

AWH ENGINEERING COLLEGE, KOZHIKODE

Department of Artificial Intelligence and Data Science

PROJECT REPORT

ON

Sentiment Analysis Using Python

Submitted by: Rinsha Sherin Erakuth

B.Tech - AI & DS

AWH Engineering College, Kozhikode

Date: July 2025

AWH ENGINEERING COLLEGE, KOZHIKODE

Department of Artificial Intelligence and Data Science

Introduction

Sentiment Analysis is the process of identifying the emotional tone behind a body of text. It is widely used in business, marketing, politics, and social media to understand whether a statement is positive, negative, or neutral.

Objective

To build a Python-based sentiment analysis tool that determines whether input text is positive, negative, or neutral using the TextBlob library.

Tools Used

- Python 3.x
- TextBlob Library
- IDLE
- Command Prompt

Methodology

1. Accept text input from user.
2. Analyze text using TextBlob.
3. Determine polarity:
 - Positive > 0
 - Negative < 0
 - Neutral $= 0$

AWH ENGINEERING COLLEGE, KOZHIKODE

Department of Artificial Intelligence and Data Science

4. Display sentiment result.

Python Code

```
from textblob import TextBlob

text = input("Enter your sentence: ")

blob = TextBlob(text)

sentiment = blob.sentiment.polarity

if sentiment > 0:

    print("Sentiment: Positive")

elif sentiment < 0:

    print("Sentiment: Negative")

else:

    print("Sentiment: Neutral")
```

Sample Output

Input: I love this product!

Output: Sentiment: Positive

Input: I hate this.

Output: Sentiment: Negative

AWH ENGINEERING COLLEGE, KOZHIKODE

Department of Artificial Intelligence and Data Science

Pros & Cons

Pros:

- Easy to implement
- Real-world application
- No training needed

Cons:

- Cannot detect sarcasm
- Basic model
- Not visual

Conclusion

This project demonstrates a simple implementation of sentiment analysis using Python. It is a beginner-friendly project to understand basic NLP concepts using the TextBlob library.

References

- <https://textblob.readthedocs.io>
- <https://www.python.org>
- Stack Overflow
- YouTube tutorials