WhatsApp Cloud API Integration

Submitted by

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ABSTRACT

WhatsApp integration is a way to help your business to grow up in market. It's very helpful for small businesses because WhatsApp is most popular app in market each and every person is using WhatsApp and some persons are not using WhatsApp. Most people are doing business via WhatsApp so WhatsApp API help us to send message to multiple persons at a time so here we used WhatsApp Cloud API for integration. We can send our new business ideas to customer with one click and most interesting things are we can send messages via google sheet. We can add numbers in google sheet so command line can read one by one line and sent WhatsApp message. WhatsApp cloud API can be accessed directly from meta for free. WhatsApp cloud API provides a permanent token, phone id, and WhatsApp business id free for messaging a particular person. If you verify your business then the message limit will be 1000.

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Chapter: 1 Introduction

1.1 Project Details

WhatsApp is a very popular app in the market. Most people use WhatsApp for chatting, calling, sharing some information, and many more...but in some places WhatsApp is used for business, they share some business ideas with their partner, launch a new application, share today's deal offers, and many more...

So, WhatsApp is very helpful for businesses that's why WhatsApp integration is important. Now here, using WhatsApp Cloud API for WhatsApp integration. WhatsApp Cloud API is free for up to 50 recipients. This API provides a Bearer token, phone number id, and WhatsApp business id and generates a permanent bearer token efficiently. No need for accessed API via BSPs. So, we can send messages to multiple persons using WhatsApp. Phone numbers are read in a .csv file. We can also send WhatsApp messages through postman, PHP programming, and Python programming. We can also set a time and date so the message will be sent on that time and date.

1.2 Purpose

WhatsApp integration is a way to help your business to grow up in market. It’s very helpful for small businesses because WhatsApp is most popular app in market each and every person is using WhatsApp and some persons are not using WhatsApp. Most people are doing business via WhatsApp so WhatsApp API help us to send message to multiple persons at a time so here we used WhatsApp Cloud API for integration. We can send our new business ideas to customer with one click and most interesting things are we can send messages via google sheet. We can add numbers in google sheet so command line can read one by one line and sent WhatsApp message. WhatsApp cloud API can be accessed directly from meta for free. WhatsApp cloud API provides a permanent token, phone id, and WhatsApp business id free for messaging a particular person. If you verify your business then the message limit will be 1000.

1.2 Objective

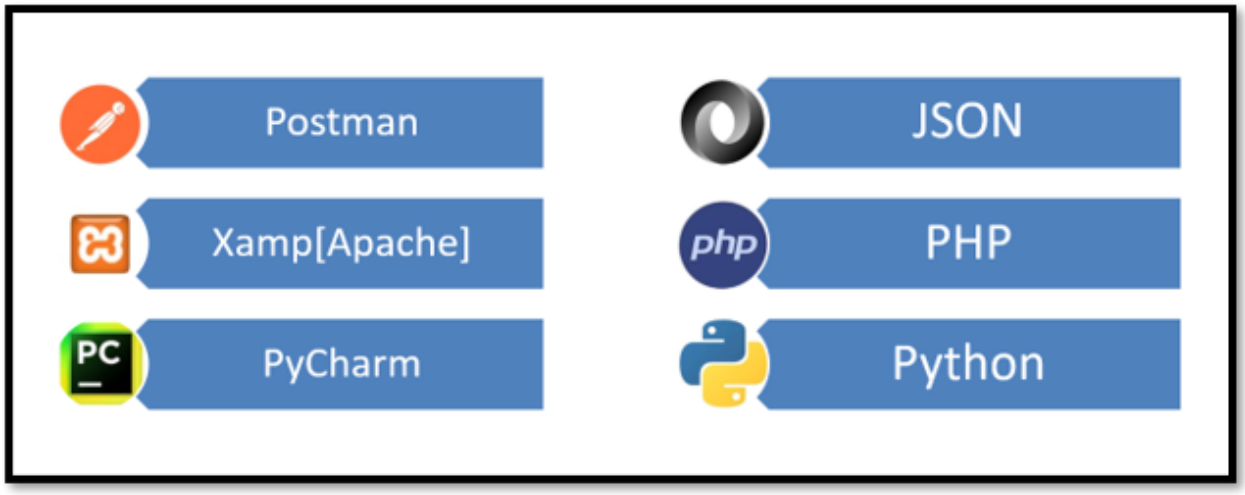
The main objective is to send WhatsApp messages to multiple people using WhatsApp Cloud API and phone numbers added in the .csv file so the command line read one by one line and send messages on WhatsApp in one click.

And we doing this thing using postman, PHP programming, and Python programming.

1.3 Scope

WhatsApp integration with WhatsApp Cloud API is using small businesses for marketing. Businesses are declaring their new ideas in the market by using WhatsApp integration they can send messages to multiple people at a time so businesses spread their ideas to customers easily.

1.4 Technology



1.4 Literature Review

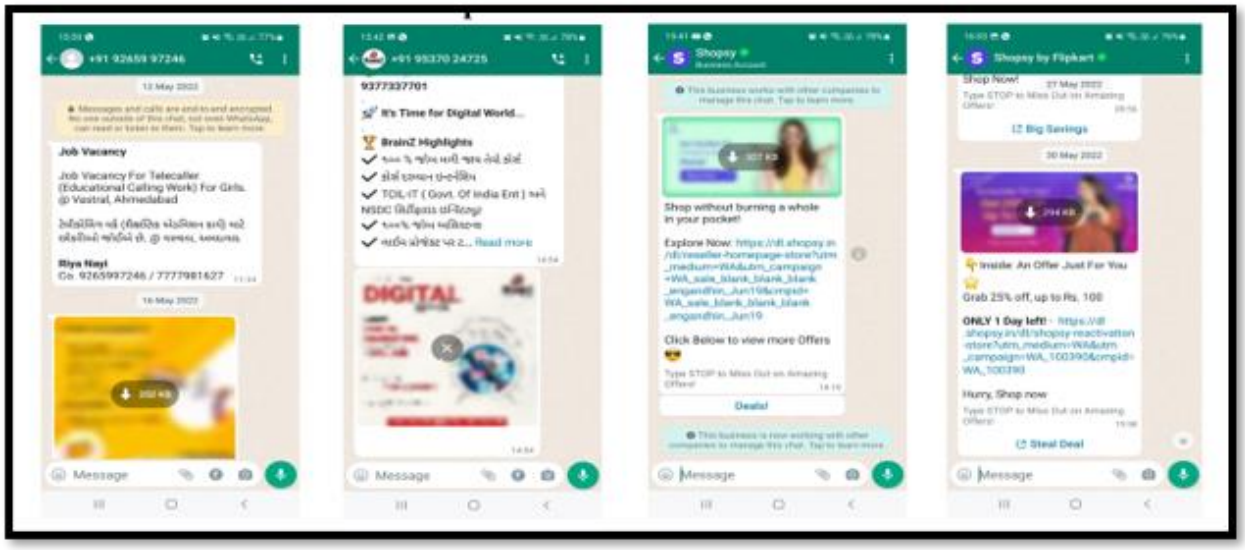
- Many businesses are used WhatsApp Business API that is costly
- **Example:**

