**Artifact Description**

The artifact I chose for the software design and engineering category is the Event Daddy mobile app. I first built it in Android Studio using Java for CS 360 Mobile App Development. It’s a simple event-tracking app that lets users create accounts, log in, add and delete events, and see everything in a clean table format. I’ve come back to it during CS 499 to clean up the structure, make things more user-friendly, and improve how the app handles user data.

**Justification for Inclusion**

I chose Event Daddy for my ePortfolio because it’s a solid example of a full mobile app and touches on key areas like UI, data storage, and user interaction. It uses a local SQLite database and a custom DatabaseHelper, plus some Android activity lifecycle stuff. Altogether, it gives me a good way to show my practical skills with real app development.

**Here’s what I improved:**

**Split up the login code**: Pulled the login and account creation logic out of the onCreate() method and into their own helper methods to keep things clean.

**Logout button**: Added a logout button that clears user data and brings them back to the login screen.

**Fixed edge cases**: The logout button now works even if the user hasn’t added any events.

**Better navigation**: Cleaned up the flow between login, permissions, and event screens.

**Inline comments**: Added in-line notes to make the code easier to understand.

**Future to-dos noted**: Like moving hardcoded strings to resource files later on.

These changes made the code easier to read and maintain, and they helped eliminate bugs tied to user data and screen transitions.

**Outcome Alignment and Updates**

This work supports the CS 499 outcome:

"Demonstrate an ability to use well-founded and innovative techniques, skills, and tools in computing practices for the purpose of implementing computer solutions that deliver value and accomplish industry-specific goals."

That’s the outcome I was aiming for from the start, and I think these updates show I’ve made real progress toward it. The app is more stable and more maintainable now, which are big wins in real-world development.

**Reflection on the Enhancement Process**

Coming back to my own code after a break was a great learning moment. Cleaning things up and reorganizing how the app handles login and event data reminded me how valuable clean code and separation of logic can be. It was quite the struggle last week popping it open and being a little lost at first.

All in all, these enhancements helped me level up the app and made it easier to extend in the future. I’m happy with the direction it’s going and confident that it reflects solid software design and engineering practices.