This artifact is an Android event-tracking app created a few months ago during my CS 360 course. The app uses two local databases: one to handle user login information and another to handle user event information. The users can use the app to insert, update, and delete event information from the app and send themselves notification reminders on the day of the event.

I chose to include this project in my portfolio because it showcases my ability to design and develop an app in a common language, Kotlin, that is user-friendly and functional. The multiple SQLite database usages highlight my ability to implement CRUD protocols. The notifications and login screen are also beneficial in showcasing my ability to create common app features. I improved the artifact by converting it from Java to Kotlin. I then added new class files to modularize the code, so now, instead of having every CRUD feature in one file, the methods are separate. Next, I completely re-designed the app UI, so it was more intuitive. Now, users can delete or update events from the home screen, and each update and delete protocol has its own layout screen instead of all being on the same events page. Finally, alongside re-designing the UI, I implemented a new search screen so users can search for specific events by their name. There were also some minor errors throughout the code like unused variables and missing accessibility content, so I fixed those as well.

My goal with this artifact enhancement was to complete course outcomes three and four to design and evaluate computing solutions that solve a given problem using computer science principles and demonstrate an ability to use well-founded and innovative techniques, skills, and tools in computing practices. These new improvements accomplish these goals, so I’m on track to complete all course outcomes and don’t have any updates or changes to make to my outcome coverage plans.

I faced many challenges while improving this artifact. With my initial goal of making it multi-platform, I had issues with some software I was using and realized the code wasn’t as transferrable as expected. Once I switched to improving the initial code and making a better Android app, I overcame these challenges. Throughout the process, I learned more about Android development and how to effectively handle and utilize SQL databases.