

## **MODULE 4-1 JOURNAL**

### **CAREER CHOICE AND ARTIFACT UPDATE**

CS499 Computer Science Capstone

Zhraa Al-Bayaa

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I started studying this Computer Science Program in 2023 and continued for two years to complete this program with the core objective of learning Computer Programming and Software Development skills. This Computer Science Program offers in-depth knowledge and skills in the development of various aspects of different Software Development skills such as Software Design and development, Testing and Quality assurance, Programming and developing databases, Algorithms and data structures, Full Stack development using Node, Express, and Angular, embedded programming, Android Programming using Java, Core programming languages such as Java, C++, JavaScript, and Python. All these courses covered a lot about desktop development, web development, and Mobile programming, especially Android.

To become a successful Software application developer, one needs to learn not only the theoretical foundation of computer programming but also the physical and practical aspects of computer programming with actual exposure to the development of applications. During this Computer Science Program I have been exposed to extensive study, learning, and practice of different phases of software development, from requirement gathering to analysis, from the implementation of the application to the testing and quality assurance, from analysis to project management through conventional software develop frameworks to the agile and scrum project management frameworks I learned and accumulated a prolific skillset that will not only varnish my skills but also give me experience and confidence to work in a diverse market workspace. High-level programming languages such as Java, C++, and Python will help me implement desktop and web applications in diverse domains and industries. The relational and NoSQL databases such as MongoDB will help me implement Database-driven applications, data warehouses, data lakes, and other enterprise-level applications with huge data repositories.

As this course is near its completion, I am confident that my skill set is sufficient to address the needs of the industry and work on large applications. This knowledge and portfolio will help me hunt entry-level jobs in software development firms and this strong Software design and development foundation will help me lay down a strong footing that I'll build my career on and accelerate my skills and knowledge to enhance my future.

Initially, I wanted to be an AWS (Amazon Web Services) engineer along with a web development and web services expert. During this course, I evolved my goals and researched to become an Android application developer as this is an emerging field and a lot of cellular applications are being developed every day and appealing to more clients as compared to conventional devices such as Desktops. With the advancement of technology, smart devices are spreading like cats and dogs and becoming a trending computing domain with each coming day. Hopefully, I'll base my final computing project to be included in my ePortfolio as a mobile application on some productivity such as Inventory Management Application. I also have intentions to do some Software application Certifications such as Oracle DBA and AWS Associate Certifications along with a Master's Degree in Software Application Development to enhance my Portfolio and to be more compatible with this emerging software development marketplace. The significant achievement from this course is learning how to evolve my ePortfolio and market myself and my skill set to meet the software marketplace requirements through networking and establishing my presence online by sharing my accomplished projects and other marketing tools.

During the course, I learned how efficiently I can develop and evolve an ePortfolio to present my skills, achievements, and projects in the public domain for the sake of networking and job search assistance. The major learning outcome of this course is how to enhance an already

existing project or an artifact by adopting the best Software Design and Development techniques and procedures.

Checkpoint	Software Design and Engineering	Algorithm and Data Structures	Databases
<b>Name of Artifact</b>	Contact Service Unit Testing	Vector Sorting using Quick Sort	MongoDB Database on Animal Shelter
<b>Status of Initial Enhancement</b>	Completed enhancement and submitted during module 2	Completed enhancement and submitted during module 2	Completed enhancement and submitted during module 2
<b>Submission of Status</b>	Completed	Completed	Completed
<b>Status of Final Enhancement</b>	Completed and submitted in Module 3 Milestone 1 enhancement		
<b>Uploaded to ePortfolio</b>			
<b>Status of Finalized ePortfolio</b>			