

## WhatsApp bot for Auto replying & sending images via Python and Selenium

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Are you the one who wants to send Lots of Quotes or Shayaris to your Ex or to a whatsApp friends or colleague group or random emojis to your wife or Latest gf? This blog will help you out in programming a bot to impress them.

Here comes the demo:

```
Requirement already satisfied: crayons in ./my_project_env/lib/python3.6/site-packages (from webdriver_manager) (0.2.0)
Requirement already satisfied: configparser in ./my_project_env/lib/python3.6/site-packages (from webdriver_manager) (5.0.0)
Requirement already satisfied: urllib3[secure]==1.25.0,!=1.25.1,!=1.26,!=1.21.1 in ./my_project_env/lib/python3.6/site-packages (from requests==2.22.0) (1.25.0)
Requirement already satisfied: certifi==2017.4.17 in ./my_project_env/lib/python3.6/site-packages (from requests==2.22.0) (2017.4.17)
Requirement already satisfied: idna==2.5 in ./my_project_env/lib/python3.6/site-packages (from requests==2.22.0) (2.5)
Requirement already satisfied: chardet==3.0.2 in ./my_project_env/lib/python3.6/site-packages (from requests==2.22.0) (3.0.2)
Requirement already satisfied: colorama in ./my_project_env/lib/python3.6/site-packages (from crayons==0.2.0) (0.4.3)

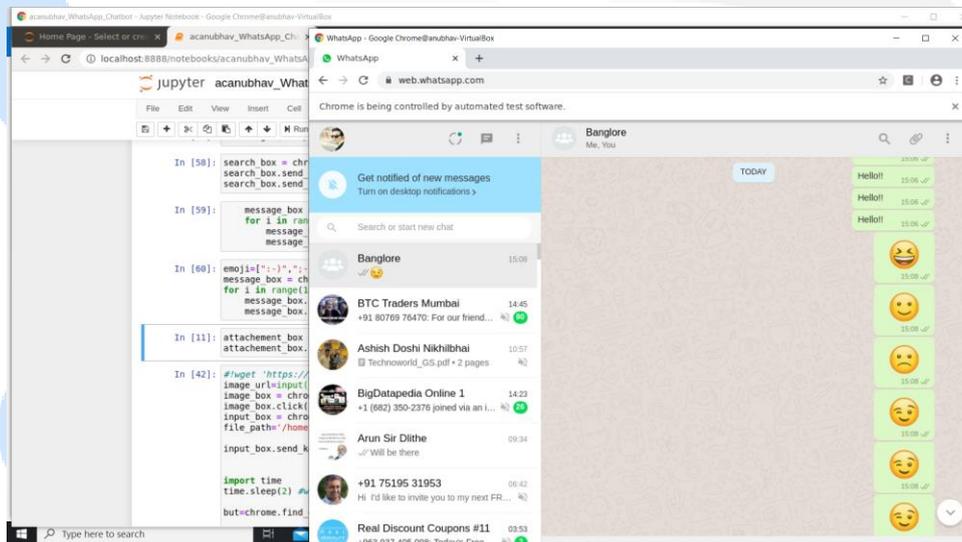
In [67]: chrome = webdriver.Chrome(ChromeDriverManager().install())

[WDN] - Cache is valid for [08/06/2020]
[WDN] - Looking for [chromedriver 83.0.4103.39 Linux64] driver in cache
[WDN] - Driver found in cache [/home/anubhav/.wdm/drivers/chromedriver/83.0.4103.39/Linux64/chromedriver]

In [58]: chrome.get("https://web.whatsapp.com")

In [61]: search_box = chrome.find_element_by_class_name("_3FVCE")
search_box.send_keys("Banglore")
message_box = chrome.find_element_by_xpath('//*[@id="main"]/footer/div[1]/div[2]/div/div[2]')
for i in range(10):
    message_box.send_keys("Hello!")
    message_box.send_keys(Keys.ENTER)
```

Bot performing auto replying and login



For implementing this you will need Jupyter Python notebooks installed .You can use this procedure illustrated over here for installation on windows or Linux :

Also we will be using Selenium which is an automatic testing tool compatible with Java,Ruby ,Python and many other programming languages.

