

BUY ANG ATIN
(TIMES NEW ROMAN 12 BOLD / UPPERCASE)

An Android Mobile Application Project presented to the
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In Partial Fulfillment of the
Requirements for the subject
Mobile Development focusing on Android Development

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APPROVAL SHEET

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CHAPTER I

THE PROBLEM AND ITS BACKGROUND

1.0 Introduction

- 1-2 PARAGRAPHS DISCUSSING THE PROBLEM NOWADAYS RELATED TO YOUR APP.

E-commerce applications encounter a multitude of obstacles, such as security worries stemming from growing cyber threats and data breaches, market complexity and competitiveness, choice oversaturation, and issues specific to mobile e-commerce. Consumers' concerns about the security of their financial and personal data can erode their faith in e-commerce sites. Due to choice fatigue brought on by the market's complexity and competition, consumers find it challenging to select between comparable goods and services. The surge in mobile-based e-commerce poses new difficulties for responsive design and cross-device user experience. The issue of fraudulent reviews and misrepresented product details adds to the difficulty of making well-informed purchases. For e-commerce to flourish sustainably, these problems must be solved, which calls for constant innovation and dedication to improving security, user experience, and transparency.

- PROPOSE ANDROID APP TO ADDRESS THE PROBLEM

The "Buy ang Atin" app presents a comprehensive solution to the prevalent challenges faced by users in existing e-commerce platforms. Acknowledging the growing concerns related to security, user experience, and the need to support local businesses, "Buy ang Atin" is strategically designed to address these issues head-on. With a state-of-the-art security infrastructure, user-friendly interface, and a dedicated marketplace for local products, our app aims to redefine the e-commerce landscape. By prioritizing the protection of user data, simplifying the shopping experience, and fostering a sense of community through local business partnerships, "Buy ang Atin" envisions a platform where users can shop with confidence, discover unique local products, and contribute to the growth of their communities. This proposal underscores our commitment to creating a

safer, more accessible, and community-driven e-commerce experience, positioning "Buy ang Atin" as the go-to solution for those seeking a better, more sustainable online shopping alternative.

- SUPPORTING INFORMATION ABOUT THE PROPOSAL

The "Buy ang Atin" app proposal addresses e-commerce challenges like security vulnerabilities, user interface complexity, and supporting local businesses. It emphasizes security protocols to instill confidence in users and focuses on intuitive shopping experiences. The app aims to create a unique space for convenient shopping and contribute to local economies. It integrates AI-powered recommendations and a robust review verification system to enhance user trust and satisfaction. The proposal reflects a strategic approach to e-commerce, positioning the app as a transformative force in the industry.

1.1 Objective of the Mobile Application

- Objectives of your app. Why did you create the application?
 - Our objective is to make a mobile application that can advertise and aid small clothing businesses in the Philippines and if the application is successful, we could also consider opening it to other countries. To also provide the users with the convenience of shopping from anywhere at any time, eliminating the need to visit physical stores. Our common objective include:
 - Mobile Accessibility: provide a user friendly and accessible mobile platform, and to help small business by using mobile commerce and ens
 - uring a positive user experience across various devices
 - E-commerce Sales: Facilitate the purchase of clothing items online, providing users with a convenient platform to browse, select, and buy products.

- Brand Visibility: Increase the visibility and awareness of the clothing brand by reaching a wider audience through the app, potentially attracting new customers.
- Virtual Try-On and Augmented Reality: Improve the online shopping experience by incorporating virtual try-on features or augmented reality tools, allowing users to visualize how clothing items will look on them.
- Customer Support: Offer responsive customer support channels, including chat, email, or helplines, to address user inquiries, concerns, or issues promptly.
- User Data Information: User privacy and ensure the security of sensitive information such as personal details, payment information. Enhance the user experience by providing personalized product recommendations based on user preferences, purchase history.
- Security Protection Integrity: Securing the integrity of our app involves implementing measures to protect user data, ensure the application's reliability, and safeguard against potential threats.

1.2 Scope and Limitation of the Mobile Application

- Scope and Limit. (San lang ginagamit yung app, ano yung device na gagamitin for testing at anong version ng android ang supported, Sino lang ang target audience nyo?)
 - The mobile application can only be used here locally in the Philippines. Where our local seller and merchandiser can sell their own branded merchandise, And were only be seen here in the country.
 - Our application is focused only on mobile phones. The device we will use for our testing will be desktop computer, laptop and our mobile phones. The version of the android that will be supported by our application is version 10 to 13.
 - Our target audience will be the people who are active in engaging in online shop applications and want to browse or buy clothes online that

are safe, fast and reliable. Targeting individuals who are passionate about fashion, trends, and staying up-to-date with the latest styles.

