**Individual Report**

In this project as a team the first step we needed to take was creating the game design document for the first piece of coursework for this module. Making this game design document was quite integral because it gave us scope for the project with a brief idea of what features would need to be implemented in the future. After receiving approval of our game idea, as a group we thought the next best step would be to make a spreadsheet which included any features or documentation across a timeline of roughly 14 weeks. This spreadsheet furthered our knowledge of the scope of the project and provided a solid structure throughout development, although it did need to be modified at times due to feature changes. To bring an end to the first piece of coursework for the team project we had to make a presentation to demonstrate the design of our game, this included descriptive information, screenshots of our spreadsheet and concept art.

The concept art I made for the presentation included a locust enemy and our main character, developing these drawing turned out to be more difficult than expected. The reason they were more difficult was because for both it was very hard to find a reference photo because the ideas were unique to our game idea. So I had to conflict ideas with the team to get the best understanding of what the assets should look like, from this I was able to find a couple reference photos but had to interpret certain features and the point of view for myself. After completing the concept art of the main character and locust I now had to develop these drawings into 2D sprites. Having prior experience of making sprites I chose to use piskel this is because this software gives me a lot of control with level of detail and fps of animations, also I already knew that piskel was compatible with the game engine we decided to use which is unity.

Now I was ready to move onto the development stage, the first sprite I decided to create was the front view for the priest main character. In these initial stages I created a structure to development by establishing the colours being used first before I start adding pixels. Next I moved onto creating an outline for the character, this was made a lot easier because I had concept art next to me which was already proportional and with detail. After the outline was complete I then focused on adding the detail and colour, this stage was quick because pixel drawings require less detail compared to the concept art. Finally the front view main character was complete so after I just needed to create the right, left and back view. Once all them views were complete I moved onto making the locust, but it was only once starting this I realised that I could’ve used a mirror tool to make the development process twice as quick, so I amended my process structure and continued. So now the sprites are done I was able to implement them into the current project version.

Now that some progress has been made on the artwork I looked at our trello backlog and saw I needed to move onto programming the first enemy AI into the game. First of all I retrieved the current version of our game from a fellow team member and then imported the locust sprite. Next I created a script to allow the locust to track and chase the main character, this process seemed to go smoothly with only a few syntax errors coming up.

After how well the artwork went at the start of the project as a team we decided it was best I continue to make more concept art and sprites for the next step. It was also discussed that my artwork had a set style that needed to be withheld to maintain the theme within the game. So I was given the tasks of making projectiles (spray attack, Abaddon attack) and the Abaddon boss. When making these I decided at the start that there was no need to hand draw concept art again, this is because it takes me a lot of time to create and also the sprites being made had a lot more reference photos compared to the last few created. So instead I just moved straight onto piskel to create these sprites, the projectile sprites were quick and easy because they were small and didn’t contain a lot of pixels/detail. Whereas the Abaddon sprite took me a bit more time to complete but was worth it because it ended up having higher quality.

After the sprite drawings were complete I needed to animate them, so I started with the main character walk animation. For this part it took up a lot of my time this is because I had to edit 12 frames in each view of a total of four views, as I had no reference for the main characters walk I had to mimic the motion so I could create imagery of what each frame would look like. Once complete it was time to export the sprite sheet and then import it to unity. But unfortunately this is where we came across the issue of the character walking a different direction to the direction it was firing in. When this issue occurred it was already too late into our project which meant we couldn’t attempt to fix this issue. To overcome it though we would’ve had to not use unity’s animator but instead program the animation in not through a sprite sheet. This issue also halted the creation of the enemy animations as the same problem could’ve occurred. But overall as it was a prototype we were creating we decided to leave these issues and if we were making a full complete game we would’ve overcome this issue.

In conclusion as a team we worked very well together and structured our project appropriately due to the ambitions of our game design. I believe if the assignment was to develop a full game we would’ve pulled through and made a very good game.