Text Analysis on Brexit Opinions: use openAI API for NLP analysis

1 Introduction

In this assignment, you will work within a provided Jupyter Notebook and a Data File to develop a Prompt that analyzes tweets related to Brexit. Specifically, you will focus on classifying each tweet based on whether it supports the UK leaving or staying in the EU. You will also conduct sentiment analysis and summarize the tweet.

2 Objectives

- Implement the doAnalyse function in the given Jupyter Notebook.
- Classify the tweet's opinion as either 'leave' or 'stay.'
- Conduct a sentiment analysis on the tweet.
- Summarize the tweet.
- Return the output as a JSON-formatted string.

3 Requirements

- Your doAnalyse function should accept a tweet string and return a JSON-formatted string.
- The JSON string must decode into an object with three keys: "Opinion," "Sentiment," and "Summary."
- The values for "Opinion" and "Sentiment" should be in lowercase.

4 Grading Criteria

- Correct implementation of the doAnalyse function
- Accurate tweet opinion classification
- Accurate sentiment analysis
- Clear and concise tweet summary
- Correct output format

5 Submission Guidelines

Please submit the completed Jupyter Notebook along with the created file brexit_analysis_result.csv.