In partial fulfillment of requirements in

Web Systems and Technologies 2
ITS22L

Jaden's Online Phone Shop
Project Proposal

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I.   Introduction

Jaden's Phone Shop is a local cell phone shop in Tarlac specializing in the sale of smartphones. The business offers a wide selection of smartphones categorized into budget-friendly, mid-range, and flagship models.

In addition to smartphones,the store also offers customer support services, such as minor phone repairs, including screen and battery replacements.

II.   Problem Statement & Objectives

The growing market for retail shops specializing in electronics has increased competition over the years, impacting Jaden's Phone Stop's ability to attract customers. The business previously relied on word-of-mouth marketing, which has become less effective over time. Additionally, Jaden's Phone Shop faces challenges in reaching a broader audience, as customers who wish to purchase a phone in person must visit the store to view its product selection.

To address these issues, the development of an e-commerce website is proposed. This website will allow the business to expand its reach, attract a larger customer base, and eliminate the limitation of requiring in-person visits. The website will also feature an AI chatbot designed to assist customers in selecting products. However, the website will focus solely on browsing and ordering products, and shipping-related features will not be included

The project aims to achieve all objectives outlined upon its completion:

- Create a website for customer and administrative usage
- Enable users to log in to their accounts.
- Allow users to navigate the website using the navigation bar.
- Integrate an AI chatbot for product recommendations.
- Provide browsing functionality for users to explore available products.
- Display product details, including price, image, and a brief description.
- Allow users to specify the quantity of an item before adding it to the cart.
- Enable users to add items to their shopping cart.
- Provide a cart page where users can review their selected items.
- Allow users to select specific items for checkout.
- Implement a checkout process for purchasing items.
- Display a notification confirming a successful checkout.
- Automatically update the cart by removing checked-out items.
- Allows admin to be redirected to the admin page when logged in
- Allows the admin to Update and Delete users data in the User Management Page
- Allows the admin to Create,Update and Delete in the Product Management Page

III.   Scope of the Project

The e-commerce website focuses on the showcasing of the products being offered by the business as well as the utilization of the ai language model to help customers with selecting their desired smartphone. Besides that, the website allows the customer to perform checkouts of their desired product from the website. The website is only limited to the showcasing of products, checking out of products and assistance of the ai language model in product recommendation for the customer side, for the Admin side, the admin is capable of creating, updating and deleting products that would be showcased in the website as well as create,update and delete user account in the website.

IV.   **Functional/ Non-functional requirements**

Name	Requirements
Functional Requirements	
Login Page	The website should have a login page that would redirect you to either the customer page or admin page
Chatbot Page	The website should be able to display the ai chatbot after logging in the website where the users can ask questions
Product Page	The website should have a Product page in the website that displays all the available products currently in the website. The products should be able to display the name of the product, the image of the product, the price of the product, the description of the product, the number of items the customer wants to order and the add to cart button.
Cart Page	The website should have a Cart Page that displays the items currently in the cart of the customer. The Cart page should allow the user to pick and choose which items they want to check out.
Checkout Page	The website should have a Checkout Page that shows the items being checked out, the price of each item and the total price of all the items as well as the checkout button.

User Management Page	The website should have a User Management Page which shows the registered accounts in the website, it also allows for updating,deleting.
Product Management Page	The website should have a Product management Page which allows for the admin to update,create and delete listings in the website.

Name	Requirements
Non - Functional Requirements	
Product Requirements	
Usability	The website shall be easy by administrators and clients by implementing GUI principles that can be understood through first time interaction with the system.

	The administrator shall easily see the reports: sales reports,inventory reports,user activity reports as well as update
Performance	The website should load quickly, and all functionalities should work seamlessly without any delay.
Compatibility	The website should be compatible with all modern web browsers, including Chrome,Opera, Firefox, and Edge.

Maintainability	The website should be easy to maintain, with clear documentation and a user-friendly content management system.
Dependability Requirements	
Reliability	Inputting incorrect log-in credentials would alert the user and redirect them to the login page. Authorization process of the administrator should have a 100% match before accessing the feature and the services of the software. Information that is entered by the administrator at any time of day shall be accurately reflected in the public website, particularly both client and admin side.
Security Requirements	
Integrity	Information that is deleted or modified by the administrator shall be validated before being committed in the database.
Confidentiality	Password should not be visible at any time

| Authentication | Clients must input the right information to successfully log in at the first time.

Services that shall deny and approve appointment and schedule, as well as adding animals for adoption shall only be accessible to the administrator side. |
|---|---|

