

**David Tomlinson**

## **Midterm Project Writeup**

Write a report on your \*personal\* progress on your Game Project

1) What things have you self learned in Unity and how you went about it

In self learning the important aspects of unity, that would benefit me to know as I developed parts of our game, I experimented with a lot of the features of unity in and outside the making of this project. Such as:

Scripting- For manipulate any object i made scripts with public variables that would change the objects in real time. I needed scripts to play audio at a certain point, I needed scripts to have the menu UI transfer the player in and out of scenes and i made scripts to get images to constantly scroll. I also needed to code to get the skybox to move.

Rendering- In order to fully understand how objects are rendered in regards to light, shadows and materials, I experimented with how textures effect 3d characters using unity's complex rendering system.

Shaping models/textures- Using blender and photoshop i played with character models, UI textures/sprites. I rigged models and assigned textures to them.

Animating- I attempted to learn how to animate a character walking in order to understand how the unity animator works. Using animations I found online and the rigged character, I managed to get the character moving forward at different speeds.

2) What have you contributed to the group game proposal thus far

In the first week I pulled the idea for the game out of my list of games I'd make in the future. I had this whole random story that would serve as a template for what this type of game needed. I made a word document that I placed all my storyboarding ideas onto. It explained the character motivation and the types of enemies in the game and what the missions could be and a boss battle at the end. It also had an ending to throw the player off.

3) What assets you have found and/or created, including images, audio and/or 3D models

Found almost everything on the unity asset store. Except a UI background and some UI sprites but I never finished making those. Also used a website to find more interesting fonts. The things in the project right now that I did place there are asteroids, space skies for backgrounds, some text fonts I found online, and textmesh pro to help me make a better looking UI. I found this premade UI in the asset store but I haven't used it yet. I also have some ripped character models on standby that I may use in the future.

4) What implementation work have you done to the group Unity project (scripting, animation, scene setup etc)

My group mate gave us a template of a moving spaceship in the beginning of the semester. From that I added the previously mentioned backgrounds to the scene. In more detail, I used a lot of youtube tutorials to help me with the project. With the use of them, I created materials with star assets from unity then I placed scripts onto all the backgrounds in order to get them to move around in their own ways. I changed the camera configuration to better fit the background

implementation. Then I changed resolution of the game to make more sense for whoever planned on playing the game and to fit to whatever they planned on playing our game with. I first added some UI elements that would show the spaceships health in the top left corner if need be. With the basic background done in this scene, I created another scene for the menu. Made 3 buttons that will call functions based on their desired properties. One transfers to the game scene, one to an options menu which can go back to the main menu screen, and one to exit the game.

#### 5) What you plan to work on next

I plan on finishing drawing the intro screen and creating transition UI that will make the game warp into a new level more seamlessly. I plan on doing this by animating intros of scenes, like the ship flying into a neutral position. I plan on creating a UI element to have the characters thoughts displayed to the player. I plan on making the current UI look nicer by animating the buttons to do things or make sounds when the player is interacting with them. I may incorporate the particle system in some way when doing this.







