

Suraj Jagmohan

Project Proposal

Summary

For our Culmination Project we will be creating a first person shooter game within Unreal Engine, in which we will be learning for the first time as we have previous experience within Unity Engine, so throughout this whole culmination project we will learn many things along the way to adapt to all the new utilities which are provided. The game is expected to be complete in the fall, in which we will be able to show the game in a playable state of the First person shooter showcasing character action, weaponry variations, responsive enemies, and level design.

The project will be done in a pair of two, me and Kevin Huang who is also a student at City Tech. We took some time prior to discuss what type of game we will be making, what engine we would be using, and what would be realistic to make within our given time. And hence, we decided to make sure we allocated time into the right sections to stay on track, such as researching tutorials for things we need to learn, what needs to be done by when and so on.

Throughout this project we are given the opportunity to learn more in Unreal, by properly being able to utilize the things within the engine which were provided, This process will allow us to understand more about Blueprints, Objects, Character movement, Projectiles, Enemy response, Level design and many more things as we are just scratching the surface of what is offered.

My expectations for this project is to be used as a vital piece in my portfolio to help when it comes to me making a career choice.

Methods we plan to use for the Game:

- For Software we will be using Unreal Engine 5
- Using tutorials provided online throughout our experience
- Learning from tutorials how to properly utilize projectiles, enemy ai
- Understanding how to setup a health system within the game(such as health decay, damage, respawn)

- Scripting will be a vital part, and is something which will be used to implement a lot of the things within the game.

Deliverables:

- 1.) A first person shooter game
- 2.) Will be working weapons/projectile firing
- 3.) Level Design and Generation
- 4.) Implementation of the User Interface
- 5.) Health and Damage

Work Breakdown Structure:

- Learning Unreal Engine and Scripting
 - Blueprints
 - Utilizing Assets
 - Level Building
 - Weapons and Projectiles
 - Sound Design
 - Health System
 - Character movement
 - Enemy AI
 - Weapon physics
 - Level generation

Resources:

- Personal Laptop - Free
- Blender - Free
- Unreal Engine Assets (~\$100)
- Unreal Engine - Free

Set Budget of \$200|

Gantt Chart:

Game Design culmination - Suraj

