Social Media Sentiment Analysis Code Documentation

Introduction:

The code performs sentiment analysis on articles from social media. The code reads a list of URLs from an Excel file, extracts the title and article content of each URL, and saves it to a text file. The code then uses the Beautiful Soup library to scrape the HTML content of each URL. The code then reads a list of positive and negative words from text files and a list of stop words from text files. Finally, the code calculates various metrics related to the sentiment of the article.

Code Flow:

1. Import necessary libraries: BeautifulSoup, requests, glob, nltk, syllables, and pandas.
2. Read input data from an Excel file using pandas. The data includes a list of URLs and their corresponding ID.
3. Loop through each URL in the input data and extract the title and article content using Beautiful Soup library.
4. Write the title and article content to a text file with the corresponding ID.
5. Read in positive, negative, and stop words from text files.
6. Define a function `sentiment_analysis` that takes in a text string and returns several sentiment analysis metrics, including positive and negative word counts, polarity and subjectivity scores, fog index, and personal pronoun count.
7. Loop through the text files created in step 4, and apply the `sentiment_analysis` function to each text file to obtain sentiment analysis results.
8. Store the sentiment analysis results in a list, and convert the list to a pandas DataFrame.
9. Write the sentiment analysis results to an Excel file.

Conclusion:

The code performs sentiment analysis on articles from social media, and the VBA presentation explains the code flow, the importance of sentiment analysis, the results of sentiment analysis, and a demo of the code. The code and the presentation can be used for sentiment analysis of articles from social media.