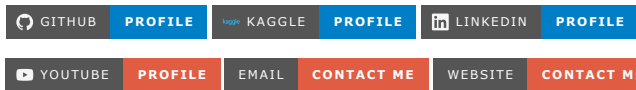


✓ Sentiment Analysis with NLTK

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This project uses the Natural Language Toolkit (NLTK) to perform sentiment analysis on text data.

```
# Install NLTK
!pip install nltk
```

```
Requirement already satisfied: nltk in /usr/local/lib/python3.10/dist-packages (3.8.1)
Requirement already satisfied: click in /usr/local/lib/python3.10/dist-packages (from nltk) (8.1.7)
Requirement already satisfied: joblib in /usr/local/lib/python3.10/dist-packages (from nltk) (1.4.2)
Requirement already satisfied: regex<=2021.8.3 in /usr/local/lib/python3.10/dist-packages (from nltk) (2024.5.15)
Requirement already satisfied: tqdm in /usr/local/lib/python3.10/dist-packages (from nltk) (4.66.5)
```

```
# Import Libraries
import nltk
from nltk.sentiment.vader import SentimentIntensityAnalyzer
from nltk.tokenize import word_tokenize
nltk.download('vader_lexicon')
nltk.download('punkt')
```

```
[nltk_data] Downloading package vader_lexicon to /root/nltk_data...
[nltk_data] Downloading package punkt to /root/nltk_data...
[nltk_data] Unzipping tokenizers/punkt.zip.
True
```

```
# Initialize the sentiment analyzer
sid = SentimentIntensityAnalyzer()
```

```
# Sample text
text = "I love using Google Colab for python projects. It is fantastic!"
```

```
# Perform sentiment analysis
scores = sid.polarity_scores(text)
print(scores)
```

```
{'neg': 0.0, 'neu': 0.497, 'pos': 0.503, 'compound': 0.8439}
```

1): **'neg' (Negative)**: The proportion of the text that is considered negative. In this case, 0.0 means there is no negative sentiment detected in the text.

2): **'neu' (Neutral)**: The proportion of the text that is considered neutral. Here, 0.527 indicates that 52.7% of the text is neutral, meaning it's neither positive nor negative.

3): **'pos' (Positive)**: The proportion of the text that is considered positive. A value of 0.473 means that 47.3% of the text is positive.

4): **'compound'**: The compound score is a normalized score that combines all the individual sentiment scores into a single value. It ranges from -1 (most negative) to +1 (most positive). In this case, 0.8439 indicates a strongly positive sentiment.

Overall Sentiment:

The compound score of 0.8439 suggests that the overall sentiment of the text is positive.

Distribution of Sentiments:

0% of the text is negative.

49.7% is neutral.

50.3% is positive.

