

AACJ Inventory Management System

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DESCRIPTION

The AACJ Inventory Management System (AIMS) is an inventory management system web app that allows employees at AACJ Cycle Parts to automate tasks in tracking inventory stock, storing purchases, and accounting.

STAKEHOLDERS

The stakeholders of this project are yours truly, the lone developer of this project, and the end-users of the web application, which are the AACJ Cycle Parts Employees.

RATIONALE

1. There does not exist an inventory of all the products in AACJ Cycle Parts.
2. AACJ Cycle Parts Employees are struggling to keep track of their daily revenues using physical methods, as it is prone to being lost or misplaced.
3. New AACJ employees are struggling to memorize prices given the number of items being sold and the lack of an inventory system
4. AACJ Employees may need extra information on products that are in demand or need for restocking.

TECH STACK

HTML, CSS, JS, PHP, and MySQL were used in the tech stack.

For the frontend development,

1. HTML is for the structuring of elements of the web app.
2. CSS is for the display, layout, and styling of the web app.
3. Javascript is responsible for dynamic behaviors on the client side, such as event listeners and style manipulation.

For the backend development,

4. PHP is responsible for server-side processes such as fetching data from the server and facilitating HTTP Requests.
5. SQL is the chosen database.

For the IDE used,

6. VSCode is used as the IDE for all the programming stacks.

FEATURES

1. A Dashboard is there to display information about the status of the store's revenue. This includes the display of the daily revenue, total weekly revenue, popular products purchased, the recent purchases, and recent actions taken.
2. An Inventory Page is there to put all the items in a tabular manner with attributes such as name, price, quantity stocked, and quantity sold. The inventory page may allow the creation, deletion, and editing of products in the inventory. Moreover, it has a search bar for searching products in the inventory and a sorting menu that sorts based on the sorting function chosen.
3. A "Create Invoice Page" is there to create an invoice when a customer buys from the store. You can add products by choosing the product in the inventory. In adding a product to the invoice, it will be put as an invoice item with a default purchase quantity of 1. You can edit the invoice items if there are changes in the pricing or the quantity purchased, and submit it if done.
4. A Purchase History page is there to keep track of the purchases. These are segregated per day as well as the total revenue garnered per day.

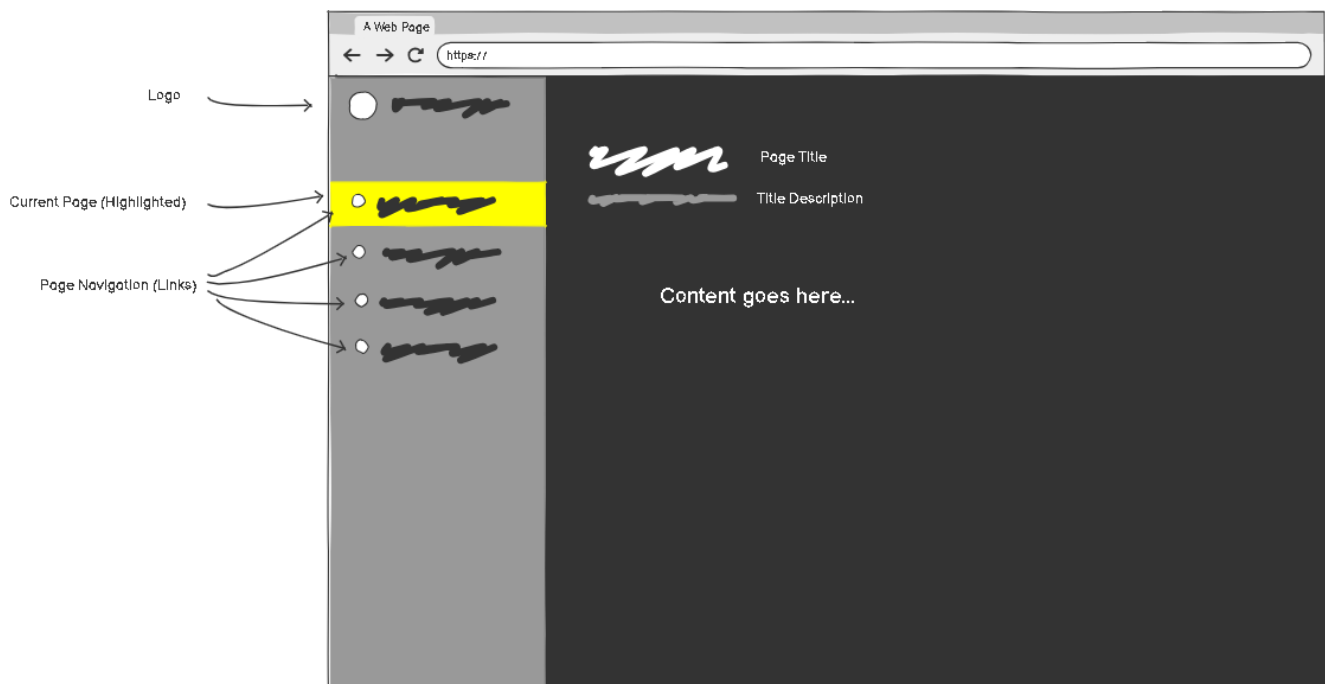
More features may be added after the completion of the project

