Nicholas DaRosa
ndarosa2
CS410 Text Information Systems
14 November 2022

<u>Progress Report: Natural Language Processing Extension for Firefox</u>

1) Which tasks have been completed?

One task that has been completed is creating a webpage in which a user can copy and paste text into a box for it to be analyzed. Another task that has been completed is that the text pasted into the text box is analyzed for sentiment score, sentiment label, and part-of-speech tagging. Currently only the sentiment score and sentiment label are displayed to the user.

2) Which tasks are pending?

One task that is pending is the creation of the browser extension. Although I have created a webpage that can analyze the text, I need to use portions of that code in the creation of a browser extension that has similar functionality to the webpage. Another task that is pending is the implementation of entity recognition and stemming for the user inputted text. In addition, the overall design of the extension and the pasted text character limit still need to be finalized.

3) Are you facing any challenges?

One challenge I am facing is the creation of a browser extension. I have not created a browser extension before, so it has required reading documentation and tutorials before I can start on the extension itself. Another challenge I am facing is that the libraries I am using for natural language processing do not appear to support lemmatization, so I will likely use stemming as the replacement for lemmatization.

<u>References</u>

1. https://github.com/Ulflander/compendium-js
2. https://github.com/spencermountain/compromise/