Options 1:

The database design will have two tables. One for the user login and passwords and the other for the inventory items. In the inventory table the data will hold item ID, name, quantity, description, etc.

The login screen would allow existing users to log in. The new users will create an account and the security will ensure the password meets the hashing requirements.

The inventory screen will display the inventory in a grid or a table format. The columns would include item ID, name, quantity, description, and actions.

The inventory management would allow the add/remove items by the user. The user will have the ability to update the item’s quantity. The changes that the user updates would reflect in real-time.

There would be a notification to the user when an item inventory has been reduced to zero. Would consider to setup an in-app or a push notification to alert the user in real-time.

1. The application I have chosen to work on is the inventory application. The goals for the application would manage tracking inventory items, manage quantities, and notify the user of critical inventory levels. This will streamline the inventory operations, reduce errors, and increase productivity.
2. A competitive analysis of two applications that are on the current market is Sortly and Inventory Now. Sortly strengths is a user-friendly interface that is customizable. They offer the features of visual inventory management, barcode scanning, and detailed reporting. The weakness is the higher cost for advanced features. The other application is Inventory Now. The strengths are simple to use and ideal for a small business. The features track inventory, sales, and purchases. The weaknesses are limited features, and it is not scalable.
3. The potential users would be warehouse managers, mall business owners, and retail employees. Each one would need to manage inventory levels, track item movement, and enhance overall inventory health. It would provide a user-friendly interface that can track the inventory levels in real-time and send alerts when stock levels are at critical level.

*Inventory now*. (n.d.). Inventory Now. <https://www.inventorynowapp.com/>

Sortly. (2024, March 26). *Sortly: Inventory simplified*. <https://www.sortly.com/?utm_source=google&utm_medium=cpc-search&utm_campaign=NA_Search_Brand&utm_adgroup=Sortly&utm_term=sortly&gad_source=1&gclid=CjwKCAjw7s20BhBFEiwABVIMrY1qBbYnTGtOeaD8UpHPzwZXBco7Fg4oaugx7A_qw6O7Q8JLpHBkKhoCaFgQAvD_BwE>