FUNCTIONALITIES

This section tackles on the website's functionalities. The target devices for the website design are desktop computers and smartphones. The wireframing tool used was Balsamiq, and the UI and prototyping tool used was Figma.

1. General Website Design and Functionalities

Basic Parts of the Website



All webpages in the website contain the logo, the page navigation, and page elements like title and title description.

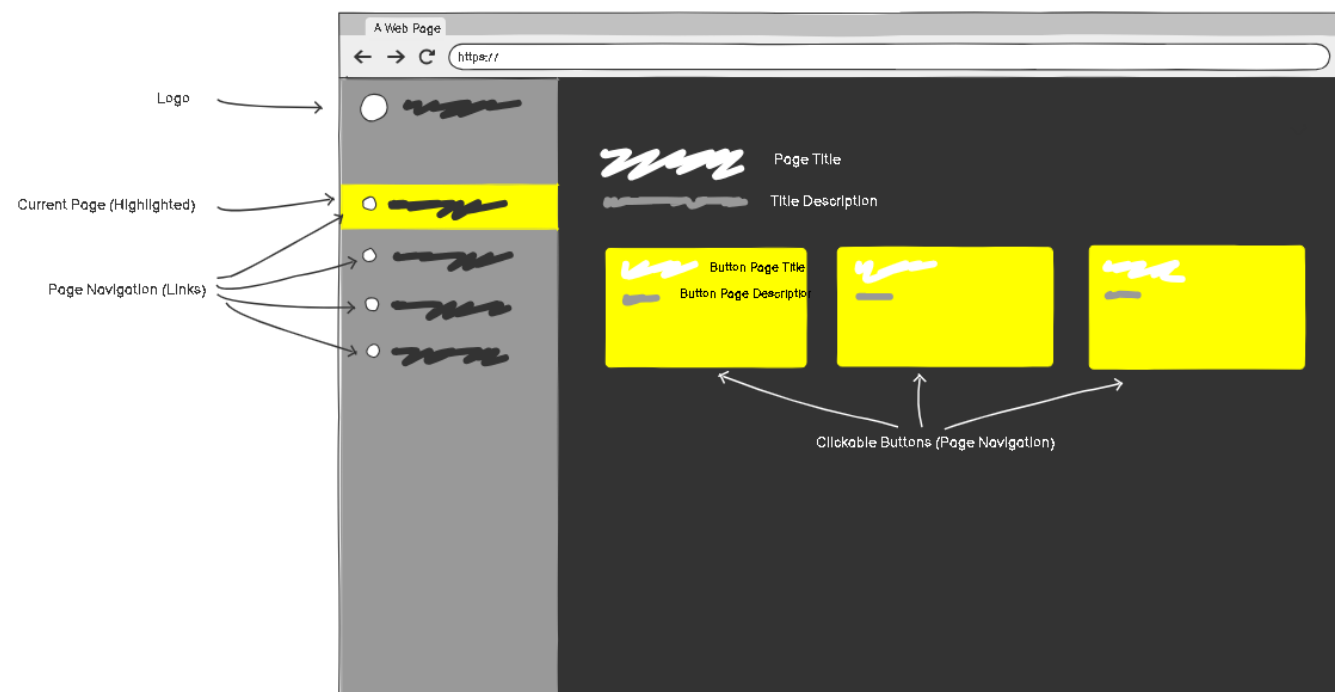
The logo contains the “AACJ Cycle Parts” Logo. The logo is clickable, and it goes to the dashboard when clicked.

