App: StockVault Option: 1

For this project, I am developing an inventory app to help manage items in a warehouse. The main goal of the app is to provide a simple and efficient way for users to track inventory, add or remove items, and update stock quantities. The app will have a login feature where users can either log in with existing credentials or create a new account if it's their first time using the app. After logging in, users will be taken to a screen that displays all the inventory items in a grid format, making it easy for them to see the available stock.

In terms of functionality, the app will allow users to add new items, remove items, and adjust the quantity of specific inventory items. The app will also include a notification system that will alert users whenever an item's stock has been reduced to zero, helping to prevent stock shortages. The user interface will be designed to be simple and intuitive, making it easy for warehouse staff to perform these tasks quickly and efficiently.

The users of this app will primarily include warehouse staff and managers. Warehouse staff will need to interact with the app regularly to update inventory quantities and manage items, while managers will use the app to monitor stock levels and ensure items are being managed correctly. Both types of users will need a straightforward way to track inventory, update quantities, and receive notifications when stock is low. The app will be designed to meet these needs by offering clear, easy-to-use features.

The main screens of the app will include a login screen, a grid screen for displaying inventory, and various mechanisms for adding, removing, and updating item quantities. The login screen will allow users to enter their credentials or create a new account. Once logged in, users will see a grid displaying all inventory items with options to add or remove items and adjust quantities. Notifications will appear when an item runs out of stock, helping users stay on top of inventory needs. The app will allow users to navigate between these screens easily, with clear buttons and transitions between actions.

The functional requirements of the app will be reflected in the code by connecting the user interface to a database that stores the inventory items and user login information. The code will manage the data flow, ensuring that the app can add, remove, and update inventory items based on user input. Each UI component will either display data from the database, like item names and quantities, or accept user input, such as new item names or updated stock numbers. The app’s design will follow guidelines to ensure that it is user-friendly, clear, and efficient for its intended users.