

## Final Project Plan

### Team Hello

#### 1. The scope of the project

1) We are going to create a small RPG game by Processing:

Before the game starts, there is a menu that the user can click on to change between wizard and soldier. After the user chooses the character, the user can control this character to move left or right, jump, attack, or cast spells. Each action will have the related sound effects.

This game will record the enemies the player defeated, and print out the score on the top right corner on the screen.

There will be classes of the wizard, the soldier, and the enemies. There will be several maps that the user can play, and different kinds of enemies in different maps.

#### 2) Keyboard interactivity:

We will let the user press (W, A, S, D) on the keyboard to control the movement of the character.

(W: move up; A: moves left; S: moves down; D: moves right).

What's more, the user will fire by clicking the left button of the mouse.

#### 3) Multiple GUI systems:

We will display the information of 1) player's level and 2) player's HP on the top left corner of the screen. And we will add an extra GUI button to control the background music.

#### 4) Class objects with animation hierarchies:

There will be a class for knight and a class for wizard, as two different characters the player can choose to play. There will also be a class for enemies. Moreover, we plan to build class for the ground, trees, and other background settings.

#### 5) Data input/output:

We will make the program read a XML file to set the level system for player, like how many experiences are needed for to get to the next level.

#### 6) Sound:

We will insert an auto-played background music in this game. The user can click a GUI button “Mute Sound” on the game screen to mute this music, or he can click “Unmute Sound” to unmute this music.

### 2. Project challenges

- 1) The mutable sound could be a challenge. Since we only know how to insert the background music in previous homeworks.
- 2) It's quite hard to create several different classes for different types of characters
- 3) It's quite to understand the specific meaning of the requirement of the data input/output. We are planning to go to professor Abraham's office hour to discuss about how we can implement this function in our project.

### 3. Breakdown of work per groupmate

Hopefully we will finish this homework together during our meetings;

Yue Jiang: will be responsible for Multiple GUI systems and Data input/output;

Xiaohan Wu: will be responsible for Keyboard interactivity and Sound;

And both of us will focus on the animation part since this is the most significant part of the game.