```
Megaproject 02 >  01_main_bot.py ×

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1  # MEGAPROJECT 02 : CHATBOT ASSISTANT FOR WHATSAPP !

2

3  # Importing all of the important and needed libraries in our project:
4  import pyautogui
5  import pyperclip
6  import time
7  from openai import OpenAI
```

# PROJECT: SWIFTREPLY INTELLIGENT CHAT AUTOMATION FOR WHATSAPP

Status: Completed •

## **OVERVIEW**

This project demonstrates the integration of OpenAI's GPT-based chatbot to automate intelligent and context-aware WhatsApp responses. It combines Python libraries like pyautogui for GUI automation, pyperclip for clipboard handling, and OpenAI's API to generate dynamic responses based on WhatsApp chat history.

## **FEATURES**

- Seamless Integration with WhatsApp Desktop: Automates tasks such as reading chat history and sending responses.
- OpenAI GPT-powered Responses: Generates context-aware, short, and engaging replies.
- Multilingual Capabilities: Replies in Hindi, English, and Hinglish, tailored to emulate a specific personality.
- Clipboard Handling: Efficiently copies and pastes messages to and from WhatsApp.

## **INSTALLATION**

#### **Prerequisites For The Project:**

- 1. Python 3.8+: Ensure you have Python installed on your system.
- 2. Libraries: Install the required Python libraries:

pip install pyautogui pyperclip openai

3. OpenAI API Key: Get your API key from the OpenAI Platform.

# **USAGE INSTRUCTIONS**

Step 1: Setup OpenAI Integration

Replace the placeholder api\_key with your actual OpenAI API key:

```
client = OpenAI(api_key="your-api-key-here")
```

### Step 2: Customize Behavior

Modify the system message in the client.chat.completions.create function to define the chatbot's personality and response style.

#### Step 3: Run the Script

Execute the Python script to automate chat responses on WhatsApp.

## **CODE EXPLANATION**

#### 1. Whats App Window Interaction:

- o Opens WhatsApp Desktop and selects the chat window.
- Copies the chat history using pyautogui for GUI automation.

#### 2. OpenAI GPT Integration:

- Sends the copied chat history to the OpenAI API.
- Generates a response based on predefined personality traits.

#### 3. Automated Response Sending:

- o Pastes the generated response into the WhatsApp chat window.
- Sends the reply by simulating the Enter key press.

## **KEY LIBRARIES**

- pyautogui: Automates mouse and keyboard interactions.
- pyperclip: Manages clipboard operations for seamless text handling.
- openal: Communicates with the OpenAI API to generate intelligent responses.

# **PROJECT DEMO**

Want to see the project in action? Check out this short demo video: Want to use the project in action? Check out this github link:

# **IMPORTANT NOTES**

- Safety: Ensure you run this script in a controlled environment, as it manipulates your system's GUI.
- Ethics: Use this project responsibly and avoid spamming or impersonation.

# **CONTRIBUTORS**

Feel free to contribute to this project by:

- Improving automation techniques & machine learning integration.
- Enhancing response personalization.

• Adding support for other platforms.

# **CONTACT ME**

For inquiries or feedback, connect with me on <u>LinkedIn</u> or drop me an email at <u>sarthakdhiman815@gmail.com</u>