

## PROJECT DOCUMENTATION

**Project Name: ANICLO RETAIL SHOP 2023**

### I. INTRODUCTION

**AniClo Retail Shop** is an online platform offering Anime-themed clothing designs for all users. Our purpose is to *promote Japanese Anime culture* and make it accessible to all audience. While our target audience encompasses *individuals of all ages* specifically focus is on catering to the preferences of anime enthusiasts, particularly teenagers and children.

Our website exclusively only features *Anime merchandise*, including clothing items that showcase popular characters and series. The interface includes key sections such as the *homepage*, where featured products and promotions are highlighted, and a detailed product page allowing users to explore different offers. We included also a *shopping cart* functionality, enabling users to review and manage their selected items. Additionally, we included *social media platforms*, ensuring that users can stay connected with us and rate their favorite products. Incorporating third-party software, our Social Media Pages and associated accounts provide an avenue for users to engage with us beyond the website. For any inquiries or assistance, the Contact Information and Customer Support are available.

### II. PROJECT OVERVIEW

#### Project Objectives

AniClo Retail Shop's objective is to establish a website dedicated to selling and promoting Anime Merchandise, with a specific focus on catering to all Anime Lovers. The goal is to create a user-friendly interface that is accessible and easy to navigate for individuals. The website aims to provide a seamless experience, ensuring that users, regardless of their technological proficiency, can navigate through it easily.

Furthermore, the website seeks to contribute to the growing popularity of Japanese culture, specifically the Anime. As one of the trending cultural elements of Japan, Anime holds a significant place in global entertainment. AniClo Retail Shop aims to not only offer Anime merchandise but also serve as a platform to highlight this unique aspect and creativity of Japanese culture.

#### Key Features

The key features used for the system are:

1. **User Account** – Registrations/ Login

2. **Homepage** – Highlights Specific Items
3. **Product Page** – Product Information such as Name, Type, Price and Size
4. **Shopping Cart** – Customize Orders, Payment Methods
5. **About Page** – Display the websites Overview, Objectives and Team
6. **Contact Page** – Included the social media platforms of the website and customer support.
7. **Third Party Integrations** – these includes social media platforms such as Facebook, Youtube, Instagram, Twitter and Google Playstore.
8. **Return Policy** – rules and regulations for returning or changing of items ordered.
9. **Blog Post** – Includes Anime and Clothing Articles
10. **Responsive Website** – Can be run through Computer and Mobile Devices (Cross Device Accessibility)
11. **Security** – Secures User Account and Payment Processes.

## Technologies Used

**Frontend:** HTML, CSS, Javascript

**Backend:** MySQL

**Payment Gateways:** Gcash

**Customer Support:** Social Media Links

**Version Control:** Github

**UI Design:** Figma and Adobe

## III. SYSTEM ARCHITECTURE

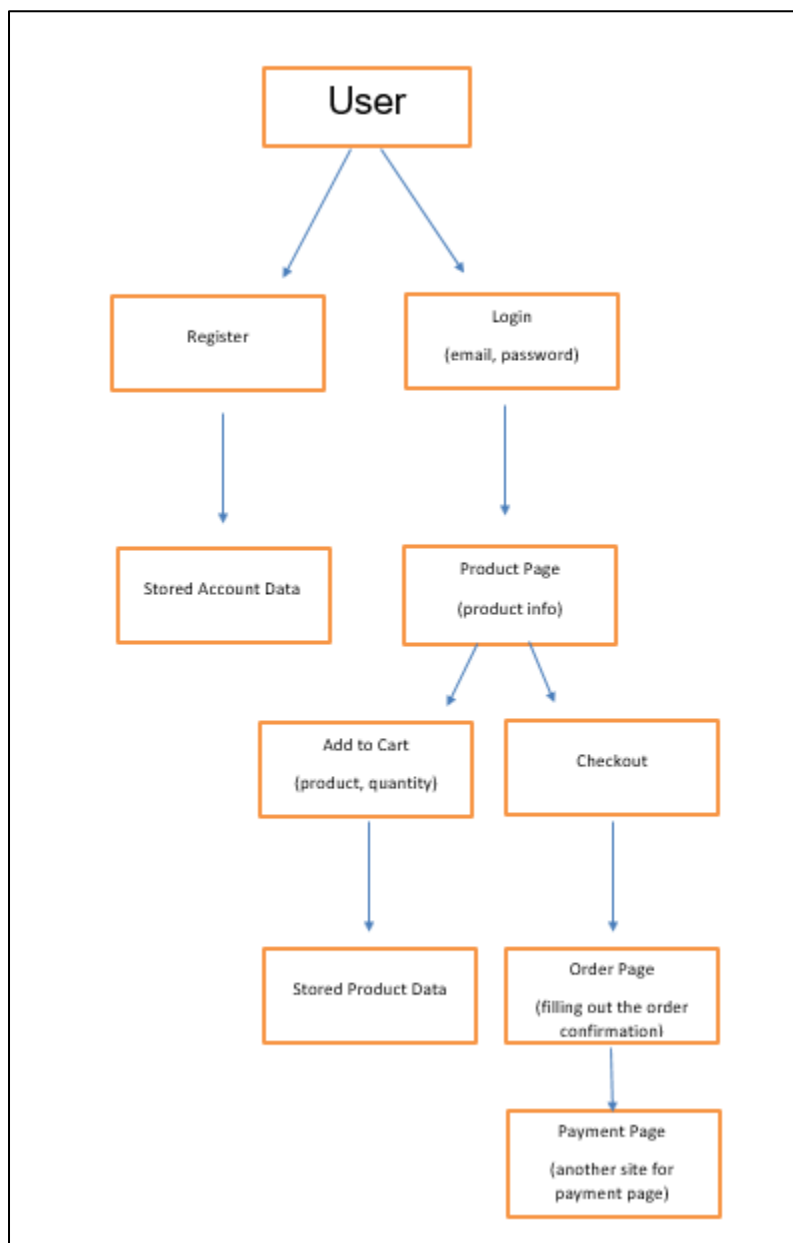
Website architecture is the hierarchical structure of your website pages. This structure is reflected through internal linking. This website's structure should help users easily find information and help search engine crawlers understand the relationship between different pages.

