Project Summary

By: Iveth Contreras, Benjamin Berman, Gleason

Overview

The program written in Python will be able to find synonyms and similar words. This is done by giving the program a word and a file. The program then executes and labels the word given as a synonym if it matches the words in the file and if so appends it to the file. With the program, a word or phrase can be given and a calculation will be done outputting the word given and the file uploaded showing the correlation between the words. Natural Language ToolKit(NLTK), a library for statistical natural language processing for English, is imported in the project in order to use WordNet library. WordNet library is used for its large collection of related words; those similar words are grouped into lemmas which are compared to the given word and is how it is able to distinguish equality between word and file.

Intellectual Merit

As technology advances, natural language processes are becoming important in the tech workforce and in artificial intelligence applications. Working with human language data is commonly used in corporations and businesses to understand the customer's needs and feedback. There is a substantial amount of data available to be processed and analyzed and it is essential in getting insight and understanding customers. The synonyms program can help in getting this insight by assisting in giving meaning to data.

Broader Impact

The application provides insight into how natural language processes work and how an application that calculates synonyms can be used for speech recognition and text analytics. With the preference and growth of chatbots, messages, reviews, and tweets Natural language processes are vital in understanding and being able to interact with the user in mind.