README for DSCI 510 Final Project

Overview

This Jupyter Notebook contains an analysis of sentiment across various news sources using Python. The notebook focuses on scraping news headlines from different geographic locations, analyzing sentiment using the NLTK library, and comparing sentiments between national and local news sources.

Files

- `main.ipynb`: The primary Jupyter notebook file containing all the code, analysis, and visualizations.

Data Sources

The data used in this notebook was scraped from the following sources:

- Local news websites (specific URLs would be listed here if applicable).
- The New York Times API, for comparison between local and national news sentiments.

Dependencies

This notebook depends on several Python libraries, which you can install via pip. The required libraries include:

Bash

Pandas

Matplotlib

Nltk

BeautifulSoup

BaseMap

Geopandas

Contextily

Numpy

Prettytable

Features

- Data Collection: Scripts for scraping news headlines and fetching data via the NYT API.
- Sentiment Analysis: Utilization of NLTK's Sentiment Intensity Analyzer to compute sentiment scores for the headlines.
- Data Visualization: Graphical representations of data including bar charts, pie charts, and maps using `matplotlib` and `geopandas`.

How to Run

1. Ensure all dependencies are installed using the provided pip command.
2. Open the `main.ipynb` file in Jupyter Notebook or JupyterLab.
3. Run each cell in the notebook sequentially to replicate the analysis.

License

Contact

For any additional questions or comments, please contact the author of the notebook at [your-email@domain.com].

Acknowledgments

- Thanks to the contributors of the NLTK library for providing extensive tools for text processing and sentiment analysis.
- Gratitude to the maintainers of the various Python packages that made this analysis possible.