V. Database design (ERD)
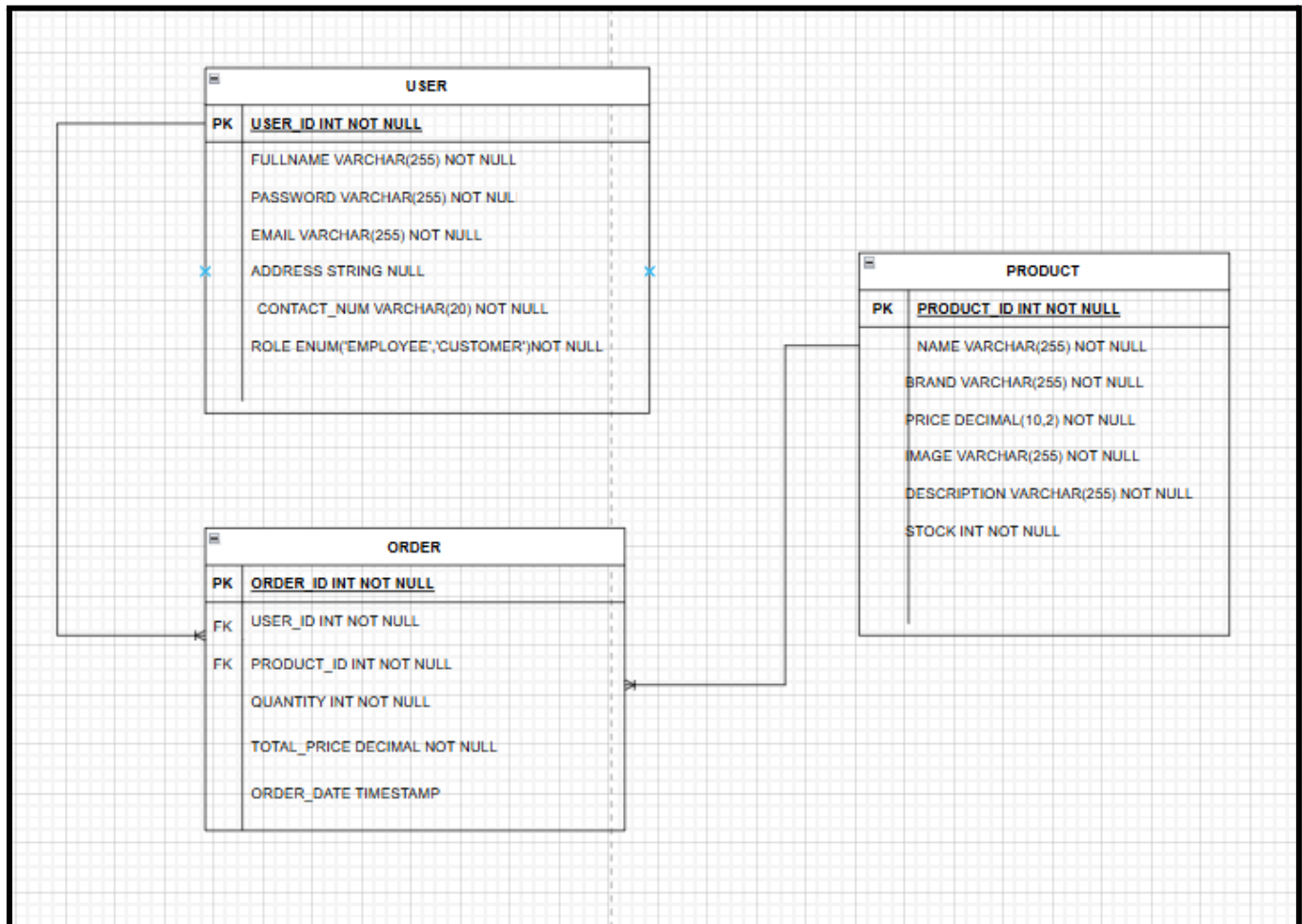
Jaden's Phone stop uses XAMPP with MySQL for the relational database management system. The database is structured with multiple tables to handle customers, orders,and products, for customer inquiries. The database is implemented using MySQL, managed through phpMyAdmin in XAMPP. Tables use foreign keys to ensure data consistency,AUTO_INCREMENT for primary keys, and ENUM values for order and payment statuses.

The database consists of the following tables:

- Users – Stores customer information such as name, email, password, address, and phone number. Each user can place multiple orders and interact with the AI chatbot.
- Products – Stores product details, including name, brand, model, price, stock quantity, description, and category.
- Orders – Stores order details such as customer ID, order date, total amount, and status. Each order is linked to a customer.

VI. Features of the System
A. Sitemap

User Page
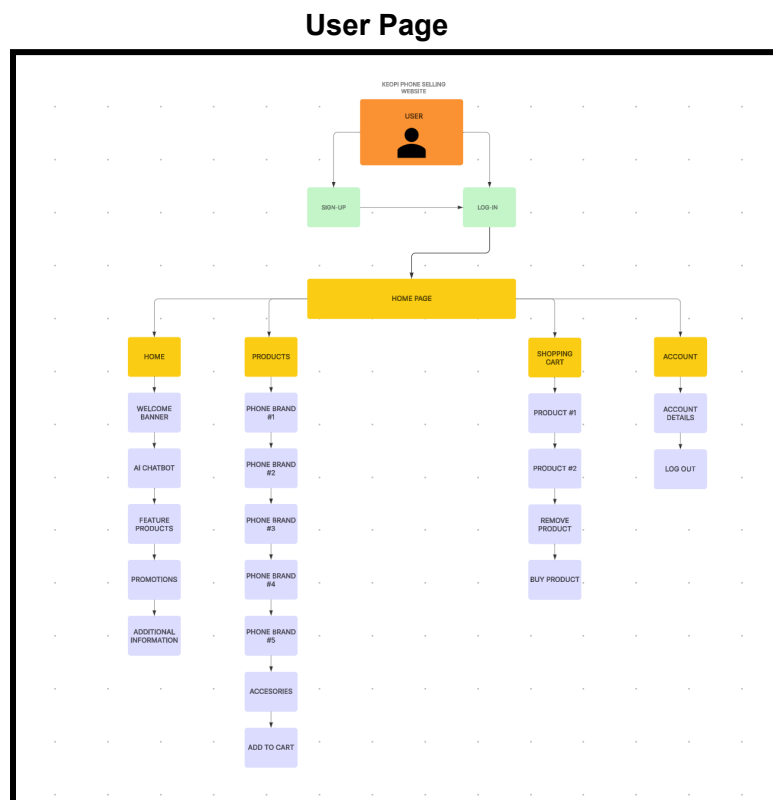
Sitemap description:

The Jaden's Phone Stop offers a smooth navigation system for users. To access the website, users can register to create an account or log in if they have an account. After logging in, they are directed to the Home Page, which is the main navigation hub.