1.3 Significance of the Study

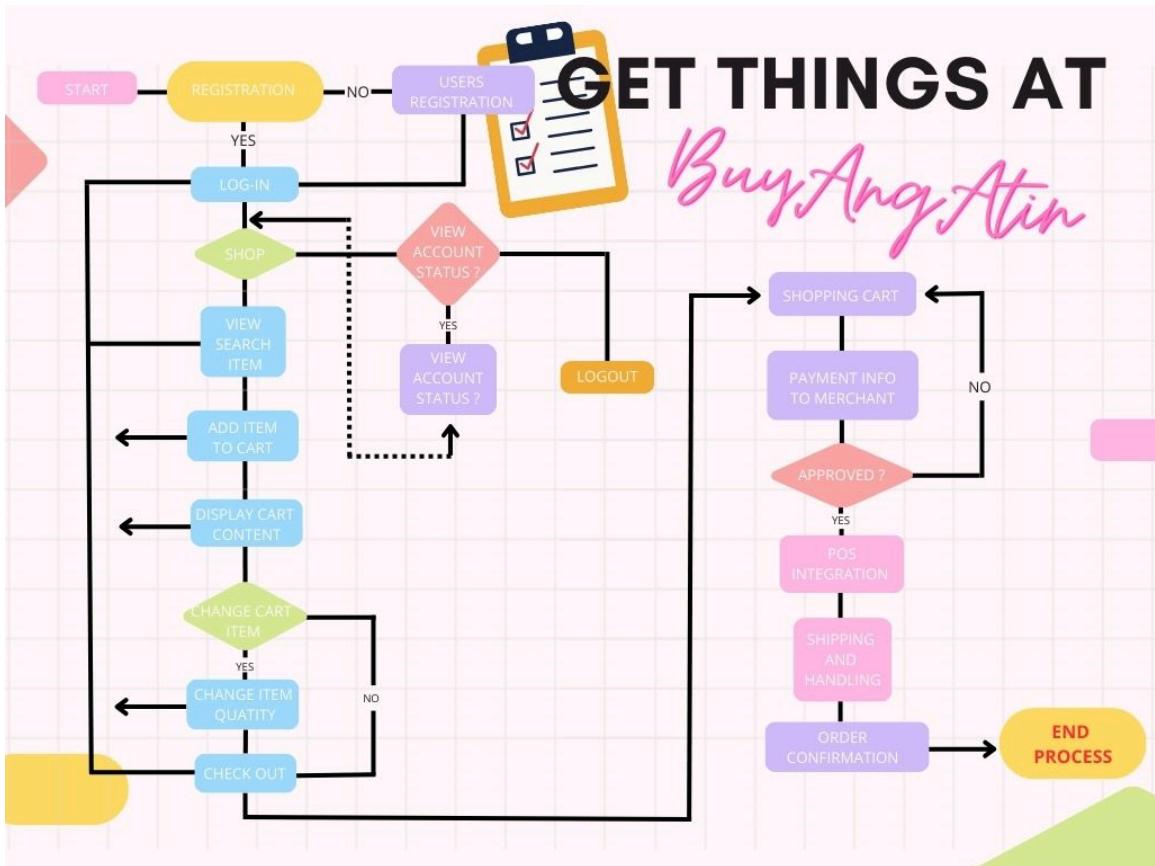
- Ano ang benefits ng application nyo sa mga target users?
 - The user can benefit by having choices that they need to buy on their need for all types of clothing. All clothing is locally made in the Philippines and furthermore supports and advertises their locally made clothing brands.
 - For the application it will be trusted and well secured for all users who will download the application, and has high security, enough to secure all users accounts and data privacy.
 -

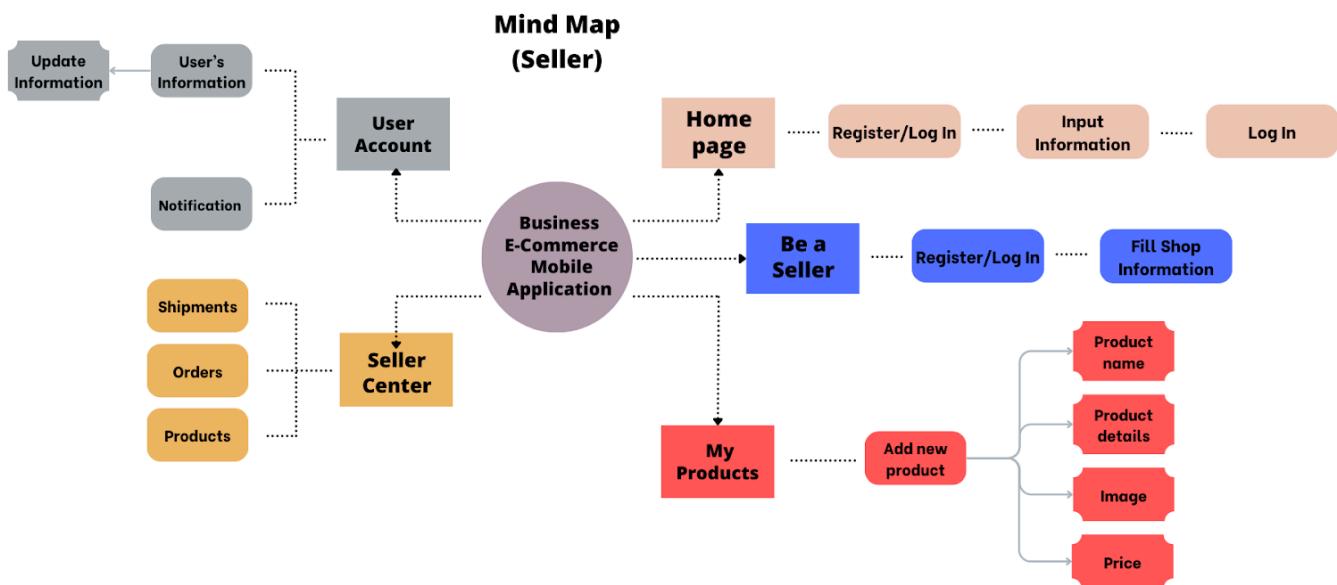
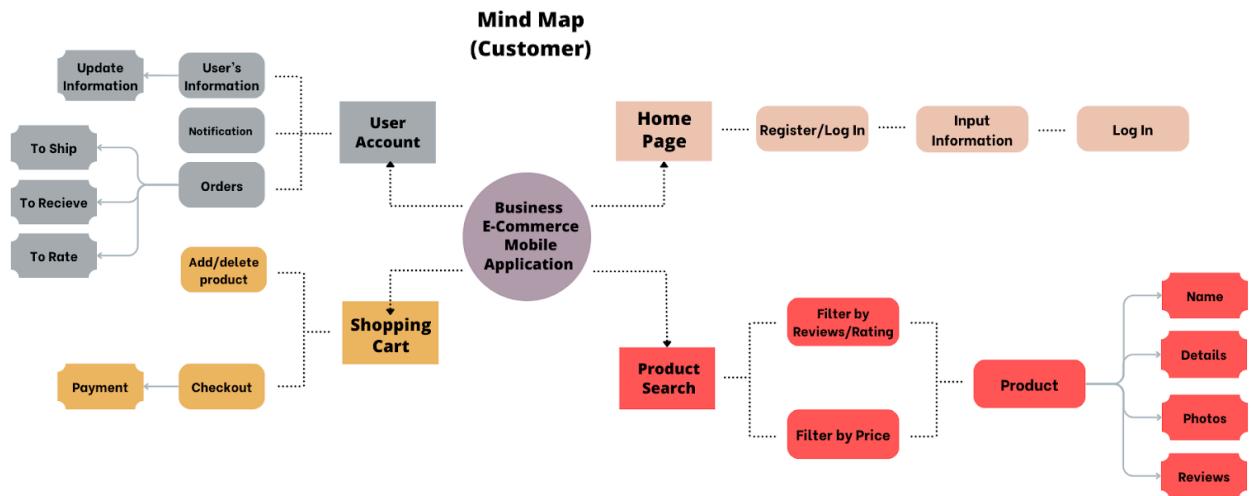
1.4 Requirements Gathering

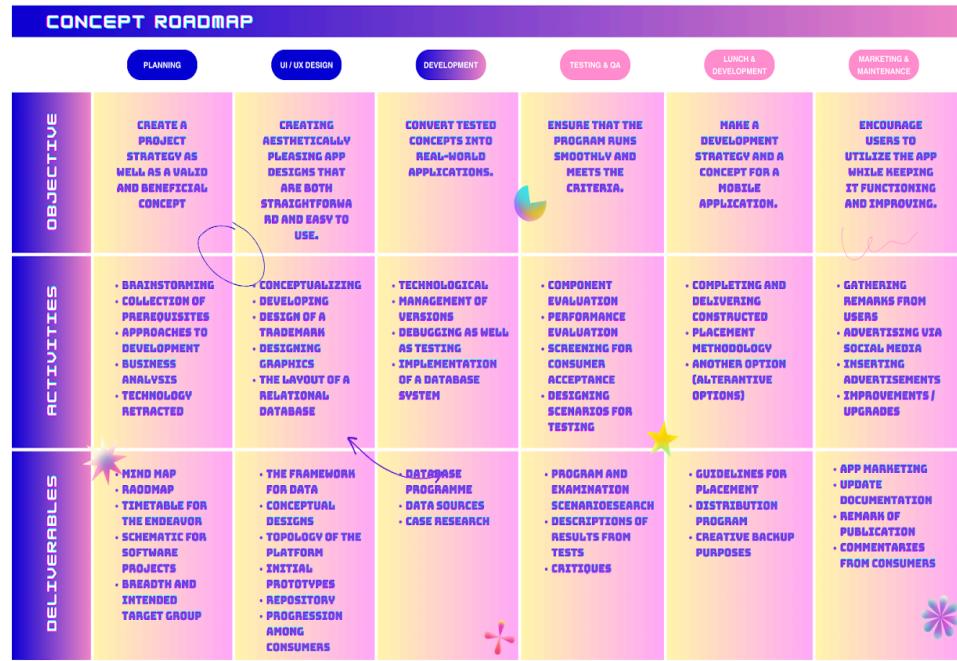
- IDE, FRAMEWORK, Programming Languages to Be Used, Database, Android Device for testing (Android version), Designing Tools.
 - Android Studio
 - Frameworks??
 - Java and JavaScript
 - SQL and Json
 - Android 10 to 13 (Android Phones)

1.5 Visual Table of Contents Diagram

Name of Module(Features)







1.6 Definition of terms

- Unfamiliar terms
- E-commerce - E-commerce is the activity of electronically buying or selling products on online services or over the Internet.
- Framework - A software framework in computer programming is an abstraction that allows extra user-written code to selectively alter software that provides general functionality to create application-specific software.
- Wireframes - A wireframe is a schematic or blueprint that is useful for helping you, your programmers and designers think and communicate about the structure of the software or website you're building.
- Mockups - A mockup is a static design of a web page or application that features many of its final design elements but is not functional.

- Prototyping - Prototype-based programming is a style of object-oriented programming in which behaviour reuse is performed via a process of reusing existing objects that serve as prototypes.
- Android Studio - Android Studio is the official integrated development environment (IDE) for Google's Android operating system, built on JetBrains' IntelliJ IDEA software and designed specifically for Android development.
- SQL - Structured Query Language is a domain-specific language used in programming and designed for managing data held in a relational database management system, or for stream processing in a relational data stream management system.
- JSON - JSON, or JavaScript Object Notation, is an open standard file format and data exchange format that stores and transmits data objects made up of arrays and attribute-value pairs (or other serializable values) using text that is understandable by humans.
- Erode - to slowly reduce or destroy something, or to be slowly reduced or destroyed:
- Robust - An automated system is called robust if they keep stability and performance indices in some permissible range in conditions of disturbances influence without using adaptation methods.
- AI - Artificial intelligence is a branch of computing that mimics human intelligence and can learn from and adapt to data input.
- IDE - is a software suite that consolidates basic tools required to write and test software.

- Market Complexity - The environment in which firms operate fits the definition of a complex system quite well: Customers, employees, partners, suppliers, and other stakeholders interact with each other, exchange information, and adapt their behavior in response to actions by the firm and other network peers.
- Fraudulent - characterized by, involving, or proceeding from [fraud](#), as actions, enterprise, methods, or gains
- Data Breaches - is a security violation, in which sensitive, protected or confidential data is copied, transmitted, viewed, stolen, altered or used by an individual unauthorized to do so.
- Java - is a high-level, class-based, object-oriented programming language that is designed to have as few implementation dependencies as possible..
- Javascript - often abbreviated as JS, is a programming language that is one of the core technologies of the World Wide Web, alongside HTML and CSS. As of 2023, 98.7% of websites use JavaScript on the client side for webpage behavior, often incorporating third-party libraries.
- Security Protocols - Also called cryptographic protocol, it constitutes transferring specially constructed encrypted messages between legitimate protocol participants to fulfil objectives such as mutual authentication or key-exchange in a predefined procedure.
- Interface Complexity - A term that describes the degree of complexity that a user encounters when engaged with a digital medium like a website.

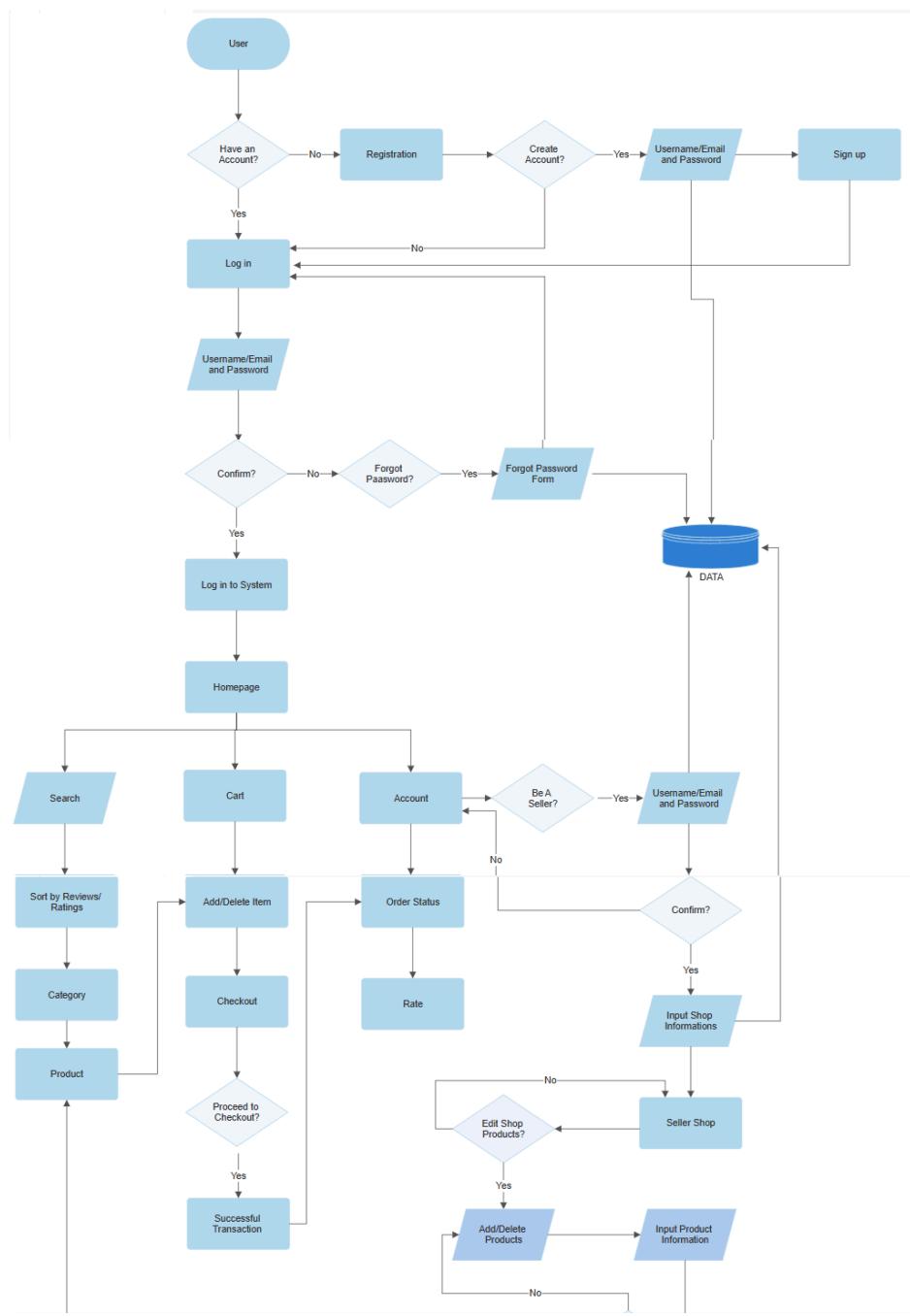
CHAPTER II

UI/ IX DESIGN

This chapter indicates the interaction between users and digital products that focuses on the overall experience, usability, and accessibility of a user interface. To ensure that users can easily access and accomplish their goals by navigating and interacting with the user interface.

2.0 Information Architecture

- Diagram on how the information is processed from the database to the application and vice versa.





2.1 Wireframes

- Wireframes (Figure # and name each frame) and its process and flow.

Figure 1

Log in frame

The wireframe for the Log in frame consists of several rectangular input fields arranged vertically. At the top is a field labeled "Login". Below it is a field labeled "Username or Email". Underneath that is a field labeled "Password". Further down is a field labeled "Sign Up". Below "Sign Up" is a field labeled "Forgot password". At the bottom is another field labeled "Login".

Figure 2

Registration frame

The wireframe for the Registration frame consists of several rectangular input fields arranged vertically. At the top is a field labeled "Registration form". Below it is a field labeled "Username". Underneath that is a field labeled "Email". Further down is a field labeled "Password". Below "Password" is a field labeled "Confirm Password". At the bottom is a field labeled "Sign up".

Figure 3

Forgot Password frame

Figure 4

Home frame

Forget password

Email

Verification Code

New Password

Confirm Password

Continue

Figure 5
My Cart frame frame

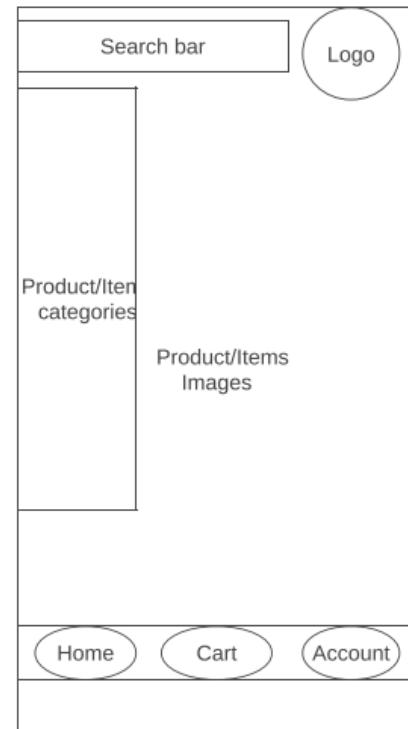


Figure 6
User Account frame

Back

Add/Delete Button

Product

Product

Product

Product

Product

Payment

Check Items Button

Home

Cart

Account

Figure 7

Profile

log out

Username

Contact#

Date of Birth

Be a Seller

Home

Cart

Account

Figure 8

Seller Sign up frame

The Seller Sign up frame consists of the following components:

- A large rectangular container.
- At the top left, a button labeled "Be a Seller".
- Below it, three stacked input fields: "Username or Email", "Password", and "Forget password".
- At the bottom center, a button labeled "Login".

Shop Information frame

The Shop Information frame consists of the following components:

- A large rectangular container.
- At the top left, a button labeled "Shop Information".
- Below it, three stacked input fields: "Shopname", "Seller Type: Individual Or Business", and "Address".
- At the bottom right, a button labeled "Submit".

Figure 9
Seller Account frame

The Seller Account frame consists of the following components:

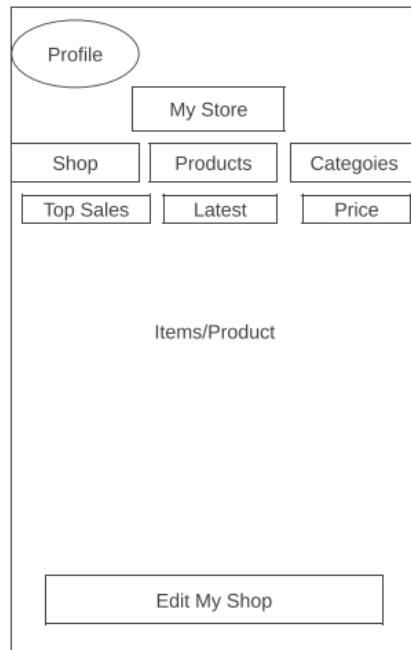
- An oval labeled "Seller Account" at the top left.
- A rectangular button labeled "Message" at the top right.
- Two stacked rectangular buttons in the middle-left: "My Store" and "Order Status".
- Two stacked rectangular buttons in the middle-right: "My Products" and "Earnings".
- Three circular buttons at the bottom: "Home", "Cart", and "Account".

Figure 10
Check-out frame

The Check-out frame consists of the following components:

- A large rectangular container.
- At the top left, a button labeled "Order List".
- Below it, a button labeled "Order Summary".
- In the center, the text "Summary of Orders".
- Below the summary, a button labeled "Payment Method".
- Two circular buttons for payment methods: "Cash On Delivery" and "Add/Debit Card".
- At the bottom, a button labeled "Place Order".

Figure 11
Seller Account frame



2.2 Prototyping

- Prototyping (Figure # and name each frame) and its process and flow.

Figure 1
Log in frame

- The "Sign Up" button directs to the registration page to create a new account. Next is the "Forgot Password" option; if you forget your password, use this to recover and change it. Lastly, the purpose of the "Log In" button is to navigate to the home page.

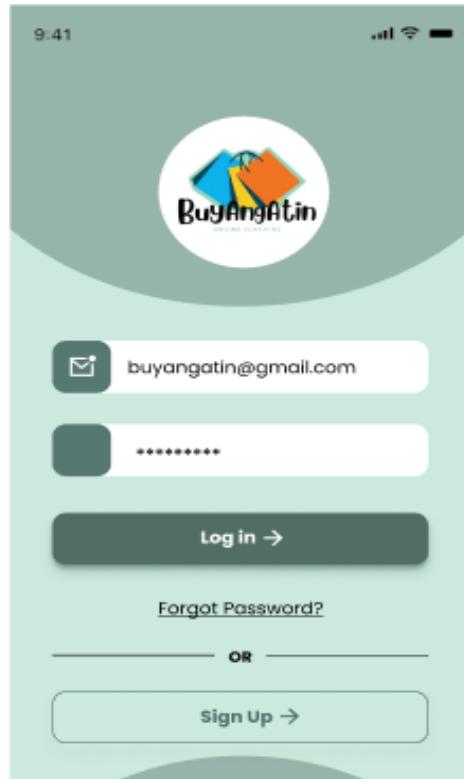


Figure 2
Registration frame

- Registration Frame - The purpose of the registration button is to sign up for a new account.



Figure 3

Forgot Password frame

- The purpose of the "Forgot Password" feature is to recover your account and change your password.

**Figure 4**

Home frame

- The home frame includes buttons to navigate to the home, cart, and account pages.



Figure 5

Product View frame

- In the view frame, you can see the price, product description, color, and size options. Choose the desired options and then proceed to click the "Add to Cart" button if you want to save or purchase the item.

**Figure 6**

My Cart frame

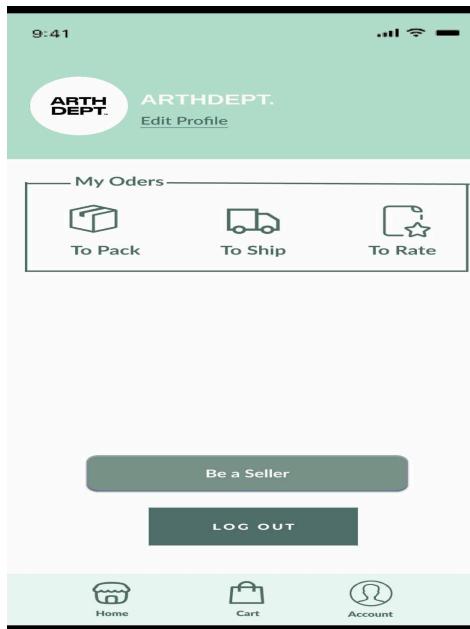
- In the cart, you can adjust the quantity of products, choose options, and proceed to payment to place your order.