In order to install the selenium dependencies we will use pip (package installer for python) :

```
!pip install selenium
```

```
!pip install webdriver_manager
```

For every block to run , we will use Shift+Enter to execute the relevant command.

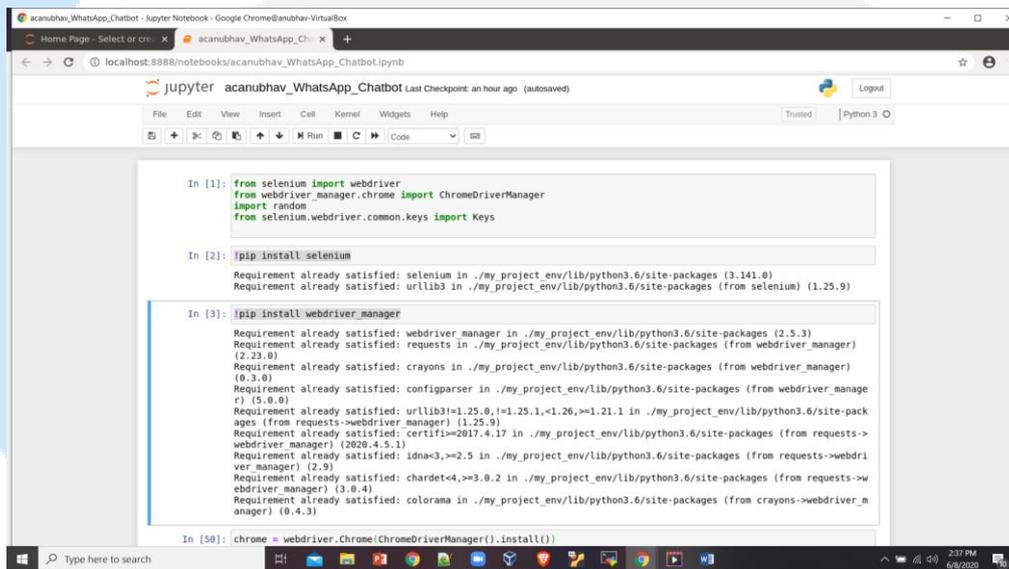
Along with this you will import the files like this :

```
from selenium import webdriver
```

```
from webdriver_manager.chrome import ChromeDriverManager
```

```
import random
```

```
from selenium.webdriver.common.keys import Keys
```



```
In [1]: from selenium import webdriver
        from webdriver_manager.chrome import ChromeDriverManager
        import random
        from selenium.webdriver.common.keys import Keys

In [2]: !pip install selenium
Requirement already satisfied: selenium in ./my_project_env/lib/python3.6/site-packages (3.141.0)
Requirement already satisfied: urllib3 in ./my_project_env/lib/python3.6/site-packages (from selenium) (1.25.9)

In [3]: !pip install webdriver_manager
Requirement already satisfied: webdriver_manager in ./my_project_env/lib/python3.6/site-packages (2.5.3)
Requirement already satisfied: requests in ./my_project_env/lib/python3.6/site-packages (from webdriver_manager) (2.23.0)
Requirement already satisfied: crayons in ./my_project_env/lib/python3.6/site-packages (from webdriver_manager) (0.3.0)
Requirement already satisfied: configparser in ./my_project_env/lib/python3.6/site-packages (from webdriver_manager) (5.0.0)
Requirement already satisfied: urllib3[!1.25.0,!1.25.1,<1.26,>=1.21.1 in ./my_project_env/lib/python3.6/site-packages (from requests->webdriver_manager) (1.25.9)
Requirement already satisfied: certifi[>=2017.4.17 in ./my_project_env/lib/python3.6/site-packages (from requests->webdriver_manager) (2020.4.5.1)
Requirement already satisfied: idna[>=2.5 in ./my_project_env/lib/python3.6/site-packages (from requests->webdriver_manager) (2.9)
Requirement already satisfied: chardet[>=3.0.2 in ./my_project_env/lib/python3.6/site-packages (from requests->webdriver_manager) (3.0.4)
Requirement already satisfied: colorama in ./my_project_env/lib/python3.6/site-packages (from crayons->webdriver_manager) (0.4.3)

In [50]: chrome = webdriver.Chrome(ChromeDriverManager().install())
```

