Emily Marzano IS455-002 Professor X. Ye 8 March 2020 In Class Assignment 1

Project Summary

Overview:

1) Find synonyms and similar words. You can define words similarity by yourself and write the similarity definition in your report. You need to write a program (or function) that take words, embedding them and calculate the similarities.

In this project, I created a program that asks the user for a word, which then it would output synonyms of the word entered. To do this, I used the NLTK class with wordnet that needed to be downloaded. I then, created a list for the output as well as a variable input for the users' word. I created a for loop with methods from wordnet function that would pull the users word and search the wordnet dictionary. Within that loop it searches and pulls similar words from the dictionary of words and appends them to the output list. With that being done, it finally can print the list of synonyms for the word the user typed in.

Intellectual Merit:

This program can be useful because it allows users to easily search for like words, if they are writing a paper and can't remember like words instead of repeating them. Using the class NLTK with wordnet is a benefit of using python in this instance. Using the synset function to integrate the dictionary to find like words while using lemmas function to pull the data is beneficial to this program. This program could inspire others to create a more functional GUI with options to limit the input and make sure that the user doesn't input a number or a word that isn't in the dictionary which could throw off the functionality of the program. It can teach programmers the functionality of the NLTK class with wordnet.

Broader Impacts:

This program allows users to search for synonyms if someone is struggling to think of synonyms while writing a paper or if they just would like to know the synonyms of words. The program is simple to use, input any word in the dictionary when prompted to receive a list of alike words. It is a fast and easy way to retrieve a synonym of words rather than to google or go on a dictionary website and search. It takes a few seconds to type out the word and to retrieve all synonyms.