From the Home Page, users can have access to four main sections: Home, Products, Shopping Cart, and Account. The Home section offers improved browsing experience with a welcome banner, an AI assistance chatbot, a feature product showcase, ongoing offers, and more details about the website. This section offers an informative and interactive environment for users.

The Products section offers users a browsing facility for available products grouped into various phone brands and accessories. Users can browse and choose products, with an Add to Cart facility to reserve products for future purchase.

The Shopping Cart section assists users in managing chosen products prior to checkout. Products in the cart are listed separately, with the options to remove products or complete the purchase. This section offers complete control to users over their shopping experience.

The account section offers a view and edit service for account details and log out securely. This section offers users the option to manage their personal details and session security.

Admin Page
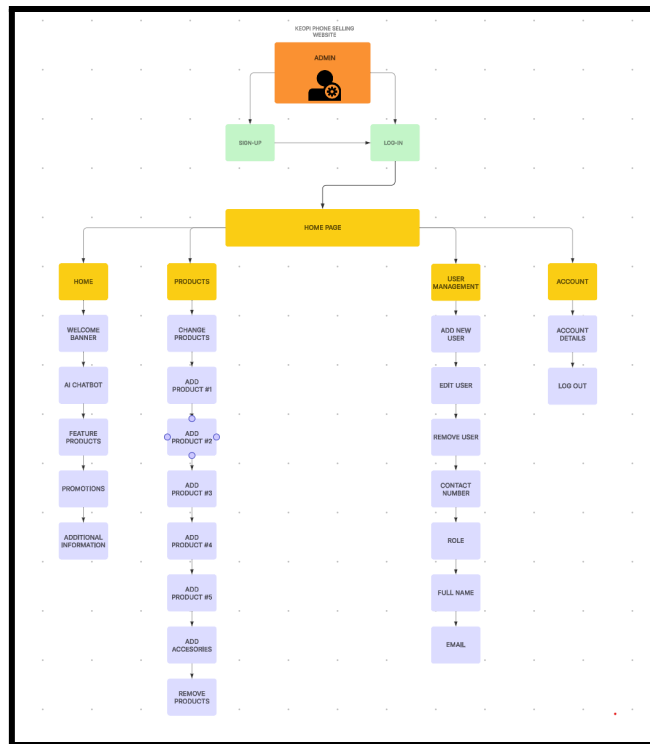
Sitemap description:

The Jaden's Phone Stop website provides a convenient and well-organized navigation system for the administrators. To access the system, the admin must sign up or log in beforehand. After the successful login, they are redirected to the Home Page, which is the primary page for managing most of the website's features.

From the Home Page, the admin can access four primary pages: Home, Products, User Management, and Account. The Home section has a welcome banner, an AI chat support, feature products showcase, promotions and more information about the business. Even though the section is for improving user experience, it does not require direct administrative control.
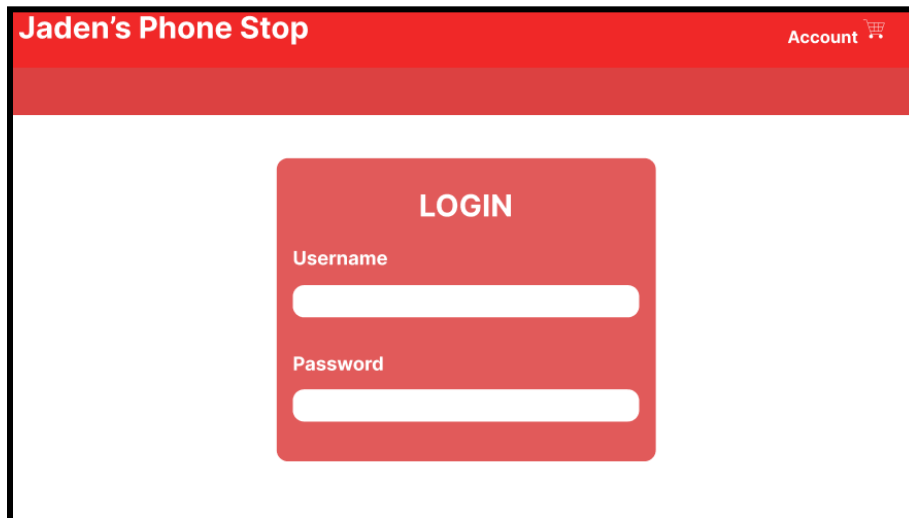
The Product section gives the admin the capability to manage stock by editing products, adding new products and accessories, and removing unwanted or out-of-stock products. This section gives full control over the product lists on the website.

The User Management section gives the admin the capability to manage user access by adding, editing, or removing users. They can also manage user contact information, view their roles, and update user information such as full names and email addresses. This section is crucial for ensuring security and accessibility in the platform.

The Account Section gives the admin the capability to manage their profile by viewing or updating account information and securely logging out when needed. After the admin completes their task, they can log out to ensure system security.

B. Wireframes

Login

Sign Up

Chatbot

Jaden's Phone Stop   Account 🛒

What Specific Features are you looking for in your phone?

Add your preferences or price range...

