



Personal Career Manager Software Agent Chatbot

User Guide

Team Name: Team10

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NUS-ISS Master of Technology in Intelligent Systems

ISY5001 Cognitive System

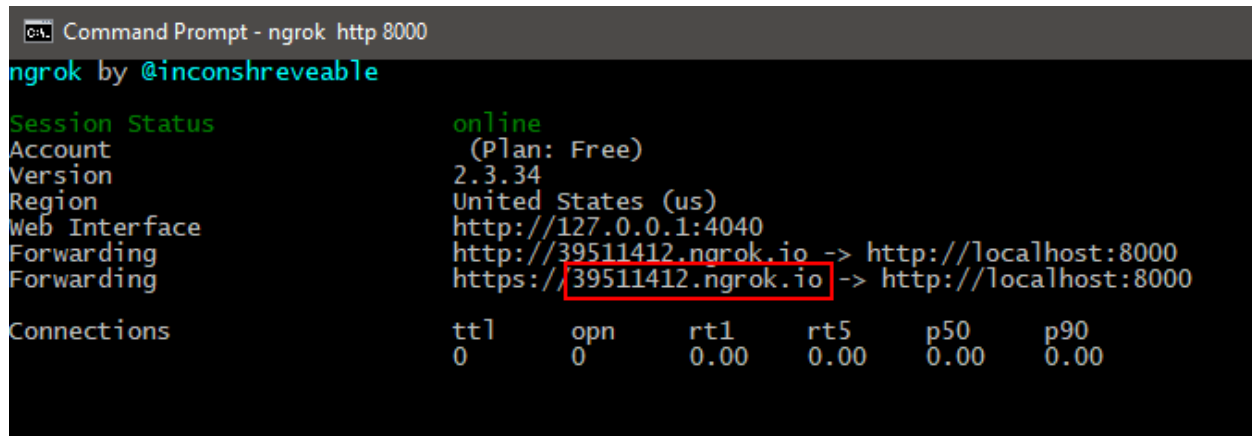
Setup:

Step 1) Clone or download zip from <https://github.com/raymondng76/IRS-CS-2019-07-29-IS1FT-GRP-Team10-Personal-Career-Manager-Software-Agent>

Step 2) Download ngrok executable from www.ngrok.com.

Step 3) Launch a command console and run the following command.

ngrok http 8000



```
Command Prompt - ngrok http 8000
ngrok by @inconshreveable

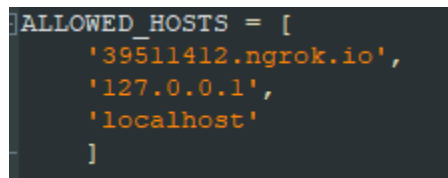
Session Status      online
Account             (Plan: Free)
Version             2.3.34
Region              United States (us)
Web Interface       http://127.0.0.1:4040
Forwarding           http://39511412.ngrok.io -> http://localhost:8000
                    https://39511412.ngrok.io -> http://localhost:8000
Connections
  ttl    opn    rt1    rt5    p50    p90
    0      0     0.00  0.00  0.00  0.00
```

*Note: ngrok is hosted in the United States, it is possible for network timeout when using the chatbot during United States daytime due to busy traffic.

Step 4) Navigate to the cloned project folder and open the settings.py file from the following folder with any text editor,

.\IRS-CS-2019-07-29-IS1FT-GRP-Team10-Personal-Career-Manager-Software-Agent\SystemCode\Level_Up_Chatbot\Level_Up\settings.py

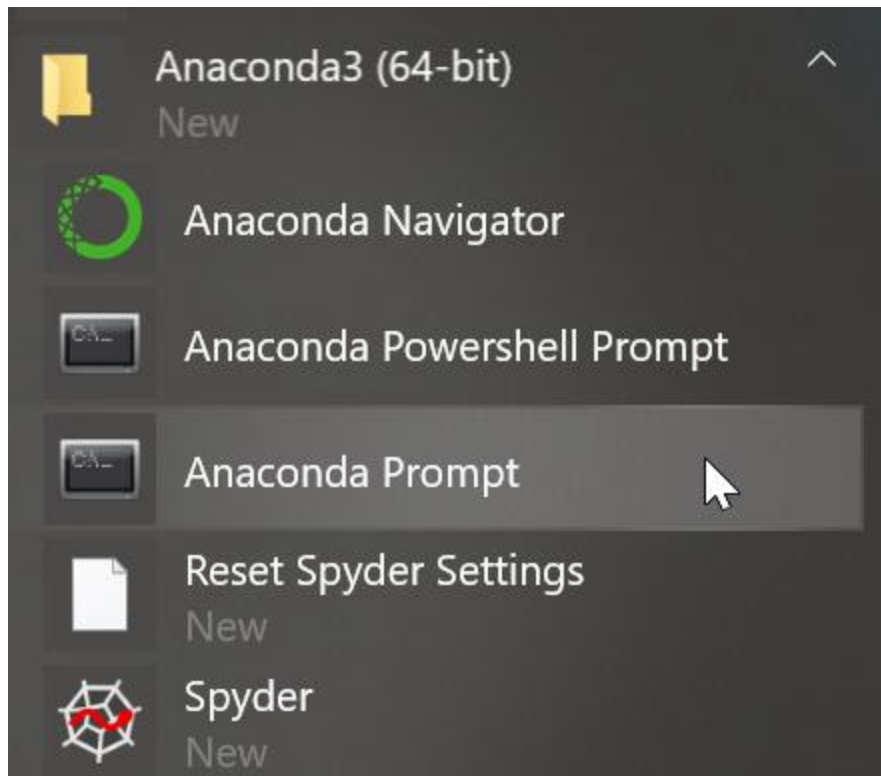
Step 5) Copy the https address (omit 'https://') shown on Step 3 (highlighted in red box) and paste it to the 'ALLOWED_HOSTS' section in the 'settings.py' file as shown below, save and close the file. (Note: This step needs to be repeated everytime ngrok is re-launched).



```
ALLOWED_HOSTS = [
    '39511412.ngrok.io',
    '127.0.0.1',
    'localhost'
]
```

Step 6) Install Anaconda from www.anaconda.org

Step 7) Launch Anaconda prompt from start menu (right click and run as administrator)



Step 8) From the Anaconda prompt console, enter the follow command to add the conda-forge channel to conda.

conda config --append channels conda-forge

Step 9) From the Anaconda prompt console, enter the follow command to create a virtual environment.

conda create --name levelup python=3.6 django=2.2.4

```
Administrator: Anaconda Prompt

(base) C:\WINDOWS\system32>conda create --name levelup python=3.6 django=2.2.4
Collecting package metadata (current_repodata.json): done
Solving environment: done

## Package Plan ##

  environment location: C:\ProgramData\Anaconda3\envs\levelup

added / updated specs:
- django=2.2.4
- python=3.6

The following NEW packages will be INSTALLED:

certifi                pkgs/main/win-64::certifi-2019.6.16-py36_1
django                 conda-forge/win-64::django-2.2.4-py36_0
pip                   pkgs/main/win-64::pip-19.2.2-py36_0
python                 pkgs/main/win-64::python-3.6.9-h5500b2f_0
pytz                   pkgs/main/noarch::pytz-2019.2-py_0
setuptools             pkgs/main/win-64::setuptools-41.0.1-py36_0
sqlite                 pkgs/main/win-64::sqlite-3.29.0-he774522_0
sqlparse               pkgs/main/noarch::sqlparse-0.3.0-py_0
vc                     pkgs/main/win-64::vc-14.1-h0510ff6_4
vs2015_runtime         pkgs/main/win-64::vs2015_runtime-14.15.26706-h3a45250_4
wheel                  pkgs/main/win-64::wheel-0.33.4-py36_0
wincertstore           pkgs/main/win-64::wincertstore-0.2-py36h7fe50ca_0

Proceed ([y]/n)? y
Preparing transaction: done
Verifying transaction: done
Executing transaction: done
#
# To activate this environment, use
#
#   $ conda activate levelup
#
# To deactivate an active environment, use
#
#   $ conda deactivate
#

(base) C:\WINDOWS\system32>
```

Step 10) Enter the following command to activate the newly created environment.

conda activate levelup

Step 11) Install Experta package with the following command

pip install experta==1.9.1

```
Administrator: Anaconda Prompt - "C:\ProgramData\Anaconda3\condabin\conda.bat" activate levelup

(base) C:\WINDOWS\system32>conda activate levelup
(levelup) C:\WINDOWS\system32>pip install experta==1.9.1
Collecting experta==1.9.1
  Using cached https://files.pythonhosted.org/packages/f2/21/18207f6f6141c1182db30d177b1757b4dc502f3f201fe899f2465d240374/exp
rta-1.9.1-py3-none-any.whl
Collecting frozendict==1.2 (from experta==1.9.1)
Collecting schema==0.6.7 (from experta==1.9.1)
  Using cached https://files.pythonhosted.org/packages/5d/42/32c059aa876eb16521a292e634d18f25408b2441862ff823f59af273d720/sche
ma-0.6.7-py2.py3-none-any.whl
Installing collected packages: frozendict, schema, experta
Successfully installed experta-1.9.1 frozendict-1.2 schema-0.6.7

(levelup) C:\WINDOWS\system32>
```

Step 12) Navigate to the **Level_Up_Chatbot** folder of the cloned Github project.

```
Anaconda Prompt - "C:\ProgramData\Anaconda3\condabin\conda.bat" activate levelup

(levelup) D:\>cd Workspace\GitHub\IRS-CS-2019-07-29-IS1FT-GRP-TeamName-LevelUp\SystemCode\Level_Up_Chatbot
(levelup) D:\workspace\GitHub\IRS-CS-2019-07-29-IS1FT-GRP-TeamName-LevelUp\SystemCode\Level_Up_Chatbot>
```

Step 13) Enter the following command to start the Django server.

python manage.py runserver

```

Anaconda Prompt - "C:\ProgramData\Anaconda3\condabin\conda.bat" activate levelup - python manage.py runserver

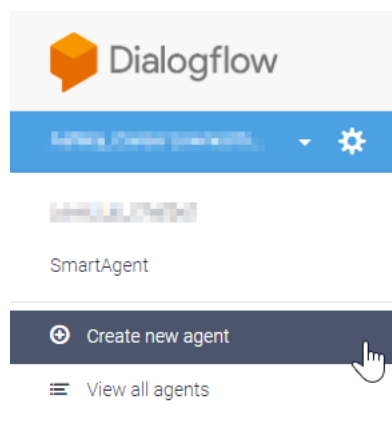
(levelup) D:\workspace\Github\IRS-CS-2019-07-29-IS1FT-GRP-TeamName-LevelUp\SystemCode\Level_Up_Chatbot>python m
manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).
August 24, 2019 - 11:00:33
Django version 2.2.4, using settings 'Level_Up.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.

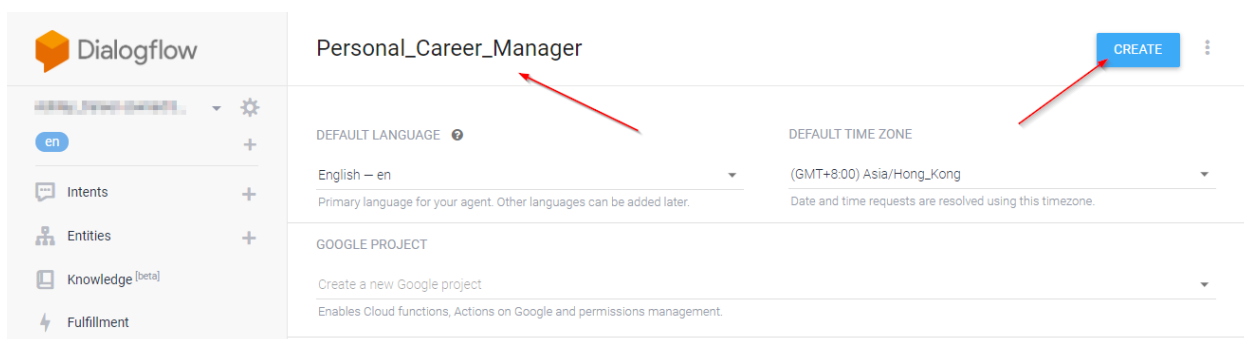
```

Step 14) Go to www.Dialogflow.com and sign in with Google account. Click on ‘Open Console’ from the top right.

Step 15) Click on the dropdown list on the top left and click ‘Create new agent’.

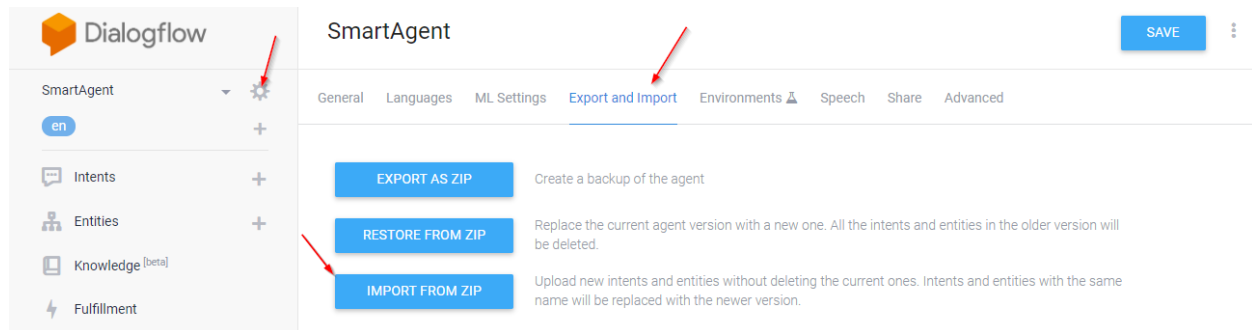


Step 16) Enter a name for the agent and click the ‘Create’ button.



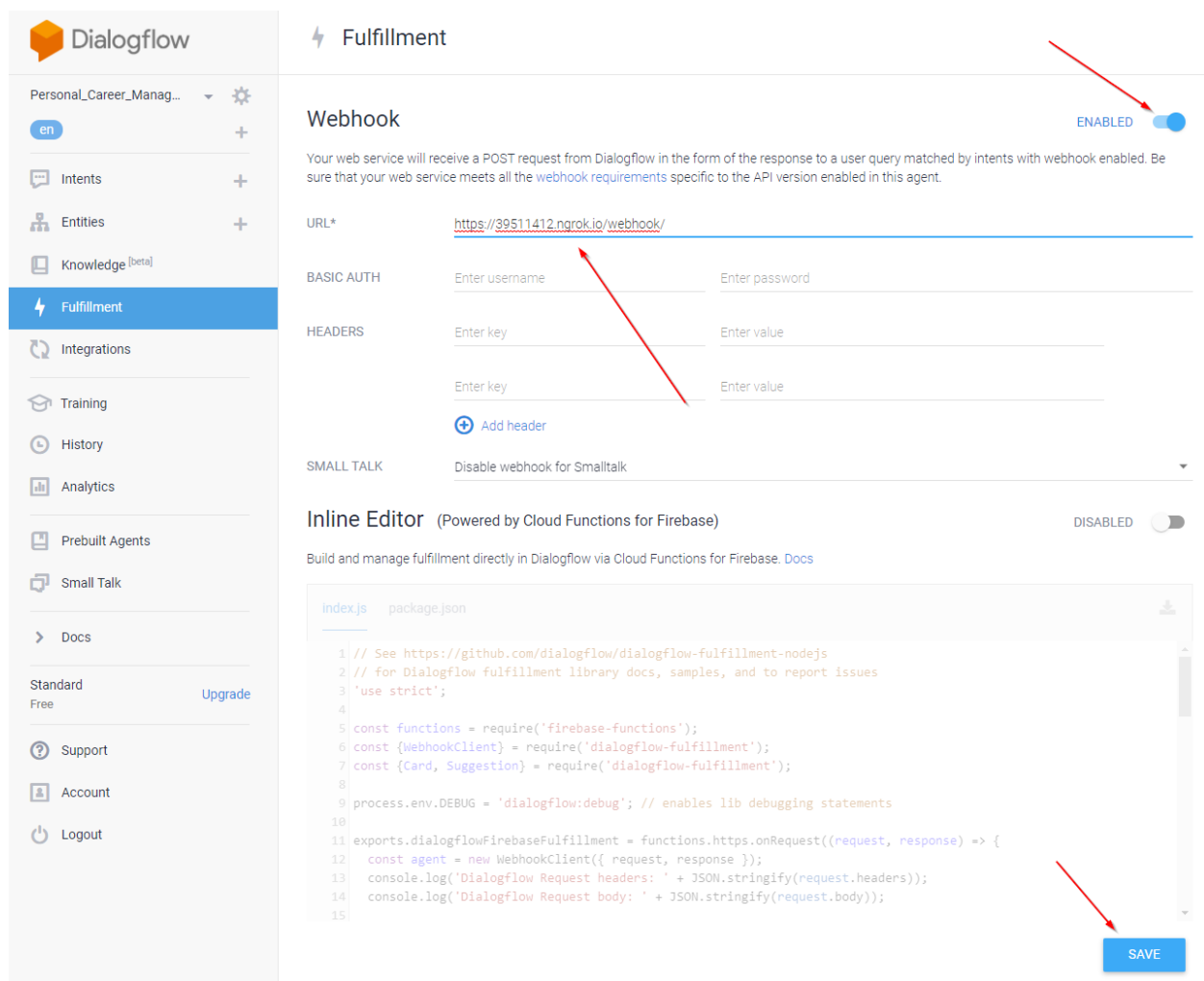
Step 17) Click on the gear icon then click on ‘Export and Import’ tab. Click on ‘IMPORT FROM ZIP’ button and select the zipped intent packages from the cloned Github project ‘SystemCode’ folder as shown below.

**.\IRS-CS-2019-07-29-IS1FT-GRP-Team10-Personal-Career-Manager-Software-Agent
\SystemCode\Team10_Personal Career Manager Software Agent - Dialogflow Intents.zip**



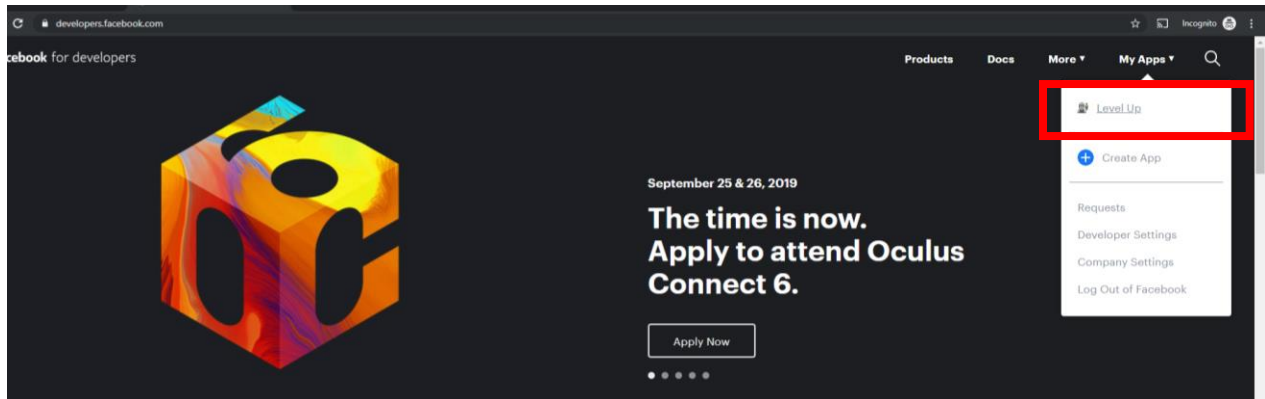
Step 18) Select the imported agent from the top left and click on the 'Fulfillment' tab.

Step 19) Enable the webhook if it is not enabled already. Enter the full ngrok address from Step 3 with a '/webhook/' suffix in the URL field. Press save button at bottom right once done.

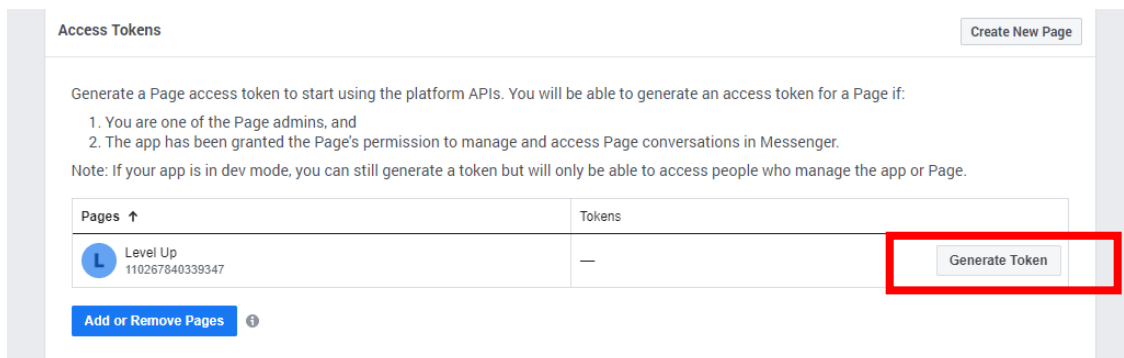


Step 20) Go to www.facebook.com and login with the credentials zipped with the submission folder in Luminus <IRS-CS-2019-07-29-IS1FT-GRP-Team10-Personal-Career-Manager-Software-Agent\Facebook Account Credentials>. For security reasons, the credentials are not uploaded to Github.

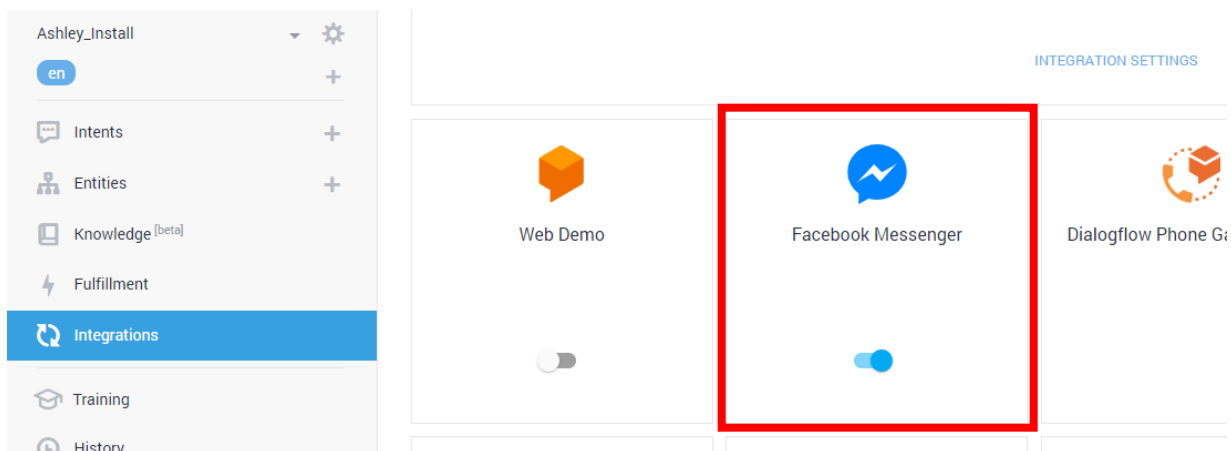
Step 21) Go to <https://developers.facebook.com/> and hover on “My apps” on the right upper corner then select “Level Up” (This step assumes that you already have logged into Facebook and the Facebook Developer account).



Step 22) On the left hand menu of the dashboard, select “Messenger” and then “Settings”. Scroll down to the Access Tokens and click Generate Token. **Copy** the Token Generated.



Step 23) Go back to the console of DialogFlow, select “Integrations” and click on the Facebook Messenger Icon. Paste the token copied into the Page Access Token as shown below. Enter any verify token you wish. In this case for e.g. “123456789”. Then copy the Callback URL as shown below.



Facebook Messenger

Create and teach a conversational bot for Facebook Messenger.

After you design and test your Dialogflow agent, you can launch your Messenger bot

1. Get your Facebook Page Access Token and insert it in the field below.
2. Create your own Verify Token (can be any string).
3. Click 'START' below.
4. Use the Callback URL and Verify Token to create an event in the Facebook Messenger Webhook Setup.

[More in documentation.](#)

Callback URL:

Verify Token:

Page Access Token:

Choose an environment to use with this integration.

Environment:

Facebook Messenger

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[More in documentation.](#)

Callback URL:

Verify Token:

Page Access Token:

Choose an environment to use with this integration.

Environment:

Step 24) Coming back to the Facebook Developer – Messenger – Settings Page. Scroll down to the Webhooks portion and click Edit Callback URL. Now, paste the Callback URL that you have copied from DialogFlow into the portion shown below and Enter the same verify token you entered in DialogFlow above - **“123456789”**. Click the Verify and Save Button.

Webhooks

To receive messages and other events sent by Messenger users, the app should enable webhooks integration.

Callback URL:

Verify Token:

Validation requests and Webhook notifications for this object will be sent to this URL.

Token that Facebook will echo back to you as part of callback URL verification.

Edit Callback URL

×

Callback URL

<https://bots.dialogflow.com/facebook/3b679709-57a9-4e55-820b-65822750fa98/webhook>

Verify Token

Token that Facebook will echo back to you as part of callback URL verification.

[Learn more](#)

Cancel

Verify and Save

Step 25] Go to www.facebook.com/LevelUpNus/ and click on **'Message'** button to start the chatbot.