Python Dependencies installation

In order to open Google Chrome from Jupyter notebook automatically we will use “chrome” element as an object from webdriver package and give it relevant URL to open (Web.whatsapp.com for WhatsApp web)

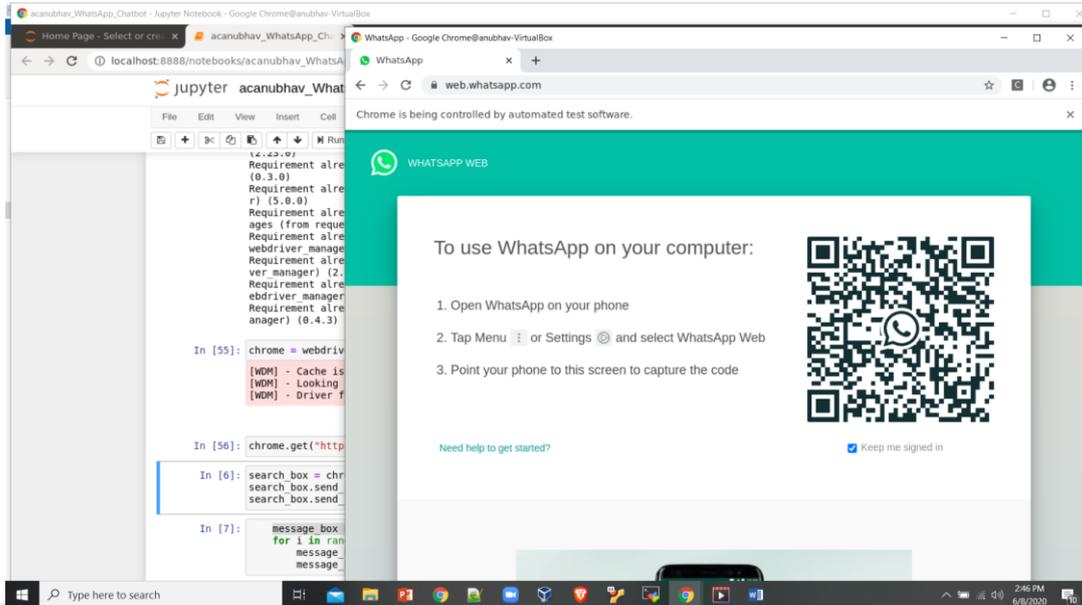
```
chrome = webdriver.Chrome(ChromeDriverManager().install())
```

```
chrome.get("https://web.whatsapp.com")
```

Once you execute this on Jupyter Notebook , you will open this :

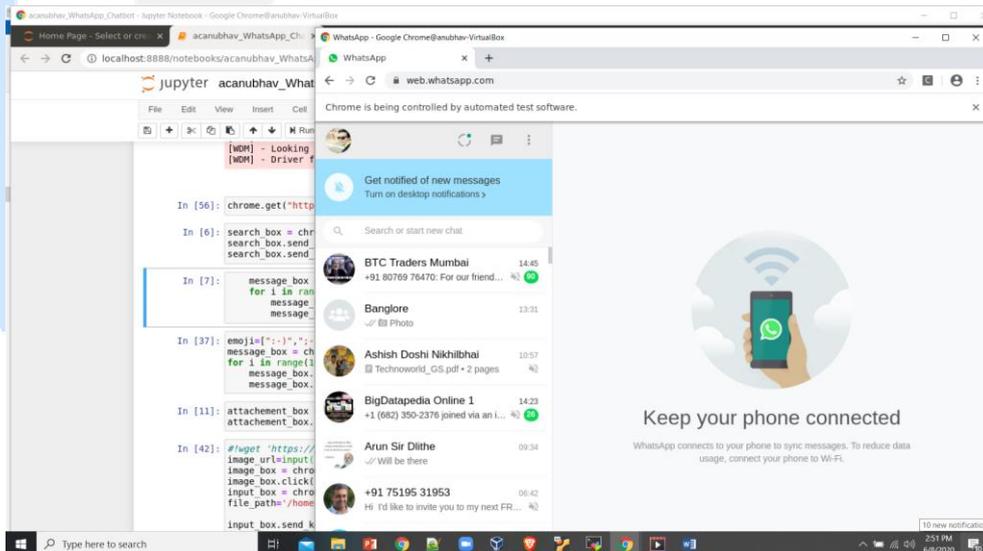


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WhatsApp web opened from Jupyter

Once you have the QR code in front of you , scan your whatsapp web and access your WhatsApp account like this:

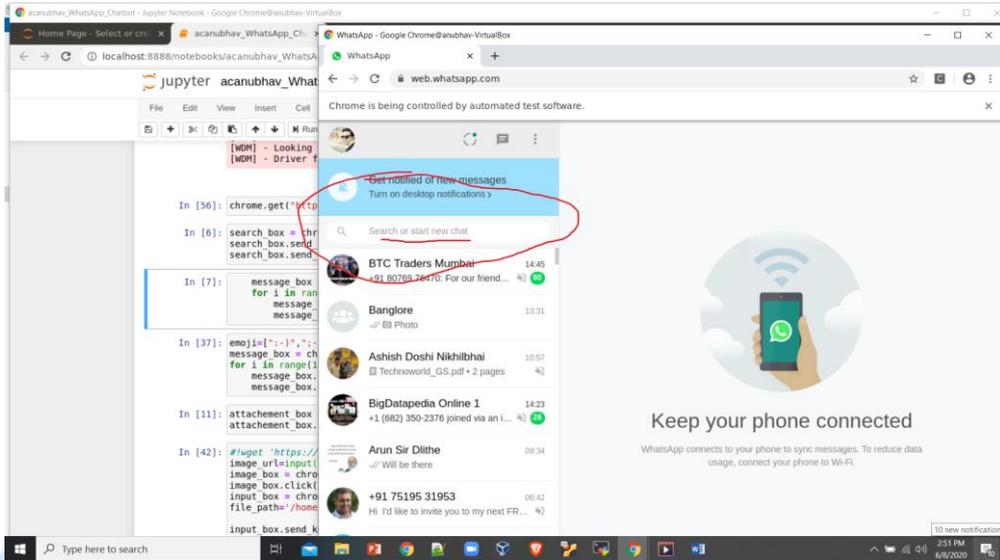


WhatsApp web after scanned

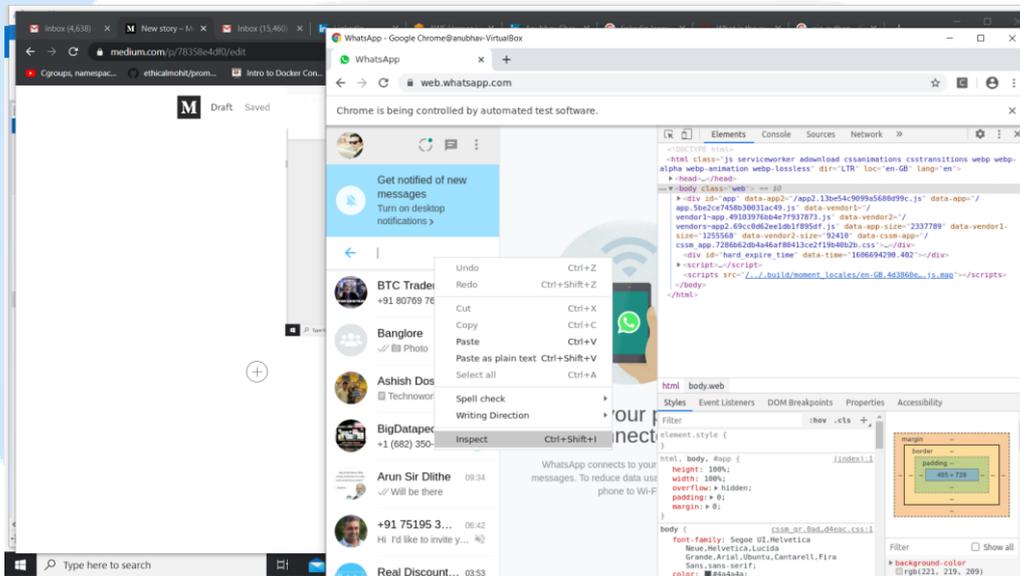
You will need to access the search contact bar to find contacts for starting a new chat.



