Abdulrahman Al-Nachar

CS360 / 3-3 Project One Proposal / Inventory App Proposal

I have chosen to work on the Inventory App, which should allow users to create and manage inventory and perform various functions such as add/remove items from inventory, increase/decrease quantities of items in inventory / notify the user when a certain item is out of stock in inventory.

To make this possible, the app should have two tables in its database: one will be used to track inventory, and a second one will be used to store users’ logins and passwords. These should be used to authenticate users using the app and protect against unwanted access and weak authentication controls. The App on the User Interface level should display a grid with all of the items in inventory and display the quantity of each item next to it.

Potential users for this App would be small-medium sized businesses, businesses that mainly operate online, businesses that don’t have a storefront and operate from private residences, Another possible set of user for the app would be unsatisfied users who already use inventory management apps from competitors, all users share a common goal when using this app, and that would be to have an App that helps with managing inventory efficiently and seamlessly and is simple to set up use and that doesn’t cost them a fortune, Users will need to have an app that accommodates them by being simple, have a smooth User Interface, and is cost friendly.

At the start of the app the app would need a login/create an account screen, in this screen there should be two text areas one for the username/email and second one for the password, the password should be replaced with asterisks as they are typing it, and then there should be a submit button to attempt a login, underneath the submit button there should be an option to create an account that display a dialog that takes the user inputs to create an account for the user.

After that the user should reach their home screen, in the home screen users should be able to see a grid that display their current inventory items and quantity, at the bottom of the screen there should be four buttons, two for adding/removing items, and another two buttons for increasing/decreasing the quantity of an item.

When clicking on the add button users should see a dialog form that takes the info of the new item (name & quantity) and then adds that to the grid, when clicking on the remove button users should be able to see a dialog that lets them choose an item to remove and then remove it, the two increase/decrease buttons should work the same by displaying a dialog that asks the user what item to increase/decrease depending on what they clicked on and then ask them for an integer to increase/decrease the quantity of that item they chose. Users should be able to cancel an activity their doing by clicking on the back button and go back to the previous screen from the screen they are at by clicking on the back button on their devices.

In the login / create an account screen. The app should compare usernames and passwords entered in the 2 text areas with the usernames & passwords table in its database after the user clicks on the submit action button, to verify login attempts, and should display an error when the username/password combinations don’t match with the information stored in the database.

When creating an account, the app should compare the new username/email entered in the text areas of the dialog to check that it hasn’t been used before and should require the password to meet certain criteria. The app should display a message to the user when the password is too weak and doesn’t meet the criteria. If the account is created successfully, the app should store the username/password as a new entry in its username/password table in its database.

After logging in, the app should take the user to the home page where they should see their inventory and four buttons that display four different dialogs for the user to perform certain activities and functions, like adding items, removing items, increasing the quantity of an item, and decreasing the quantity of an item. if the user clicks on the add item button the dialog should display a text area for the name of the item and an input area that takes a number to be stored as the quantity of that item and then that creates a new entry in the inventory table in the database, same thing should happen when a user clicks on the remove item button, they should see a dropdown menu of all the items in the database and then after choosing one the user has to confirm in the dialog that they want this to be removed and then the app removes that entry from the inventory table in the database. The last two buttons work similarly it should display a dialog where the user sees a dropdown menu of all the items in the table and then after choosing one the user enters a number that should be use to add or subtract the total quantity of that selected item, the app in this case should take the number and (subtract or add depending on what the user clicked on) change the quantity of the selected item in the inventory.