  - Flipkart

  - Shopsy

- Shopsy by Flipkart
- BrainZ Institute of Design
- Amazon
- Some Business Account to declaring job Vacancy

- **Some are screen sort for example:**



Chapter: 2 System Analysis

2.1 Study of Current System

- WhatsApp is originally known for being strict with privacy through an end-to-end encryption set up into its system, which means that the texts can only be seen by the user and the other party.
- Most the business are used WhatsApp for their business to share their ideas with customers share their today's deals or many more things
- Or WhatsApp is used for more things like chats, calls, sharing information, recipes, and many more but businesses are used to share their information using WhatsApp Business API
- WhatsApp Business API is not free we can get that API with BSPs.

2.2 Problem and Weaknesses of Current System

- WhatsApp Business API can be accessed through a Facebook business manager account.
- WhatsApp business API can be via BSPs
- WhatsApp business API is chargeable
- Some are used the broadcast to send the bulk of messages but there is one problem if we remove some numbers so we can set a new broadcast on WhatsApp.
- If we can set a time or date to send messages so, it's not possible in broadcast or group.

2.3 Requirements of New System

- WhatsApp cloud API can be accessed directly from meta for free.
- WhatsApp cloud API provides a permanent token, phone id, and WhatsApp business id free for messaging a particular person.
- We can send the bulk of messages via WhatsApp using WhatsApp Cloud API with one click
- To perform Automation and trigger easily we can send WhatsApp messages.
- And we can set a time or date also to send messages with a cronjob.
- We can use WhatsApp Cloud API with the postman or PHP language or python language also.

2.4 Features of New System

- WhatsApp integration with WhatsApp Cloud API is using small businesses for marketing. Businesses are declaring their new ideas in the market by using WhatsApp integration with Cloud API they can send messages to multiple people at a time so businesses spread their ideas to customers easily.
- Send WhatsApp messages to multiple people using WhatsApp Cloud API and phone numbers added in the .csv file so the command line read one by one line and send messages on WhatsApp in one click.
- We can perform automation and trigger
- Cronjob set every minute and every hour to run file or send messages per time or date.
- We can also send WhatsApp messages through postman, PHP programming, and Python programming. We can also set a time and date so the message will be sent on that time and date.

2.5 List Main Modules

- **WhatsApp Business API:**

  - WhatsApp Business API can be accessed through a Facebook business manager account.

  - WhatsApp business API can be via BSPs

  - WhatsApp business API is chargeable

  - Compulsory Business account will be verified then we find API

  - Sometimes business verification will be failed

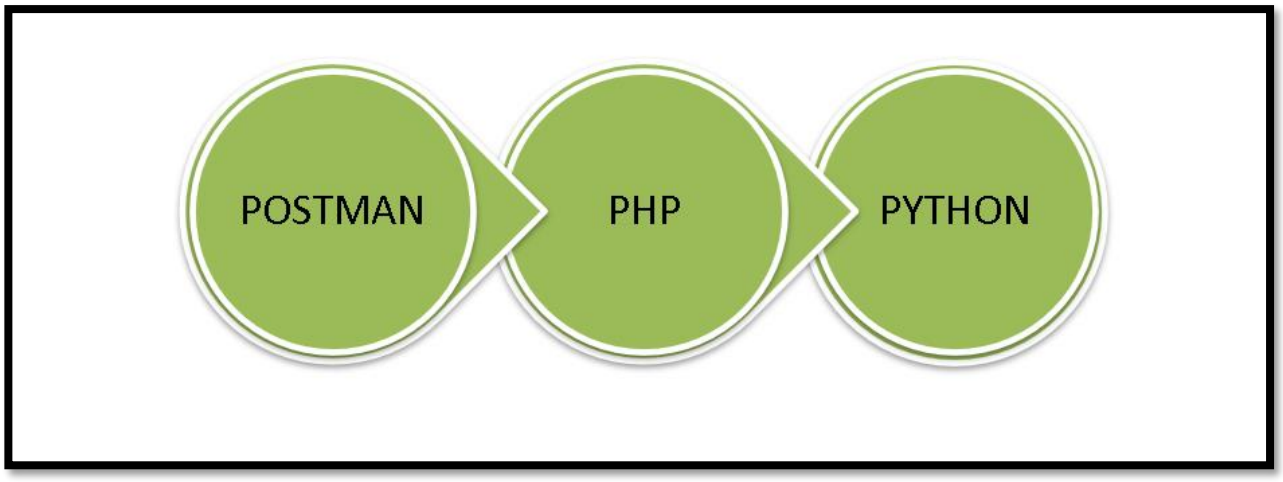
- **WhatsApp Cloud API**:

  - WhatsApp cloud API can be accessed directly from meta for free.

  - WhatsApp cloud API provides a permanent token, phone id, and WhatsApp business id free for messaging a particular person.

  - If you verify your business then the message limit will be 1000.

