CS-360 Mobile Architect & Programming – Project One

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Project One

Option 1: Inventory App

Project Goals

With option one, for creating an inventory app, there are several goals that must be met to complete the project. To meet the goals several components with different functionality will go into making the project. The goal of the inventory app is for different users to be able to log in to the app to track and manage the inventory in a warehouse. The major components making up the app include a sign in/register component, and inventory component for viewing all items in the warehouse, and an add/edit item component for creating or updating the individual inventory items. The add/edit item component will allow the user to set the name for the item and well as adjust the quantity. The quantity adjustment can be done incrementally with an increase or decrease button, or the user will be able to manually enter in a number as well. For both new items that are being created and existing items being updated the user will have the option to cancel the action or save the item once done filling out the fields. If the item already exists and is being edited, the option to delete the item from the warehouse inventory will also be available. The last feature of the inventory application will be to notify the user when the quantity for an item reaches zero.

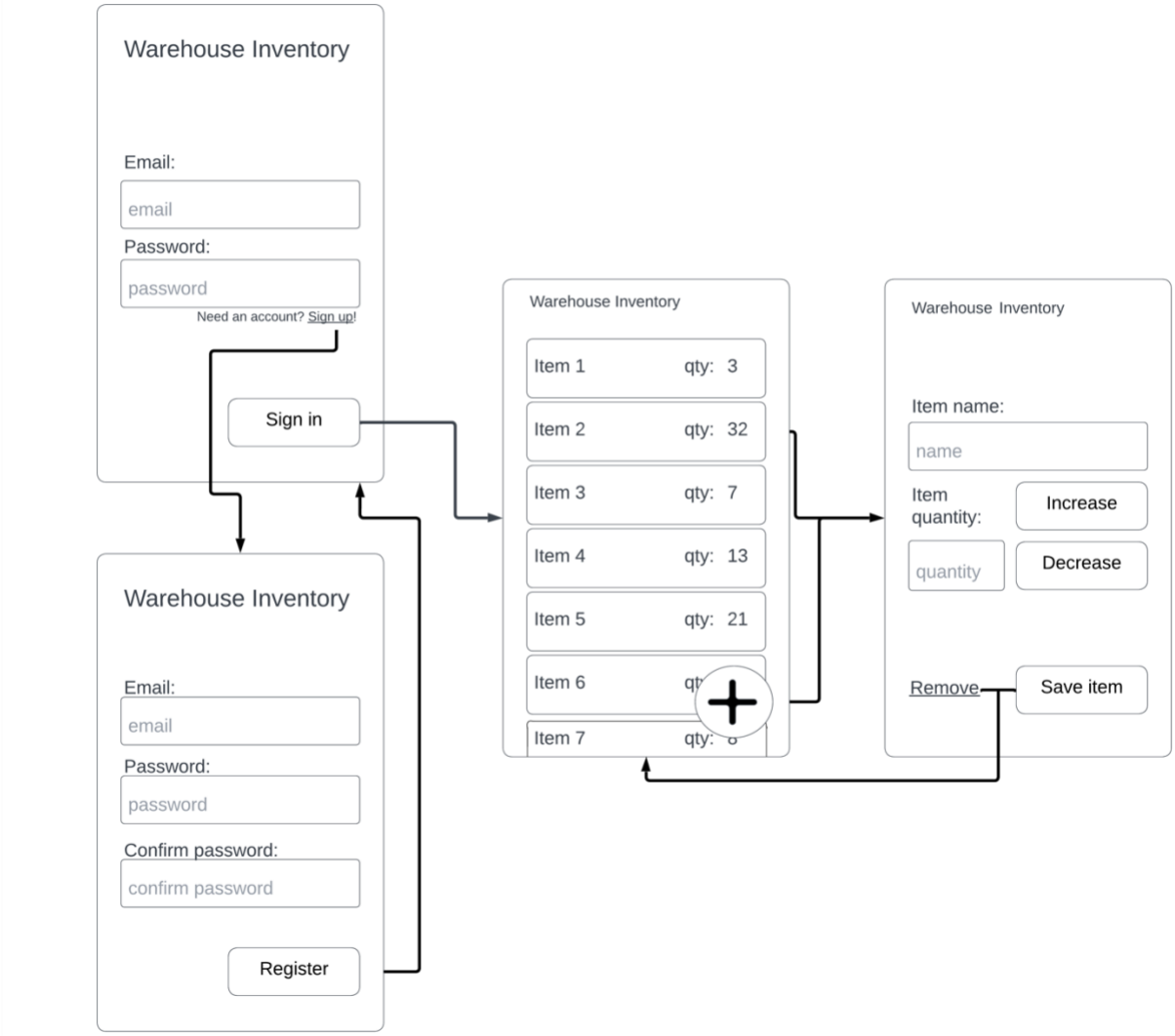
Application Users and Assumptions

In the warehouse setting that this inventory app is designed for, there will be two types of users. There is the individual worker who will primarily be using the application to increase or decrease the quantity for an item as it is received or removed from the warehouse. In some cases, they

may create a new item if it does not already exist in the inventory. The second type of user would be those in a supervisor or manager role. Their use of the app would primarily involve viewing the overall state of the inventory in the warehouse, adding new items to the inventory so they can be tracked, and removing items from the inventory that will no longer be tracked in the warehouse. In order for both types of users to achieve their goals using this app the interface will need to be simple to use and intuitive. Also, all elements of the inventory app should be easily discernable from a quick glance and easily and quickly manipulated as the individual workers move about their tasks. The app needs to not slow down the workers or make their jobs more difficult in order for it to be successful.

Screens and Features

The register/sign in screen will be the entry point for the app. This is where the user will either create their account or authenticate their access by logging in. After logging in the user will be taken to the main inventory screen. This screen lists all the items currently in the warehouse inventory. There will be a floating button in a fixed location on this screen that the user can click to add a new item. Clicking the add button will take the user to the add/edit item screen with fields for them to fill out. Clicking an item from the inventory list will take the user to the add/edit item screen with the fields prepopulated with the values for the item. When adding or editing an item a save button will be shown to save changes. Clicking the back button will cancel any changes. When editing an item an additional remove button will be displayed as well.



Function Application Requirements

Starting with the register screen, the user will enter their email and a password. They will need to enter the same password again to verify they typed it correctly. When the user clicks the register button a method will save new account to the user table in the database. From the sign in screen the user will enter their email and password. Clicking the sign in button will call a method to authenticate the user logging in against the information in the user table in the

database. After being authenticated they will go to the inventory screen. Upon creating that screen, a method will load any existing items from the item table in the database into the app to display on the screen. The user can click the add button which will take them to the item detail screen. There the user will enter in an item name and an integer to represent how many of the item they have. At that point the user can click the back button to cancel and discard the changes or the save button. The save button calls a method to save the new item to the item table in the database. Lastly, from the inventory screen, the user can click any item in the list to pull up the item details screen. The only difference this time is that the fields are preloaded with the item values and there is a remove button to remove the item completely from the inventory. Clicking that button will call a method to delete the item record from the database.