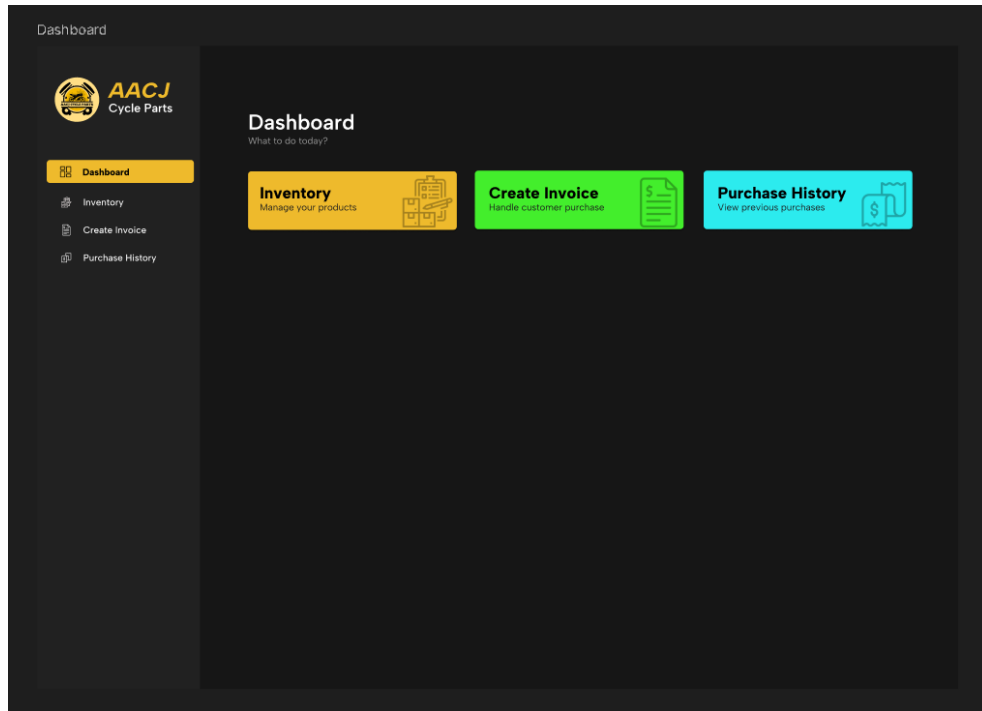
The page navigation contains the different pages of the website. The four main pages of the website are: “Dashboard”, “Inventory”, “Create Invoice”, and “Purchase History”. Moreover, the page navigation highlights the page the user is currently on to prevent the user from getting lost on the site. In addition to that, icons are placed beside the name of each page for easy distinction. A navigation sidebar was used for the desktop to maximize whitespace use and familiarity. A hamburger element was used for the navigation for familiarity as well.

The title signifies the current page the user is in, and the title description gives a brief sentence explaining the functions of the page.