Products

Jaden's Phone Stop   Account 🛒

Our Products

Cart

User Management Page
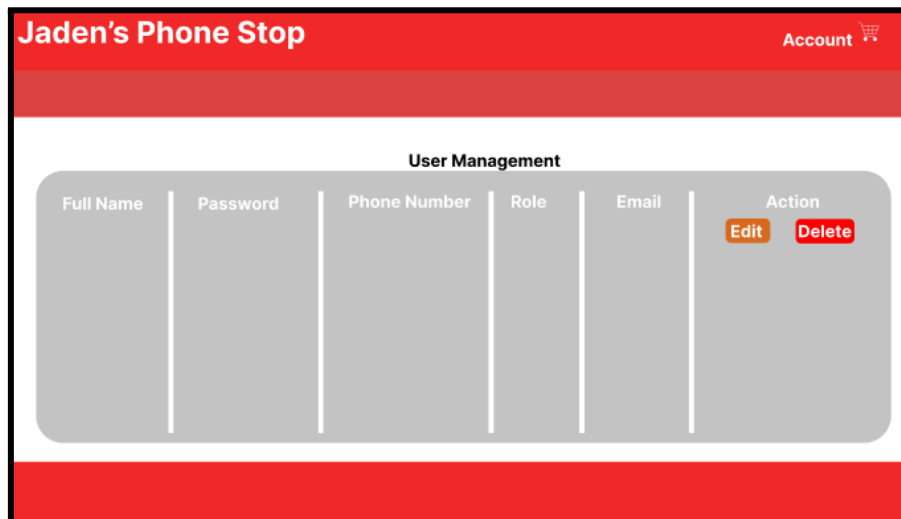
Product Management Page
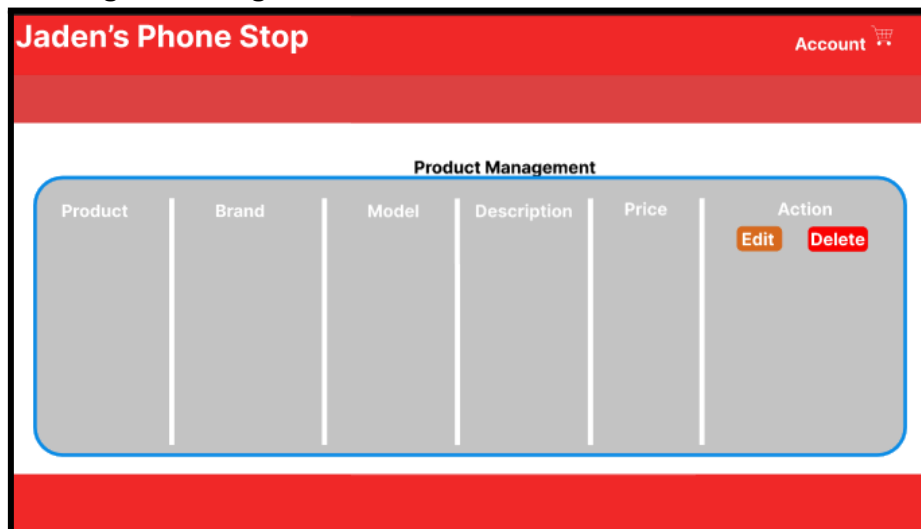
VIII. Communication Letter

IX. Acceptance Letter

X. Test Results

TEST SCRIPT #:	1
TITLE:	Site Availability
CREATED BY:	Denver Belarmino
DATE TESTED:	3/1/2025
PRE-CONDITION:	Access to browser and Internet
TEST SCENARIO:	Verify that the user can access the site through the internet.

ID#	Description	Steps to Execute	Expected Results	Actual Results	Pass/Fail
TC1	Verify that the user is able to access the site through the internet	Navigate to the website link	Website should open	Website should open	Pass

TEST SCRIPT #:	2
TITLE:	Account Registration
CREATED BY:	Denver Belarmino
DATE TESTED:	3/1/2025
PRE-CONDITION:	Access to browser and Internet
TEST SCENARIO:	Verify that the user registration page is working

ID#	Description	Steps to Execute	Expected Results	Actual Results	Pass/Fail
TC1	Account creation through inputting credentials to be used for account login	1. User will go to the register page 2. The user will input name, email, password, phone number and address	1. User's details must reflect on the users database	1. User's details have been included in the users database	Pass

TEST SCRIPT #:	3
TITLE:	Product Viewing
CREATED BY:	Daniel Jegera, Christian Paglinawan

	DATE TESTED:	3/1/2025			
	PRE-CONDITION:	Access to browser and Internet User has an account User has the role of Customer			
	TEST SCENARIO:	Verify that the user can access product page			

ID#	Description	Steps to Execute	Expected Results	Actual Results	Pass/Fail
TC1	Products must be viewed depending on the page accessed	1. User goes to products page 2. User sees all products listed in the shop 3. User goes to Oppo page 4. User sees products of the brand Oppo 5. User goes to Redmi page 6. User sees products of the brand Redmi 7. User goes to Oneplus page 8. User sees products of the brand Oneplus 9. User goes to Samsung page 10. User sees products of	1. Products listed must match its brand	Products listed match with the brand name	Pass

		the brand Samsung			

TEST SCRIPT #:	4
TITLE:	Chatbot Testing
CREATED BY:	Christian Paglinawan
DATE TESTED:	3/1/2025
PRE-CONDITION:	Access to browser and Internet User has an account User has the role of Customer
TEST SCENARIO:	Verify if chatbot is responsive to user questions

ID#	Description	Steps to Execute	Expected Results	Actual Results	Pass/Fail
TC1	The Chatbot is a system used to provide detailed information on the available products to the user through inputting a prompt and the chatbot	Input a prompt on the text area	Chatbot will provide a recommendation based on prompt	Chatbot recommended a phone while giving detailed specifications meeting the user's	Pass

	delivering its recommended product based on the user's description.

