4-1 Journal Assignment

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CS-499: Computer Science Capstone

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November 24, 2024

**Part One:**

**Have you changed your career plans? If so, what prompted this change? If not, why have you remained with your original plan?**

No, my current career plans have not changed. I still plan on getting my degree while I’m enlisted in the USAF and furthering my knowledge, so that whenever I am ready to retire, I can effectively get a programming job in the civilian sector.

**How has your thinking about your career evolved?**

As I have gone through this degree process, I have discovered how much actually goes into creating a product. Before pursuing my degree, I thought creating a program or a game was more simplistic; however, as I have learned, it is much more of a process of not only creating the code efficiently, but also ensuring that code is secure.

**Have you completed any research about your choice of career? How has this impacted your thinking? Have you thought about seeking an advanced degree or certification after earning your undergraduate degree?**

I have begun searching for different programming careers slightly, but since I will not be actively looking for a job, my searches are merely for interest’s sake.

**Which course outcomes have you achieved so far, and which ones remain?**

As of now, I have achieved the following course outcomes:

* **Employ strategies for building collaborative environments that enable diverse audiences to support organizational decision making in the field of computer science**
* **Design, develop, and deliver professional-quality oral, written, and visual communications that are coherent, technically sound, and appropriately adapted to specific audiences and contexts**
* **Design and evaluate computing solutions that solve a given problem using algorithmic principles and computer science practices and standards appropriate to its solution, while managing the trade-offs involved in design choices**
* **Demonstrate an ability to use well-founded and innovative techniques, skills, and tools in computing practices for the purpose of implementing computer solutions that deliver value and accomplish industry-specific goals**

I also feel that I have accomplished the course outcome, “**Develop a security mindset that anticipates adversarial exploits in software architecture and designs to expose potential vulnerabilities, mitigate design flaws, and ensure privacy and enhanced security of data and resources**,” however, I am unsure of this. I feel that I have developed a security mindset, and that I have utilized this while creating my Acronym Invaders! Program, yet I feel that I would be more comfortable in acknowledging this course outcome if I were able to see if a “would-be attacker” could expose a vulnerability.

**Part Two:**

**Provide an update to your instructor on your progress with each category of artifacts for the ePortfolio:**

**Link to Acronym Invaders! on GitHub  
https://github.com/Wayward-One23/Acronym-Invaders/tree/master**

I have effectively designed the additional game mode where the spaceships fall at 1.75 pixels/second, causing the user to be able to pull the acronyms from memory at a faster rate.

**Software design and engineering**

I have effectively designed the additional game mode where the spaceships fall at 1.75 pixels/second, causing the user to be able to pull the acronyms from memory at a faster rate.

**Algorithms and data structures**

**Databases**

Secondly, I have created a database for the program. Now, after every game is completed, the program will call for the user’s name. Once the user enters their name and presses enter, a database will appear on the left side of the screen with the top ten highest scores that have been reached. On the right, the program will ask the user if they would like to play again. If they type Y, the program will revert back to the main menu so the user can choose their play mode. If N is typed, the program will automatically close.

Status Checkpoints for All Categories

|  |  |  |  |
| --- | --- | --- | --- |
| Checkpoint | Software Design and Engineering | Algorithms and Data Structures | Databases |
| Name of Artifact Used | Artifact Invaders! Origin: Personally developed | Artifact Invaders! Origin: Personally developed | Artifact Invaders! Origin: Personally developed |
| Status of Initial Enhancement | Enhancements completed | Working on enhancement | Working on enhancement |
| Submission Status | Submitted | Submitted | Submitted |
| Status of Final Enhancement | Waiting for feedback from Instructor | Waiting for feedback from Instructor | Waiting for feedback from Instructor |
| Uploaded to ePortfolio | Waiting for feedback from Instructor | Waiting for feedback from Instructor | Waiting for feedback from Instructor |
| Status of Finalized ePortfolio | Waiting for feedback from Instructor | Waiting for feedback from Instructor | Waiting for feedback from Instructor |