2.6 Techniques



Chapter: 3 System Design

3.1 Flowchart

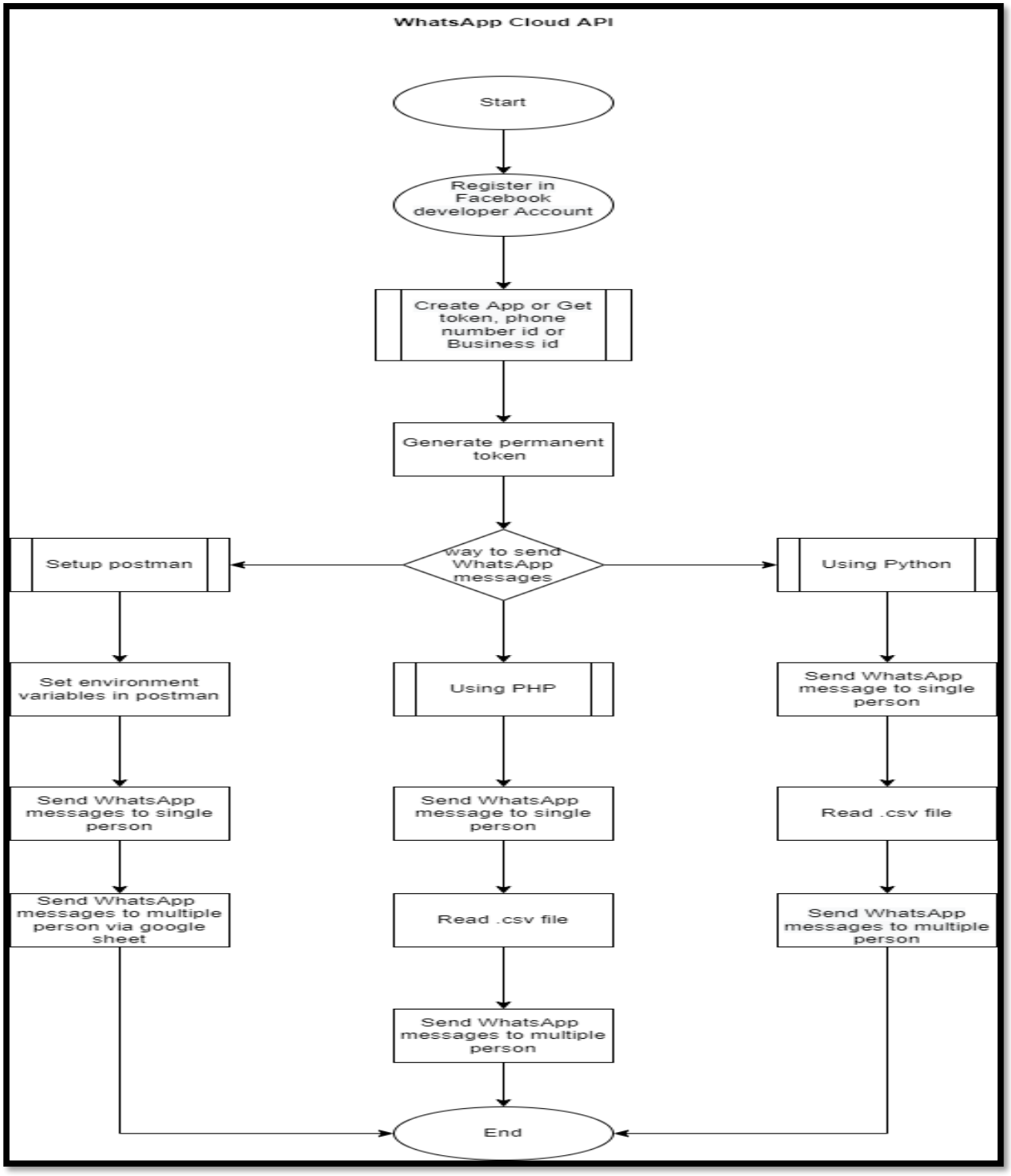


Fig 4.1 Flowchart

Chapter: 4 Implementation and Screenshots

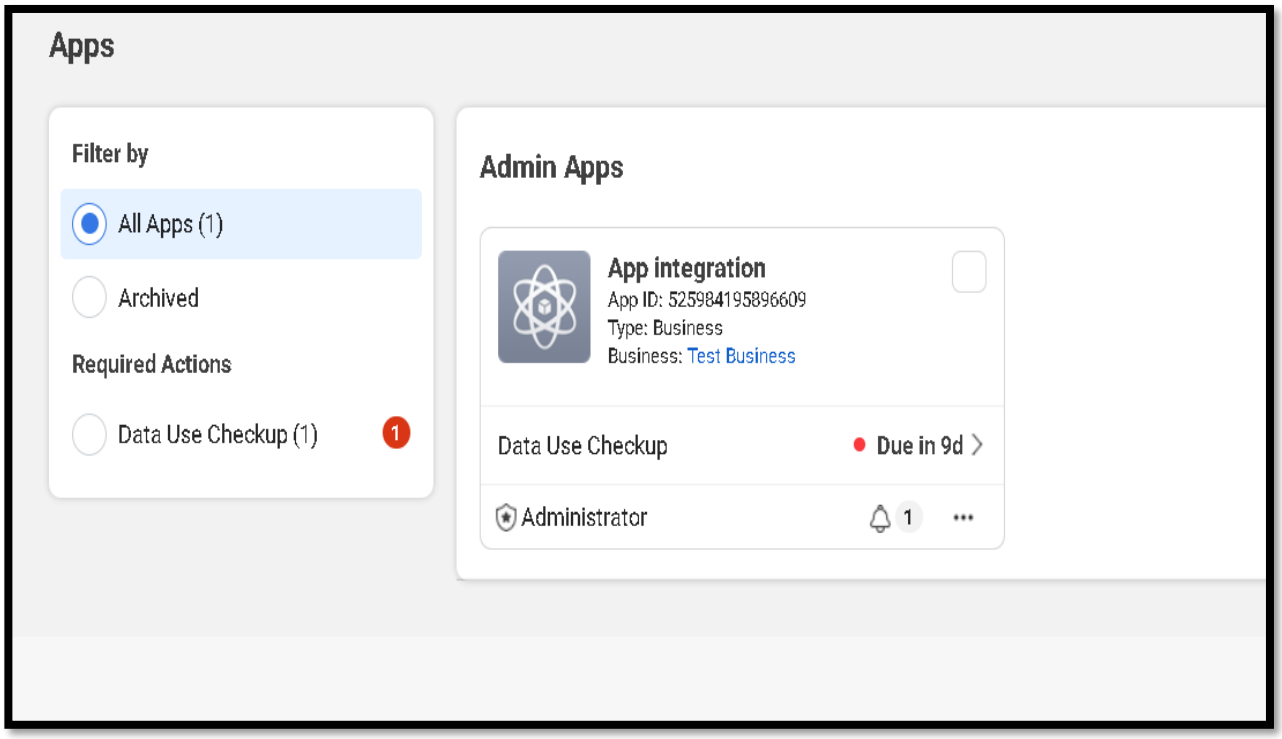
4.1 Implementation Platform

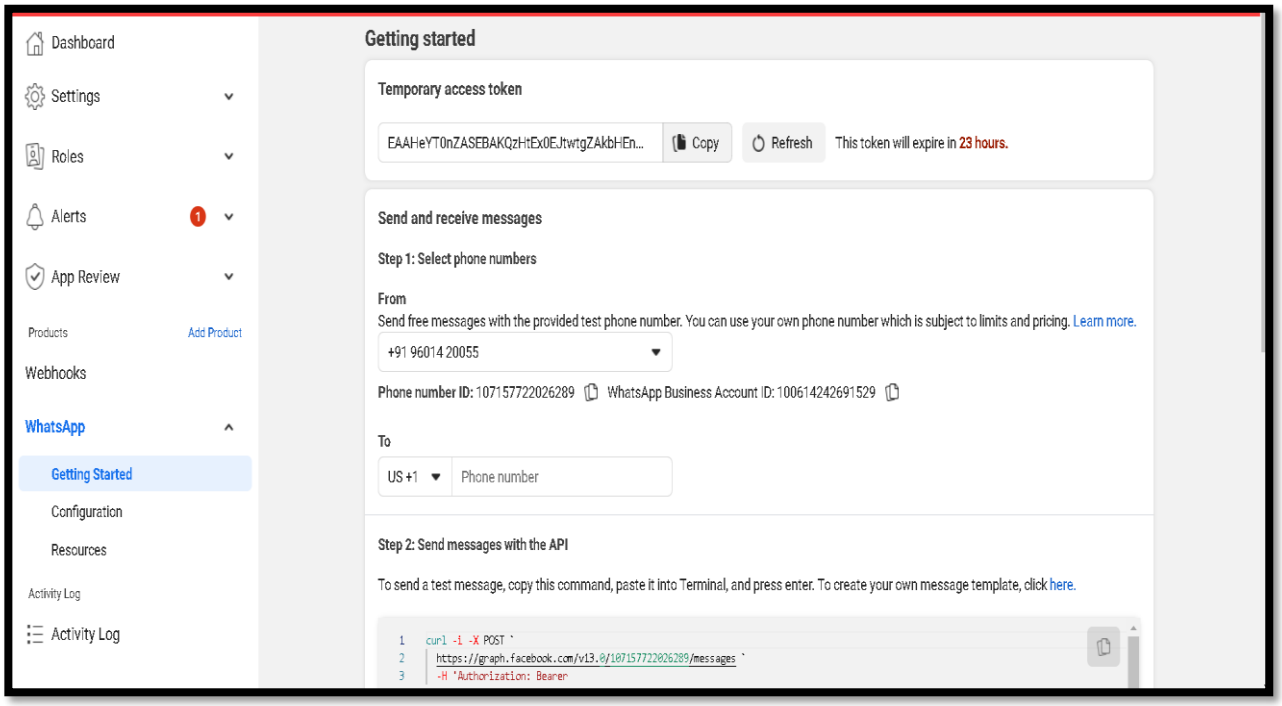
- Research on what is API, how it works, and which API is suitable for us. So let's find the difference between WhatsApp Business API and WhatsApp Cloud API.
- Then decide which API is better? I'm choosing WhatsApp Cloud API. So now register for this API then we get a Bearer token, Phone number ID, and WhatsApp Business ID.
