Milestone Three:
Enhancement Two Narrative

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1. **Briefly describe the artifact. What is it? When was it created?**

This app is from IT390 Mobile App Development and is a simple to-do list app. The user can type tasks or to-do items into to the text field and the app will add the items to the list. The app also allows for editing or deleting tasks and saves the list of tasks to a database.

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 algorithms and data structure? How was the artifact improved?**

I chose to include this artifact in my portfolio because it is the first project I completed with the ability to save to a database instead of saving to local storage and was also the first app I ever made on Android Studio not including the simple exercises we completed on Android Studio and submitted earlier in that course. This app, while simple, showcases many elements found in much more complex programs. It utilizes a database for storing information, buttons on a user-friendly interface, and the way I made one of the buttons have multiple functions shows that I can develop much more intricate apps in the future.

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?**

My original plan was to change the data structure that held the user's task items from a normal list to a linked list. I want to demonstrate that I can use more advanced data structures so that if a client finds that it needs to upgrade the simple systems already in place, I can do so. This aligns with the course outcomes as it shows that I can provide creative solutions to problems and create programs that appeal to many audiences.

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?**

Implementing a linked list is far simpler than some of the other data structures like binary search trees or hash tables. As I was making the changes to the program, I remember thinking about how easy my enhancement was and wondered if I was cheating myself by not committing to a more advanced data structure. The algorithms in the app are constructed quite well and I didn't see much opportunity to improve the existing code given the simple nature of the app as it is now. I've come to learn that just because faster more efficient data structures exist, it doesn't mean that they must be used in every program. Developers need to know when enough is enough and when a simple linked list will accomplish everything that the client needs.