TEST SCRIPT #:	5
TITLE:	Cart System
CREATED BY:	Matthew Manalang
DATE TESTED:	3/1/2025
PRE-CONDITION:	Access to browser and Internet User has an account User has the role of Customer User added products to cart
TEST SCENARIO:	Verify if the product is added to the cart

ID#	Description	Steps to Execute	Expected Results	Actual Results	Pass/Fail
TC1	The cart system enables the user to buy the products listed and is informed about the price of the products based on the product name and quantity	1. User goes to preferred product's page 2. User adds the product to cart 3. User goes to cart page	1. The user can only add to cart based on the stock of the phone 2. The user must have the product details reflect on the cart page 3. If the user checked out, it	1. User cannot add to cart a product if quantity is higher than current stock 2. User's order is seen on the cart page 3. User's order reflected on the orders database	Pass

		4. User proceeds to checkout	must reflect on the order database		

TEST SCRIPT #:	6
TITLE:	Dashboard and Transactions List Viewing
CREATED BY:	Matthew Manalang
DATE TESTED:	3/1/2025
PRE-CONDITION:	Access to browser and Internet User has an account User has the role of Customer
TEST SCENARIO:	verify if the user is able to access the dashboard and transactions

ID#	Description	Steps to Execute	Expected Results	Actual Results	Pass/Fail
TC1	1. The navbar must only contain dashboard and transactions 2. The user must be able to access dashboard and transactions	1. Access transactions page 2. Access dashboard page	1. User must only see the dashboard and transaction page as employee	1. User can only see the dashboard and transaction page as employee	Pass

TEST SCRIPT #:	7
TITLE:	Add Users, Products
CREATED BY:	Denver Belarmino, Daniel Jegera
DATE TESTED:	3/1/2025
PRE-CONDITION:	Access to browser and Internet User has an account User has the role of Employee
TEST SCENARIO:	1.verify if the user can edit, add and modify product and product. 2.Verify if the changes are applied

ID#	Description	Steps to Execute	Expected Results	Actual Results	Pass/Fail
TC1	1. User inputs product or account details and adds it to database	1. User inputs product details and adds it to products database 2. User inputs user details and adds it to users database	1. The product details must be reflected in the database and show in the products page 2. User details must reflect on the user database and be able to log in with the email.	1. Product and Users are inputted in the database and are functional.	Pass

TEST SCRIPT #:	8

TITLE:	Edit Products and Users
CREATED BY:	Denver Belarmino
DATE TESTED:	3/1/2025
PRE-CONDITION:	Access to browser and Internet User has an account User has the role of Employee
TEST SCENARIO:	1.verify if the user can edit, and modify product and product. 2.Verify if the changes are applied

ID#	Description	Steps to Execute	Expected Results	Actual Results	Pass/Fail
TC1	The user should be able to edit the details of either the user or product by changing the name, brand, image and the stock.	1. choose a product to edit 2. edit the details listed 3. the database should change depending on the details provided 4.choose a user to edit	1. the product database should change based on the details listed 2. The user database should change based on the details listed	Both user and product database have shown changed details such as name, brand and stock	Pass

		5. edit the details listed the database should change depending on the details provided			

IX. Screenshots of the functions of system (with description)

Home Page
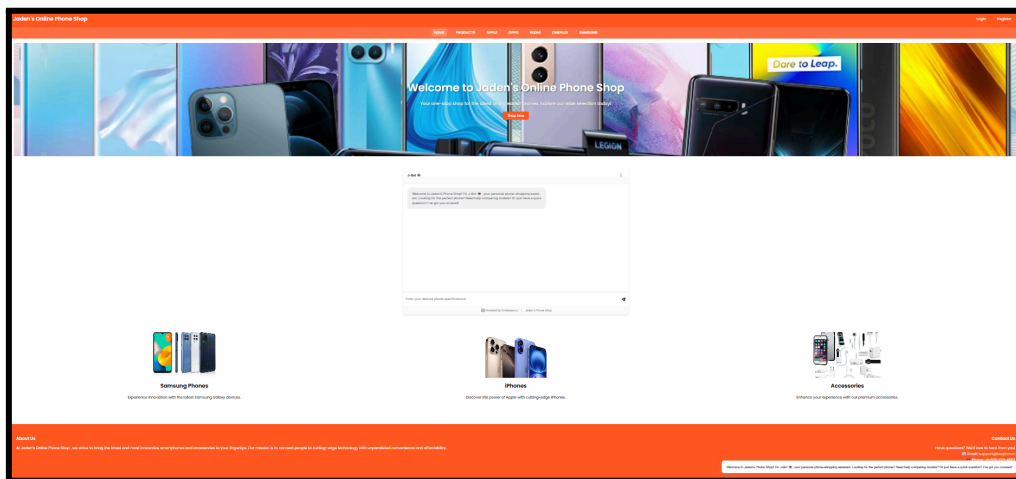
 The home page is the first page the user is redirected to in the website. In this page a navigation menu is visible that will redirect the user to a specific page. A banner can be seen in the middle of the page that has a shop now button that will redirect the user to the products page to see the available products at the shop. Below the banner is the ai chatbot that can assist users with phone recommendations and questions. Contact information about the business is found at the footer of the page.

Ai Chatbot
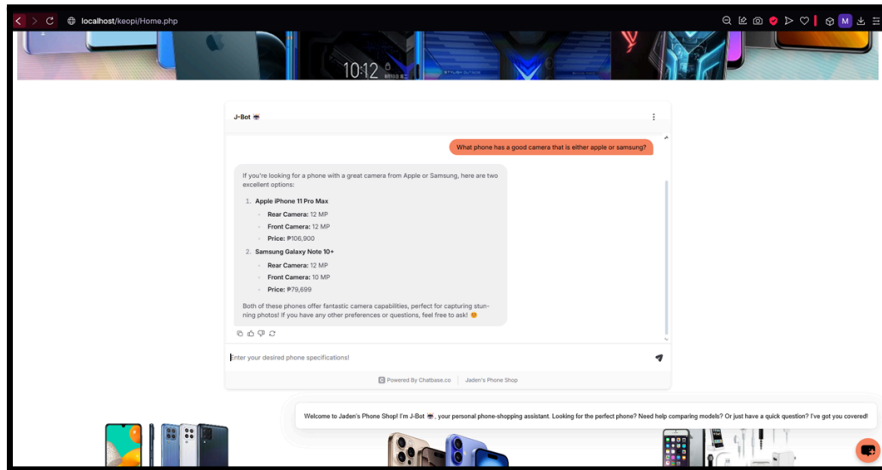
The ai chatbot answers any question the user may have about a product, to use the chatbot the user needs to type the query in the textbox and press enter, the chatbot will automatically generate a response based on the users query.

Product Page
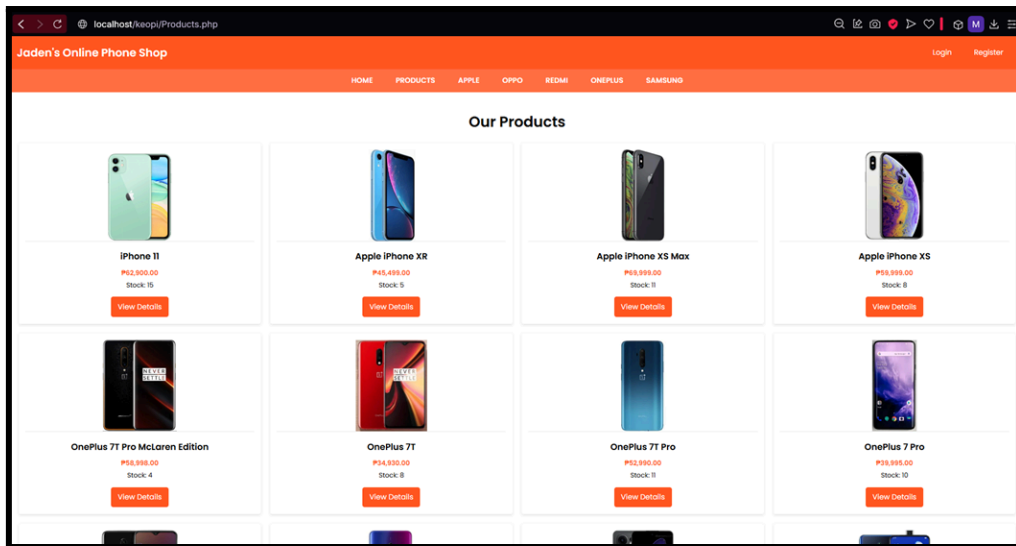
The product page displays all the products currently in stock at the shop, to see additional details about the product users, click the view details for specific information about the product.

Apple Page
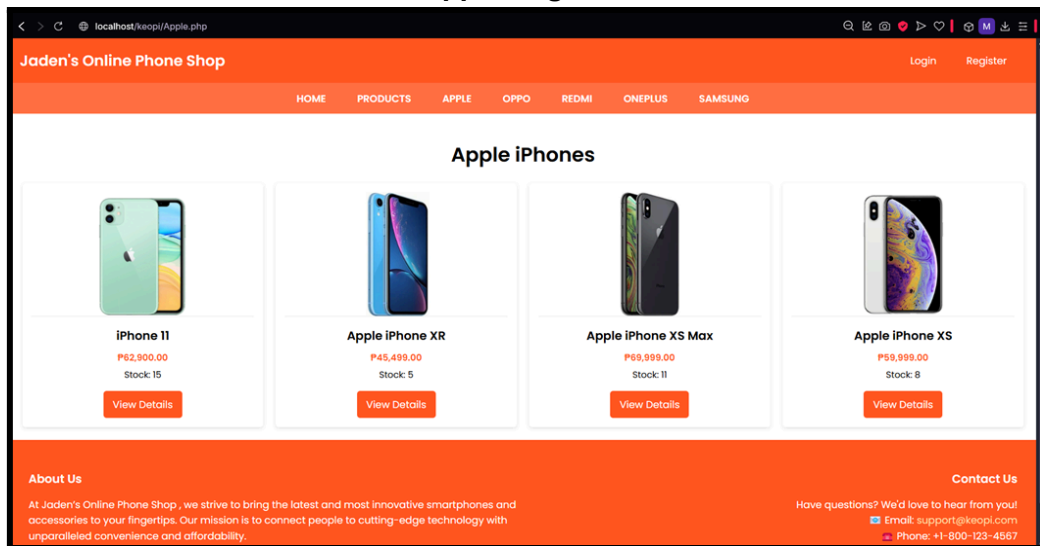
Apple Page showcases all the Apple phone products currently in stock on the website. The price and number of stocks are displayed below the image. To see added information about the product click the view details button.

Oppo Page
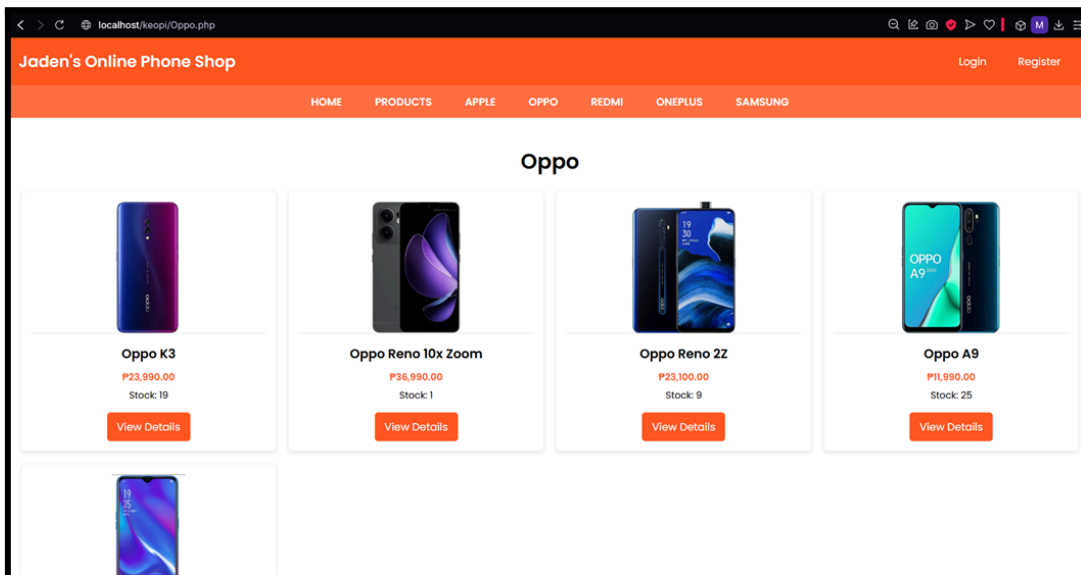
Oppo Page showcases all the Oppo phone products currently in stock on the website. The price and number of stocks are displayed below the image. To see added information about the product click the view details button.

Redmi Page
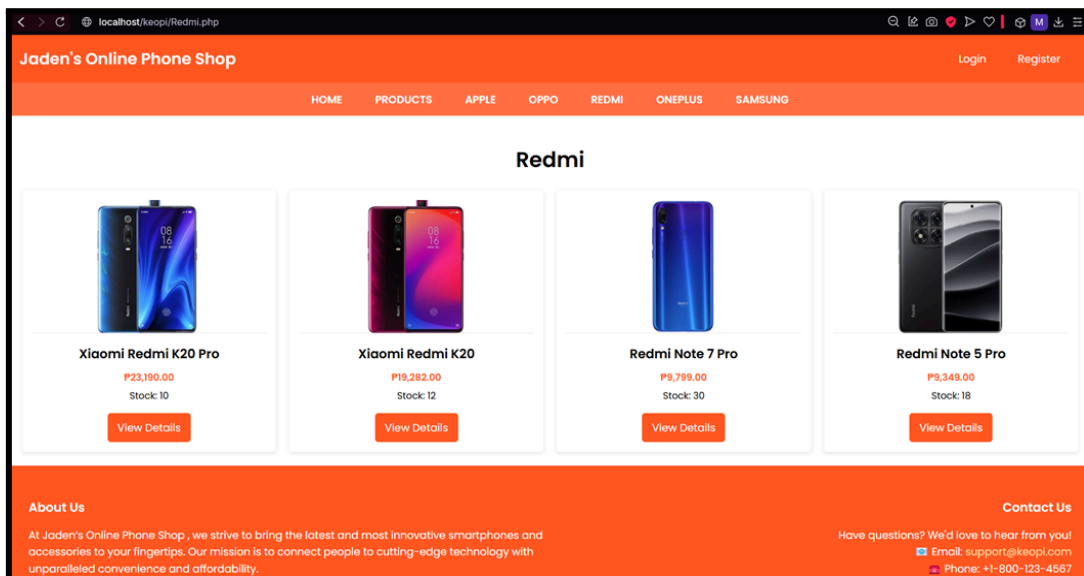
Redmi Page showcases all the Redmi phone products currently in stock on the website. The price and number of stocks are displayed below the image. To see added information about the product click the view details button.

Oneplus Page
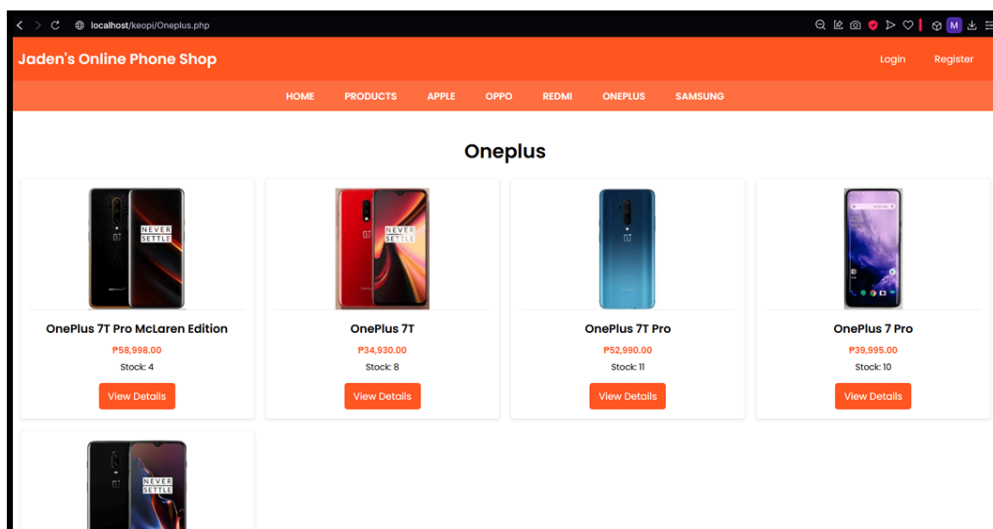
Oneplus Page showcases all the Oneplus phone products currently in stock on the website. The price and number of stocks are displayed below the image. To see added information about the product click the view details button.