- Next generate a permanent token, set up a postman account, and set environment variables in postman.
- After setting environment variables, send a WhatsApp message to a single person. Then phone numbers add to the google sheet. After adding phone numbers, google Sheets connect with postman so we can send WhatsApp messages to multiple people in one click.
- Now in PHP, first read the .csv file then write code for sending a message to one person then write code for sending a message to multiple people in one click.
- In python, repeat the same process.

4.2 Outcomes

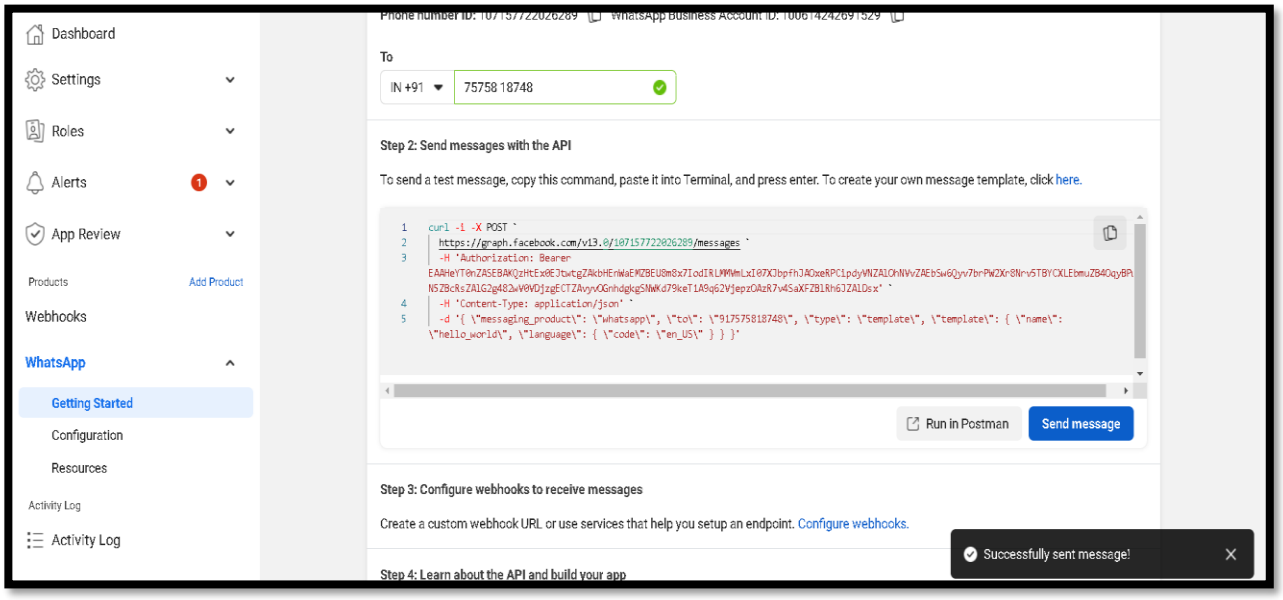
4.3 Other Screenshots

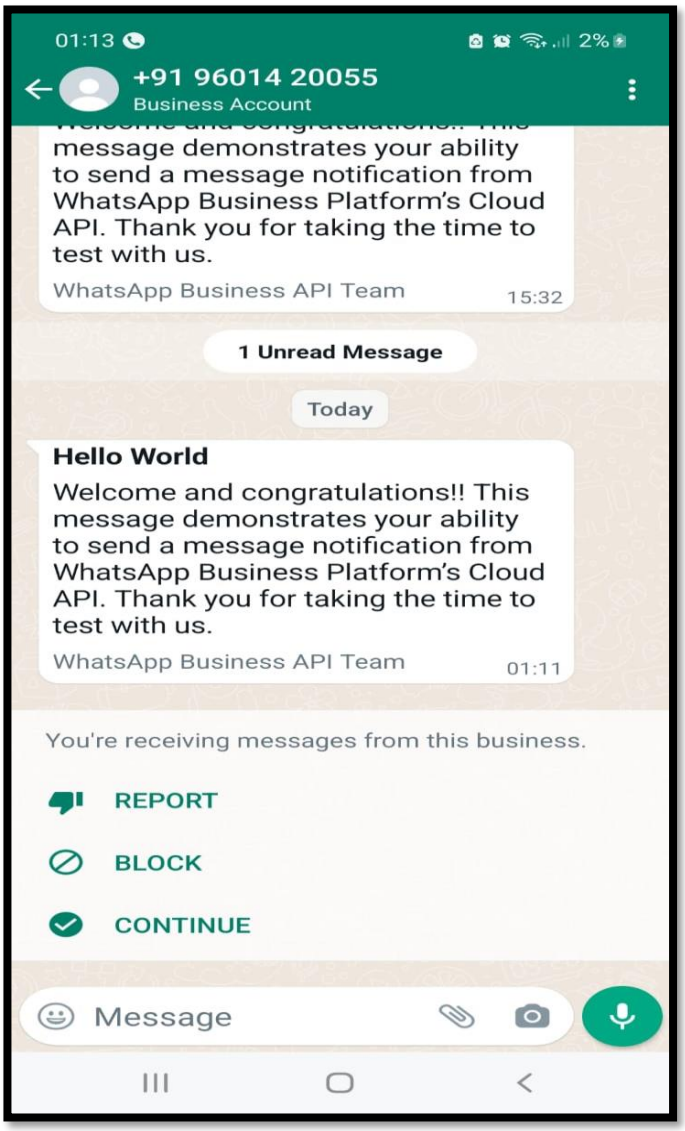
API portal:



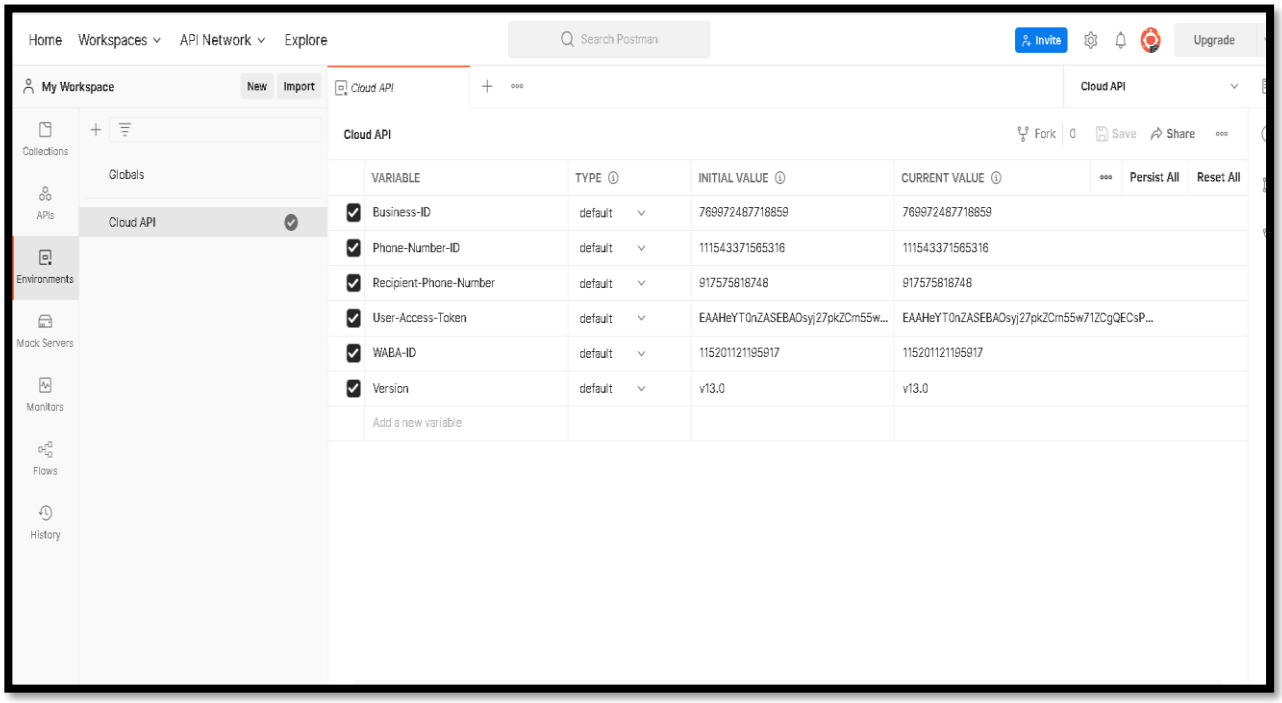


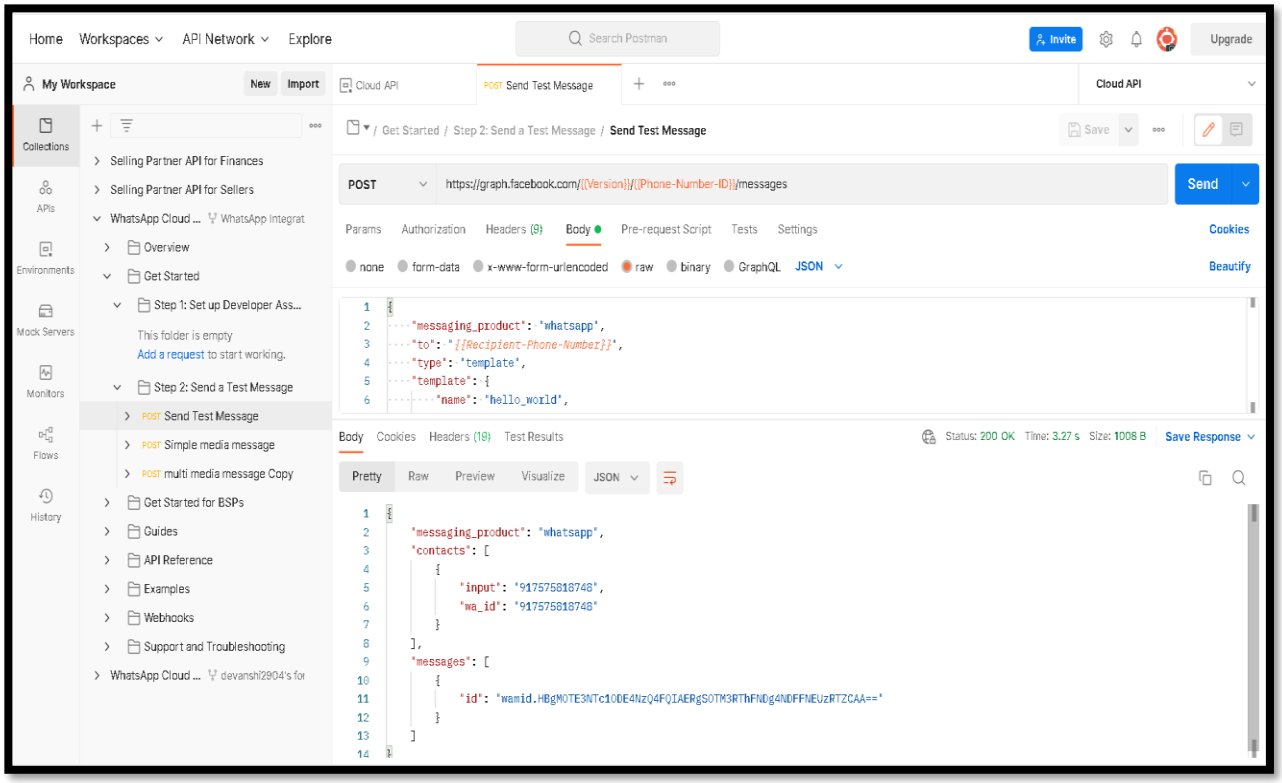
Send message:

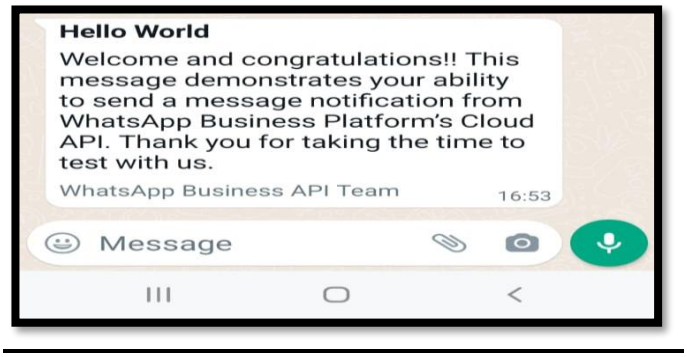



01:13
2%
+91 96014 20055
Business Account
message demonstrates your ability to send a message notification from WhatsApp Business Platform's Cloud API. Thank you for taking the time to test with us.
WhatsApp Business API Team
15:32
1 Unread Message
Today
Hello World
Welcome and congratulations!! This message demonstrates your ability to send a message notification from WhatsApp Business Platform's Cloud API. Thank you for taking the time to test with us.
WhatsApp Business API Team
01:11
You're receiving messages from this business.
REPORT
BLOCK
CONTINUE
Message

Using POSTMAN:

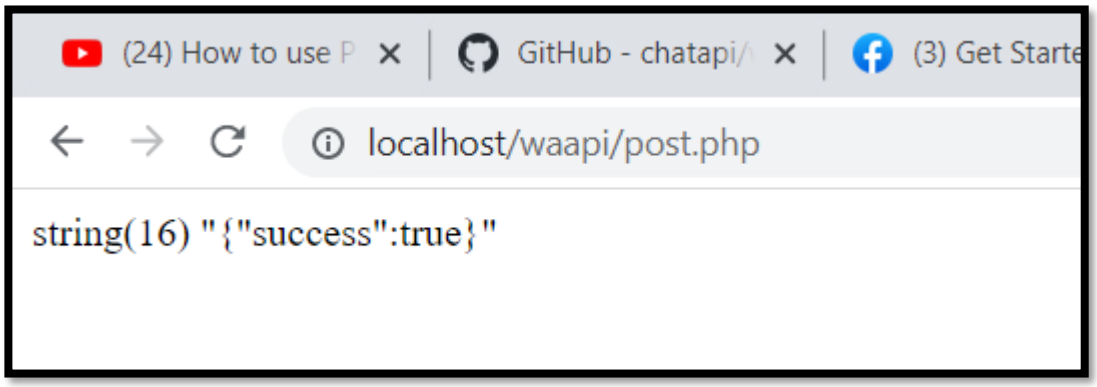




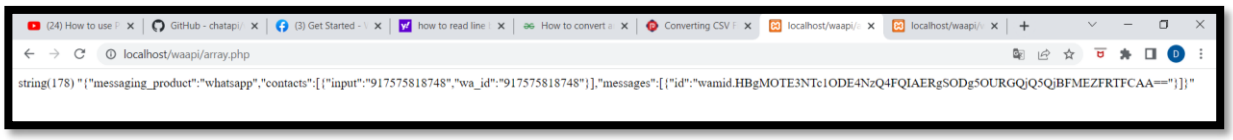


Using PHP:

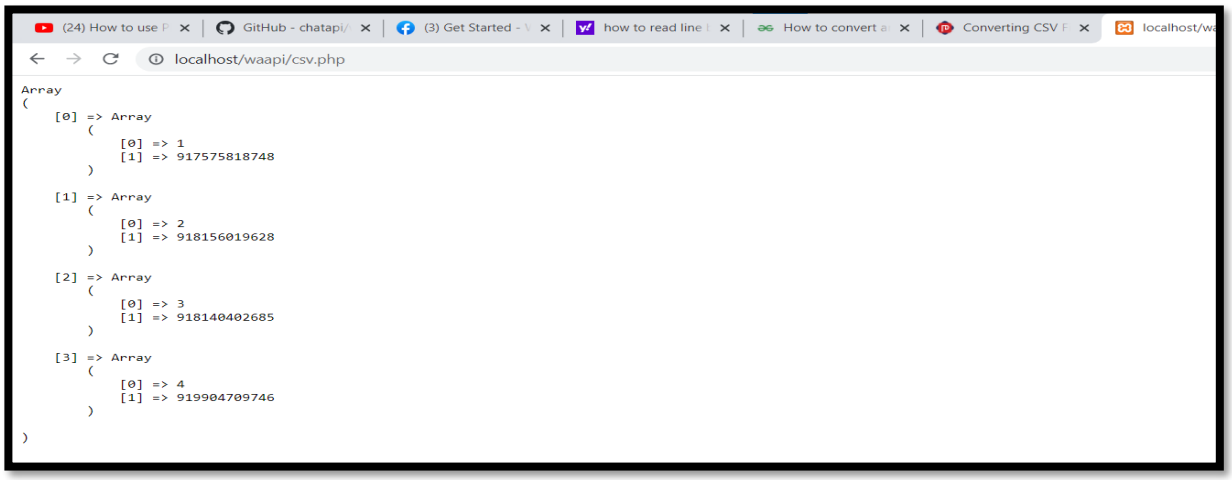
- API configuration:



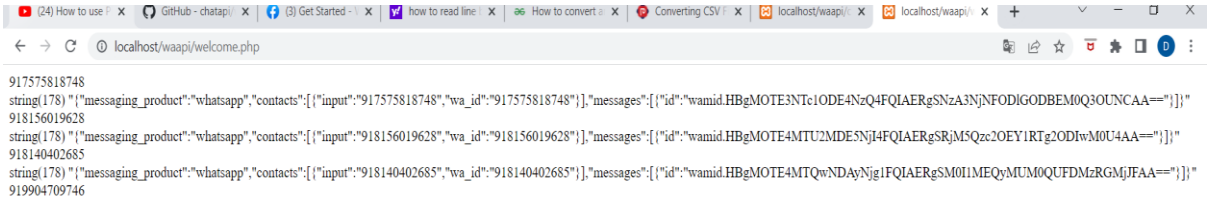
- Send WhatsApp message to single person:

