CS3080 Python Programming - Task 1

1 Instructions

1.1 Task Teams

- Students will be divided into teams.

- The team can be 1, 2, or 3 students.

- It is not allowed for a team to contain more than 3 students. A team of 4 or more students will get a score of zero.

- Once you form a team, you will continue with that team to implement all the tasks of the semester.

- It is not allowed to change the team members for each task.

- It is your own responsibility to use the modules and modules versions you want.

1.2 What to Submit?

- A single ZIP file that contains the whole task folder.

- The whole task folder contains all the files (.py, .xlsx, report, etc.).

- A report contains the following:

  - Introduction
  - Table of functions

Function Prototype	Description of its purpose

  - Snapshots of the program execution
  - Name of group members including the role of each one.
  - Steps showing how to run the task.
  - Difficulties (if any) that you faced during implementing this task.

2 Tasks

Task 1: Word Guess Game

- Write a Python program to web scrape the following website:

    https://www.ef.edu/english-resources/english-vocabulary/top-1000-words/

- The goal of that web scraping is to obtain the 1000 most common words in the English language.

- Once you have them, you should save them in an Excel spreadsheet file.

- After that, develop a word guess game.

- At the start of the game, the program will randomly select a word from the Excel spreadsheet.

- The word characters will be displayed as underscores separated by spaces. For example, if the word has 5 characters, then the word will be displayed as 5 underscores separated by spaces.

    _ _ _ _ _

- If the player (the guesser) guesses correctly a letter, the character will be displayed in every place in the word.

    a _ a _ _

    a _ a _ t

- The player can make any number of guesses, but can make 5 mistakes only. For the fifth mistake, the program should do the following:

    - displays the word (the actual characters, not the underscores).
    - displays the message "You Lost!".
    - terminates.

- If the player guessed the word correctly, the program should do the following:

    - displays the word (the actual characters, not the underscores).
    - displays the message "You Won!".
    - terminates.