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Over the course of my Computer Science program, my career plans have shifted and matured in meaningful ways. Initially, I entered the program with the broad goal of becoming a software engineer, primarily focused on web and mobile development. However, as I progressed through the curriculum, especially in advanced courses like databases, algorithms, and system design, my interests evolved toward building scalable, intelligent systems that leverage AI and data-driven decision-making. This shift was prompted by my exposure to emerging fields like retrieval-augmented generation (RAG) and multi-agent AI systems, which align closely with my long-term vision of becoming an AI engineer and building products that can impact millions of users. My thinking has evolved from pursuing a single-track development role to envisioning myself as a technical leader who can architect solutions that merge software engineering principles with machine learning innovation.

To support this career trajectory, I have researched both the job market and academic pathways for AI-focused engineers. I found that companies at the forefront of AI innovation highly value a strong foundation in algorithms, data structures, and software design, coupled with specialized certifications in AI and cloud platforms. As a result, I am considering pursuing certifications in cloud engineering (AWS, GCP) and advanced training in machine learning frameworks after graduation. These steps will strengthen my ability to contribute immediately to industry while keeping open the possibility of a master’s degree in AI or data science in the future. In terms of course outcomes, I have achieved significant progress in designing scalable systems, optimizing algorithms, and structuring relational databases. What remains is finalizing my ePortfolio artifacts to reflect not just technical achievement but also clear demonstrations of problem-solving impact, such as performance improvements, usability, and scalability enhancements.

### Current Status Checkpoints for All Categories

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| --- | --- | --- | --- |
| **Checkpoint** | **Software Design and Engineering** | **Algorithms and Data Structures** | **Databases** |
| **Name of Artifact Used** | Inventory Tracker App (Software Engineering Project) | A sorting/searching program from CS-300 (Data Structures & Algorithms | Database design from CS-340 (Client/Server Development |
| **Status of Initial Enhancement** | Draft completed with initial documentation | Draft completed with initial documentation | Draft completed with initial documentation |
| **Submission Status** | Submitted for initial review | Submitted for initial review | Submitted for initial review |
| **Status of Final Enhancement** | Adding modularity, logging, error handling, and testing | Improving efficiency, adding comments, modular design | Enhancing queries, normalizing schema, improving security |
| **Uploaded to ePortfolio** | |  | | --- | | Planned for next module |  |  | | --- | |  | | |  | | --- | | Planned for next module |  |  | | --- | |  | | |  | | --- | | Planned for next module |  |  | | --- | |  | |
| **Status of Finalized ePortfolio** | |  | | --- | | Not finalized yet |  |  | | --- | |  | | |  | | --- | | Finalized and polished |  |  | | --- | |  | | Not finalized yet |