Sentiment Analysis Using Tkinter

Subjects	Projects
Date	@April 11, 2022
AI summary	The Sentiment Analysis project utilizes Python and machine learning to automate the analysis of user-generated content sentiment, offering a user-friendly interface for input and results display. It addresses the inefficiencies of manual sentiment analysis by storing data in a MySQL database and employing libraries like Tkinter, TextBlob, and NLTK. The system is designed to provide accurate sentiment results categorized as positive, negative, or neutral.

Introduction:

- The Sentiment Analysis project is designed to analyze the sentiment of user-generated content.
- The project aims to provide a user-friendly interface for users to input text and receive sentiment analysis results.

Problem Statement:

- The current manual system of sentiment analysis is time-consuming and prone to errors.
- The manual system requires human intervention to analyze the sentiment of text, which can lead to delays and miscommunication.

Proposed Solution:

- The Sentiment Analysis project is a Python-based project that uses a machine learning algorithm to analyze the sentiment of text.
- The project uses a database to store user input and sentiment analysis results.
- The project generates sentiment analysis results in the form of positive, negative, or neutral

Tools and Technologies Used:

- Programming Language: Python

- Python Libraries:
  - Tkinter (for GUI)
  - MySQL Connector (for database connectivity)
  - TextBlob (for sentiment analysis)
  - NLTK (for natural language processing)
  - MySQL Connector (for database connectivity)
- Database: MySQL
- Web Server: XAMPP

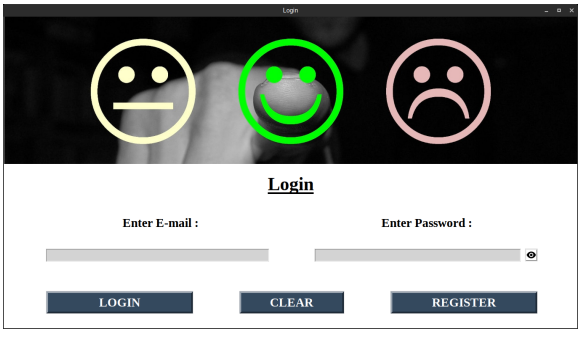
Functional Requirements:

- User Input: Users can input text to be analyzed for sentiment.
- Sentiment Analysis: The system analyzes the sentiment of the input text and generates results.
- Results Display: The system displays the sentiment analysis results in the form of positive, negative, or neutral.
- Logout: Users can log out of the system.

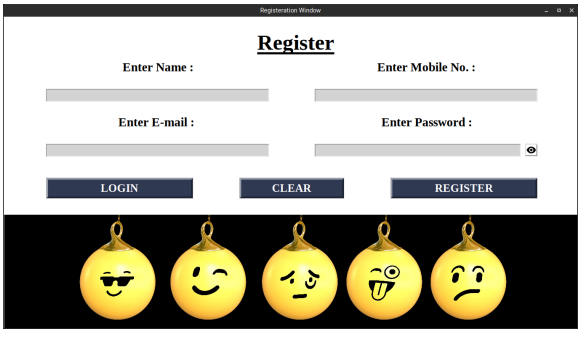
System Design:

- The system consists of a user interface, a sentiment analysis module, and a database.
- The user interface allows users to input text and view sentiment analysis results.
- The sentiment analysis module uses a machine learning algorithm to analyze the sentiment of text.
- The database stores user input and sentiment analysis results.

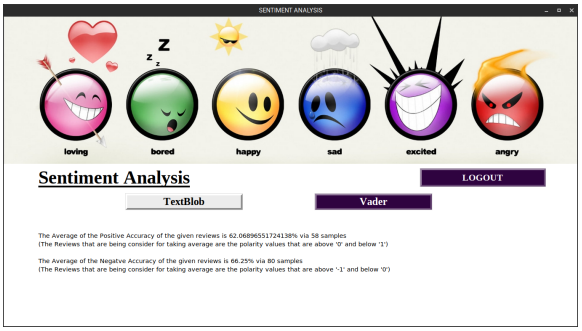
Screenshots:



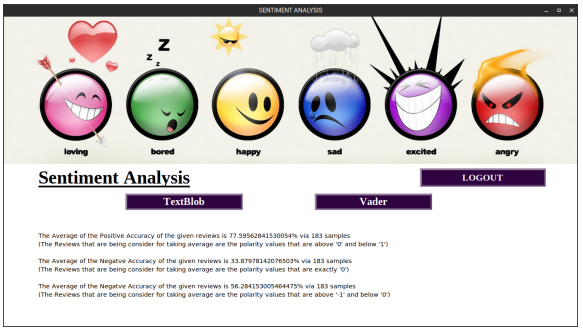
Login Page



Register Page



Analysis Using TextBlob Library



Analysis Using Vader Sentiment Library

Conclusion:

- The Sentiment Analysis project is a user-friendly and efficient system that automates the manual process of sentiment analysis.The system meets the requirements and provides a reliable solution for sentiment analysis.