Samsung Page
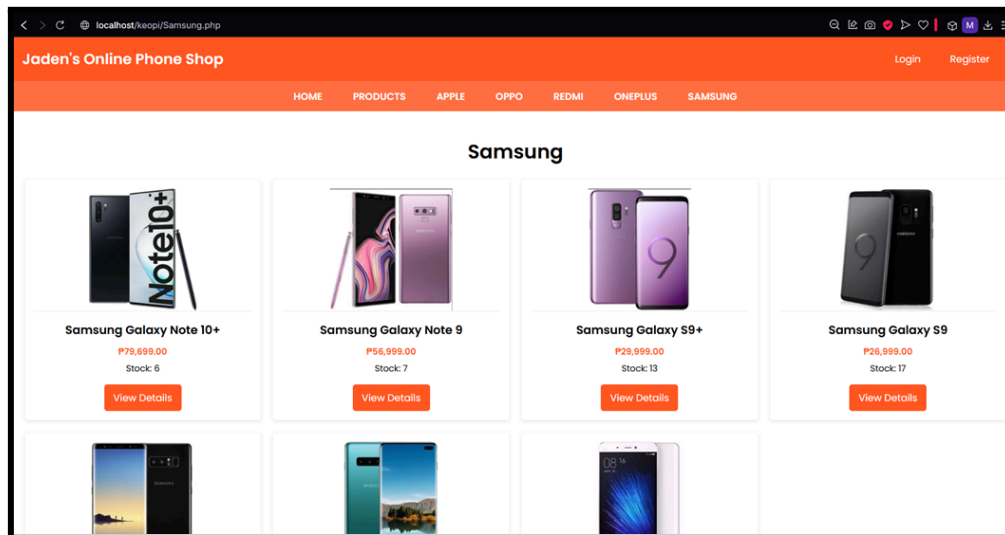
Samsung Page showcases all the Samsung phone products currently in stock on the website. The price and number of stocks are displayed below the image. To see added information about the product click the view details button.

Product Details Page
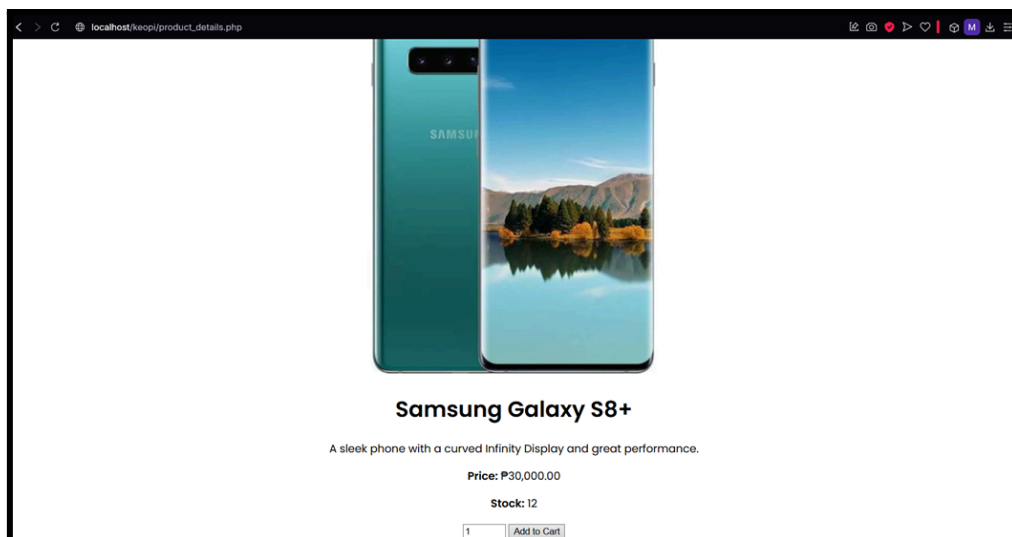
Product Details page showcases an image of the product, a brief description about it, the price as well as the current number of stock. If the user wants to add the product to cart they need to click the add to cart button.

Login Page

The login page asks the user to enter their email and password in order to access their account which lets them see and access their cart. If a user with a employee account enters their credentials they will be redirected to the employee page.

Registration Page

The registration page allows the user to create an account whether it is a customer or an employee. After inputting the needed information the user needs to click register now to create their account, a small message will pop up stating that the account has been created.

Dashboard Page

The Dashboard page is only accessible to users that registered as employees, in this page the user is able to manage products and manage users. allowing the to edit, delete or create new products or users.

Manage Product
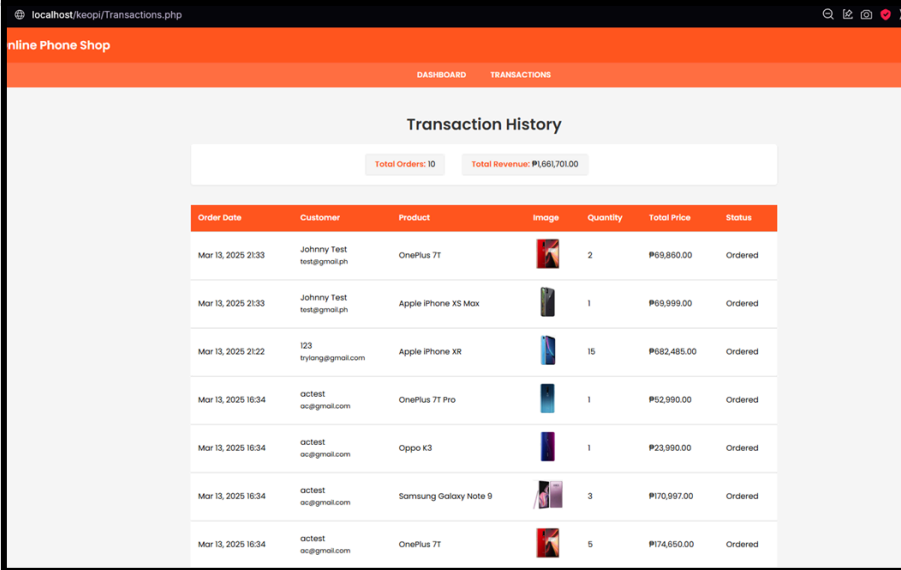
In Manage products, the user can add, modify or delete a product, simply fill out all the required fields and click update product to finalize modifying. The new or updated product will automatically be added to the products page.

Transaction History

The transaction history page is only accessible to users that registered as employees, in this page the users are able to see the products that have been ordered as well as the total number of order and the total revenue the business generated after the products were ordered.