GUI Documentation

General Section:

* Front Page
  + POS System starting screen consists of three login buttons. The three levels of application access are an employee account login, a guest login, and an admin account login.

Graphical user interface, application

Description automatically generated

* + Log In:
    - The employee login has general access to the POS system. This includes item search, inventory search, adding to cart, clearing the cart, and completing transactions. Detailed instructions and explanation are given further in the documentation. The employee login does not permit access to account creation, account manipulation, and database editing. This level access level is purposed for general transaction completion and surface level data viewing, like inventory. Transaction data is saved and registered. Receipt options can also be accessed through the employee account.
  + Log In As Guest:
    - The guest login has the lowest level of access to the POS. It is purposed mainly for quick transaction completion. This account does not have access to data editing or viewing, account editing or viewing, but still retains the functionality of the point-of-sale system, effectively completing transactions quickly. Shopping cart functions and visualizing remain the same, however inventory viewing, and documentation is not allowed for access as a guest.
  + Admin Log In:
    - The admin login has the highest level of application accessibility. From here, the user can create employee accounts, generate reports, access records and inventory, edit and download those records, and essentially have complete access to the system. Admins can search for inventory, edit inventory, edit carts, complete transactions, generate receipts, and generate reports. The documentation goes further in depth for each feature later.
    - Admin accounts by default are generated a user and password of (Admin/Admin). This can later be changed in the account settings frame. Also, by default, access to the pre-generated database and its structure are granted to the admin. (The design behind the admin account is for the user to have complete control and access to the program, and of all its entities.

Table

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* + Employee and Admin logins require a username and password. The guest login does not require account credentials; however, the guest account restricts access to the database and report generation features.
  + Each login transitions the user to their corresponding access main frame. From there, the user will be able to execute transactions services. Buttons for the user will appear depending on the accounts allowed access.
    - (For Example: The guest main frame will not have a report or account button, but the admin main frame will)
    - (The main frame refers to the POS main page)
  + The Admin and Employee accounts have access to a password help frame. From here, the user can change their password.

Table

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* Main Page POS
  + The main page is the hub for access to all features within the POS. From here, the user can transition to the various frames needed for transaction completion, database viewing, and report generation. This page also acts as a transitional space for viewing inventory items that are added to cart.

Graphical user interface

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* + Top Bar Navigation:
    - The navigation bar located at the top is consistent in appearance among all pages/frames. The top bar allows for the user to go back a page, to the main menu screen, and to the login screen. It also grants navigation access to the reports and accounts page. (These are only accessible from an admin account).
    - This gives transitional access to “Back” (the homepage), “Add Product” (inventory additions), “Product List” (frame and view of products within inventory), “Reports” (the transaction and sales reports screen), and the “Logout” button (exiting account).
  + Item Search:
    - In the item search bar, the user can look up inventory by typing on keywords. The items are displayed directly underneath and are clickable. On click, the item is added to the designated shopping cart on the right side.
  + Shopping Cart
    - Items that are selected from the lookup are added here. From the shopping cart, the user can identify the sales tax, the sub total, and then the total payment that will be required for purchase.
    - There are two buttons in order to transition from this screen (to complete or halt a transaction). The user can clear the cart, which removes the items selected, or the user can hit finish and be transitioned to the cart page.
  + Modules within the POS
    - Included features within the program are the bar code scanner, and the camera scanner functionality. The user is able to utilize their external camera or barcode scanner, to scan items that can then be added to the cart. The program will recognize any barcoded product, and the user is also able to create a barcode and add it to their inventory, via the add product page.
* Cart Page
  + From the main screen, the user can click “finish” and will be transitioned to this page. Here, the user is able to take payment, send receipts to the customer, and finalize the sale.

A screenshot of a computer

Description automatically generated

* + The order total is displayed at the top of the page
  + Name and email text slots are provided for the user to input the customers information. This information is used for receipt generation.
    - The receipt is emailed to the user when the “Click to Generate Button” is pressed.
    - However, if a receipt is declined by the customer, there is a button that completes the transaction without emailing the purchase details.
  + Payment
    - Text input boxes are provided to insert fund amounts if there was an acceptance of cash, and if a card is being used.
    - The credit cards numbers, for security reasons, are visually encrypted when inserted.
    - Once the credit card is inputted, the user can press “Click to Finalize,” the credit card is scanned for validity. If valid, the transaction can complete as normal. If not, the user is notified.
    - Customer change is calculated in the “Calculate” box. Once the total cash received is inserted in the text box, and the change button is pressed, the correct amount of funds to return to the customer is displayed.
    - From here, the transaction can be completed, and return the user to the main page.
* Add Inventory
  + Add inventory is the page where the user can include further items for the store into the database.

Chart

Description automatically generated with medium confidence

* + The user can import inventory data via excel spreadsheet (taking both .xlsl and .csv files)
  + The user can export the current inventory data into spreadsheet format
  + Finally, the user can export a template of the excel data, in order to add or edit their inventory items (this was implemented for sake of consistency)
  + Icons appear on the center of the screen here for selection. Here, the user selects database entries
* View Inventory
  + The program provides a viewing window into the current database inventory within the system.

A screen shot of a computer

Description automatically generated with low confidence

* + From the main menu page, the user can select product list
    - This transitions to the view inventory page, where a complete listing of the in-store products can be seen.
    - The viewing window is traversable through the page buttons at the bottom right corner, the list is scrollable, and the number of items listed per viewing page can be edited with the “rows per page” input. (Makes it convenient for the viewer to navigate and edit)
* Reports Page
  + The reports page grants the user access to all transaction and sales reports. The activity on the program is saved and ready for report generation at any time. There are three buttons.

Graphical user interface

Description automatically generated

* + Daily sales – generates a report for download of the sales for the day, and for sales split into daily subsections. (This is used to see the sales trend on a daily basis)
  + Total Product Sales – The user can download a report of the product sales in totality based on program transactions. (Every product sale is logged into the system, from this page, the program can generate and print the activity report)
  + Sales Transactions – The user can generate a report of the total amount of sales transactions, and the funds obtained (All transactions are saved, calculated, and totaled. This is important for GDP calculations)