Ou Zheng

Prof. Joshua Eckroth

CSCI 221- Software Development I

24 April 2015

Final Report of the Wooden Engine

Past three weeks, our team work on a game engine named as: Wooden Engine from github.Our goal is to make a map editor to help people create their own map for this game engine.And this map with shoe different of tile.such as land,water,fire and sand..my job is to created the save, load and the GUI with other teammate Aaron Cook.

For the first work we planned to get everything ready.such as went over the game engine,installed Linux and did some research on game engine. so this game engine it is include a tile class and it come with a original map. It is just a blue background with a black block in the middle which can not be able to cross. There other thing take too many times is to install the Linux system. I installed it on my Mac, for some reason the driver of the network card is broken and the graphic card is not working. So I have to use a ethernet cable connect to Christiant’s computer to get a internet.

For the GUI, at beginning , Aaron used the QT to design the Interface. Which looks pretty good. However, since we make a 16x12 map and the Qt request each block need to be input by itself ( cause we want each block have 4 different title)the we can not loop the void class. It is nearly impossible to set up 192 button one by one. Then,we give up the QT interface and start to use the c++ text to present the GUI.

The basic idea for this GUI is use "00" to represent the "null" land and use other number to represent other type of land. At first, we set up a output on screen which it 16\*12 matrix made by"00". Then we have the 2D array for save all the data.Also,we save the array[0][1-16]and arry{1-12][0] for display the location of the map to make the user can easily find the block they want. After first time output the map. The system will ask the user the x location,y location and what number they want to put in it. After user input all the date, the number will insert into the 2D array and there is a bool for system to decide if the user is in editor mode or not. we use one while loop when the user is in editor mode.therefore, the map will refresh after the input. So the user will be able to see the new map with changed number.and the first line of the row and the first line of the col we use number to show user the x and y location of this map.

For the save method I use the out file. The idea for the save file try to save all the data as a 16\*12 matrix made by number. So for the save file.I used the “ofstream out;” of out put all the data into a TXT file.also I use two for loop. For the inside for loop it output all the row. And after first line finish it will go to the next line. Also in order to out put"00" not just"0". We used the "stew(2) which means "Number of characters to be used as field width"(cplusplus). This code will save two space for all the number. Next I also use the "setfill('0')" which means"c. The new fill character for the stream.char\_type is the type of characters used by the stream (i.e., its first class template parameter, charT)." (Cplusplus), so all the number less than ten will be added a "0" in front of them.

For the load, it is most likely is the reverse of the save. We will have a 16\*12 matrix need to be read. The way we load fill is .and insert it back into a 2d array. So we can load the 2d array on the screen to show the user.and the 2d array start at (1,1) because we need to ignore the x,y location which is at x=0 and y=0.

As a group project, we do have something need to be improved. First for choose the project we chose the game engine written by russian,lots of commit we need to translate into english and this game engine for the different system. which took soo long to learn how to use other system. I almost spent whole week to try to get this game engine work on the Linux system. second, when I work with Aaron on GUI. We didn’t set up the standard format. Then, when we try to put things together, the save and load file is not match with the GUI,therefore we redesign all the GUI ,Save and Load file.Also the merge and branch still is a big problem for us.

Overall, this project is a fun experience with game engine and github,there are still a lot of stuff need us to learned.