**APCV 498: Capstone Project Proposal**

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Semester and Year of Project: ­­­­­­­­­­­­\_\_\_Spring 2024\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Title of project: TBD

Problem to be studied/project topic:

We would like to complete a project that includes our two different emphasis areas.

Emphasis: DevOps and Information Management.

We intend to create a game that will explore various IT related topics and in addition to the game we will create an HTML webpage that will act as a guide in learning the game.

Objective/questions/goals:

We plan to use HTML, CSS, and JavaScript.

a. HTML: Tags, Attributes, structure of an HTML document

b. CSS: Styling, selectors, box model

c. JavaScript: Variables, functions, DOM manipulation

The goal:

Methods (how/what are you doing? Describe the process, survey, population, statistical analyses, grant writing, policy development, etc.):

Game Concept Development - Narrative and Settings

Simple storyline

Each level/set of levels represents a different IT concept/learning objective.

Game Mechanics

Determine how players will interact with the game.

Example: solve a CSS puzzle to unlock a door.

Education / Curriculum Integration:

Plan how the levels are structured to teach specific concepts.

Game Design - Level Design:

Each level should incorporate puzzles and/or challenges that start simple and gradually increase in complexity.

User Interface:

Design interface that includes both game screen and a code editor

Players should be able to write code and see how it affects the environment.

Conclusions/expected results (what do you expect to learn?)

We hope to learn new concepts from each other’s emphasis as well as explore a new coding language together (JavaScript). The game should be easily understood by those with some knowledge in the IT field. The HTML document will be similar to a wiki page and will provide guidance on the game itself.

Briefly describe the significance/impact of your project.

Anticipated product/s or deliverables (e.g., report to an agency, tested intervention materials for dissemination, development/design plan to inform practice or policy)

Timeline (when do you think you will complete the project?):

We would like to ideally finish the base of the project well in advance so that we are able to focus on the information/details we would like to include in the project. We plan to divide up the work to the best of our ability so that everyone has equal chance to contribute.

Potential problems/limitations:

We will be learning a new programming language (JavaScript). This could be a potential problem as we are unsure how difficult it will be to learn and implement. We have knowledge of other similar code but unsure how this will look in a group setting.

Like most online groups we anticipate some potential problems/limitations. There may be occasions when we will not be able to meet as often as we would like, delayed communication due to work restraints or other classes.

Competencies brought to the project (What did you bring to this project (Every student should respond to this question)? Which skills have you used (i.e., skills gained during other APCV courses you have taken)? Please list 5 key competencies.

Ashlyn: I would like to contribute my knowledge of HTML and CSS to this project. Additionally, I have knowledge in Networking, Database Management, Python and other courses that I have taken. This will help with the information that could be included in the game to allow our players to learn something new.

Competencies to be gained through the project (what specific competencies will you be increasing/gaining through this project)? Please list 5 key competencies, including 3 from within your concentration area.