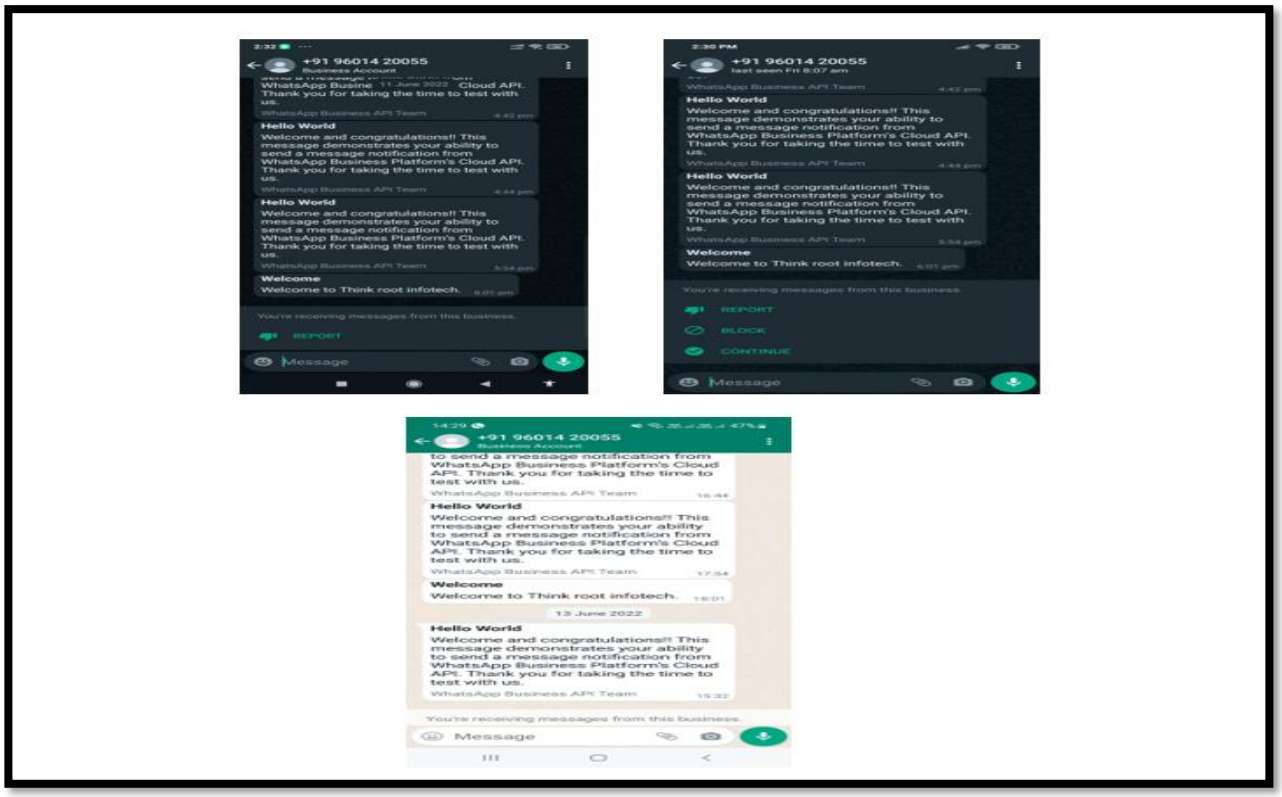


- Read .csv file:



- Send messages to multiple person:



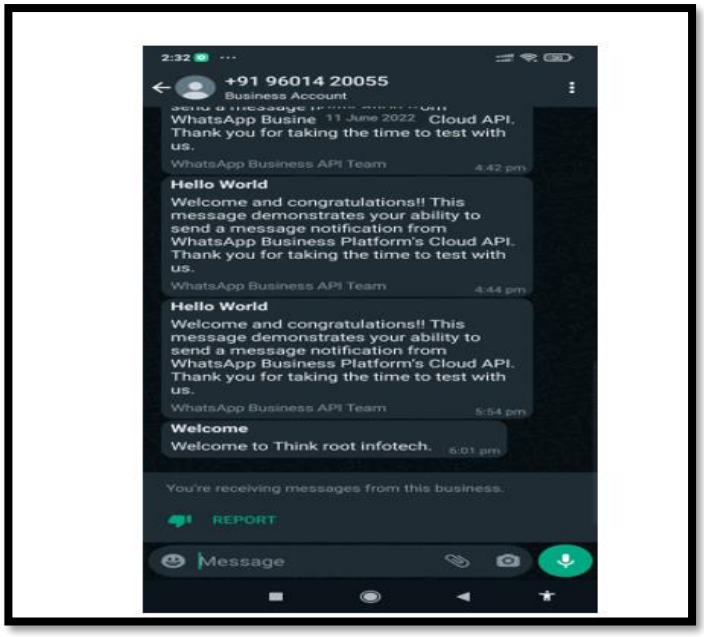


Using Python:

