CS-499 Computer Science Capstone

Module 3-1 Journal: Marketing With ePortfolios and Artifact Update

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PART ONE:

An ePortfolio is an excellent tool for self-promoting in the technology industry and across various domains, including academia, professional careers, and creative endeavors. There are several advantages to creating and maintaining an ePortfolio for personal and IT professionals. An ePortfolio allows us, as students and upcoming IT Professionals, to display samples of our work, whether academic papers, projects, designs, app code, or any other creations. It includes detailed descriptions and samples of projects we have worked on, which could be anything from software applications we've developed, such as building websites or any other technology-related projects we have designed.

It may also include screenshots, code snippets, or live video links demonstrating our professional skills. ePortfolio can help us illustrate what we have learned during our degree program and keep track of and manage it. "The potential benefits associated with adopting an ePortfolio as a tool for job searching include the ability to highlight a greater range of skills and competencies by offering examples of work with reflections, the opportunity to stand out from the competition, and greater flexibility compared to a paper-based CV" (Kilroy, 2017). I can include positive feedback from colleagues, clients, or supervisors in my ePortfolio. This feedback and recommendation can help me establish credibility and demonstrate my value and skills to potential employers or clients. When I graduate and look for a job, the ePortfolio will be a resume to demonstrate my skills and experience to recruiters and potential employers.

Several factors come into play when mitigating risks while minimizing the marketing potential of an ePortfolio. These factors include effective strategic planning, effective communication, and putting in place technical measures. I would ensure that all my contents in the ePortfolio are accurate, up-to-date, and relevant to other people like recruiters and employers.

I have to regularly review the ePortfolio by removing old and irrelevant content and adding current content that would boost my marketing potential.

To make the ePortfolio highly marketable, I will also focus on my user experience (UX) design by creating a user-friendly and easy navigation and accessibility interface across different screen sizes and devices. I would have to constantly gather and implement feedback inputs like contact forms and other comments from those who visit the page, such as mentors, peers, and industry professionals, to improve my ePortfolio. I must also share my ePortfolio on professional networking platforms like LinkedIn and Handshake and participate in relevant online community events to improve my marketing potential.

Even though ePortfolio provides an opportunity for us by marketing our potential in the job market, some risks are associated depending on how we handle it. One potential risk is that when individual property is publicly shared on ePortfolio or online, especially if not protected (encrypted), it increases the risk of theft or unauthorized use by others. Individuals and competitors with malicious intent may exploit the unprotected or poorly secured content for their gain. It could increase the likelihood of plagiarism, where others may use part or the whole work shared publicly as their own without proper attribution. Plagiarism of this kind can damage the original author's reputation and give rise to legal issues.

Another risk is that when properties are shared online, it may also reduce prospects for profit because some clients and publishers could be less willing to buy or license content that is already publicly accessible online. While sharing our innovative property online can enhance visibility and our marking potential, we should also bear in mind that it exposes us to various risks and challenges that must be carefully considered and managed. For instance, putting in place

suitable security measures, getting legal counsel, and being careful over and monitoring the property right on ePortfolio are crucial actions to reduce these risks.

The course outcomes I have achieved so far would include the following:

- "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."

There are three more course outcomes I feel I have not yet achieved, and I am hoping to achieve them as we move forward through the remaining modules. These include:

- "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."
- "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."

PART TWO

Category One Artifact: CS-370 Current and Emerging Trends in Computer Science

For the first category, Software Design and Engineering, I have added comments to each line of code to help other developers or even you understand its purpose, functionality, and implementation details in the future. I have addressed the inconsistencies of variable naming. I have also refactored the code by breaking it into smaller functions to enhance code readability, maintainability, and scalability. I will perform the final review before uploading it to the ePortfolio.

Category Two Artifact: CS-360 Mobile Architecture and Programming

For the category two artifacts, algorithms, and data structures, I am working to improve the error handling. I have improved user authentication functionality by creating a login interface with username and password buttons. I have also addressed the inconsistency in my package naming. I have improved the commenting style and documented comments in each line of code where necessary. I am working on fixing errors I found in the code initially to make the app function properly, and after that, I will upload it to my ePortfolio.

Category Three Artifact: CS-465 Full Stack Development I

For this category, Databases, I have enhanced the user interface of the travel website, and we can now clearly see the homepage and the website logo. I am creating user authentication that includes login and logout interfaces. I am almost done creating user account registration features where users can create an account with a username, email address, and password and use it to access the website. I have been doing a lot of work on this artifact and needed to add some additional features to make it function well.

I have added comments to some code elements to make it easier for other developers to follow. I have also refactored the code to improve structure and readability. I have completed most

of the areas I needed to improve on this artifact, and I look forward to working on the rest to achieve the course outcome before moving it to ePortfolio.

Checkpoint Table

Checkpoint	Software Design and Engineering	Algorithms and Data Structures	Databases
Name of Artifact Used	Artifact name: Treasure Hunt Game: Human Brain and Artificial Neural Network Origin: CS 370: Current/Emerging Trends in Computer Science	Artifact name: Android Mobile App – Inventory App Origin: CS360 Mobile Architect and Programming	Artifact name: Traveler Website Origin: CS465: Full Stack Development I
Status of Initial Enhancement	Enhancements completed	Working on enhancement but on track for the submission deadline with a day to spare for issues	Working on enhancement but on track for the submission deadline with a day to spare for issues
Submission Status	Submitted with feedback from the instructor	Planned but not yet completed	Planned but not yet completed
Status of Final Enhancement	Feedback was applied, and the final polish was applied	Planned but not yet completed	Planned but not yet completed
Uploaded to ePortfolio	Completed with polished narrative and confirmed navigation on GitHub Pages site	Planned but not yet completed	Planned but not yet completed
Status of Finalized ePortfolio	Ready for review in Module Seven	Planned but not yet completed	Planned but not yet completed

References:

Kilroy, J. (2017). From a CV to an ePortfolio: An Exploration of Adult Learner's Perception of the ePortfolio as a Jobseeking Tool. International Association for Development of the Information Society.

Kapila, D. (2023, May 29). *Need a job? Add these 8 projects to your portfolio*. Skillcrush. https://skillcrush.com/blog/portfolio-advice-2/

Admin, S. (2016b, August 3). *Students use ePortfolios for self-promotion*. The Globe. https://www.globeslcc.com/2016/08/03/gen-ed-eportfolio-sites-workshops/