. (2023, July 9). Teachers need resources, curriculum flexibility to make climate change education stick. Retrieved December 14, 2023, from Philstar.com website: https://www.philstar.com/headlines/climate-and-environment/2023/07/09/2279809/teachers-need-resources-curriculum-flexibility-make-climate-change-education-stick

Clarke, A. (n.d.). *Art Direction for the Web A Hardboiled Web Design shot*. Retrieved February 11, 2024, from https://www.smashingmagazine.com/provide/eBooks/Art-direction-FTW-excerpt.pdf

Cynthia Vinney (2022, June 29). *The 5 elements of UX design explained - UX Design Institute*. (2022, June 29). UX Design Institute. https://www.uxdesigninstitute.com/blog/5-elements-of-ux-design/

De Leon. (2021). Agents of Place: Negotiations between Artist and Government in Philippine Public Art. Southeast of Now, 5(1-2), 405–437. https://doi.org/10.1353/sen.2021.0017

Divya P. (2022, January 23). *Competitor Analysis (in a nutshell) - Divya P - Medium*. Medium; Medium. https://medium.com/@divyaputrevu27/competitor-analysis-in-a-nutshell-b6706a179175

Dusica Popovic - Qode Interactive. (2020, October 16). Retrieved October 25, 2023, from Qode Magazine website: https://qodeinteractive.com/magazine/playable-interactive-websites/#guccioff-the-grid

Emily Stevens (2022, March 22). What is UI design? A complete introductory guide - UX Design Institute. (2022, March 22). Retrieved December 17, 2023, from UX Design Institute website: https://www.uxdesigninstitute.com/blog/what-is-ui-design/#what-is-user-interface-design

Fitzgerald, A. (2021, June 10). 20 of the Best Interactive Websites [+ How to Make Your Own]. Retrieved October 25, 2023, from Hubspot.com website:https://blog.hubspot.com/website/interactive-websites

George, T. (2022, March 31). What Is an Observational Study? | Guide & Examples. Retrieved February 19, 2024, from Scribbr website: https://www.scribbr.com/methodology/observational-study/

Gordon, R. (2022, March 28). Competitive benchmarking: Best practice guide. Retrieved June 5, 2024, from Qualtrics website: https://www.qualtrics.com/blog/competitive-benchmarking/#:~:text=Competitive%20benchmarking%20analysis%20seeks%20to,you%20compare%20favorably%20or%20unfavorably.

Guillergan-Schott, M. (2017). Youth Media in Two Worlds: A Comparative Analysis of Children TV Shows in the Philippines and in Germany. Retrieved from https://www.tojcam.net/journals/tojcam/articles/v03i04/v03i04-05.pdf

Harsha, S. (2019, April 15). Usability testing in design — why is it important? - UX Collective. Retrieved December 16, 2023, from Medium website: https://uxdesign.cc/usability-testing-in-design-and-why-is-it-important-cfddfbbdaac9

Holbrook, D. (1997). The Consequentialistic Side of Environmental Ethics. Environmental Values, 6(1), 87–96. http://www.jstor.org/stable/30301525

J. Mantaring (2023, July 22). 'Race against time': Climate change and the environment a year into Marcos presidency. Retrieved from https://www.cnnphilippines.com/news/2023/7/22/climate-change-environment-marcos-first-year.html

Karen. (2020, December 14). Validating Personas & Other Methodologies - Karen - Medium. Retrieved May 13, 2024, from Medium website: https://karenbvh03.medium.com/validating-personas-other-methodologies-3f9a9cb8e381

Kenton, J. (2023, October 17). Marketing Mastery: Strategies for Promoting Your Business and Brand. Retrieved February 19, 2024, from Medium website: https://medium.com/@jameskenton/marketing-mastery-strategies-for-promoting-your-business-and-brand-8725665a9809

Killian, S. (2015). The Importance of Brand Identity for Environmental Conservation Brands. Iie.ac.za.

http://hdl.handle.net/11622/73

Liz Blazer (2016). Animated Storytelling: Simple Steps for Creating Animation & Motion Graphics Edition 2

Lindberg, O. (2021, April 12). How art direction in web design creates more engaging experiences. Retrieved October 25, 2023, from Shaping Design Blog website: https://www.editorx.com/shaping-design/article/art-direction-web-design

Praveen, C. K., & Srinivasan, K. (2022). Psychological Impact and Influence of Animation on Viewer's Visual Attention and Cognition: A Systematic Literature Review, Open Challenges, and Future Research Directions. Computational and Mathematical Methods in Medicine, 2022, 1–29. https://doi.org/10.1155/2022/8802542

Perkins, K. M., Munguia, N., Moure-Eraso, R., Delakowitz, B., Giannetti, B. F., Liu, G., … Velazquez, L. (2018). International perspectives on the pedagogy of climate change. Journal of Cleaner Production, 200, 1043–1052. https://doi.org/10.1016/j.jclepro.2018.07.296

Punzalan, C. H. (2020). evaluating-the-environmental-awareness-and-practices-of-senior-high-schoolstudents-basis-for-environmental-education-program. Aquademia, 4(1), ep20012. https://doi.org/10.29333/aquademia/8219

Ratziel San Juan. (2019, December 3). *Philippines lowest in reading comprehension among 79 countries*. Philstar.com; Philstar.com. https://www.philstar.com/headlines/2019/12/03/1974002/philippines-lowest-reading-comprehension-among-79-countries

Rikke Friis Dam. (2016, October 20). The 5 Stages in the Design Thinking Process. Retrieved December 17, 2023, from The Interaction Design Foundation website: https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process

The Boat by SBS. (2023). Retrieved October 25, 2023, from Designrush.com website: https://www.designrush.com/best-designs/websites/the-boat-sbs

Vegara, 2023 About - Little People, BIG DREAMS. (2023, November). Retrieved February 19, 2024, from Little People, BIG DREAMS website: https://littlepeoplebigdreams.com/about/

Vu, K. L., Proctor, R. W., & Hung, Y. (2021). Website design and evaluation. Handbook of human factors and ergonomics. Website design and evaluation. Handbook of human factors and Ergonomics, 1016–1036 | 10.1002/9781119636113.ch39