Figure 7

User Account frame

- In the user account, there are buttons to view packages, shipments, and ratings. These buttons help you monitor your sales and view your ratings and orders. If you aspire to become a seller, simply click “Be a Seller” to initiate the application process.

**Figure 8**

Profile Edit frame

- To edit your profile, sign up with your updated username, phone number, and date of birth.

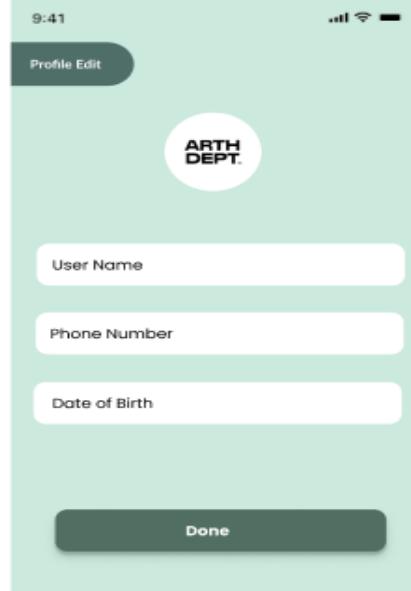
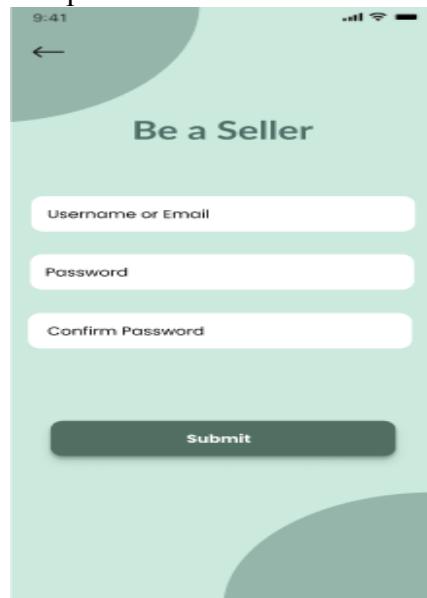


Figure 9

Seller Sign up frame

- In the Seller Sign-Up, enter your username, name, and password. Click the "Log In" button to proceed to shop information.

**Figure 10**

Shop Information frame

- In this frame, you can enter your shop name, seller type, and address. Click the "Submit" button to process your application.

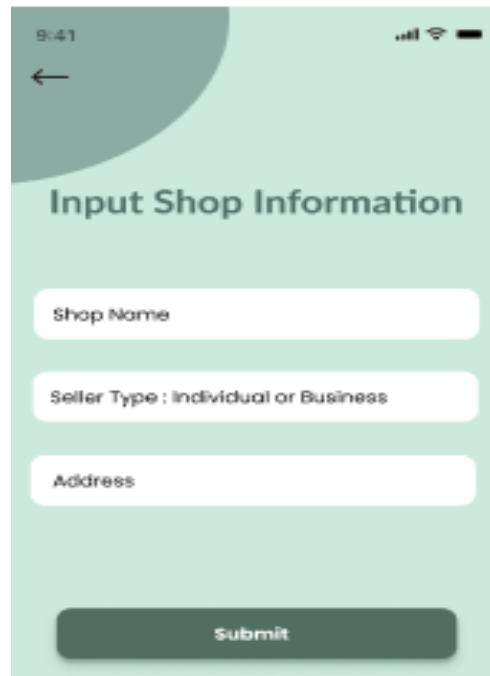
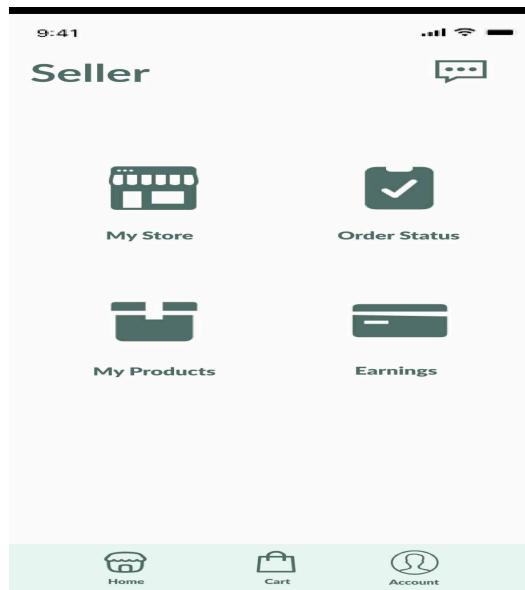


Figure 11

Seller Account frame

- For the seller account, there are buttons to access "My Store," "Order Status," "My Products," and "Earnings." These buttons help you manage your store.

**Figure 12**

Check-out frame

- In the checkout frame, you'll find buttons for selecting the payment method, whether cash or credit card. Once settled, you can proceed to place your order and successfully complete the payment.

