## Python Project Write Up

It came to my notice that many people enjoyed playing games, but they are limited because they do not have enough game consoles and TVs. Again, some were looking for ways of improving their vocabulary. I witness someone develop a number guessing game for them, but they wanted something more complicated and competitive. With the concepts I learnt from programming in computer science this semester and on the internet, I was able to come up with a word guessing game.

Now, what the program does, is that it reads from a file. This file is a text file that contains different words. This read and write concept is from chapter 5 of John Zelle's book, python programming. The program then randomly picks a word and assigns the word to a variable called secretword. The interface was done with Tkinter. Tkinter contains a lot of functions that made it very easy to develop the game. With buttons, labels and entries, I was able to get the right interface for my game. The main program uses buttons with a function called checker. It loops through the secretword to check if the letter guessed is in the secretword and add it to a label placed above.

The program has 3 pages before getting to the main game. One of the pages asks the user whether they want to play or quit. The second one takes the user's name for the leader board and the next page starts the word guessing function.

Every mistake made by the user comes with a certain emoji with a facial expression to show how dangerously close the user is getting to failing to guess the word.

With every letter that is guessed correctly, it is written on top and when the user guesses wrongly, a red button is shown. Every user has a maximum of 4 tries. Every letter guessed is added to the total score of the user. Every score has an emoji that comes with it. The emojis are images that were put in a list and a loop was used to read each png file from the list. Buttons were assigned to the number of mistakes made. At the end of the program, it has the last page that displays your scores plus the emoji that comes with it, and the word that was initially picked.

The name and score of the player is written to a file called leader board. The list there is arranged in ascending order. This was done by reading from the leader board file, splitting the name and score and using the score as the reference for comparing. It then arranges them in ascending order using the scores.