

Final Project Proposal

4 Years at Stuy: Mini RPG Adventure

The Idea:

This is a bit of an ambitious task for quite a few reasons. We are trying to make a full RPG adventure with characters, story and a typical turn-based battle system. The reason why we call it “4 Years at Stuy” is because there will be 3 bosses and 1 final boss, representing the 4 years that a student should spend at stuy.

The enemies you will encounter during the adventure include: teachers, homework, exams, broken escalators, internship applications. All of these enemies will get stronger as you go through the 4 years. These enemies will also be in the form of random encounters.

There will be a final boss for each grade as well. Freshmen will have to defeat a security guard. Sophomores will have to defeat a dean. Juniors will have to defeat the SATs. And Seniors will need to defeat a particular teacher (It’s a secret for now).

To-Do List

- 1) Make a UML diagram for each class that will need to be implemented.
- 2) Look into tilesets that we could use to help us with the graphics.
- 3) Plan out the little things such as a level up system, stat balancing, etc.
- 4) Start coding the very basics.
 - a) Get the player class finished.
 - b) Get one enemy finished.
 - c) Get one area finished (Ex: 5th floor).
- 5) Test and see if it runs smoothly.
- 6) Implement more and more and expand from there.
- 7) Once one year is done, rinse and repeat.

Implementation

Player:

The Player will be its own separate class as it has many attributes special to it. Specifically, movement in the open area. Something we have yet to figure out, is how we will animate that but it is not completely necessary. The Player will have a basic attack method, and a magic attack method. It will also have the typical instance variables, HP, Attack, Defense, Magic and Speed. Within the move() method, there will be chance of activating battle().

Enemies:

Enemies will fall under the superclass Enemy. Enemy will be an abstract class with methods such as attack(), defend() and heal(). Of course, it will also have instance variables such as HP, Attack, Defense, Magic and Speed.

Tiles:

We are currently looking at different PNGs that we can use that will make this job easier. We will make it so certain tiles are passable, but others or not. For example, you would be able to walk on a floor tile, but not a wall tile.

Map:

Map will have an instance variable in which it holds a 2D Array of Tiles. This is how we will be forming our areas.