Sentiment Analysis of Social Media Posts

Introduction

Social media is full of people's emotions—happiness, anger, frustration, or excitement. This project aims to build a simple Machine Learning model that can understand whether a social media post is Positive or Negative.

Objective

• Understand how ML works with text

• Convert text into numerical form

• Train a sentiment prediction model

• Test model accuracy

• Demonstrate real-world application

Tools Used

• Python

• Scikit-Learn

• TF-IDF Vectorizer

• Logistic Regression

How It Works

1. Collect sample posts

2. Convert text to numbers

3. Split into training/testing

4. Train Logistic Regression model

5. Predict new post sentiment

Project Structure

Sentiment-Analysis-ML/

|— README.md

|— sentiment_analysis.py

|— dataset.txt

|— requirements.txt

Python Code (Short Version)

See Python file in repository.

Output

The model displays accuracy and predicts whether a new post is Positive or Negative.

References

• Scikit-Learn Documentation

• Stanford NLP Notes

• Andrew Ng ML Course (Coursera)

• Introduction to Machine Learning with Python

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