

WhatsApp BOT

Expected Deliverables:

- A demonstration of the WhatsApp bot handling at least five different commands.
- The integration of OpenAI to ensure the bot can answer questions dynamically and accurately.

My approach

WhatsApp Integration:

As mentioned, i have used the whatsapp-web.js library to build the whatsapp bot. this library uses whatsapp web with puppeteer for automation .

- The bot was programmed to handle five custom commands, since this is a test bot running in my personal number, i have setup the commands to be starts with the symbol (&). because by using this ,the bot wont send replies or interfere to actual chats when running
- eg :&hello triggers a response from the bot, whereas hello does not. However, this can be changed if the bot were deployed on a dedicated number
- The bots command are :
 1. Greeting commands (&hello ,&hi, &Hello ,&HELLO) it will give an greeting response .
 2. Options command (&options, &option ,&Options ,&OPTIONS) it will generate the set of commands that this bot can respond.
 3. Current time command (&time) this wil generate the current time in 24hrs formate.
 4. Joke command (&joke) this will generate an random one line joke from a set of jokes array (it may repeat in mayn use).
 5. Gemini AI Command (&gemini) this command is used at the start of any message which we wish to get an response form the Gemini AI

OpenAI API limitation

initially i have tried to use the openAi api to perform the chat interactions as mentioned. However , due to the limitations of the OpenAi's Free tire access for their api usage form an certain account has Expired for my own account ,so i couldn't able to use their apis in the project.

i have tried to use the free tire access from my another account but this approach did not work either. i have searched and I discovered that OpenAI detects and blocks all the accounts that are used from the same device, leading to restrictions across all my multiple accounts.

As an alternative, I decided to integrate the Gemini API from Google, which allows the users to access their GeminiAI api for free with only certain limitation.

GeminiAI API Implementation

I used The Gemini AI API for interactions because it is the next good GenAI after chat GPT and it also offers excellent Quotas and request limits for their API usage in the free tire .

i have used the (**gemini-1.5-flash model**)..it is as good for text generation and also its available for free tire

I have tried two different methods to get the response from the API :

1. fetching by using API URL. (<https://generativelanguage.googleapis.com/v1beta/models/gemini-1.5-flash:generateContent?key=>).
2. buy using the @google/generative-ai dependency

the method i choose is 2 , because it is more readable ,simple and also recommend by the google.

The message prompt is passed to the function which will return the geminiAI response according to the message and the response will sent to the whats app as a reply

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How to start the bot

1. You have to install nodejs in your Pc for running the bot.
2. after extracted the zip file
3. Navigate to the Project Directory whatsbott in vscode terminal
4. type - npm install (it will take few minuter or sec to download the pacages)
5. type - node index.js
6. after few moments "client is ready" will appear in the console)

how to test and use the bot

1. you can test the bot by sending commands to my number (9566244054). which is logged in. (my phone should connected to internet).
2. type and send (&options) command to view command options
3. only the correct commands will get reply.
4. try Gemini AI by typing your message After &gemini (eg: &gemini what is oops?)

Running the bot on your number

you can skip to the 6th step, if you already tested with my number(9566244054) else do it from step1

1. Ensure you have access to two separate WhatsApp numbers on different devices.
2. You have to install nodejs in your Pc for running the bot.
3. after extracted the zip file
4. Navigate to the Project Directory whatsbott in vscode terminal.
5. type - npm install (!!! if you are did not already tested with my number(9566))
6. Delete the following folders from the project directory (.wwebjs_cache & .wwebjs_auth) - it will delete my login and saves yours,
7. type - node index.js
8. scan the QR code from your whatsapp APP (link devices option).
9. few moments later "client is ready" will appear in the console
10. use the 2nd device whatsapp and send command messages to your number