

## **SENTIMENT DETECTOR USING TKINTER PYTHON**

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**Abstract:** Python offers several GUI (Graphical User Interface) development possibilities. Of all the GUI techniques, Tkinter is the one that is most frequently used. The quickest and most straightforward method for developing GUI apps is to use Tkinter with Python. This post will walk readers through the process of creating a Sentiment Detector graphical user interface (GUI) using Tkinter. Determining if a sentence has a good, negative, or neutral nature is the main goal of this program. It's a really basic program that may be quite helpful in many ways. For example, it can be used to determine someone's mood based on the type of words the person uses to communicate.

**Keywords:** Tkinter, GUI

### **I. INTRODUCTION**

Sentiment analysis is a popular natural language processing (NLP) activity that entails determining the sentiment of a document and categorizing it as positive, negative, or neutral. A pre-trained sentiment analysis model is provided by the well-known Python sentiment analysis package Vader. The Python vaderSentiment module provides the functionality. VaderSentiment gives percentage numbers for positivity, negativity, and neutrality and enables you to assess the sentiment of a straightforward comment or feedback statement. In addition to these rankings, it also offers a composite score that indicates if the statement's overall sentiment is neutral, negative, or positive. Due to its ease of use and simplicity, Tkinter is among the most popular modules for Python GUI application development. Python already includes the Tkinter module, so you don't have to bother about installing it separately. offers an object-oriented Tk GUI toolkit interface.

### **II. LITERATURE REVIEW**

Because social networking sites are becoming a vital tool for sharing emotions with people worldwide, the rapid growth of the Internet has made them indispensable. Many utilize text, pictures, music, and video to convey their

thoughts or emotions. The initial methods relied on lexicons. It includes a collection of terms that are connected to particular emotions. Next emerged methods for sentiment recognition based on machine learning. Scientists began classifying data using machine learning algorithms. Liu et al. (2005) were among the researchers who investigated feature-based sentiment analysis. Next emerged techniques for sentiment recognition based on deep learning. That represented a breakthrough in this area. Over the last ten years, sentiment detection has grown in popularity.

### III. SYSTEM REQUIREMENTS

Programming Environment : Windows 11

Features: A pop-up box with feature sentiment detection using Python.

- Visual studio code  
Microsoft created Visual Studio Code (VS Code), a small but effective source code editor. Numerous programming languages are supported, it is quite configurable, and it has built-in tools for code completion, syntax highlighting, debugging, and version control integration (like Git). Its vast extension ecosystem, which enables users to further improve their coding experience by adding support for additional languages, frameworks, and tools, is one of its standout characteristics. Because of its versatility and ease of use, Visual Studio Code is used extensively by developers on a variety of platforms, including Windows, macOS, and Linux. JavaScript, TypeScript, and Node.js are all supported natively, and it boasts a robust ecosystem of extensions for additional languages and runtimes.

