For this milestone, I focused on improving the database side of my event-tracking app. My main goal was to make the app handle data more efficiently and securely. One of the biggest changes I made was switching from using raw SQLite to Room Database. Room made the code cleaner, easier to manage, and helped reduce the chances of errors when dealing with data. It also made it easier to perform database operations without worrying about SQL queries all the time.

I added features like editing events, which meant updating how the database handles changes. Before, I could only add or delete events, but now I can update existing events directly. This required changes to my data access object (DAO) and making sure the ViewModel handled updates properly. I also improved how data is displayed, adding swipe gestures to edit or delete events. For deleting, I added a confirmation step to avoid accidental deletions, which adds to the overall user experience.

Security was another focus. I made sure user data is handled safely by using encryption for sensitive data and ensuring proper validation when saving information. The app now keeps users logged in unless they choose to log out, which improves the convenience without compromising security.

Through these updates, I’ve met the course outcomes related to database management, data security, and efficient data handling. I learned a lot about how small changes in data flow can affect the whole app’s performance. One challenge was making sure the data updates were smooth and didn’t cause crashes, especially when dealing with quick changes. But after testing and adjusting the code, the app runs better, handles data more efficiently, and provides a smoother user experience.