2. Dashboard

Dashboard

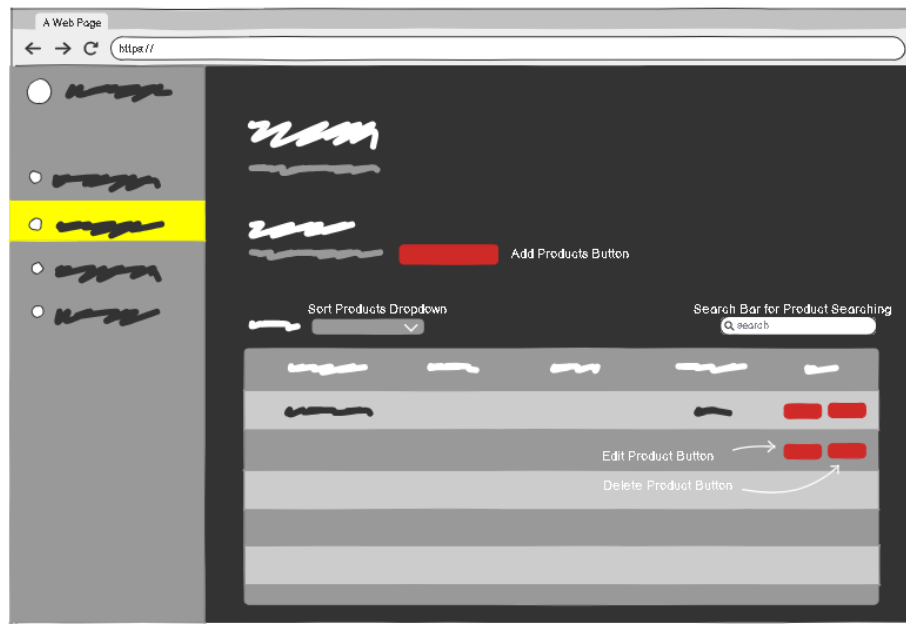




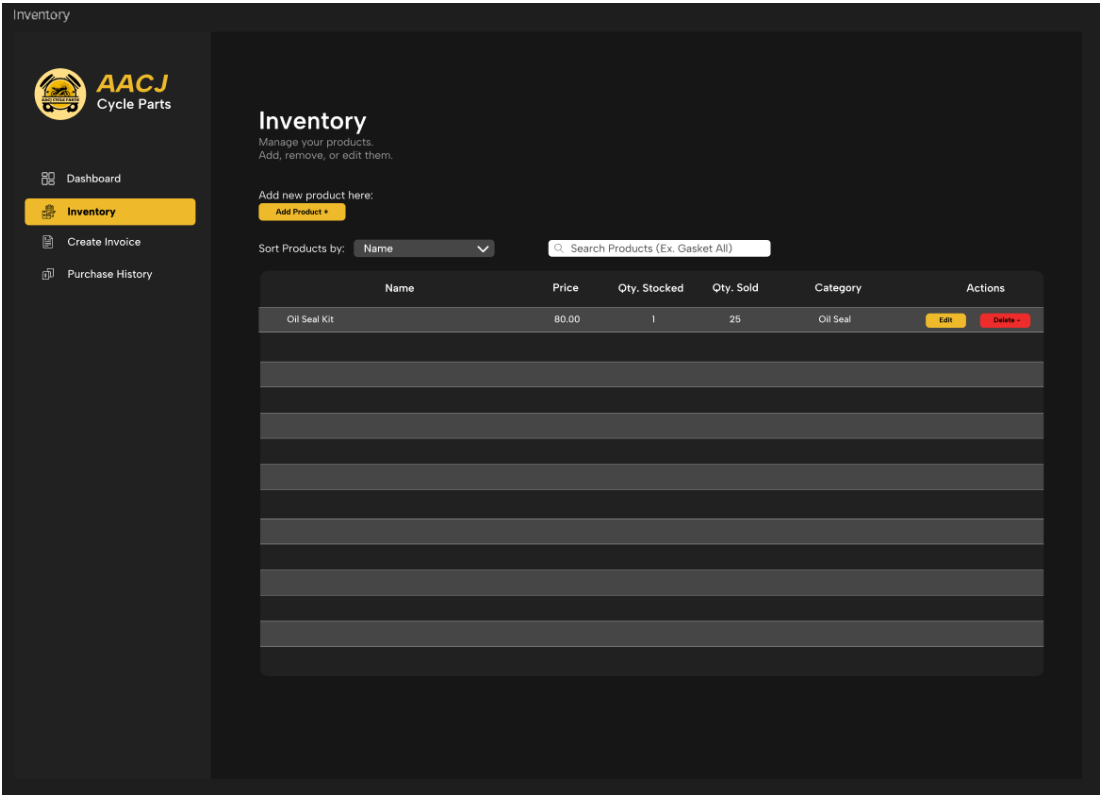
The dashboard (as of 08/07/2025) only contains buttons for page navigation similar to the page navigation UI discussed in “1.General Website Design and Functionality”.

