

“a document of the design of your game”

Including design, development, and documentation of the code you write

- Comments in code
- Explicit explanation for each function
- User's manual explaining how to play the game

We are designing the game Snake. In this game, the user controls a snake with the arrow keys with the goal to catch the red coin. If the red coin is caught, the snake grows by a coin and a new target coin randomly appears. If the snake touches the edges of the window, they lose.

Our Game currently has 3 files: Menu, Coin, and Snake. Menu() sets up the display window and Start Menu. Our Start Menu handles an image, dessert.jpg, using it as the background of the game. The menu also implements a hover feature over each level choice, “Start” box, and the “Quit” boxes. The level choices are underlined when hovered over and the button boxes enlarge when hovered over. We still have yet to implement the different levels, but we plan to do this by changing the frame rate of the game. If “Quit” is clicked, the window exits. If “Start” is clicked, a game begins.

When the game begins, an instance of snake is called. The function called is moveSnake, which places the snake in the top left corner of the window. MoveSnake also calls the function getCoin on the instance of a coin. GetCoin checks for the need to replace the coin, by comparing the position of the snake head to the coin. GetCoin will also be responsible for adding segments to the snake once it “eats” a coin token. There is also the keyPressed() function in snake which is responsible for taking in input from the user so that the snake moves in the desired direction. We will also be adding boundary checks so that if the snake runs into itself or the wall the game fails.

The tasks left to do in addition to the ones mentioned above are to add background music if possible and also to add a sound for when the coin is consumed. We will also be keeping track of the amount of lives with a simple counter, and reduce the number of lives the player gets at each difficulty level. Finally, there will be a score counter on the top left corner of the screen so that the player can keep track of their score while they play.