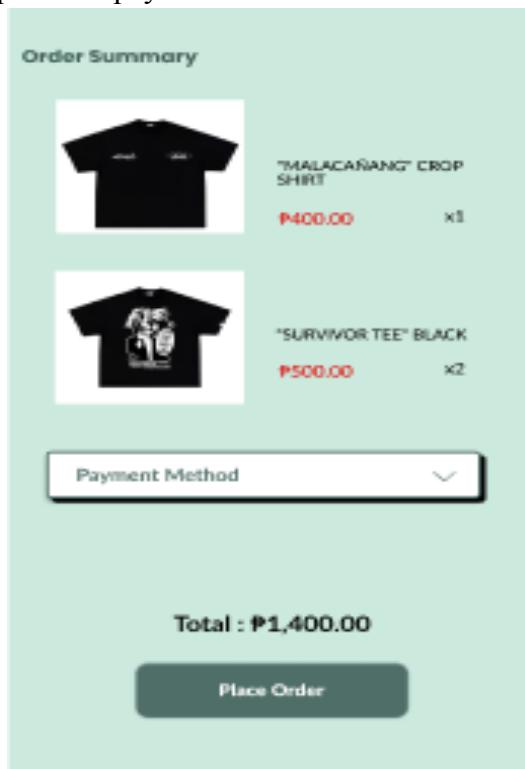
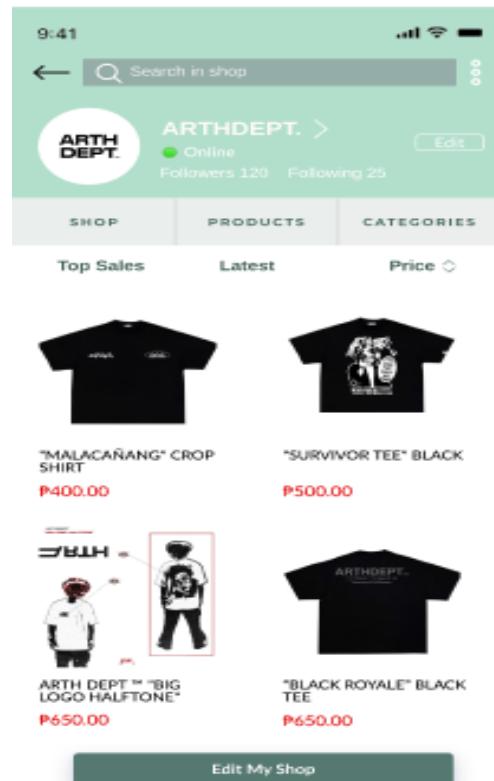


Figure 13

Seller Account Shop frame - In this frame, you'll find the "Edit My Shop" button, allowing you to modify your store details and post new products as needed.

**Figma Prototype Link : BuyAngAtin**

<https://www.figma.com/file/eg6xwyyDH0QnrS3HJWGOPE/BuyAngAtin?type=design&node-id=195%3A55&mode=design&t=WpMSw8jFnMoPaAGc-1>

2.3 Mockups

- Mock Ups (Figure # and name each frame) and its process and flow.