The Aniclo Retail shop architecture comprises three tiers: frontend for user interaction, backend with web and application servers handling logic and database interaction, and middleware facilitating communication. The web server manages static

content and directs requests to the application server, which executes business logic and interacts with the database storing product and user data.

The components of the retail shop website are categorized into frontend, and backend, design. Frontend components include the homepage, product pages, shopping cart, checkout pages, and user account features. Backend components consist of the database for storing product information, the server for handling requests, authentication for secure access, order processing, inventory management, payment gateway integration, and security measures. Design components focus on the user interface (UI), user experience (UX), and responsive design for adaptability across devices. The website is further structured with various modules such as product management, order management, user account, shopping cart, payment, search and sorting, review and rating, analytics, security, and content management.

### Data Flow Diagram



#### IV. SITE STRUCTURE

1. **Home** – Front page of the AniClo Retail Shop
2. **Products** – Product Details (Sort according to Type, Prices, and Gender Specifications)
3. **About** – Website Overview, Objectives and Introducing the Team/Developers.
4. **Contact Us** - Customer Support / Assistance
5. **User Account** – Login Existing Account or Create New Account
6. **Shopping Cart** - Selected Items to Purchase
7. **Social Media Pages** - Third Party APIs
8. **Customer Support** – these includes the Return Policy and Assistance

#### V. DESIGN AND LAYOUT

##### 1. Color Scheme



##### 2. Typography

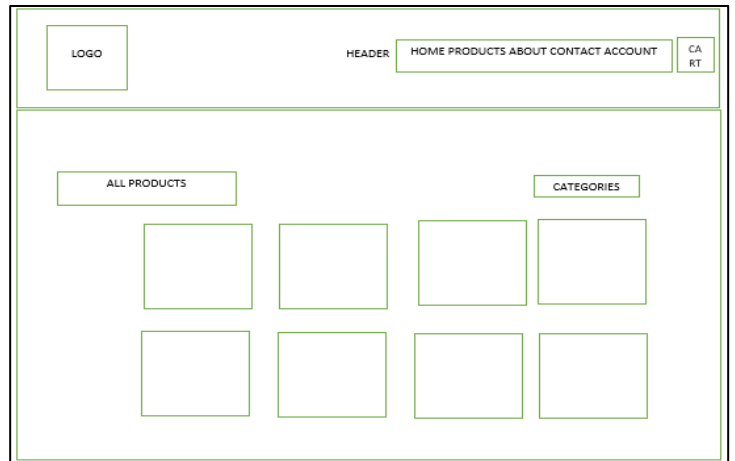
A. **Font- family:** Font Poppins

B. **Icons** : Font Awesome

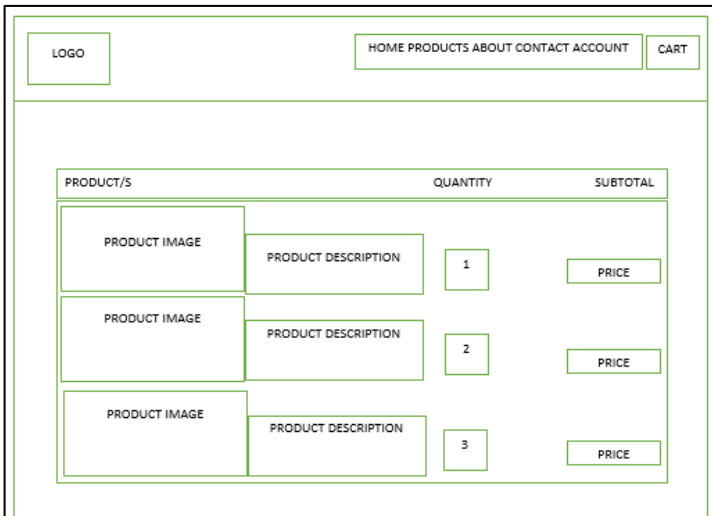
### 3. Layout



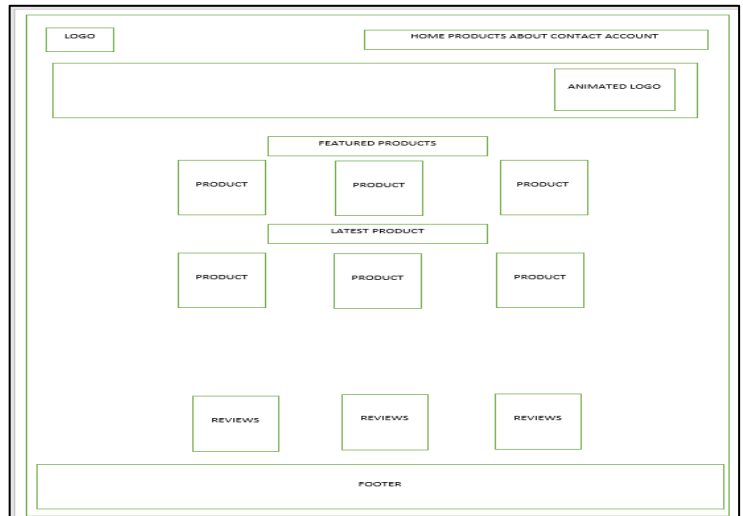
**Login Page**



**Product Page**



**Shopping Cart Page**



**Homepage**

## VI. CONTENT

### 1. Text Content

**A. Homepage** – Tagline, Featured Products, Product Ratings, Highlight Item, Purchase Reviews

**B. Product Page** – Item Name, Price, Item Ratings

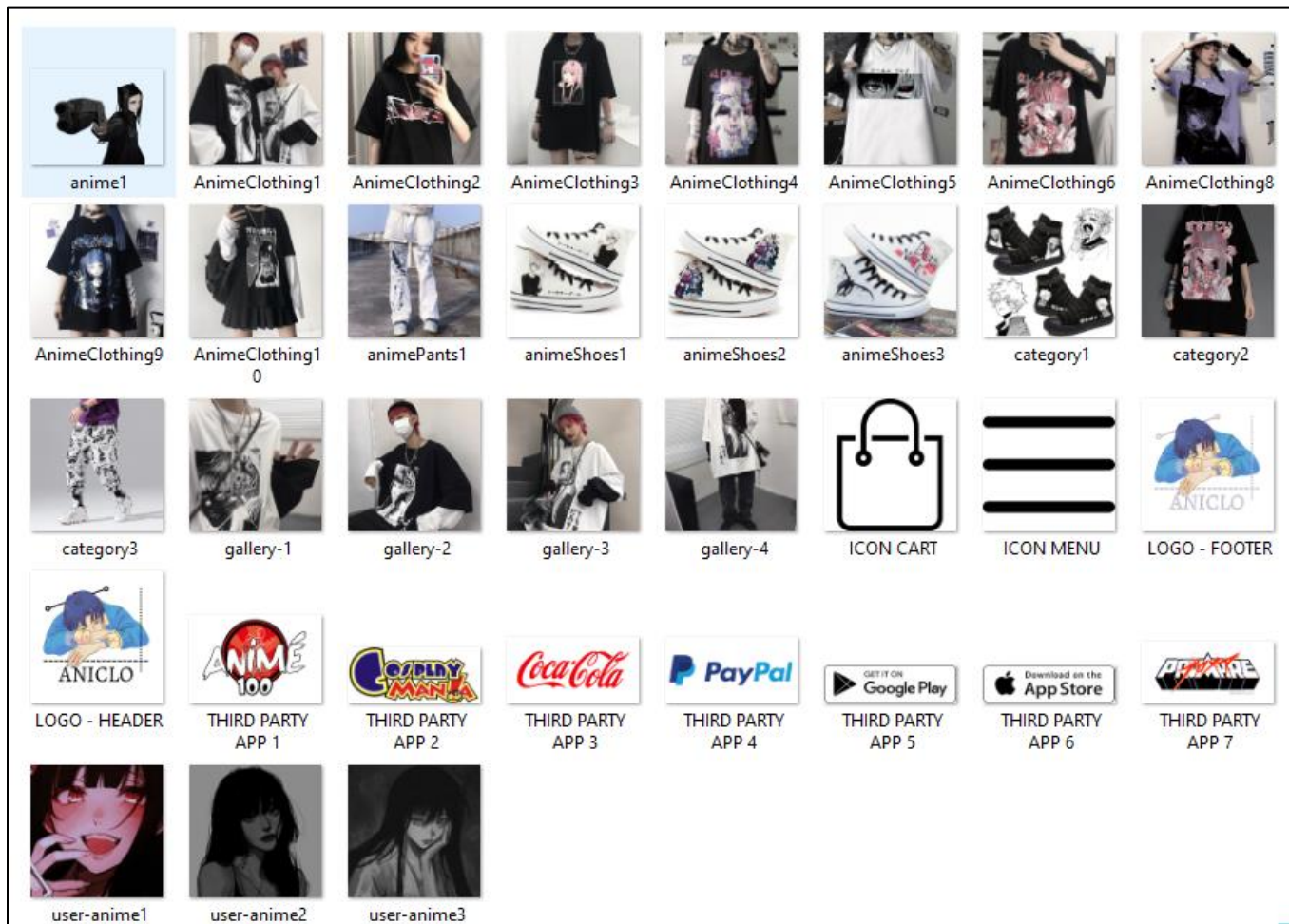
**C. About Page** – Shop's Objective, Team Name and Roles

