**Developer Diary**

**By**

**Brendan Toolan G00350190**

**November 18th**

On this day I began the development of the game document I was given. I first began by creating the Main Menu and 1st level scene. I then added a script for the menu so that when the start button is pressed the player is brought to the first level of the game.

I created a basic layout for the game by creating a track using a 3d object in unity. I then added a mock player to the scene when I added a jump functionality to it as well as some left and right movements. At first, I had a few problems with the movement, but managed to fix it but realised that I would need to look at the gravity aspect of the players jump more.

**November 19th**

First thing I did on this day was trying to get the camera and player to move forward on the z axis by itself. I tried doing this with the use of Circuits and waypoints.

The player was able to move along the circuit I had set up but the camera for some reason would not. I then instead went to changing the layout of level 1 and then added back the temporary player to the game.

**November 20th**

I have made more progress then I had done the previous two days after some research I did online, I managed to get the camera to move along the track by having it follow the player on the scene.

I then generated the tiles for the track in the game when a new tile for the track gets created by adding +3 to its z.position and keeps repeating.

Also, with this I created some obstacles for the game and was able to generate them so they would appear randomly on the track for the game. I also today slightly adjusted the position and rotation of the camera in unity.

**November 21st**

I worked more on generating more obstacles to appear on the track for the game. I had a small issue where the two obstacles would overlap each other on the same time in the game, but this was easily fixed. I then tried to get one of these obstacles to move by itself but was having trouble doing this as the object did move but instead would float up in the scene when it started to move on the z axis.

**November 24th**

I somehow fixed the moving obstacle today and then went on to create more obstacles for the game. The player now moves along with the camera in the scene now and I can move the player left and right now, however not as smooth as I would like it to be.

I went to see if this was achievable, but this caused more problems for me during the games development as it caused the player not to move along with the camera of the game anymore. I commented out that bit of code for the time being.

**December 2nd**

I fixed the problem with the players movement on the game but need to fix the problem with the problem I am now having with the camera. Could not find a way to fix this. Will need to look more into it when back at developing.

**December 3rd**

I added Z movement on the player today by having it when the player presses the ‘w’ key the player moves forward however this is only a temporarily fix for this problem.

The jump functionally of the player caused me some problems today as at first the player can jump up but once it the player jumps, it does not go down on the ground but rather stills in the same y position while it moves forward in the game. I was able to get this fixed but still had an issue with the position of the player still.

**December 9th**

Today I work on the main menu of the game by adding a quit button and adding functionality to it in the menu script. I fixed the movement and jump problem I had come across the last day, by changing around the code in the player movement script. The player now moves more smooth and the camera now keeps following the position of the player.

The player now when it hits an obstacle of falls from the track, goes back to the start of the level now. I added a pause menu for the game too today and created a script for it as well.

**December 10th**

Today I gave the player lives from the GameSession object and created a game over screen when the player can restart the game when they are out of lives.

However, I did noticed a small problem when running the game as when the player would hit an obstacle on the track the player would instead lose two lives instead of one, will need to investigate into this more at some stage.

Added in scenes for levels 2 and 3 and worked on the level 2 scene by increasing the speed of the players movement to make it harder than level 1.

**December 11th & December 12th**

I created Skyboxes for the scenes in the game. Fixed a small issue I had with pause not working in level 2 then. I also experience a issue with the command prompt not pushing to my GitHub repo as well, but seemed to sort itself today. Next day I added the skyboxes that were created into my scenes.

**December 13th**

Today I set up an options panel in the main menu when the player can set the volume of the background music. I added audio background music to the game. I created more obstacles and put them into level 2. These obstacles are more complexed then the ones previous before.

**December 14th**

Today I went onto updating level 3 for the game. I created more complex obstacles and increased the players speed in this level. I added a slider in the options panel in the game. At first it did not seem to work but figured out why when I saw I didn’t add the audio mixer to the audio source in the Audio Object. Cleaned up my assets folders as well on unity too.

**December 15th**

I finished up on developing level 3. Get the game to progress to different levels throughout the gameplay today. I also managed to fix the issue I was having with the lives.

In the game flow scripts I had it set up in the update method that when the z position of the next tile spawn was at a certain number (e.g. “if(nextSpawnTile.z = 123)”). The game would then load up the next level of the game for the player.

I get in contact with the person I was developing the game for. I explained to him I did not have time to add a crouch function to the player, nor was I was able to figure out how-to pass-through walls if the player was same colour as the wall by changing their colour. The client did not seem to mind this and said that this was ok with him.

**References**

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