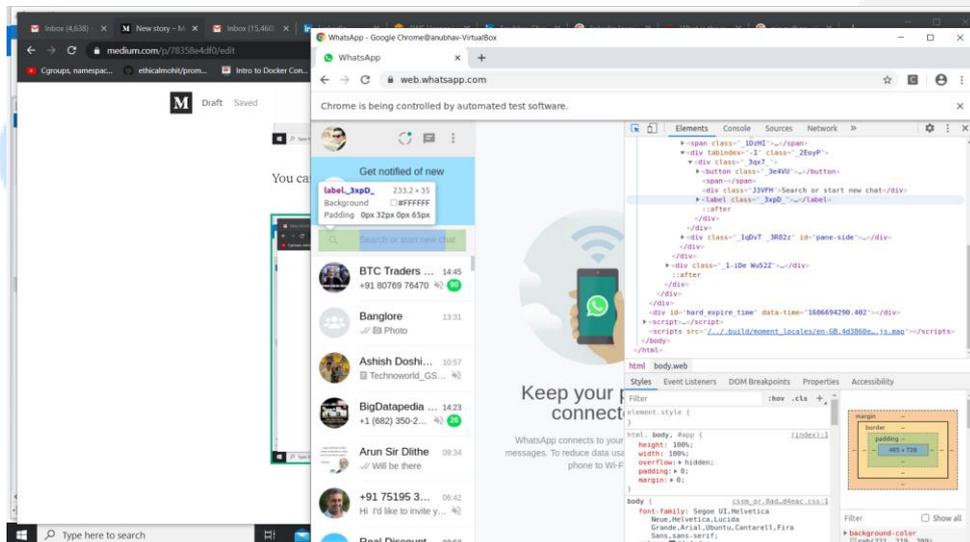
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You can right click upon it and do “inspect element”



Inspect element



Element class name for Search bar

+91 7043122287  
+91 794007058

+1 408 689 1891  
+1 603 921 3957

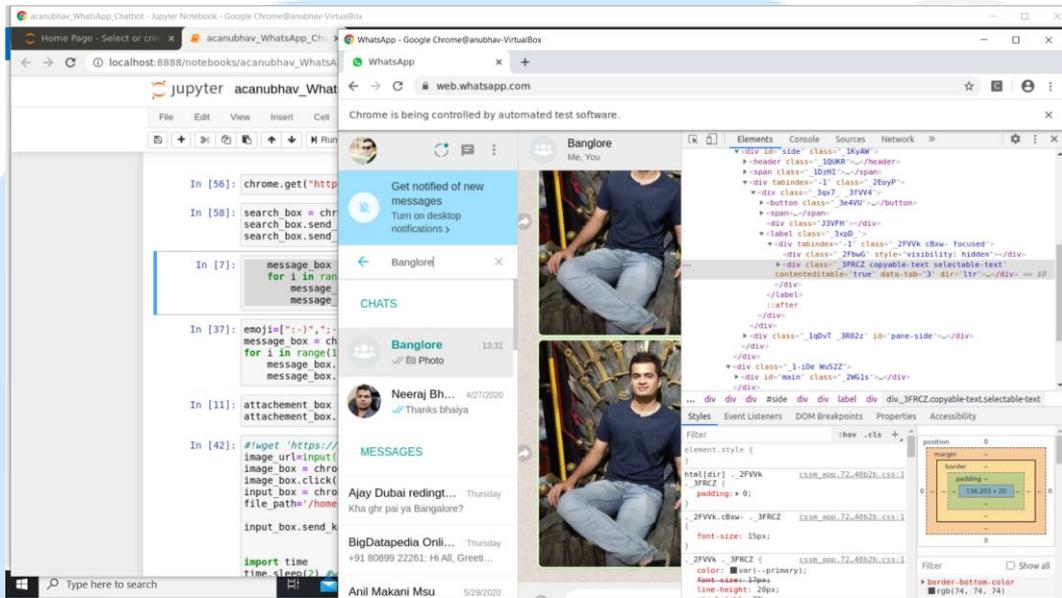
Ahmedabad  
New York

www.cilans.net  
info@cilans.net

We can see that class name for the search bar is :”\_3FRCZ”

