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Milestone 4 narrative

1. Briefly describe the artifact. What is it? When was it created?
   1. This artifact was created during my course in CS360 in which I was tasked to create an app in android studio using the programming language JAVA. The app was designed to allow the user to keep track of their weight and weight loss progress.
   2. In the app, the user was able to create an account and log-in using their credentials (username and password). In the backend of the code, SQLite was used to create and store databases that will hold the users credential information and their weight information.
2. Justify the inclusion of the artifact in your ePortfolio. Why did you select this item? What specific components of the artifact showcase your skills and abilities in software development? How was the artifact improved?
   1. I selected this artifact to enhance because I believed it was a perfect way for me to show case my skill in database and design. This is because the app heavily utilizes SQLLite to store user information. I was able to edit my design changes of the SQL databases by changing multiple layers. For example, changing what is stored on the table and what is displayed to the user. Additionally, the user is now able to update their information within the app using SQL queries running in the background.
3. Did you meet the course outcomes you planned to meet with this enhancement in Module One? Do you have any updates to your outcome-coverage plans?
   1. I did manage to achieve the course outcomes that I had originally planned as I was able to create more refined SQL queries running in the back end of my app. I used industry standard practices and changing the information I wanted to store in these databases leading to a more user-friendly robust app for my users.
   2. The app now allows users to sign in using the newly created Create Account page that will store more information than just the username and password. It will now take in their first and last names, email, username and password. This is all stored in the database table called users and each element can be updated within the Edit Account page which the update SQL query will run to apply these changes to the database table.
4. Reflect on the process of enhancing and modifying the artifact. What did you learn as you were creating it and improving it? What challenges did you face?
   1. During my time working on enhancing this artifact there were issues I had come across that I required solutions. For example, any database design changes that I have developed in the enhanced version of the app, I would need to apply these changes to existing users who have already downloaded and used the app previously.
   2. Another issue I came across while developing this enhancement came from creating the ‘Edit Account’ page. I had to decide what information I would like the user to update and ensure that any changes to the username or email did not cause conflicts as these fields are the primary key within my database table.
   3. Finally, once the user has made their changes, I wanted to ensure they entered the correct password in the “old password” text box. This is to ensure that it is the actual user who is requesting to make these changes and not an external malicious user.