**CS 360**

**ARTIFACT**

In this project, we are tasked with creating an app that allows users to log in, create new accounts, and manage data through a database. The application will have a login system where users can either log in using existing credentials or create new accounts. I also integrated an SQLite database to store user information and other app data (such as inventory items, event details, or daily weight). Additionally, the app will request permission to send SMS notifications and handle cases where permission is granted or denied.

Before proceeding with the code development:

**UI Review**: I ensured that any feedback received from Project One and Project Two regarding UI design is incorporated. This may involve adjusting layout elements, ensuring proper user flow, and ensuring responsiveness.

**Android Studio Setup**: I ensured me Android Studio environment is set up, and the app UI (from Project Two) is ready for coding.

App Code Design

Here’s how you can approach coding the required functionality.

**Login Logic**:

Add functionality to validate the user's login credentials (username and password) by checking them against the database.

For this, you will need a login screen where users enter their credentials.

**Send SMS Notification**:

If permission is granted, send an SMS when a certain event occurs (like low inventory or an upcoming event).

**Industry-Standard Best Practices**

**In-Line Comments**: Add clear comments explaining the purpose of each section of the code

**Testing and Debugging**

Use the **Android Emulator** to test your app frequently.

Test the following scenarios:

* + Logging in with correct credentials.
  + Logging in with incorrect credentials.
  + Creating a new account.
  + Adding, updating, and deleting database items.
  + Granting and denying SMS permissions.