Blog URL: <https://www.tumblr.com/blog/tienfinalproject>

Github URL: <https://github.com/cakeydoodoo/Final-Project.git>

Video Demonstration of current progress: <https://youtu.be/4AUUi7R-80Y>

The project that I decided to create is a combination bases RPG tech demo which I will be creating in Unity. The reason why I chose to do a tech demo was because the scope of the game would have been too large which is why I decided to focus on the actual gameplay mechanics of the game. What inspired me to do a project like this was a game that I played as a child – Kingdom Hearts. With the recent development of the latest game in the series I thought it would be a good idea to challenge myself to make something that I envisioned how the game would be played; of course, only how the combat works, as the movement system in the game would be far too complex to do.

The aim of my demo is to showcase the battle system of what would become a game. The idea of the demo is that the user can play as a character who is chased and attacked my enemies and the user must fend them off with a series of attacks which can be fully customised according to the user’s preference. Customisation includes the change of weapons, attacks and possibly armour. I am starting off with the character movements using animations found on www.mixamo.com; I intend to add my own character design to the animations towards the end of the project since the mechanics of the game is the focus.

I have created a chart of what I need to accomplish; I created it in the form of a sprint. The actual sprints will be included in my game blog.

|  |  |  |
| --- | --- | --- |
| Task | Priority | Done? |
| Create the movement of the player character | High | Yes |
| Add animations for the movement | High | Yes |
| Attacking system | High |  |
| Enemy movement | High | Kind of |
| Enemy tracking system | High |  |
| Enemy attacking system | High |  |
| UI – enemy/player health | Medium |  |
| PGC environment | Medium |  |
| Create a game controller using the Arduino | Low |  |
| Concept art of the character | Low |  |
| Game Controls | Low |  |
| Create behaviour trees for the enemies for difficulty using NPBehave | Low |  |

In my current progress I have already implemented movement for my player character which is a basic female model taken from the Mixamo website which will be changed to my own character design later once the core mechanics of the game is complete. I also have an enemy player ready which follows the target however it is not currently implemented in the latest version of the game as it was part of a separate project that I was working on. I will be adding the enemy once I have the player character movements fully completed. The animations of the player were implemented using Mecanim and I may explore blend trees for smoother animations. The actions I currently have finished are: idle, walk, run, jump, and walk backwards; how this is done is explained in the video demonstration as well as the movement for the enemy. In my initial project proposal, I included a physical controller that I would create using the Arduino however I now feel like it is not possible to do so; I may settle for the use of an existing controller such as a PS4 controller or Xbox controller or stick with the basic keyboard and mouse if that is not possible.

The next stage in the game/demo I will be creating the attacking system for my game. This includes the attack animations and creating the rigid body for the weapon that will be able to detect the enemy bodies thus decreasing their health (which I will be adding once the attack animation and enemy movement is complete). I will also have to revisit movement animations since the movement will have to change according to the type of weapon that is to be held.

Once the basic player attacking and enemy movement is complete I will begin the playtesting stage of development. After my initial feedback I will make the necessary changes and then start basic enemy attacks so that there is more of a game feeling to the demo; once I feel like the demo feels more like a game I will change my focus to the main mechanic of the game, combinations. This will prove to be difficult because the animations may have to be created from scratch as I cannot find the specific animations necessary for my project.

To speed up the progress of my project I will be setting myself realistic weekly sprints; this is to keep myself motivated to finish key goals and to keep the workflow at a steady pace.

Sprint 1: 1st March – 15th March

|  |  |  |
| --- | --- | --- |
| Task | Priority | Done? |
| Find attack animation for shield and sword | High | yes |
| Combination for the attack animations for shield and sword | High | no |
| Enemy tracking/movement | High | Yes |
| Enemy hitbox/health/death | medium | No |

Sprint 2: 16th March – 29th March

|  |  |  |
| --- | --- | --- |
| Task | Priority | Done? |
| Combination for the attach animations for sword and shield | High | Yes |
| Enemy hitbox/health/death | High | Kinda |
| Enemy Spawning system | High | Yes |
| Enemy attacking system(animation) | Medium | No |
| Player health/death/hitbox | Medium | Kinda |
| Find animations for dagger and or sword attacking and or hand to hand | Low | Yes |

Overall projection

|  |  |  |
| --- | --- | --- |
| Task | Priority | Done? |
| Combination for the attach animations for sword and shield | High |  |
| Enemy hitbox/health/death | High |  |
| Enemy attacking system | High |  |
|  | Medium |  |
| PGC environment | Medium |  |
| Create a game controller using the Arduino | Low |  |
| Concept art of the character | Low |  |
| Game Controls | Low |  |
| Create behaviour trees for the enemies for difficulty using NPBehave | Low |  |