**User Experience (Required)**

<Describe at least two user experiences to outline how users will interact with the system and the overall experience they should have while using it. Use a free User Interface Design Software to create wireframe for each user interface.>

Requirement ID: UX1 – Creating new user profile and accessing the information

Description: When a new user begins to use the OmniStock application, the first screen to appear is the sign-in screen. From here, the user is given the option to either log in, if they have an account, or to sign up, if they are new. In this case, the user will click the text “Sign Up.” Once this text is clicked, a form with fields to fill with user information will be brought up. These fields include first name, last name, email, email confirmation, password, and password confirmation. Once these fields have been filled out, at the bottom of the screen, there is a “Finish” button. If all the fields are filled out correctly, a new user account will have been created, and a “Account successfully created.” screen will appear. If not, the sign-up information form screen will be reloaded with error messages above the fields where the error occurred, indicating what the issue was. The sign-up form screen will also have a “Login” button for the user to login with their newly created information. This login screen will have fields for the user’s email and password. If everything has been successfully completed, the login will go through, and the user will be taken to the home page of the application.

Requirement ID: UX2 – Scanning an item into the system

Description: When a user is logged into the application, the home page will include a button with a barcode icon. This is to indicate where the user can access the application’s barcode scan function. Once the button is clicked, the application will access either the camera or scanner built into the device the user is using. Once the device scans the barcode, the application will indicate whether the item and its information already exists in the system. If the item has an entry in the database, the existing information will be brought up in the application. If the item is new, a form to fill out relevant information, with the item name and barcode already populated. Once the fields have been filled out, the form can be submitted, adding a new item record to the database. The user will be taken back to the home screen.

**Top-level Classes (Required)**

< Design the major top-level classes and their components. Use a free Class Diagram Tool to draw the Class Diagram showing classes, their attributes, operations, and relationships between them.>

Requirement ID: CLASS1 – User Class

Description: This class creates objects which contain information about each user within the system. Attributes include the following: email, password, first name, last name, and potentially employee ID. These objects can add product objects to the database by using the scanner. They can also look at the product database entries that currently exist and data trends for them. These objects will also have different permissions based on whether the are admin or standard users. The admin can also delete items from the product database and the user database.

Requirement ID: CLASS2 – Product Class

Description: This class creates objects that represent an item that is sold or carried by the company using the application. The attributes of this class include the following: barcode number, product name, and current amount of items within inventory. These objects can be created by user objects, representing users of the application. These objects can be created, updated, and deleted by the user objects, so that employees can update the database.