Word Unscrambler

Denis Leskovar

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Created for classes Programming 1 and 2 (NPRG030, NPRG031)[1] at [MFF UK](#).

Revisions

Creation date: 18.12.2018
Document version: 02
Last updated: 23.12.2018

Notes:

18.12.2018 – Denis Leskovar: Document created
23.12.2018 – Denis Leskovar: Features removed

Product Goal

A tool that unscrambles words based on words previously entered by the user. The user is provided with a reasonably fast search for 'word permutations'.

Functional description

Word Unscrambler creates a dictionary based on user's inputs. Once done, the user has the option to enter a word with mixed letters. Depending on the dictionary, he then receives either a successful result, i.e. list of one or more words from the dictionary, or a failed one - a warning if no such word was found.

User interface

The interface allows for both console and text (.txt) file inputs for the dictionary. After choosing either one, the user is then asked to provide the dictionary based on his previous decision, once done, he can then type in a string of characters, order of which is mixed in comparison with the correct word in the dictionary. Upon receiving the result, the user is presented with an option of filling up the dictionary with more words, trying another permutation or quitting the application.

Functional requirements

- The ability to input words of set maximal length through console.
- The ability to input words of set maximal length through a text file.
  - Requires getting familiar with the way text files work in Free Pascal.

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[1] Remove all that does not apply to your context.

- o Will need to consider, if reading a text file or loading it into an array is faster while searching.
- The ability to search the dictionary with reasonable speed.
  - o Requires testing various searching techniques as well as dictionary saving techniques.

Data inputs

- An array of strings containing letters.
- A .txt file containing characters separated by a New Line.
- A string containing letters.
- Characters or integers based on what options the UI presents to the user, used to navigate through the UI.

Deadline

28.02.2019