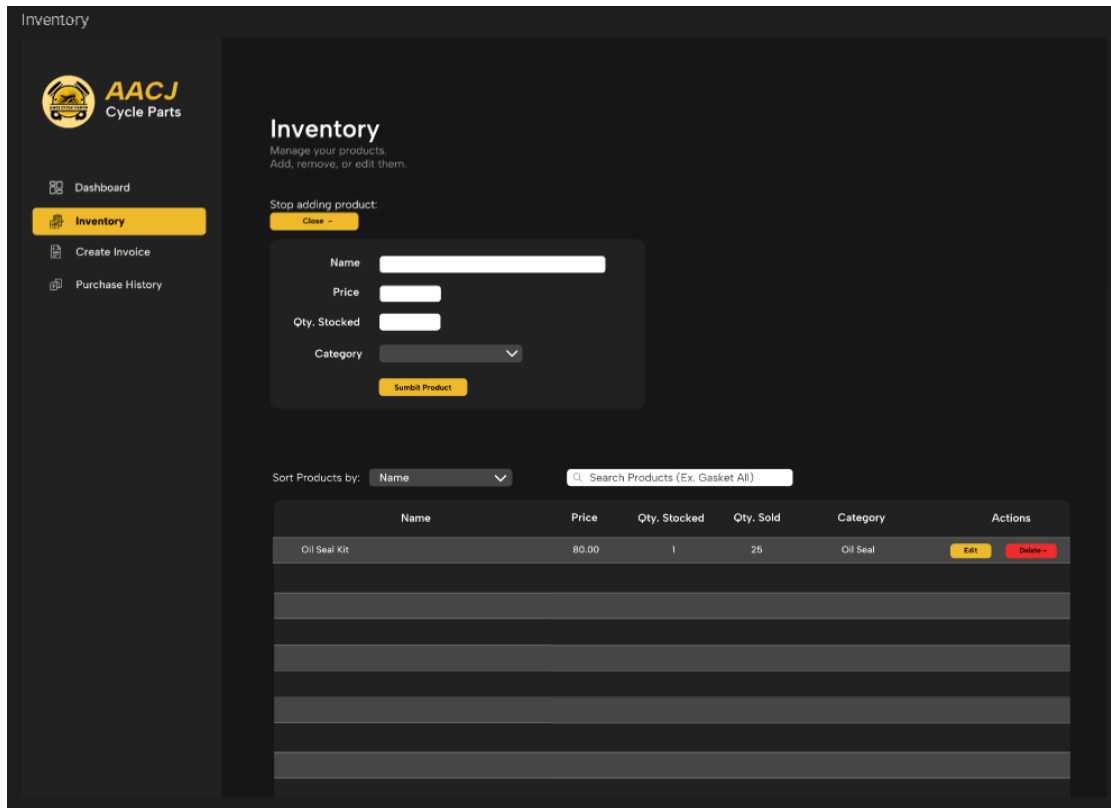
3. Inventory

Inventory (Draft 1 Default)



Inventory (Draft 1 Add Product)





The Inventory Page displays the products currently in the inventory. Moreover, it supports CRUD operations such as the addition of new products, the updating of existing products, and the deletion of existing products.

The Inventory Page allows the display of the products in a table to be changed based on a selected sorting method, and items can be searched/filtered based on the input in the search bar. The sorting methods used are “Name Ascending”, “Quantity Stocked Decreasing”, and “Quantity Sold Decreasing”. The search bar filters and displays the products where the inputted string of the search bar is a substring of a product. The table contains products placed in a row with attributes such as name, price, quantity stocked, quantity sold, category, and actions (“Edit” and “Delete” Buttons).

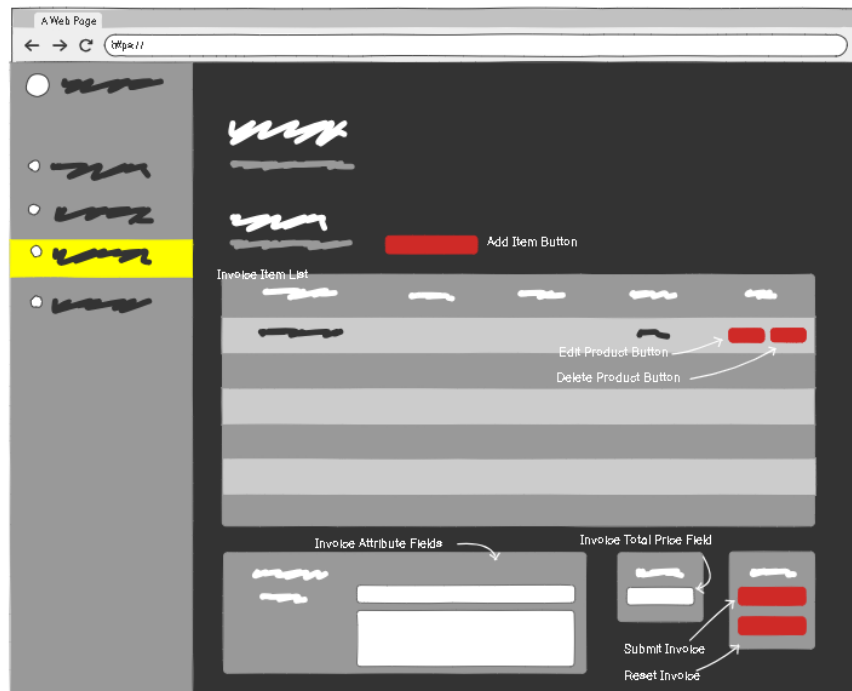
Clicking the “Add Product +” Button opens a form where you can input information on the new product. It is either submitted using the “Submit” Button or closed using the “Close” Button.

