Journal Entry #2

Zaffar Shiekh

CS-499-10941-M01 Computer Science Capstone 2024 C-4

Federico Bermudez

07/21/2024

**Part One:**

1. **How might you use an ePortfolio for the benefit of self-promotion?**

An ePortfolio can be a powerful tool for self-promotion by showcasing my skills, knowledge, and projects in a well-organized and visually appealing format. It serves as an online resume that provides potential employers with concrete examples of my work. By highlighting my best projects, particularly those that demonstrate complex problem-solving and innovative techniques, I can effectively illustrate my capabilities beyond what a traditional resume can convey. The ePortfolio can also include reflections on each project, providing insights into my thought process, learning experiences, and growth as a computer science professional.

1. **How might you mitigate risks while maximizing the marketing potential of the ePortfolio?**

To mitigate risks while maximizing the marketing potential of my ePortfolio, I will ensure that all content is appropriately anonymized to protect sensitive information and respect intellectual property rights. For projects involving proprietary code or data, I will obtain the necessary permissions or use generalized versions of the projects that demonstrate my skills without revealing confidential information. Additionally, I will regularly update my ePortfolio to reflect my latest skills and achievements while ensuring that outdated or less polished work does not detract from the overall presentation.

1. **Describe possible downsides or risks—for instance, the risks of posting intellectual property online for public consumption.**

One of the primary risks of posting an ePortfolio online is the potential exposure of intellectual property. Sharing detailed project code or proprietary information can lead to unauthorized use or replication. To mitigate this, it’s essential to include only non-sensitive information or seek explicit permission from previous employers to showcase specific projects. Another risk involves privacy; personal information shared online could be misused. Ensuring that the ePortfolio is shared through secure, professional platforms and is protected by appropriate privacy settings can help mitigate these risks.

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

So far, I have achieved the following course outcomes:

* 1. **Design and evaluate computing solutions:** I have demonstrated my ability to solve complex problems using algorithmic principles by enhancing my software design and engineering artifact.
  2. **Demonstrate innovative techniques:** Enhancing the 3D graphics project showcased my use of inno vative graphics programming techniques.

Outcomes that remain include:

* **Building collaborative environments:** In my ePortfolio, I must incorporate examples of collaborative projects and discuss strategies for effective teamwork.
* **Security mindset:** Further enhancements and documentation must address security considerations and best practices.

**Part Two: Status Checkpoints Table**

| **Category** | **Status** | **Details** |
| --- | --- | --- |
| Software Design and Engineering | In Progress | Completed initial enhancements (dynamic rotation and textures). We need to refine the code and add interactive controls. |
| Algorithms and Data Structures | In Progress | Optimized data processing algorithms. Working on advanced filtering and sorting capabilities. |
| Databases | In Progress | Added parent IDs to the schema. Working on implementing inner joins and advanced queries. |

**Status Checkpoints**

**Software Design and Engineering**

* **Status:** In Progress
* **Details:**
  + Completed initial enhancements (dynamic rotation and textures).
  + Need to refine the code and add interactive controls.
  + Plan to optimize performance and ensure robust error handling.

**Algorithms and Data Structures**

* **Status:** In Progress
* **Details:**
  + Optimized data processing algorithms.
  + Working on advanced filtering and sorting capabilities.
  + Plan to implement interactive visualizations to display algorithm performance.

**Databases**

* **Status:** In Progress
* **Details:**
  + Added parent IDs to the schema.
  + Working on implementing inner joins and advanced queries.
  + Plan to normalize the database and ensure efficient data retrieval.

My ePortfolio is a comprehensive showcase of my capabilities and accomplishments in computer science. Through continuous updates and strategic enhancements, I aim to maximize its potential as a self-promotion tool while mitigating associated risks. The progress in each artifact category reflects my commitment to achieving the course outcomes and growing as a professional in software design, algorithms, and databases.