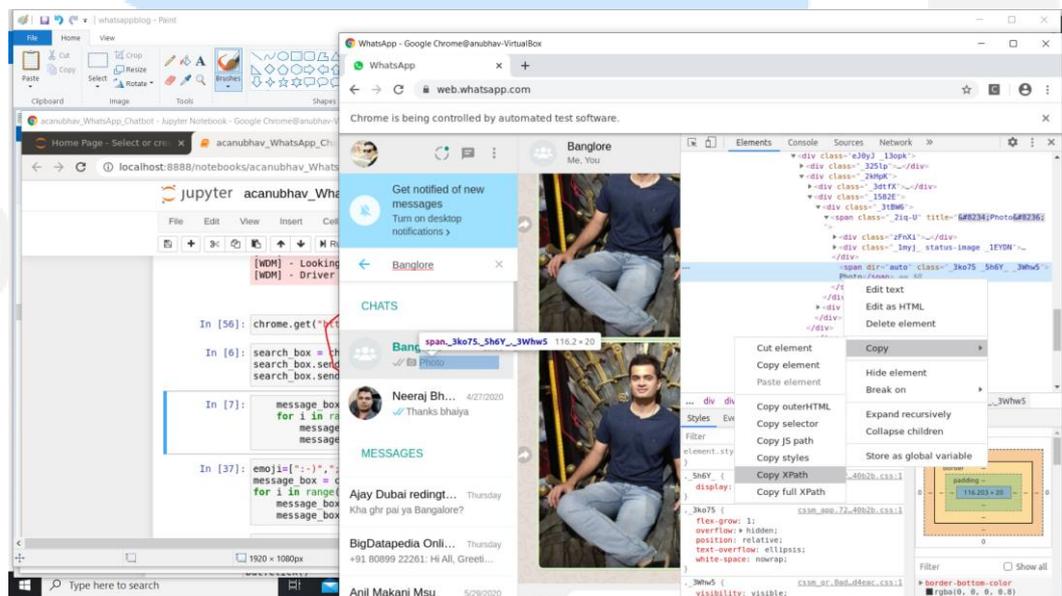
Now we will extract the element using the Python Selenium packages and search for the group named Bangalore :

```
search_box = chrome.find_element_by_class_name(“_3FRCZ”)
search_box.send_keys(“Bangalore”)
search_box.send_keys(Keys.ENTER)
```



Bangalore searched and appears on the top

Once “Bangalore” appears on the top, we will find its ID again with xpath since Calss and ID’s might create ambiguity:



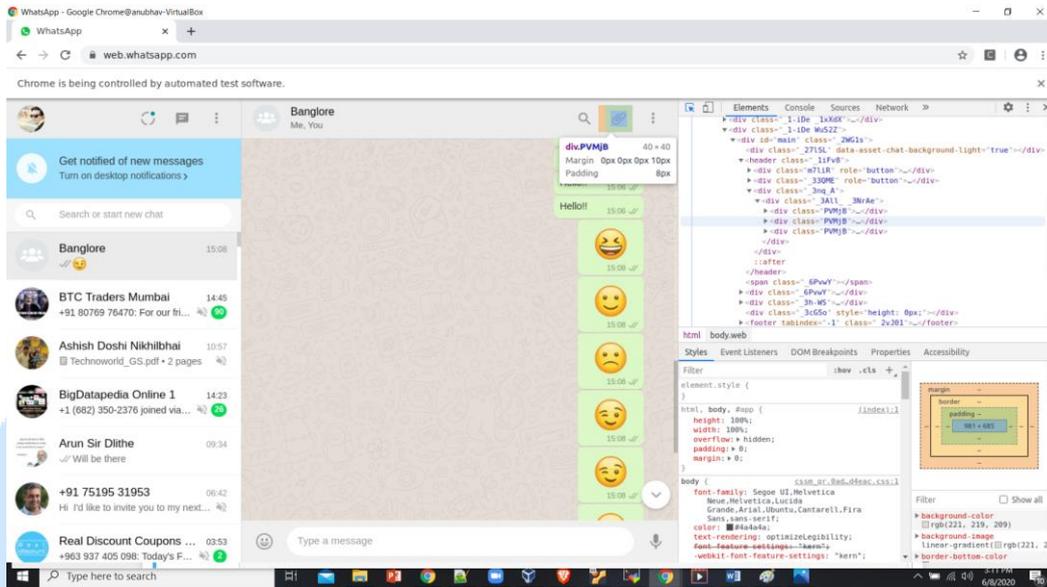
We will fetch and write a Hello message 10 times using loop in the group:



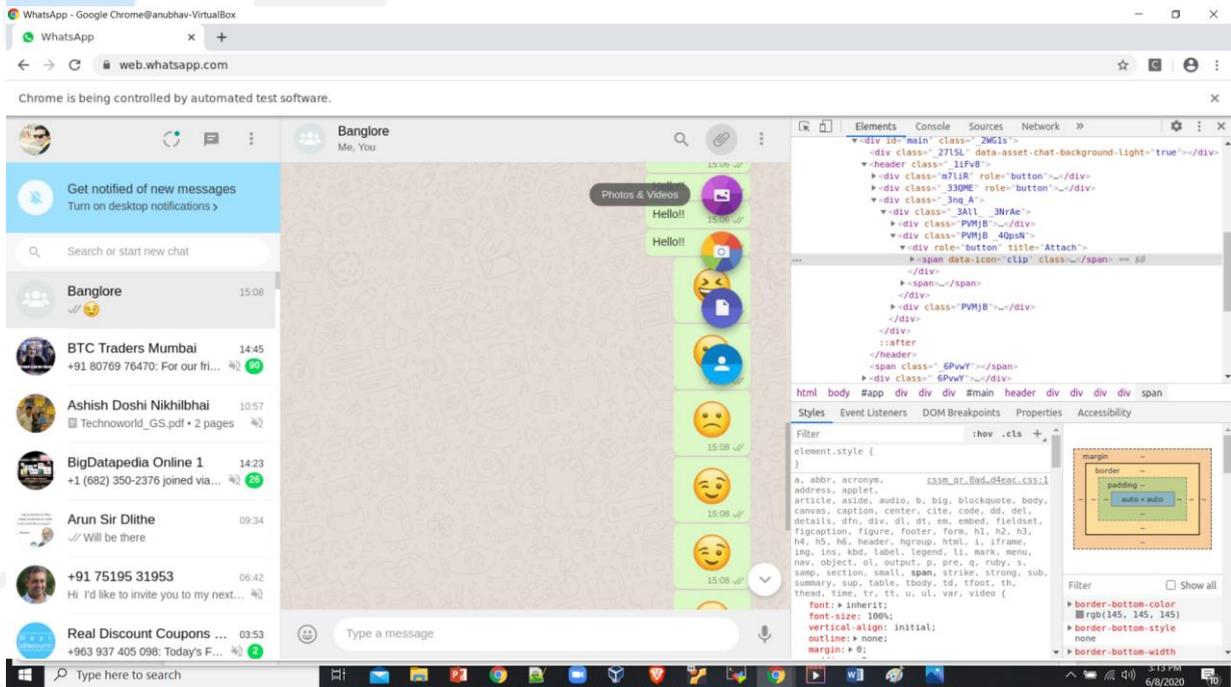


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Now we can also send attachments as pictures, videos, camera pics or contacts ,by accessing the attachment symbol:



Attachment symbol



Selecting the relevant things to attach

Once you get the XPath of icon photo attachment:



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```
acanubhav_WhatsApp_Chatbot - Jupyter Notebook - Google Chrome@acanubhav-VirtualBox
localhost:8888/notebooks/acanubhav_WhatsApp_Chatbot.ipynb
jupyter acanubhav_WhatsApp_Chatbot Last Checkpoint: an hour ago (autosaved)
File Edit View Insert Cell Kernel Widgets Help Trusted Python 3
In [59]: message_box = chrome.find_element_by_xpath('//*[@id="main"]/footer/div[1]/div[2]/div/div[2]')
for i in range(10):
    message_box.send_keys("Hello!")
    message_box.send_keys(Keys.ENTER)

In [60]: emoji=[":-)",":-)",":>","<:-)",":^_^)",""]
message_box = chrome.find_element_by_xpath('//*[@id="main"]/footer/div[1]/div[2]/div/div[2]')
for i in range(10):
    message_box.send_keys(random.choice(emoji))
    message_box.send_keys(Keys.ENTER)

