**Individual Essay**

For the group project we worked as a team to determine what the game idea and what the theme of the project was. This allowed us to identify the scope of the project by firstly, creating a game design document to outline the key features of the game. From this document we refined it listing features and mechanics in a spreadsheet. The spreadsheet displayed a plan with an estimated time frame of completion of certain features per week and an actual table which was updated throughout the duration of the project. CW1 was finished once we had created a presentation describing the features and mechanics of the game.

In preparation for CW2 we created trello board which acted as our backlog for the project of all the tasks, this board was referred to and updated throughout the development process. For the background concept I consulted the game design document, helping me to gain a better understanding of how I could integrate and appropriate environment and colour theme to the game. This gave me a clear vision of how I wanted the scenery to look. The first stage of developing the background, images for the base room of floor and walls which I created using Piskel. Furthermore, editing in Photoshop to give the correct perspective of the walls. Additionally, the concept art I found for the furniture I used as a base to transfer my idea across into the game by using Photoshop to change the lighting and perspective view to give a correct atmosphere for the game. Moreover, I also created some art such as blood stains and symbols to further enrich it as well. Finally once I had all of the artwork I needed to build the rooms I started to develop them by placing the furniture appropriately throughout the rooms ensuring the scale, colliders and position were correct, guaranteeing consistency throughout the five different rooms, which was the corridor, the three other rooms and the boss room. I didn’t experience any major issues in this process however, I underestimated how long these task would take to complete. In addition for the boss room had a few iterations over the builds as I tried to differentiate it from the other rooms to give a different feel to the game once you entered the room.

The room integration process consisted of developing code for the player to be transferred from room to room, also ensuring if you went into a room you would come out of the correct room in the corridor. Each door would take you to a random room which also had a delay once you were in the room you would have to wait to be able to return which was a base build for the room transfer. This small feature was updated later when we added the enemies to the rooms so that the player could not leave until the enemy was defeated.

From the character that was created by one of my team mates I created additional images that when they were played in a sequence gave the appearance of movement for each direction.

For programming the enemy attack I made it deal damage once it was in range of the player, adding a cool down to prevent it from dealing damage too quickly.

The projectile integration involved configuring the projectiles to add a new sprite which had been previously created, changing the parameters of the colliders to ensure a realistic hit box was integrated and finally confirming that the script was on the game object.

In creating the display for the UI, I firstly created assets such as an inventory bar which the ammo types would be located also inputting images of the ammo types in position on the bar, in addition I made sure it displayed the quantity of each ammo type so that a visual representation can be shown to the user, as well as a select image over the ammo type selected, which would be updated when the user selects the ammo type if they have more than zero. In addition I implemented hearts to show the health of the character so when he took damage he would lose a heart.

The main menu involved me to create multiple images for buttons which would take the user to different locations. One which was static and another for each when the button was selected to ensure the user was selecting the correct button. This page consisted of three buttons one to start the game, another took the user to a control page which I added all of the keys and their roles within the game ensuring that the feel of the game stayed consistent with the theme, and finally a quit option. Furthermore I found an image online of a hallway and edited it using Photoshop which would be the background to the main menu screen.

Furthermore, I created two more scenes for when the player succeeded in defeating the boss and another as a death scene. Both contained a button taking the user back to the main menu.

The team had an additional meet up for creating a working build of the game by making last minute adjustments to ensure everything was working as intended and if anything else that was required to be completed was met.

Overall, the final build of the game was only a prototype. If we had additional time for developing the game we could have implementing more features to it making it engaging. However, we stuck to our original plan meaning that the project progressed following the scope accurately making it a successful project.