Clicking the “Edit” Button makes the fields of price, quantity stocked, quantity sold, and category editable using input fields on that row. This also changes the fields in the actions column where the buttons are changed to “Update” and “Cancel” Buttons.

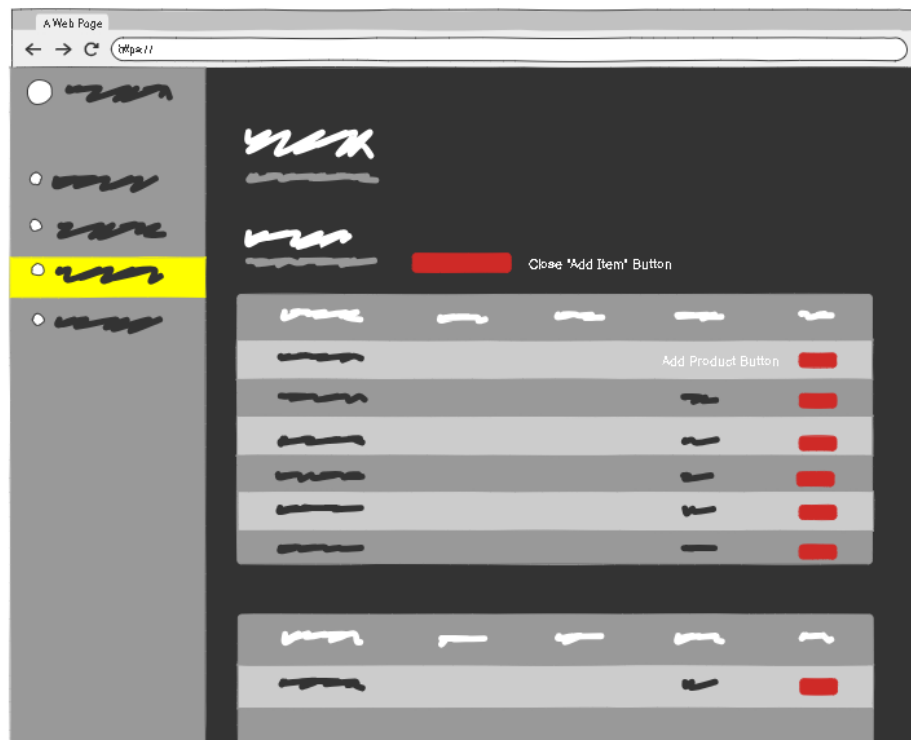
Clicking the “Delete” Button deletes the product on that row.

4. Create Invoice


Create Invoice (Default)



Create Invoice (Add Product)



Create Invoice

**AACJ**
Cycle Parts

Dashboard

Inventory

Create Invoice

Purchase History

Create Invoice

Handle customer purchase.
Add or remove products in the invoice and click "Submit Invoice" at the bottom.

Add an item here:

Add Item +

| Name | Qty. Purchased | Price | Total Price | Category | Actions |
|--------------|----------------|-------|-------------|----------|-----------------------|
| Oil Seal Kit | 80.00 | 1 | 25 | Oil Seal | <div>EditRemove</div> |

Input invoice information here:


Customer Name

Remarks

Invoice Total Price

Submit Invoice

Create Invoice

**AACJ**
Cycle Parts

Dashboard

Inventory

Create Invoice

Purchase History

Create Invoice

Handle customer purchase.
Add or remove products in the invoice and click Submit at the bottom.