In [11]: attachment_box = chrome.find_element_by_xpath('//*[@id="main"]/header/div[3]/div/div[2]/div/span')
attachment_box.click()

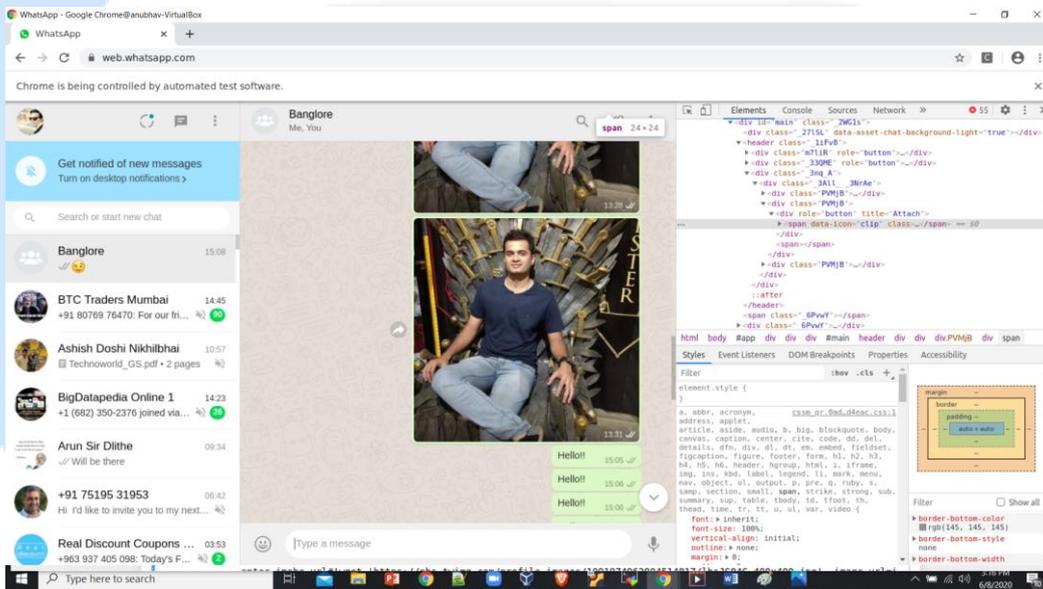
In [42]: #input 'https://pbs.twimg.com/profile_images/1091974962804514817/lhsJ5846_400x400.jpg'
image_url=input("enter image url")
image_box = chrome.find_element_by_xpath('//*[@id="main"]/header/div[3]/div/div[2]/span/div/div[1]/li[1]')
image_box.click()
input_box = chrome.find_element_by_tag_name('input')
file_path="/home/acanubhav/my_project_dir/lhsJ5846_400x400.jpg"
input_box.send_keys(file_path)

import time
time.sleep(2) #wait for 2 secs

but=chrome.find_element_by_xpath('//*[@id="app"]/div/div/div[2]/div[2]/span/div/span/div/div/div[2]/span/div/div/spa

#click the send button
but.click()
```

Script to attach the pics:



Sending pics via bot

This is simple packages to autotest the modules created, if you want to implement it kindly refer to the code repository:

For any further Queries or anything related to Blockchain or Devops you can DM me on LinkedIn or instagram id=acanubhav94.



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## About Cilans Systems:

We are a rapidly growing Corporate consultancy, and software development company based in Ahmedabad, India. We specialize in Python/R/SPSS, Data Science, Artificial Intelligence-Machine Learning (AI-ML), Data Visualization ( Power BI, Excel), Blockchain-Hyperledger, and DevOps. We also develop Mobile/Web/UX/UI applications to support earlier domains and relevant assignments. Our services portfolio include Corporate Consulting/Mentorship, Corporate Training (executive and mid management for Future Technologies and G-T-M /Go-To-Market strategies and also Hands-on for engineering level), develop POC (Proof of concept) for complex solutions/designs, custom software development and QA/Software Testing services. Our clients are from diverse sectors including Finance/Banking, Supply chain, Govt, Healthcare, E-Commerce, Hospitality, Industrial automation, auto-fleet etc. For more details, please visit [www.cilans.net](http://www.cilans.net)