Similarity Search with Word Embeddings

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Description

This is a menu-driven Java application that can parse a text file containing 59,602 word embedding into a map data structure and search the data structure for a word or short set of words provided by the user and then output the top n most similar words to a text file.

To Run

From console at .jar file directory:

java -cp ./dsa.jar ie.atu.sw.Runner

The program will then ask for the path to word-embeddings file and name of the output file

Then navigate through console options to get similarity word set from the file.

- (1) Enter the word to search for similarity, then choose number of word that will be printed to output file.
 - When press 1, the program will first parse the list to map and then ask the user to input the word or short sentence.
 - For each word found in the list, the program will ask the user to input the number of top n word to be printed out to the output file
- (2) Choose which similarity algorithm that can be used
- (3) Exit the program

If the parsing process is unsuccessful, it could be the "word-embedding.txt" is not in the right directory.

Features

- Enter the word for searching
 - o Parsing the embedding file to a map.
 - o Input text or short sentence.
 - o Input number of word will be printed to the output file.
- Choosing the similarity algorithm
 - o Input number from 1 to 3 to choose the option for similarity algorithm.