Simon Fraser University
Faculty of Applied Science
CMPT 276 - Introduction to Software Engineering

Term Project - Phase 4

Implementation Phase Report

Group 5

The Game

Our game “Temple Escape” based itself on the story of our character, who is an adventurer escaping the maze of the hidden temple of Tiki Island with the lost treasure hidden in it. However, an army of the undead guards the temple and its treasure. Furthermore, every exit of the mazes are locked and can be only unlocked through finding all the keys in the maze. Through the process of collecting the keys, the adventurer has to avoid the Trap to avoid life-threatening. The higher the adventurer can go, the more rewards can get. We added this story to bring out the narrative fun of the game and make it more interesting.

Faithful

At the beginning of designing the game, we decide to add a time remaining function to press the player who finished the game in a given time. Through the building process, we found out this function will lead the game difficult to have a huge increase. Enemies, trap numbers and the wall numbers increase is good enough for the difficulty of the game. So, we decided to cancel this function. Instead, we make a timer as well but it is just for telling the adventurer how long they used to finish the level or the game, so the player can play the game again and challenge their customs clearance time.

Final Product vs Original Plan

Except for the time remaining function, we build our game successfully based on our original plan. Through the process of building the game, we found some important elements that the game should have but not in our original plan and made some changes to our Original Plan.

First, to make the game more flexible to the user, we provided that the player can change their key to have a corresponding movement. For example, our default is pressing w and the player can go up, now the player can set the key y to move up. This helps players get started the game easily based on their experiences of playing other games.

Second, we planned the number of enemies based on the current level of the game. For example, level 1 have1 enemy and level 10 have 10 enemies. It means there are no limits to the number of enemies. When we build the games, the more enemy numbers will lead to the increased difficulty of the game. We found out some problems if we do not set the enemies limits, it will be all enemies on the maze when the player can go very high level and the player does not have a move choice at the start. More, as we generalized the enemy position randomly at the game start. Although we set some cases to avoid the enemy close to the player at each level, if there are many enemies, they must be close to the player. After our discussion, we decided to set the maximum enemy number as 3. This is easy to control and easier to the player. The game difficulty will still increase with the increasing of level as the possible moving will decrease due to the wall number increases.

Modifications after phase 3

For the UI design, we added the skin colour for the player sprite, so the player can choose the sprite base on their favourite.

For the player just getting started to the game and does not know what the sprites are representing, we add a HELP page in the main screen of the game. This helps the players know what is their target when playing the game, what should avoid the get through and what the damage of the trap so the user can decide to go through the trap or not based on their current scores.

Learned

Through this project, we build a good team and learn lots of stuff from each other. The most important lesson we have learned is to keep sharing the progress rate. During the process of sharing the progress rate, your teammates can know how far you go through and see if you are facing some difficulty. If you are facing some difficulty like confusion about the criteria or don't know how to implement the programme, your teammates may know the solutions and can help you. More, during the sharing moment, your teammates may find some bugs in your work so we can fix it. This helps the workflow become more smooth and reduce the chances that the bugs occur. More important is, it helps the projects can finish before the deadline.

Video Demo

Link: