

Commit Report

Repository: crossword_puzzle

49ae1c5 | By tomasv (tomasvana@yahoo.com) | At 09/01/2024

Initial commit

https://github.com/tomasvana10/crossword_puzzle/commit/49ae1c5d0fac28832d165f2db2e5eedf7d802914

c33c51a | By tomasv (tomasvana@yahoo.com) | At 11/01/2024

Made layout of program; began on crossword generator

Defined the `Directions` class to specify the value of the "across" and "down" orientations of words in the crossword. The `Style` class specifies what character represents an empty cell. The `Restrictions` class will eventually contain a regex that removes all non-language characters from a string to ensure the crossword contains no symbols, punctuation, whitespace, etc.

Additionally, 4 errors were defined as these will likely need to be handled in the future. The `Crossword` class is still empty.

https://github.com/tomasvana10/crossword_puzzle/commit/c33c51aacc75bc15cd5652d34942038d8071244f

10a2378 | By tomasv (tomasvana@yahoo.com) | At 11/01/2024

Began developing Crossword class

Added error checking in the constructor and added `_format_definitions` and `_find_dimensions`. The definitions formatter uses a regex added to `Restrictions` in this commit that removes all non-language characters.

Added error class `EscapeCharacterInWord` to provide appropriate error messages to user input that contains '/' as regex cannot remove it.

https://github.com/tomasvana10/crossword_puzzle/commit/10a2378d4522ca68c617279a1f61101317dba6f3

Added 3 methods in the Crossword class

Added `_initialise_crossword_grid` to to assign self.grid to a two-dimensional array of `Style.EMPTY` characters.

Added `_place_word` to place a word at the given coordinates and orientation.

Added `_find_intersections` to determine how many intersections a word has with other words (at a given position and orientation) in self.grid.

https://github.com/tomasvana10/crossword_puzzle/commit/687cb2aa063c20e636e57b7f972913806bbe7afd

Added 1 method to the Crossword class

Added `_can_word_be_inserted` which uses conditional statements to ensure a word can be place at a given position and orientation in `self.grid`.

https://github.com/tomasvana10/crossword_puzzle/commit/c31d93179677f98ec9a5cc2ca3edc09f9174040d

Added 7 methods to the Crossword class

Added the dunder ``str`` method to represent the class as a string when printed

Added ``generate`` which is called on an instance of the class to create and populate ``self.grid``.

Added ``_find_first_word_placement`` to determine the middle indexes of ``self.grid`` for which to place the first word at.

Added ``_find_insertion_coords`` to determine all possible placements for a given word.

Added ``_add_clue`` and ``_add_data`` which append important information for all the words inserted to the crossword (orientation, intersections, position). ``_add_clue`` is friendly for the user to view and is displayed with by printing an instance of the Crossword class.

Added ``_populate_grid`` to find the best placement for a word based on intersections (using ``_find_insertion_coords``). Words with no intersections are reinserted when ``_populate_grid`` is recursed. This function also appends placement information to `self.clues` and `self.data` (using ``_add_clue`` and ``_add_data``).

https://github.com/tomasvana10/crossword_puzzle/commit/87d57f90206fcf02c670747b83f13fcc8a2ec84e

Reorganised file structure slightly

https://github.com/tomasvana10/crossword_puzzle/commit/5cdca5d4ba8175d5549ac63c0a1a9910e8f6b0ef

Added intrinsic documentation and finalised the Crossword class

Added extensive intrinsic documentation including docstrings for ``Crossword`` and its methods.

Added ``_prune_placements_for_readability`` which eliminates word placements that are directly adjacent to another word. This change drastically improves the overall appearance of the crossword.

A minor change was made in ``_populate_grid`` to accompany for the new method that was introduced.

https://github.com/tomasvana10/crossword_puzzle/commit/021130e3938481031278770e468ad9b387830ae5

Added 3 static methods to the CrosswordHelper class

The `CrosswordHelper` class features 3 static methods that assist the `Crossword` class and the user. `find_best_crossword` generates a large sum of crosswords depending on the amount of words in the crossword (determined by loading `attempts.json` into a dictionary). This function does not require the user to call `generate()` and instead returns the crossword object directly.

`load_definitions` returns a specified crossword file JSON into a dictionary that is used by `Crossword` to insert words into `self.grid`.

`_load_attempts` returns the `attempts.json` file which relates the amount of words a crossword contains to the appropriate amount of iterations that `find_best_crossword` should run for before returning the best found crossword.

Driver code at the bottom of the script was added to showcase an example usage of `cword_gen.py`.

https://github.com/tomasvana10/crossword_puzzle/commit/dff2bfdcf381e97a23eebaa8b2ac1cc88d1902f4

Added Paths class

The `Paths` class defines the absolute paths to `attempts_db.json` and the `cwords` directory. Reworded some parts of the program and added a little intrinsic documentation.

https://github.com/tomasvana10/crossword_puzzle/commit/1aa7005430448bdb69e80952bb49fdcd9d039aca