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In [*]: import nltk
from tkinter import *
from tkinter import ttk
from nltk.sentiment.vader import SentimentIntensityAnalyzer

class SimpleSentimentAnalysisChatbot:
    def __init__(self, master=None):
        self.master = master
        self.master.title("Simple Sentiment Analysis Chatbot")

        # Create a chat display area
        self.chat_display = Text(self.master, state=DISABLED, wrap=WORD, height=10)
        self.chat_display.grid(row=0, column=0, padx=10, pady=10, columnspan=2)

        # Create an input field
        self.user_input = Entry(self.master, width=30)
        self.user_input.grid(row=1, column=0, padx=10, pady=10)

        # Create a button to send messages
        self.send_button = Button(self.master, text="Send", command=self.reply_to_user)
        self.send_button.grid(row=1, column=1, padx=10, pady=10)

        # Initialize the sentiment analyzer
        self.sentiment_analyzer = SentimentIntensityAnalyzer()

        # Initialize chat history
        self.chat_history = []

    def reply_to_user(self):
        user_message = self.user_input.get()
        self.user_input.delete(0, END)
        self.update_chat_display(f"You: {user_message}\n")

        # Perform sentiment analysis using VADER
        sentiment = self.analyze_sentiment(user_message)

        if sentiment['compound'] >= 0.05:
            bot_response = "Chatbot: That sounds positive!"
        elif sentiment['compound'] <= -0.05:
            bot_response = "Chatbot: That sounds negative."
        else:
            bot_response = "Chatbot: That sounds neutral."

        self.update_chat_display(bot_response + "\n")

    def analyze_sentiment(self, message):
        sentiment = self.sentiment_analyzer.polarity_scores(message)
        return sentiment

    def update_chat_display(self, message):
        self.chat_display.config(state=NORMAL)
        self.chat_display.insert(END, message)
        self.chat_display.config(state=DISABLED)
        self.chat_display.see(END)

if __name__ == '__main__':
    root = Tk()

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app = SimpleSentimentAnalysisChatbot(master=root)
app.master.geometry("400x300")
app.master.mainloop()
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In [ ]: