



# 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

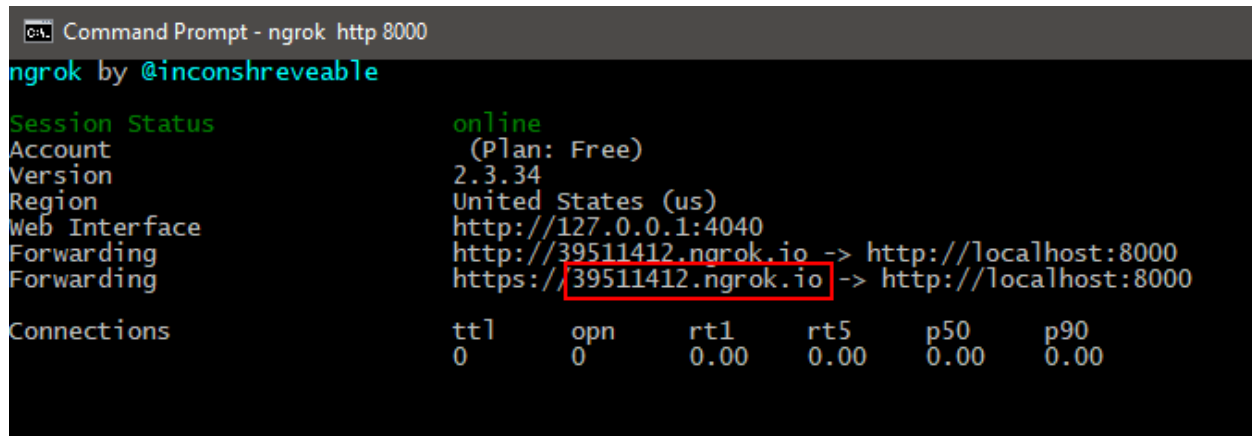
Setup:

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](http://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

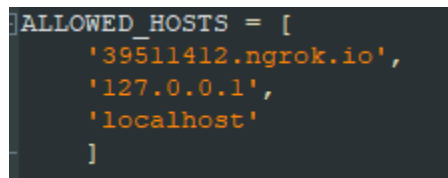
Session Status      online
Account             (Plan: Free)
Version             2.3.34
Region              United States (us)
Web Interface       http://127.0.0.1:4040
Forwarding           http://39511412.ngrok.io -> http://localhost:8000
                    https://39511412.ngrok.io -> http://localhost:8000
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**

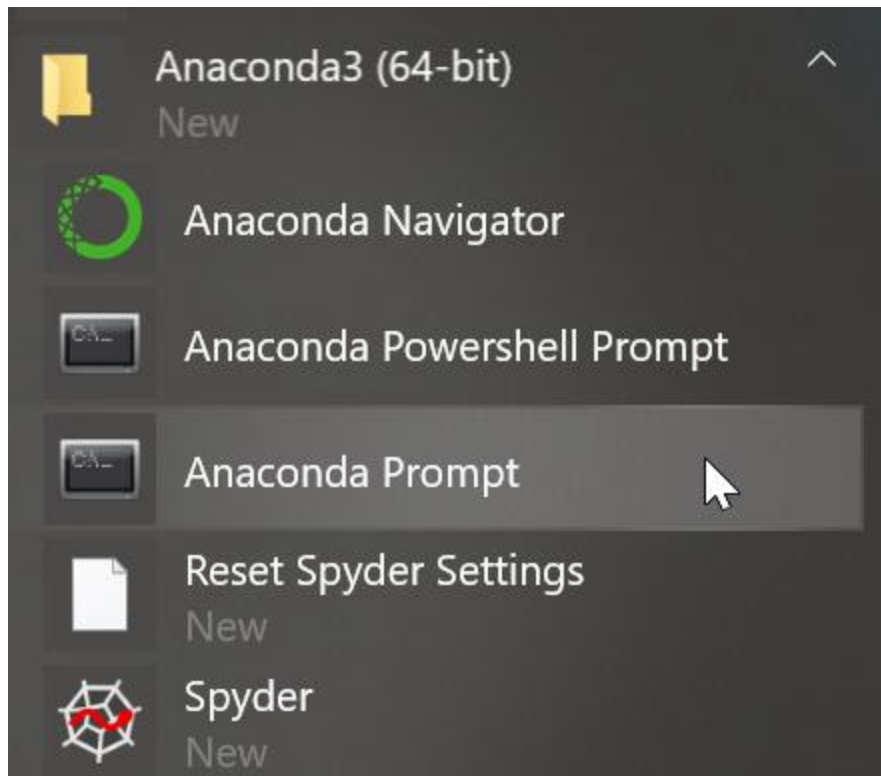
Step 5) Copy the https address (omit 'https://') shown on Step 3 (highlighted in red box) and paste it to the 'ALLOWED\_HOSTS' section in the 'settings.py' file as shown below, save and close the file. (Note: This step needs to be repeated everytime ngrok is re-launched).



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

Step 6) Install Anaconda from [www.anaconda.org](http://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-h550b2f_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/experta-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/schema-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

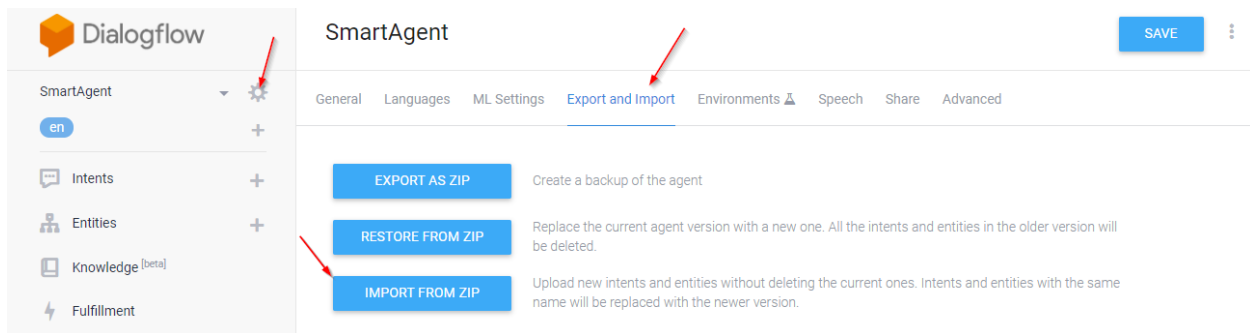
(levelup) D:\Workspace\Github\IRS-CS-2019-07-29-IS1FT-GRP-TeamName-LevelUp\SystemCode\LevelUp_Chatbot>python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

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

**Step 14)** Go to [www.Dialogflow.com](http://www.Dialogflow.com) and sign in with Google account. Click on ‘Open Console’ from the top right.

**Step 15)** 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 15)** Select the imported agent from the top left and click on the ‘Fulfillment’ tab.

**Step 16)** 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.

**Dialogflow**

NUSISS\_Ashley\_Career (...)

en

Intents

Entities

Knowledge [beta]

**Fulfillment**

Integrations

Training

History

Analytics

Prebuilt Agents

Small Talk

Docs

Standard Free

Support

Account

Logout

**Fulfillment**

**Webhook**

Your web service will receive a POST request from Dialogflow in the form of the response to a user query matched by intents with webhook enabled. Be sure that your web service meets all the [webhook requirements](#) specific to the API version enabled in this agent.

URL\*

BASIC AUTH

HEADERS

[Add header](#)

SMALL TALK

**Inline Editor** (Powered by Cloud Functions for Firebase)

Build and manage fulfillment directly in Dialogflow via Cloud Functions for Firebase. [Docs](#)

[index.js](#) [package.json](#)

```
1 // See https://github.com/dialogflow/dialogflow-fulfillment-nodejs
2 // for Dialogflow fulfillment library docs, samples, and to report issues
3 'use strict';
4
5 const functions = require('firebase-functions');
6 const {WebhookClient} = require('dialogflow-fulfillment');
7 const {Card, Suggestion} = require('dialogflow-fulfillment');
8
9 process.env.DEBUG = 'dialogflow:debug'; // enables lib debugging statements
10
11 exports.dialogflowFirebaseFulfillment = functions.https.onRequest((request, response) => {
12   const agent = new WebhookClient({ request, response });
13   console.log('Dialogflow Request headers: ' + JSON.stringify(request.headers));
14   console.log('Dialogflow Request body: ' + JSON.stringify(request.body));
15
16   // ... (rest of the code) ...
17 });
```

[SAVE](#)

**Step 17)** Go to [www.facebook.com](https://www.facebook.com) and login with the credentials zipped with the submission folder.

**Step 18)** Go to [www.facebook.com/LevelUpNus](https://www.facebook.com/LevelUpNus) and click on **'Send Message'** button to start the chatbot.

