**CS 360 Module Seven Project 3**

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CS 360 Mobile Architect and Programming

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The inventory app that I have created will need a description, icons, screenshots of different sized screens running the app, and the app's description will include features of the app and its overreaching goal. The screenshots can be done with the Android emulator. It is imperative to be as clear as possible about the security and privacy features of the app, what it will store and what the intended use is for user information.

My icon is simple and used throughout the entire app. It is a red silhouette on a white background of a stick figure carrying boxes with a hand truck or dolly. The app has a light and dark mode and large text and buttons for easy usage. The app’s theme is white and red or black and red depending on the mode chosen. For light mode, the main text is black and for dark mode the main text is white.

The description will include all the information the user needs to know about the app. The app has a way to create, read, update, and delete inventory items. When the items reach zero, a notification and or SMS message is sent to the user depending on the permissions the user has agreed to. If the user decides not to accept the permissions –as they are optional, the app will run without issue, but they will not receive messages or notifications. The app requires the use of an account to retrieve information from the database and has a minimum requirement for account names and passwords. The description is also where you “sell” your app to users. Even if the app is free to use, many apps want to monetize in some way, such as through ads, and so you need to explain to the end-user why they should choose your app over others. I have always been pragmatic and think less is more most of the time. My app is simple to setup and use in seconds. It is a no-nonsense inventory control app. Since separation of duties and or concerns is paramount in many businesses, I think the use of an app that only functions to control inventory is great for security and keeping track of growing inventory. You can log out via logout button at the top of the screen or by closing the app.

Since the app is admin level for all users at this point, there is no need to sanitize the input. As the app grows in functionality, and different accounts are needed, this needs to be addressed.

The minimum API that this app will run on is API level 26 – Android 8.0, while the target is API level 34 – Android 14. Further API updates to the app will be required as Android continues to add new API versions. This makes it so most phones in the world will be able to use this app, and since this is intended to be a business app, keeping the API minimum as low as possible is of utmost importance. There are many small businesses that could benefit from an app like this.

My app specifically only asks for phone your phone number and SMS usage. The phone number is stored on the phone locally so the app can send messages to the user via text message when the inventory hits zero. Also, notifications are used to let the user know the app is at zero as well, but this is using a different system and thus the need for notifications to be turned on. When the user signs up for the first time it prompts the user to turn on notifications and asks for SMS permissions.

As it stands, the app is not super feature rich and so the use of ads would need to be limited to something like a banner at the bottom or top and an ad pops up when the user signs in each time. Since the user is forced to sign out when they close the app, showing an app once should not be too intrusive.

Updates for the future include introducing a search function, a more detailed description screen, and filters including sort by item quantity and alphabetical.