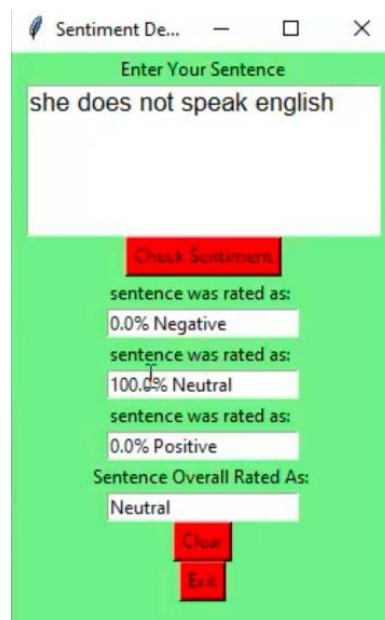


Fig.1 Output when neutral sentence is typed

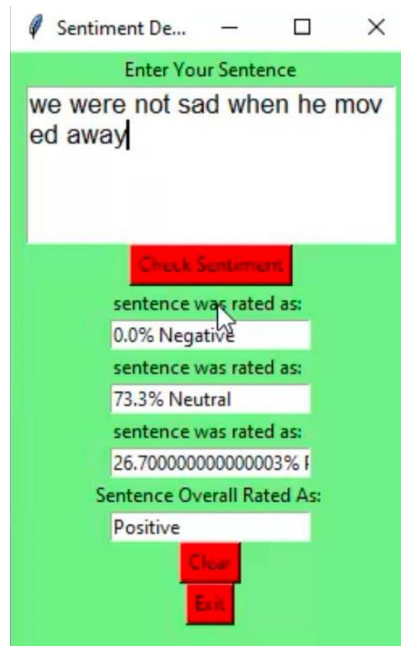


Fig. 2 Output when positive sentence is typed

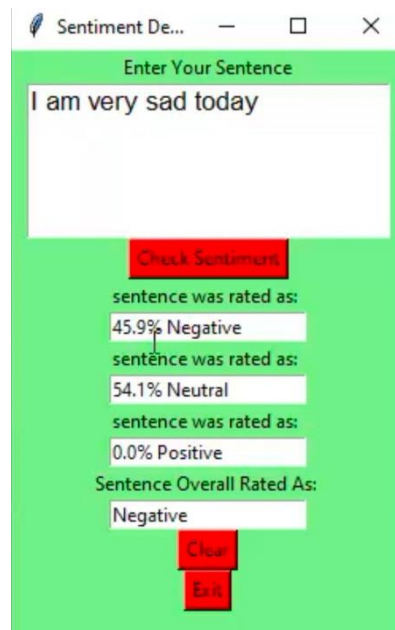


Fig.3 Output when negative sentence is typed

#### IV. PROPOSED SYSTEM

Sentiment analysis is done in the proposed framework when a sentence is provided as input. The output is expressed as a percentage of the negative, neutral, and positive rates. The overall sentence rate is provided. Tkinter is a Python tool used in GUI development. Sentiment detection is done using a Python vaderSentiment module. In this system, NLP is used. NLP operates quickly and efficiently. NLP provides thorough, precise responses to the query. As a result, it saves time by consuming less relevant and unwanted information. With NLP, consumers may ask inquiries about any subject and receive a direct response in a matter of milliseconds. The suggested framework is simple to apply. It is quite easy to use. There is a millisecond output provided. Sentiment analysis is carried out well.

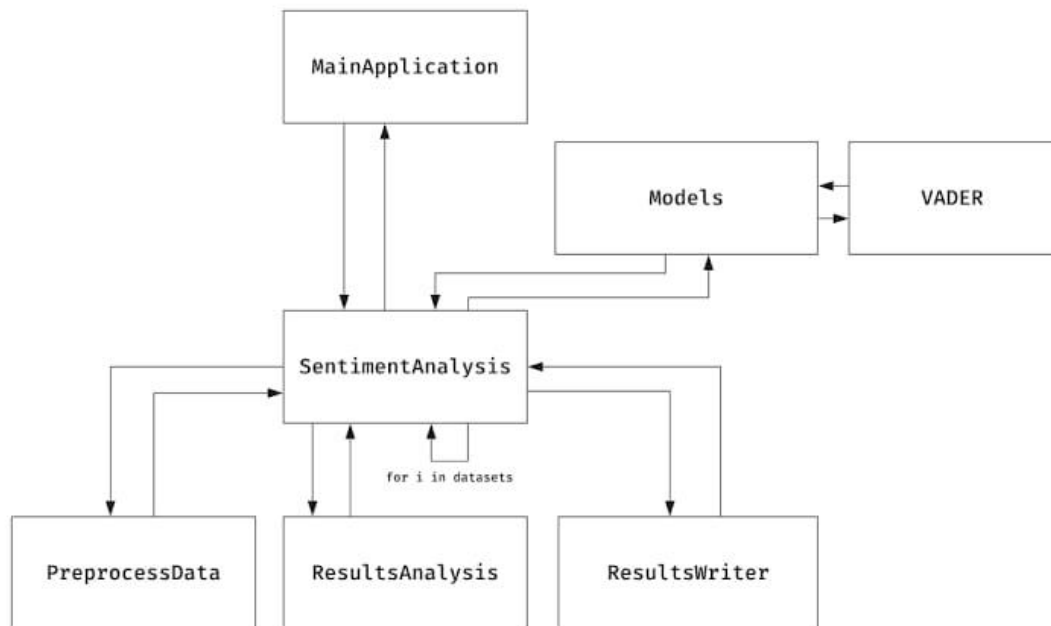


Fig.4 Block diagram

#### V. CONCLUSION

Python offers several GUI (Graphical User Interface) development possibilities. Of all the GUI techniques, Tkinter is the one that is most frequently used. The quickest and most straightforward method for developing GUI apps is to use Tkinter with Python. Determining if a sentence has a good, negative, or neutral nature is the main goal of this program. It's a really basic program that may be quite helpful in many ways. For example, it can be used to determine someone's mood based on the type of words the person uses to communicate. In this system, NLP is used. This method divides a sentence into sentiment categories with great efficiency and outputs the sentence's positive, negative, and neutral rates.

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