Figure 1

Log in frame

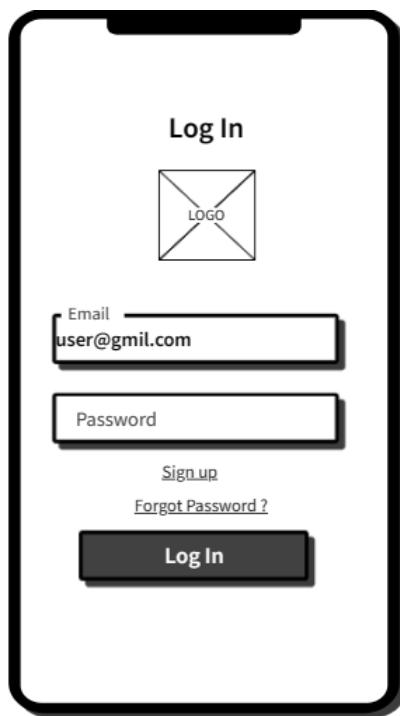


Figure 2

Registration frame



Figure 3

Forgot Password frame

Figure 4

Home frame

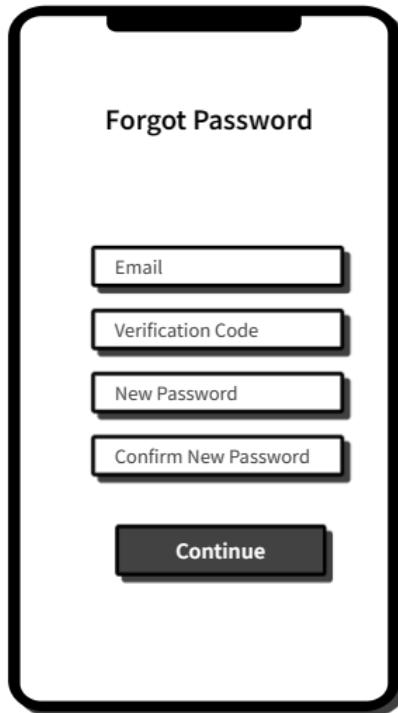


Figure 5

Product View frame

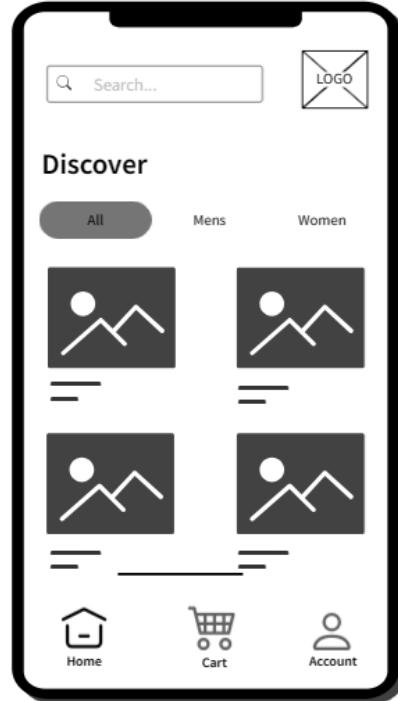


Figure 6

My Cart frame

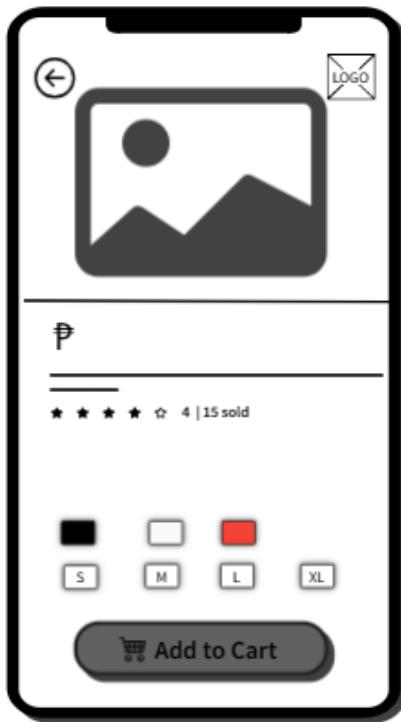


Figure 7

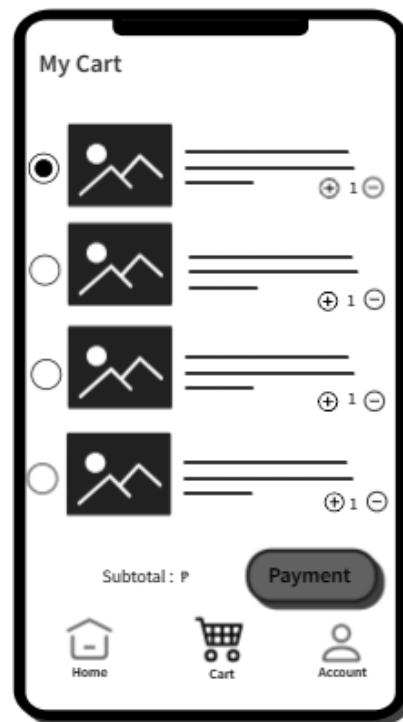


Figure 8

User Account frame



Figure 9
Seller Sign up frame

Profile Edit frame



Figure 10
Shop Information frame

The Seller Sign up frame has a title "Be a Seller" at the top. It contains three input fields: "Username or Email", "Password", and "Confirm Password". Below these is a "Log In" button.

The Shop Information frame has a title "Input Shop Information" at the top. It contains three input fields: "Shop Name", "Seller Type: Individual or Business", and "Address". At the bottom is a "Submit" button.

Figure 11

Seller Account frame

**Figure 12**

Check-out frame

**Figure 13**

Seller Account Shop frame



CHAPTER III

DEVELOPMENT

In this chapter, the development of the application is being tracked. The mobile architecture is elaborated, and further diagrams along with discussions on important source codes are presented.

3.1 Mobile Architecture

- Pano naimplement yung UI nyo then , Workflow ng bawat structure at data.

We Will implement yung

3.2 Project Development

- Coding Process

3.3 Project Builds

- Run every build discuss the progress

3.4 Pre-Testing process

- Set testing procedures

Chapter IV TESTING AND QA

4.1 User Manual

4.2 Test Cases preparation

4.3 Functional Testing

4.4 Usability Testing

4.5 Performance Testing

4.6 Device Testing

Chapter V. LAUNCH AND DEPLOYMENT

5.1 Finalized Build

5.2 Deployment

Chapter VI. MARKETING AND MAINTENANCE

6.1 Marketing Strategy

6.2 Updates and Fixes

APPENDIX A

REFERENCES

APPENDIX B

USER TESTING SURVEY FORM

APPENDIX C

ACCOMPLISHED SURVEY FORMS

APPENDIX D

RECOMMENDATIONS

APPENDIX E

GANTT CHART

APPENDIX F

ROADMAP

APPENDIX G

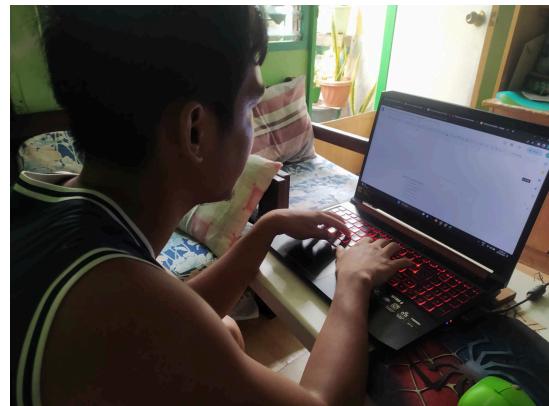
CURRICULUM VITAE

APPENDIX H

FINAL ASSESSMENT

DOCUMENTATION

Week 1 :



Week 2 :



Screenshot of the Android Studio interface showing the code editor and design preview for an activity.

Code Editor (activity_registration.xml):

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".RegistrationActivity"
    android:background="@color/white">

    <ImageView
        android:layout_width="163dp"
        android:layout_height="0dp"
        android:contentDescription="Edit text background"
        android:layout_constraintTop_toTopOf="parent"
        android:layout_constraintBottom_toBottomOf="parent"
        android:layout_constraintLeft_toLeftOf="parent"
        android:layout_constraintRight_toRightOf="parent"
        android:layout_constraintHorizontal_bias="0.0"
        android:layout_constraintVertical_bias="0.0"
        android:layout_constraintEnd_toEndOf="parent"
        android:layout_constraintStart_toStartOf="parent"
        android:layout_constraintTop_toTopOf="parent"
        android:layout_constraintBottom_toBottomOf="parent"/>
    <EditText
        android:layout_width="340dp"
        android:layout_height="wrap_content"
        android:autofillHints=""
        android:background="@drawable/edittext_background"
        android:drawablesStart="@drawable/ic_menu_person"
        android:drawablesPadding="10dp"
        android:elevation="5dp"
        android:padding="15dp"
        android:textColor="#000000"
        android:layout_constraintWidth_percent=".8"
        android:layout_constraintEnd_toEndOf="parent"
        android:layout_constraintHorizontal_bias="0.352"
        android:layout_constraintStart_toStartOf="parent"
        tools:ignore="LabelFor_MissingConstraints_TextFields"
        tools:layout_editor_absoluteY="240dp" />
    <EditText
        android:layout_width="340dp"
        android:layout_height="wrap_content"
        android:background="@drawable/edittext_background"
        android:padding="15dp"
        android:textColor="#000000"
        android:layout_constraintWidth_percent=".8"
        android:layout_constraintEnd_toEndOf="parent"
        android:layout_constraintHorizontal_bias="0.352"
        android:layout_constraintStart_toStartOf="parent"
        tools:ignore="LabelFor_MissingConstraints_TextFields"
        tools:layout_editor_absoluteY="240dp" />

```

Design Preview:

The design preview shows a registration form with two text input fields. The first field has a placeholder "Name" and the second field has a placeholder "Email". Below the fields are "Sign up" and "Sign in" buttons, and a link for "Already have an account?".