Stop adding item:

Close

Search Products (Ex. Gasket All)

| Name | Price | Qty. Stocked | Qty. Sold | Category | Actions |
|--------------|-------|--------------|-----------|----------|---------|
| Oil Seal Kit | 80.00 | 1 | 25 | Oil Seal | Select |

| Name | Qty. Purchased | Price | Total Price | Category | Actions |
|--------------|----------------|-------|-------------|----------|-----------------------|
| Oil Seal Kit | 80.00 | 1 | 25 | Oil Seal | <div>EditRemove</div> |

More Information here:

The Create Invoice Page is mainly in the processing of customer purchases. Users can add items to the invoice or remove them from the invoice. Moreover, more information can be added in the fields below where it can also be submitted.

Products can be added as invoice items by clicking the “Add Items + ” Button where it displays the product inventory. This table contains attributes similar to the “3. Inventory”. You can select the product to be added as an invoice item by clicking the “Select” Button in its row. A search bar, similar to that in “3. Inventory” is used for simple searching of products.

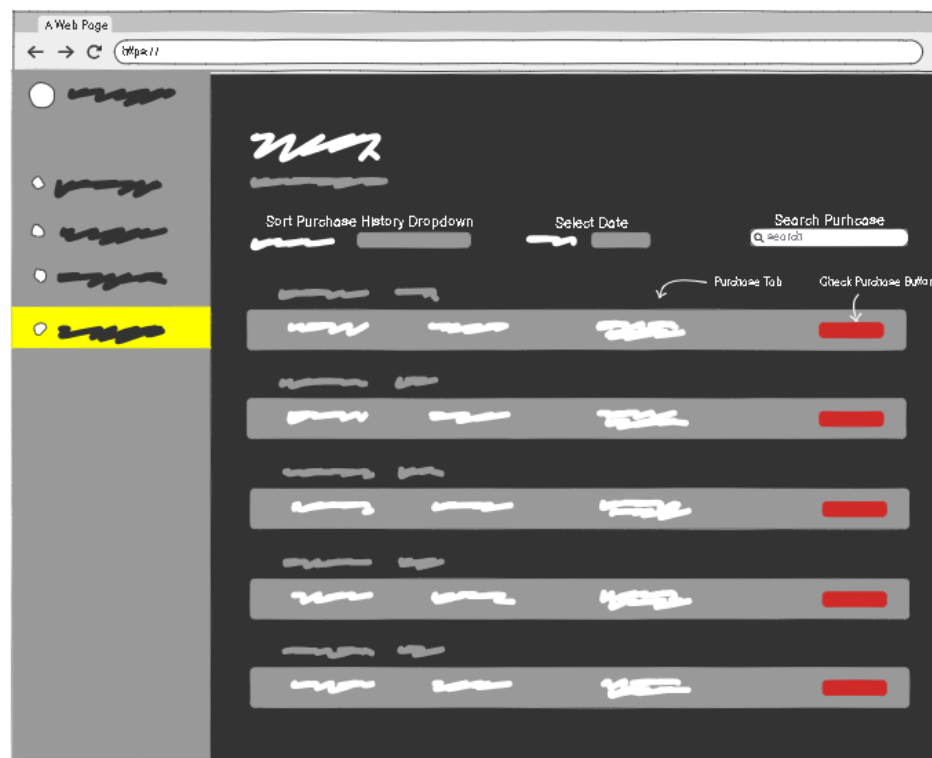
The Invoice Items are displayed in a table with attributes such as name, quantity purchased, price, total price, and actions (“Edit” and “Delete” Buttons).

