CS4900 Capstone Project Proposal Document

The purpose of this document is to outline, with as much detail as possible, critical aspects of your capstone project, the technologies involved and a timeline. You will fill this template completely and turn it in to me via email: rpmihail@valdosta.edu before February 4th.

**Group Members and Group Number:**

Group #1: Rahmel Gordon, Ryan Usher, Kymani Roach, Damian Tomlison, James

**Project Title:** Platforming Game called Colosseum: Race to Victory

**Project Executive Summary:**

Please describe the project in a paragraph or less, what is new/cool and why it’s worth doing. Do not use “because my professor requires it” or “because I’m learning a lot”. Be thoughtful about this summary.

**Problem Definition:**

What is the problem that you are addressing?

Who is the end user, and what is the end user profile? Our end user includes students at school, young children at their homes, and platforming game enthusiasts.

What is the target market? Our target market include children from ages 8 – 17 and adults that are avid video game players

Who is the organization?

**Proposed Solution:**

What is the significance of this project? This project is significant due to the unusual assignment of its criteria and constraints which is very little. It is also one of the most challenging projects that have been assigned to any of our group members. We’ll be challenging ourselves to do something we’ve never done before in which we create a game from scratch using software and coding languages that we have little to no experience with. By the end of the semester, we’d have cooperated in a group setting towards a common goal in a software developing environment in which some of our members have yet to fully experience. We’d have also gain some experience in how it is to continually learn a programming language in a setting that isn’t academically taught as well as gain some game developing skills.

What is the proposed solution or approach? Our approach includes modeling a platforming game with a Gladiator – Colosseum theme in which the goal of all levels is for the main character, the gladiator, to survive the battles and dangers of the Colosseum and reach the end of that respected round. The user must reach the end of the preceding level before advancing to a slightly longer and difficult round of challenges. With many dangers and obstacles for the Gladiator to persevere through, throughout the game will be collectible shields to protect the user from losing health which he has 3 hearts of. If all hearts are lost, game over. As the user gets further into the game, it increases in difficulty with it being most difficult at the very end right before ascending to the next level.

How do you propose to complete your project (It is important to explain how you propose to complete your project)?

What tools and/or methodology (e.g., ThreeJS, JavaScript, CSS, Blender, etc.) will be used to design, implement, and deliver the proposed solution? As of right now, the known tools we will be using is the language of C# and it may be including some implementations of JavaScript.

What type of resources (e.g., software, hardware, virtualization techniques, etc.) will you need to complete your project? As of right now, the complete packages and assets that are included with the game developing software, Unity, will be the only resource we use.

Briefly describe the schedule of activities you will engage in to complete your project.

As appropriate, include a budget with projected expenses and their importance to the project.

**Timeline:**

Since you are at the end of your undergraduate career, your experience should be insightful when creating a timeline for completing the project. Outline, with as much detail as possible, a timeline with action items and deliverables.

**Reflection:**

Why does this proposal qualify as a capstone project?

What technologies and methodologies does your capstone proposal incorporate that demonstrate your learning experience?

Are there any new technologies that will be utilized?

How will your project further knowledge, understanding, or increase your skills in your discipline?