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|  | Project One |
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**Inventory App**

The application I’ve chose to work with is the Inventory application. This application will be used to track inventory and have functions to authenticate login credentials, add, remove, and increment inventory, and a function to notify the user when the amount of any inventory item has been reduced to zero. Along with the functions described above databases will be required to store Usernames, Passwords, Customer information, and inventory. When first opening the application, a screen allowing a user should display. Following this it should bring a user to a gride view showing the inventory, allowing for inventory tracking by multiple different users.

This application could have a variety of different users, from a professional in a work environment keeping track of stock to a busy parent keeping track of their pantry at home. The parent would find this application useful keeping track of this kitchen stock when knowing what is running low or what they have an excess of. Additionally, this application would be useful to keep track of household goods that someone might not take much time to keep count of such as batteries or paper towels. The professional no matter the profession would find use in this application. From an office manager keeping track of office supplies, to a warehouse supervisor keeping track of inventory for orders to fulfill using the grid view. They would additionally find use in the log in feature to gate keep any unauthorized changes to stock. To accomplish these goals, users will use a variety of different screens.

To fulfill their inventory needs users will need a user-centered UI for the application. To start they will need to be brought to a log in screen with text fields to enter a username and a password. After entering this information, they user would need to press a log in button to authenticate this information against two databases storing the usernames and passwords of users or press a button to sign up for a new account. After Authentication the user should be brought to a screen with a table layout showing the user a small thumbnail button with an image of each item and a short text description and number in stock. Additionally, the grid view would give the user buttons to add or remove items. After tapping the item, they would like to manipulate the user would be brought to a menu allowing them to increment or decrement the item by their chosen amount. If there would be a decrement the application would throw the user a notification telling them there would not be enough or an error showing the user there are zero left in stock. To exit the menu and return the grid view the user could slide to the left or right or press the back button.

After installing the application and opening to the initial log in screen this would include text fields for login and password and buttons for log in and create new user. The text entered would be verified against he stored password and username in separate databases after the login button is pressed. The create new user button would allow the user to create a new username and password, enter their personal information in and store it in a database, and select a business affiliation if there is one to determine a company stock and company items if part of a larger organization. After logging in the application would display a grid view with the username and affiliation if there is on at the top, and button to bring up a menu to remove and add new items as well as logging off and editing personal information. Each item would be displayed with a thumbnail image with a brief descriptive title and item count. After tapping the item, a short menu will display allowing a user to increment or decrement each item and throwing an error notification if there are not enough or a warning notification if the decrement would drop the item to zero. If the item is depleted to 0 there would also be a red highlight around the image of the item showing it needs to be refilled on the grid view. To exit the menu the user would need to slide either right or left or tapping the back button on their device. Tapping the add item menu would allow a user to use the camera on their device to scan a barcode to save the items information or enter it manually in text fields. Removing the item lets the user tap from a list of items to delete and prompts the user to confirm the deletion with a yes or no option. Finally editing the personal information would allow a user to update their details saved on the application such as an employee id or first and last name and update these details on the corresponding database. This allows an admin to track who is making item edits and when.

# References

*Core App Quality*. (2021, 03 17). Retrieved from developer.android.com: https://developer.android.com/docs/quality-guidelines/core-app-quality