

Sentiment Analysis of User Reviews using NLP

Objective:

The main objective of this project is to classify user reviews as Positive, Negative, or Neutral using Natural Language Processing (NLP) techniques in Python.

Tools and Libraries Used:

- Python
- TextBlob
- Pandas
- Matplotlib

Project Description:

This project uses a set of sample reviews. Each review is analyzed using TextBlob to calculate a sentiment polarity score. Based on this score, the review is classified as Positive, Neutral, or Negative. The results are then visualized using a bar chart.

Sample Output:

Review: I love this product! It's amazing.

Sentiment: Positive (Score: 0.6125)

Review: Worst experience ever. Very disappointed.

Sentiment: Negative (Score: -0.9875)

Review: The quality is okay, not great.

Sentiment: Positive (Score: 0.04999999999999999)

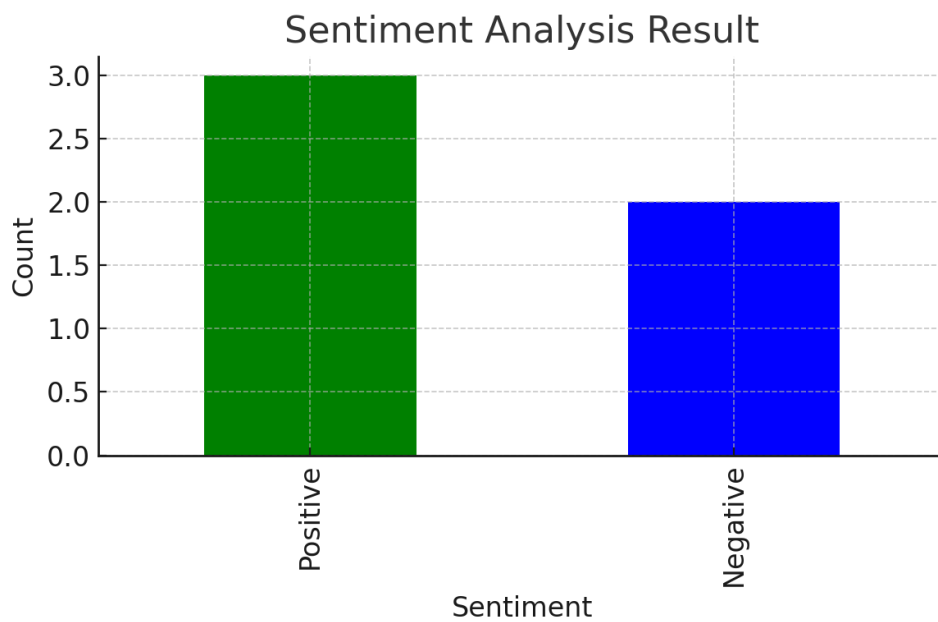
Review: Absolutely fantastic! Will buy again.

Sentiment: Positive (Score: 0.5)

Review: Terrible service, rude staff.

Sentiment: Negative (Score: -0.65)

Sentiment Distribution Chart:



Conclusion:

The sentiment analysis model is able to detect and classify the emotional tone of text effectively.

This project demonstrates how simple NLP tools can be applied to gain insights from text data.