- Send WhatsApp message to single person

- Read .csv file

- Send WhatsApp messages to multiple person



Chapter: 5 Testing

5.1 Testing Plan

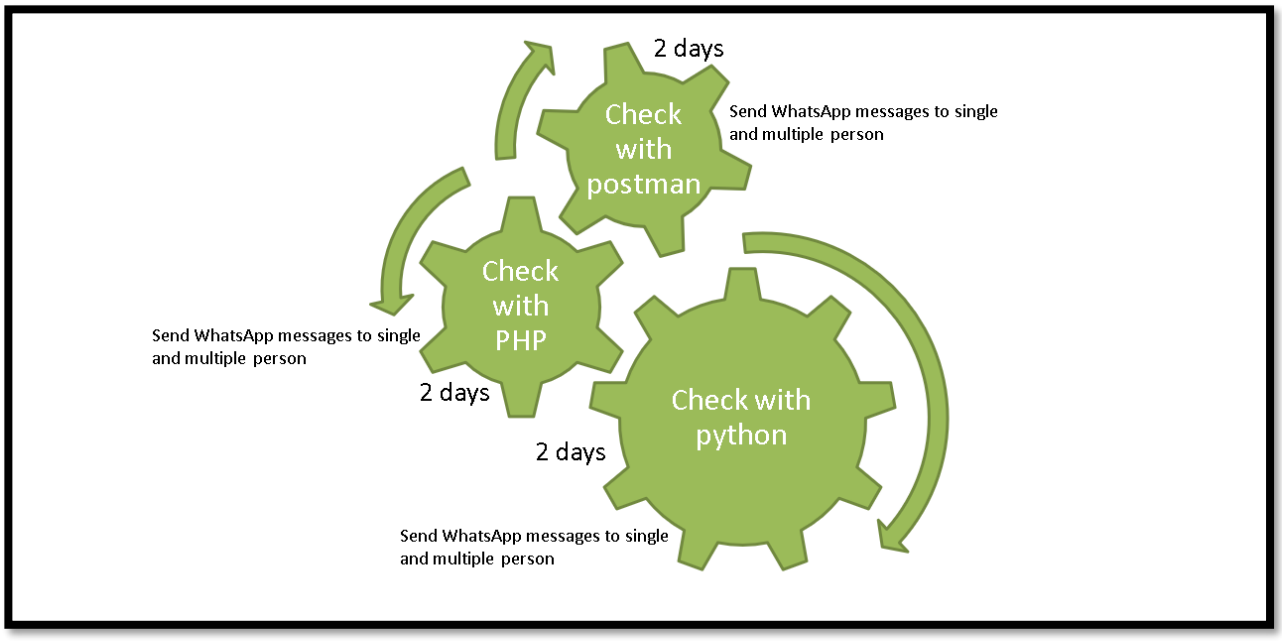
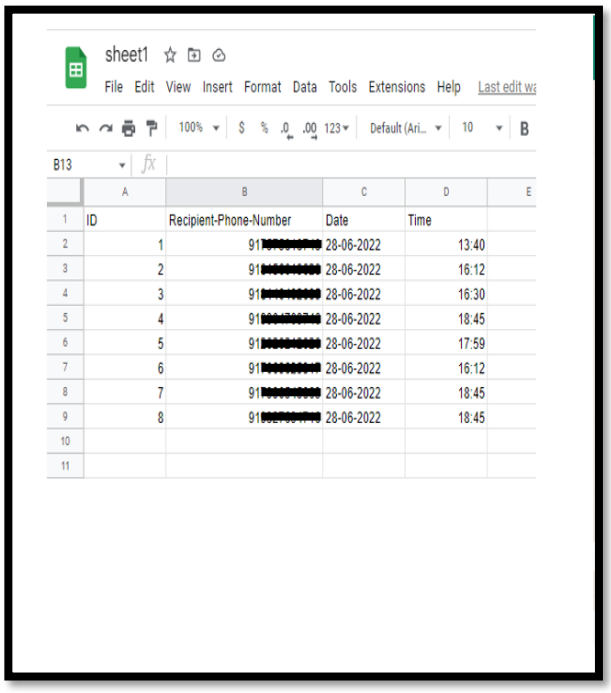
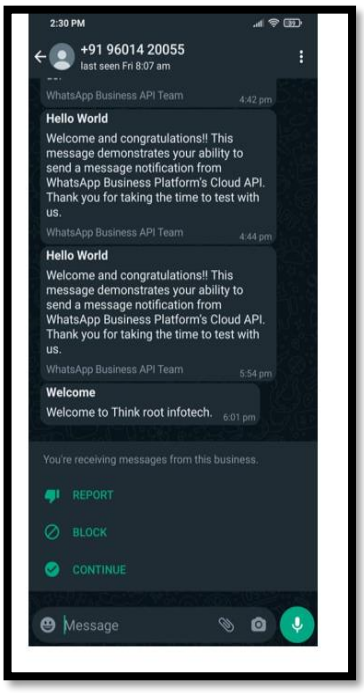


Fig 6.1 Testing diagram

5.2 Test Results and Analysis





Chapter: 6 Conclusion and Discussion

6.1 Conclusion

WhatsApp integration with WhatsApp Cloud API is using small businesses to send the bulk of WhatsApp messages in one click. Phone numbers are stored in a .csv file we can read data from a .csv file and send messages using PHP or Python. We can directly send messages to the postman also. Using this, businesses share their new ideas, deals, apps, or more with the customer easily. Businesses grow up more easy way by WhatsApp integration with API. We easily send messages to set time or date.

6.2 Limitation

- You have to send messages to 50 persons after 50 messages you need to verify your business
- Message quality is proper, if message quality doesn't proper then your message limit will be decreased.
- 1000 messages free for month
- Conversely, your limit can also be decreased if more of your messages are reported or blocked by users. (With business verification)
- Your messaging limits are automatically increased based on the volume and quality of the messages you send. (With business verification)

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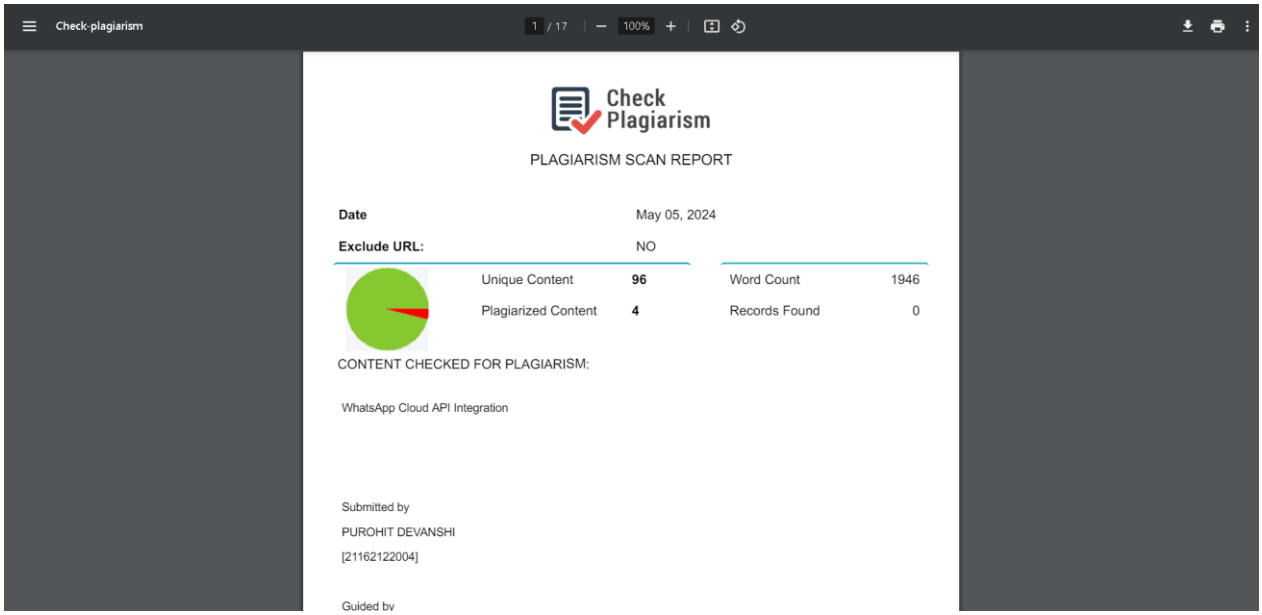
- Phone Numbers: https://developers.facebook.com/docs/whatsapp/phone-numbers

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