**D. Contact Page** – Contact Information and Customer Support

**E. Account Page** – Login / Register ( Username, Email, Password)

**F. Footer** – Third Party APIs, Useful Links, and Social Media Accounts

## 2. Images and Media



## VII. FUNCTIONAL COMPONENTS

**1. User Registration and Authentication** – Create Account / Login Existing Account

**2. Search Functionality** – Allow users to search specific items/ sort out item depending on their preferences.

**3. Shopping Cart** – Allow users to manage or track their selected items to purchase.

**4. Contact Forms** – Allow users to reach out for their concerns or ask for supports.

**5. Interactive Features** – Allow users to explore the website using other platforms such as Social Medias, Blogs and Medias.

## VIII. DATA MANAGEMENT

### 1. Database Structure

**A. Product** – Product ID, Product Type, Product Name, Product Price

**B. User** – User ID, Username, Email Address

**C. Order** – Order ID, User ID, Order Date, Order Total Amount, Order Address, Payment Method

**2. Data Flow:** User Interaction → Frontend → Backend → Database Update → User Feedback *(Take note that this flow is not yet final since our group hasn't finalized our database yet)*

**3. Data Backup and Recovery Procedures:** We will have a backup / recovery files for all the data we have.

## IX. SYSTEM INTEGRATION

### 1. Third Party API's

Our team is currently in the process of selecting a third-party API for our website. The main challenge lies in the uncertainty regarding the preferred payment method—whether it should be PayPal, Gcash, or other popular options in the Philippines. To expedite this decision, our team is actively exploring creative solutions to quickly and effectively integrate a seamless payment solution into our website. We are considering factors such as user preferences, ease of integration, and the potential for future scalability to ensure a comprehensive and adaptable solution.

In addition to the payment method API, we are also deliberating on other APIs that can be integrated for an enhanced overall website performance and user experience. This strategic approach involves considering various factors such as functionality, compatibility, and the potential for synergies among different APIs to achieve optimal results. We aim to identify a suite of APIs that collectively contribute to the website's efficiency and success.

### 2. Data Exchange and Integration

**A. Payment Gateways.** When customer make purchases, online shop needs to exchange data with payment gateways to process transactions securely.

**B. Customer Relationship Management (CRM).** To enhance customer service, the online shop might exchange data with a CRM system. This integration can include customer details, purchase history, and communication preferences, enabling personalized interactions with customers.

**C. Customer Experience.** Integrating data from various sources, including customer interactions, preferences and feedback, enables the online shop to create a personalized and seamless shopping experience.

## **X. USER EXPERIENCE**

For responsiveness, we utilized a flexible grid layouts and media queries to ensure a user-friendly interface across various devices. To guarantee cross-browser compatibility, we conduct thorough testing and optimization for different browsers on both desktop and mobile platforms.

To optimize the performance of our website, we conduct tests across various browsers to assess its flexibility and speed. These tests help us identify areas for improvement and ensure a seamless experience for users across different web environments.

## **XI. SECURITY**

**1. User Authentication** – When it comes to making user authentication for example like other login form websites, they include strong security such as password policies and password recovery.

**A. Password Policies** – Forcing the user to create strong passwords with length and complexity to avoid getting hacked.

**B. Password Recovery** – If the user forgets the password or gets hacked by someone else. However, if the user knows about the information of the account, it can recover.

**2. Data Encryption** – Since our project has storage for data that'll protect sensitive information of all users.

**A. Database** – It includes its database for user data, web database, and API for payments.

**3. Protection Against Common Web Vulnerabilities** – There are a lot of web vulnerabilities such as exploitation, injection, DDoS, etc. However, there are also ways to protect a website like firewall, pentesting, monitoring, and other more, also there are tools that can help to protect websites such as Cloudflare, Nessus, OpenVAS, Wireshark, and Burp Suite.



## XII. THIRD PARTY INTEGRATIONS

For third-party integrations, we incorporate various tools to enhance the functionality and user experience of our website. This includes integrating secure payment gateways for smooth and reliable transaction processing. We decided to use the G-Cash Application for the payment gateways. Also, we enable social media sharing functionalities to promote user engagement and broaden our online reach such as Facebook, Twitter, Instagram and YouTube which are commonly used by many users. To gather valuable insights into user behavior and website performance, we integrate robust analytics tools, allowing us to make informed decisions and optimize our online presence. We will use the Google Analytics since it is free.

## XIII. ADMINISTRATION

### User Roles and Permissions

1. **Administrator** – has the full access for the website, can delete and update items in the shop, can view customer's orders, can delete and retrieve user accounts.
2. **Manager** – has the ability to edit the website's content only
3. **Customer Support Representative** – limited access only, can communicate with the customers in their need, can view user accounts and orders.
4. **Registered User** – has the ability to shop, browse, add to cart items, and pay.
5. **Guest User** – can only view the shop/products, he/she cant add to cart items.

**Maintenance and Updates:** We will implement a regular maintenance and updates for the website to ensure its performance and security. We will check it weekly to ensure that the website is working properly and to ensure our customer's satisfaction.

## XIV. TESTING AND QUALITY ASSURANCE

We will employ different testing methods, including functional testing to ensure all features work as intended, usability testing to assess user-friendliness, performance testing to evaluate speed and responsiveness, compatibility testing to confirm cross-browser and device functionality, and security testing to identify and address vulnerabilities. Also, we will establish a robust bug tracking system to log and prioritize identified issues, facilitating efficient communication and resolution. We will have a regularly update and monitor the bug tracking system to ensure timely fixes.

## XV. DEPLOYMENT

- A. **Deployment Process** – Codes and other tools such as databases, web codes, etc. that are used in the project will be tested. Once the testing is successful, it is

ready to deploy the project. After deployment, we will conduct continuous testing to ensure that there will be no conflict on the website.

- B. Hosting Information** – This project uses Azure, Apache, and PHPMyAdmin.
- C. Domain Configuration** – Since it is not free to register a DNS, we will use the GitHub to host it for free.
- D. Support and Maintenance** – The website has user support like FAQs and Contacts. For maintenance, we will monitor the website performance and how users interact with the website, also we'll backup the website and database in case of system failure or data loss.

## **XVI. TROUBLESHOOTING**

- A. Maintenance Schedule** – We will conduct a maintenance schedule, twice a week to ensure the website's functionality and performance is good.
- B. Contact Information** – For questions and assistance, you may contact the following:

1. Salma Fae Lumaoang – [salmapeyy@gmail.com](mailto:salmapeyy@gmail.com)
2. Patrick Gonzales - [patrickgonzales20@gmail.com](mailto:patrickgonzales20@gmail.com)
3. Laurence Lagado – [laurencelagado@gmail.com](mailto:laurencelagado@gmail.com)
4. Andrei Bodota – [andreibodota@gmail.com](mailto:andreibodota@gmail.com)
5. John Christopher Remolacio – [johnchristopherremolacio@gmail.com](mailto:johnchristopherremolacio@gmail.com)
6. Lilac Erica Begino – [lilacericabegino@gmail.com](mailto:lilacericabegino@gmail.com)
7. Claris Batacandolo – [Clarisbatacandolo@gmail.com](mailto:Clarisbatacandolo@gmail.com)