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MET CS 521

10/18/2019

Final project

Description: Final project summary

Main program functionality

For my final project I created a python program that allows a single user or multiple users to enter the letters they have available to play for Scrabble and receive suggested words and their potential scores back. This program can be played with one or more players and the user-provided strings are checked against the Collins Scrabble Words (2019) accepted words list.

This program is helpful because often when playing Scrabble users can be at a loss to know what words to play or what letter combination could give them the highest score. My program takes the guess work out of that by not only providing as many full or partial matches as it can find, but also by sorting the results by score from lowest to highest.

Users also don’t have to play alone with my program, by entering how many users you want to rotate through for each run multiple players can receive help in deciding what to play on the board. Multi-player mode is not required, and users can play by themselves if they wish. This allows people to use this program to secretly impress their friends or just see how much better of a score you can get when you work with a machine rather than trying to come up with words on your own.

Limitations

The only limitation that was put on the suggested words was that they be at least two letters long so they can be played on the board. There is no limit applied to how many players can be rotated through. However, users must enter a numeric value, not a textual representation of a number or they will be shown an error and the program will exit. There are also checks in place to ensure they are entering only letters for their scrabble words.

How to run

The program is run through a main *word\_finder.py* file. To run the program type *python word\_finder.py* from within the folder and start answering the prompts. Soon you will have a list of suggested words to help you win every game.

No third-party library installations are required to run this program. Everything contained within the program is part of the Python standard library. There are two test files for the two classes to check that their methods work as expected. To run the test using unittest, type the command *python -m unittest test\_WordScores.py* or *python -m unittest test\_ScrabbleWords.py*.