**Sprint review and retrospective**

**Sprint review**

At the start we created items which we were going to work on in the sprint and added them to our sprint backlog. Firstly, we worked animating the character and enemies, to improve on the overall visual of the game.   
Damage numbers were then added so whenever an enemy or the characters takes damage, number indicating how much damage would animate off them. This same method was applied to whenever an upgraded item was picked up by the character, indicating in text what type of upgrade was picked up.   
Then we added a new “flying” type enemy into the game, which could travel directly to the character, passing over the house and lake on the map. We decided to disregard adding another type of enemy into the game as we all agreed that we had enough enemy types to use for the game.  
We then worked on the upgrades; increasing the melee and gun damage, increasing the health of the character, increasing maximum ammo that the character can hold and improving the rate of fire of the gun, to help the player scale up with the game.  
Introduction page was then designed and implemented which let user to know what the controls are for the game.   
New RPG weapon was added, which tracked an enemy guaranteeing the character a hit on an enemy.   
A boss level was then created; every five levels the user would face a boss that would have more attacks (basic area spread attack, projectile and homing projectile) the higher the level was and depending on what his health was. Level 5 it will have the basic area attack, level 10 and if the health of the boss has less than 50% health it will have the projectile attack and finally, if it’s level 15 and boss has less than 25% health it will have the homing projectile that tracks the character.   
Background music was then added with a mute button “M”, giving users the option of background music.  
A save and load function was added so that at the end of each level it gave the user a password to for completing that level, and by pressing “L” button at the title screen, it gave them the option of inputting a password which would take users back to that saved state.   
High score system was introduced to give the overall game a purpose. A score.txt file was added, allowing users to save their score if it reached the top 10. Pressing “H” on the title screen loads up the high score files, displaying the 10 top, giving first, second and third their own font and colour of gold, silver and bronze respectively.   
Sound effects were then added to every interaction of the game, such as; sword swing, firing of the gun and RPG and many more.  
Finally a code review was done to refactor any unnecessary code, to add any comments needed and to change any variable names so that they all look the same and so they did not contain any underscores, as this is not a proper naming method in java.

During this sprint, we conducted testing whenever a new functionality was added (whether solo or in a pair) by the person(s) not involved with that task. This was usually done during our group meetings so feedback and ideas could be bounced around between us. This allowed both effective finding and squashing of unintended behaviour, as well as increasing the speed of iterating and improving each module.

Finally, the things that we would not continue if we were to do this again, is to try and keep all variable and method names in the same style and not use underscores for variable names.

**Sprint retrospective**

Overall our team worked well this sprint, completing major tasks together, which progressed the game’s development.

One part that we especially did well on was the save and load function and the gun, melee and health upgrades. The save and load gave the user a chance to leave and come back to the game in the same state that it was then they left it.

However there were issues that we could improve on, one of these issues is to keep all variable names in the same style as this means that the code looks tidy and is easy for anyone else to read.

Below is what we will start, stop and continue to do if we were to do another project like this:

|  |  |  |
| --- | --- | --- |
| STOP | START | CONTINUE |
| Using underscores for variable names | Use camelCase method of naming variables from the beginning | Meeting on a regular basis. |
| Using names for variables and methods that are in different styles to others. |  | Working at a steady pace that progresses the project |
|  |  | Testing after each item has been completed |