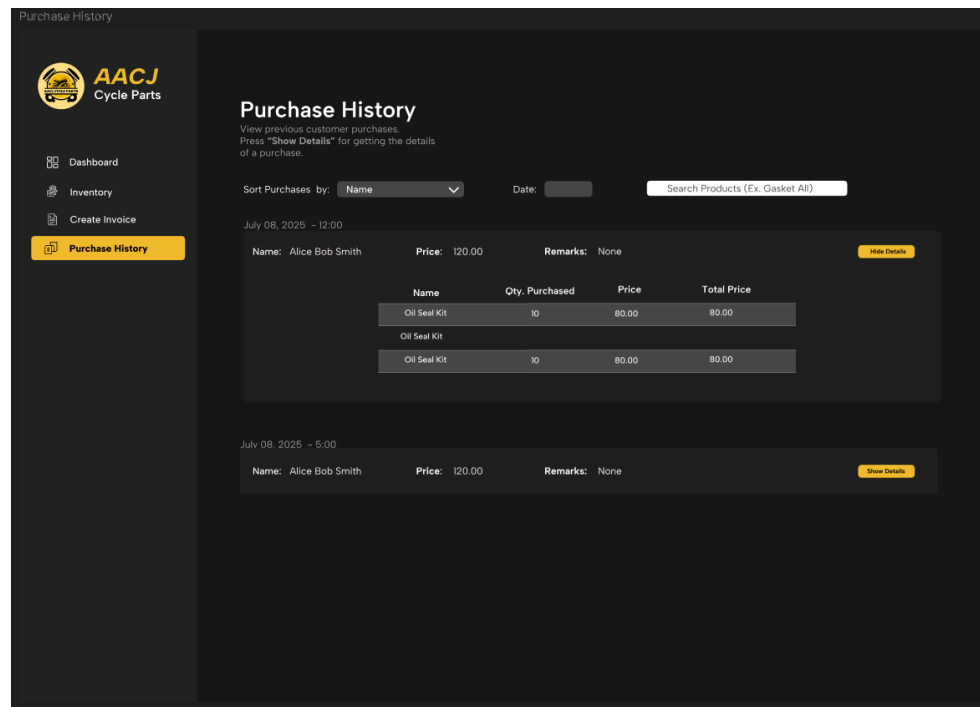
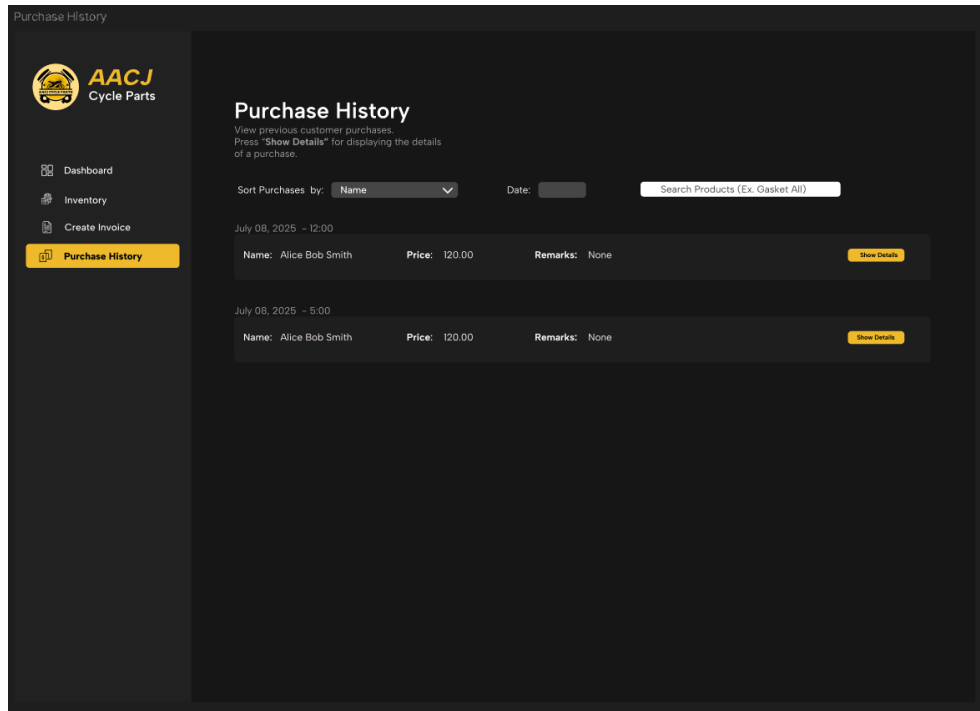
Clicking the “Edit” Button makes the fields of price, total price, and quantity purchased editable using input fields on that row. This also changes the fields in the actions column where the buttons are changed to “Update” and “Cancel” Buttons.

Clicking the “Delete” Button deletes the item on that row.

5. Purchase History

Purchase History (Default)





The Purchase History Page displays all the invoices containing customer purchases to be changed based on a selected sorting method, searched using a specific date, or searched/filtered based on the input in the search bar. Users can sort the products based on the “Name Ascending”, “Name Descending”, and “Date Ascending” items to the invoice or remove them from the invoice.

Each purchase (invoice) is put into a tab where there is a date and time added outside on top. Customer name, total price, and remarks are displayed. You can also show more details of the purchase by pressing the “Show Details” added.