

Final Project

The project will consist of a 2D maze. The library that I will use is pygame, Tkinter, random, math and time. In the one player part of the game there will be three levels getting more difficult as you go. The player will have three lives and will lose one life after every encounter with a specific set of characters, however, the player can get additional lives or replenish his health by collecting the hearts that could be scattered across the maze. Each time the player loses a life these characters will get faster and it will be more difficult to avoid them. The main goal is to reach the end of the maze with the most amount of points possible. Points can be collected by getting the coins that will be scattered around the maze and the player loses points when they lose a life. There will be a score board that saves the high-score (if at the end of the three levels, the player has the most amount of points compared to anyone who has previously played, then this player will be asked for a username and added to the top of that score board).

The two player part of the game will split the screen in two different mazes of the same difficulty and the players will each use a different set of controls (arrows and awsd keys) and there will be a clock and the person who reaches the end of their maze first wins.

The user interface will have a few different screens the first screen where the player could click on different buttons that would show them the instructions and controls or new game and then take them to the one player game or the two player part of the game or load a previous unfinished game or view the score-board. For the one player screen, the next screen will consist of the maze in the middle with the player characters as well as the other characters and the hearts and coins. Around the maze there will be the health bar, a pause button, a point counter and a timer. Every time the player wins a game, they will be asked if they want to start the next level or if they want to save the game and continue it at a later time and if the third and last level is finished, a congratulations message will pop up, if the player's score is the high-score then the pop up will also include an entry box that prompts the user for a username and then the last screen the player sees is the score-board and there will be two buttons, one to close the window and another to return to the homepage. For the two player game the screen will be split into two mazes with just a clock on top and after one of the them wins, the screen will either display a player 1 winner message or a player 2 winner message.

Features for Sunday November 12:

Create the GUI for the home screens and the instruction's page and the one and two player screens as well as the score board. The one player game.