**CS 499 Journal – Module Four: Career Reflection and Artifact Progress**

### **Part One: Career Reflection**

I entered the Computer Science program with a strong interest in mobile development, specifically Android app design. My initial goal was to become an Android engineer, and that vision has remained consistent. However, my thinking has evolved: I now have a deeper appreciation for software architecture, maintainability, and cross-functional skills such as backend integration and data modeling. These insights came from project work in courses like CS 360 and CS 340, as well as independent contributions to open-source and contract work.

Over time, I’ve researched companies like Google, PayPal, and startups where mobile engineering is crucial, and I’ve explored job descriptions to align my skill set with market expectations. This research has reinforced my goal while also inspiring me to pursue advanced certification in mobile development or AWS cloud integration in the future. I’ve not committed to a master’s degree yet, but I am considering it after gaining more industry experience.

As for course outcomes, I’ve achieved many key objectives, including:

* Designing computing solutions aligned with industry standards
* Applying advanced data structures and algorithms
* Using secure coding and architectural best practices

What remains is to finalize my professional self-assessment and polish my visual presentation in the ePortfolio.

### **Part Two: Status Checkpoints for All Categories**

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| **Checkpoint** | **Software Design and Engineering** | **Algorithms and Data Structures** | **Databases** |
| **Name of Artifact Used** | Crypto Tracker Android App | A\* Pathfinding Kotlin App | Bookstore Database (SQL + Flask API) |
| **Status of Initial Enhancement** | Completed refactoring to Clean Architecture, Jetpack Compose | Replaced Dijkstra’s with A\* search; added terrain support | Schema normalized; SQL views and dashboard design underway |
| **Submission Status** | Submitted as part of Milestone Two | Submitted as part of Milestone One | Not yet submitted |
| **Status of Final Enhancement** | Final UI tweaks and testing in Compose | Adding performance benchmarks and visual grid | Implementing stored procedures and REST integration |
| **Uploaded to ePortfolio** | In progress | Not yet | Not yet |
| **Status of Finalized ePortfolio** | Draft phase — content organizing underway | Awaiting upload after enhancements complete | Planning content structure |