Hangman Game

Purpose

This assignment will give you practice with List, User defined functions, modules, reading and writing a file, graphical user interfaces (GUIs).

Flow of the game

- 1. Computer ask the player to enter his/her name.
- 2. Computer randomly guesses a word from a "List" of 10 predefined words in the program. After studying file read/write the word will be randomly selected from a file "input.txt".
- 3. At the start of the game, let the user know how many letters the computer's word contains.
- 4. Ask the user to supply one guess (i.e. letter) per round.
- 5. The user should receive feedback immediately after each guess about whether their guess appears in the computer word.
- 6. After each round, you should also display to the user the partially guessed word so far, as well as blank spaces against letter that the user has not yet guessed.
- 7. A user is allowed to make only 8 incorrect guesses otherwise user lose.
- 8. User should only be able to enter a single character (a z) at a time. After each entry remind user about how many guesses are left.
- 9. A user loses a guess only when s/he guesses incorrectly.
- 10. Is the user guesses the same wrong letter twice, then do not take away the guess, instead print message letting him know that s/he has already guessed that letter and ask to try again.
- 11. The game should end when the user constructs the full word or runs out of guesses. If the player runs out of guesses (player losses), then reveal the word to the player.
- 12. Ask the user whether s/he wants to try again or quit.
- 13. If the user decides to quit then the name of the user along with the score is displayed on the screen and also stored in the "record.txt". If user decides to continue the start again from point 2.

Bonus marks

Graphical representation also appears as shown below.

```
This program plays a game of hangman.
Guess letters in the mystery word.
You can only make 8 incorrect guesses before you lose.
See if you can guess the word before you run out of guesses...
incorrect guesses left: 8
Enter a letter: a
good guess, 'a' is in the word.
   1/ 1
word: - - - a - - - - - -
incorrect guesses left: 8
Enter a letter: e
  good guess, 'e' is in the word.
   1/ 1
word: - - - a - - e - - e - -
incorrect guesses left: 8
Enter a letter: i
  good guess, 'i' is in the word.
   1/ 1
word: i - - a - - e - - e - -
incorrect guesses left: 8
Enter a letter: o
sorry there is no 'o' in the word.
   1/ 1
word: i - - a - - e - - e - -
incorrect guesses left: 7
```

```
Enter a letter: \mathbf{m}
 sorry there is no 'm' in the word.
word: i - - a - - e - - e - -
incorrect guesses left: 6
Enter a letter: u
sorry there is no 'u' in the word.
word: i - - a - - e - - e - -
incorrect guesses left: 5
Enter a letter: n
  good guess, 'n' is in the word.
word: i n - a n - e - - e n -
incorrect guesses left: 5
Enter a letter: g
 sorry there is no 'g' in the word.
word: i n - a n - e - - e n - incorrect guesses left: \mathbf{4}
Enter a letter: t
  good guess, 't' is in the word.
word: i n - a n - e - - e n t incorrect guesses left: 4
```

```
Enter a letter: \mathbf{m}
You already guessed 'm', try again...
Enter a letter: 1
sorry there is no 'l' in the word.
           -
word: i n - a n - e - - e n t
incorrect guesses left: 3
Enter a letter: p
sorry there is no 'p' in the word.
    1/
           - 1
word: i n - a n - e - - e n t incorrect guesses left: 2
Enter a letter: r
sorry there is no 'r' in the word.
           - 1
word: i n - a n - e - - e n t incorrect guesses left: 1
Enter a letter: f
sorry there is no 'f' in the word.
```

Sorry, you didn't win this time. The word was: incandescent