

Workshop: Making a Reddit Bot

Kouthar Waled

Steps to Making a Reddit Bot (with links!)

— — —

1. [Installing the Reddit PRAW API](#)
 - 1.1. Requires Python 3 (as of Jan 2019)
 - 1.2. [Install Python 3 and/or pip](#) if necessary
2. Creating a [Reddit Account](#) for your bot
3. “Registering” your bot on Reddit
4. Figuring out what you want your bot to do!
5. Setting up your bot!
6. Running the program



Notes

- There are so many cool things you can do with bots, so the sky's the limit!
- There are different ways of executing your bot
 - We will be going through one way



1. Installing the Reddit Praw API

1. Check what version of Python you're running
 - 1.1. Type “python”, “Python”, or “python -V” into Command Prompt/Terminal (one or all of these may work) to check
 - 1.1.1. Python 2.7 and less “requires” updating (recommended)
 - 1.1.2. Python 3 = Yippee!

Let's update Python together just in case!



1.1 Updating Python

****These are instructions for MacOSX. Instructions for Linux/Windows can be found [here](#)****

- [Download OSX-GCC-Installer Package](#) (OSX v. 10.6 or 10.7)
- [Download Command Line Tools](#) (if you have an AppleID)

1. Then install Homebrew

- a. Type `/usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"` into Terminal (the command on the Python site may not work)
- b. You'll be prompted to hit "return" then your computer's password



1.1 Updating Python cont.

2. Paste `export PATH=/usr/local/bin:/usr/local/sbin:$PATH` into Terminal

3. Now type `brew install python` into Terminal

****Note - you now have the System's Python 2 version, and Homebrew's Python 3****

Now we need to install Pipenv (what we'll be using to install the Reddit PRAW API)

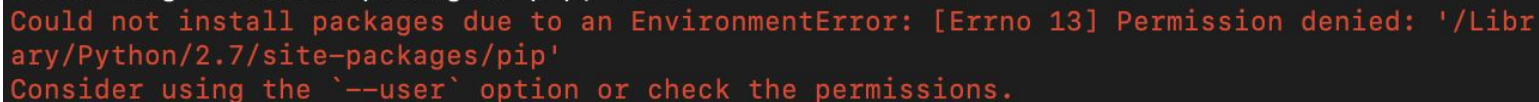


1.2 Installing Pipenv

[Here](#) are official instructions!

1. Paste `curl https://bootstrap.pypa.io/get-pip.py -o get-pip.py` into a fresh Terminal window
2. Paste `python get-pip.py`
 - a. If you get [Errno 13] then try pasting `sudo chown -R $USER /Library/Python/2.7` into Terminal, then trying again

All done! Now we can installing the Reddit Praw API!!



```
Could not install packages due to an EnvironmentError: [Errno 13] Permission denied: '/Library/Python/2.7/site-packages/pip'
Consider using the '--user' option or check the permissions.
```



1. Installing the Reddit Praw API (for real this time)

1. Type `pip install praw` into Terminal
 - a. You may need to use `pip3` instead

We're all ready to set up our bot!



2. Creating an Account for your bot

1. Go to `reddit.com/login` and click to sign-up
2. Create a username and password for your bot - be sure to keep both handy!
 - a. I advise you use an email that you verify and that you get a bit of karma to vavoid “rate limit” errors

3. “Registering” Your Bot

3. Now go to `old.reddit.com`
4. Click on “preferences” next to your username
5. Click on “apps”
6. Click on the following button!

are you a developer? create an app...



3. “Registering” Your Bot cont.

— — —

7. Enter your information with these settings: *Redirect URL is required*

create application

Please [read the API usage guidelines](#) before creating your application. After

name

☐ web app

A web based application

☐ installed app

An app intended for installation, such as on a mobile phone

☒ script

Script for personal use. Will only have access to the device

description

about url

redirect uri




Then click create app!



3. “Registering” Your Bot cont.

You should find a page like this! Keep it open!



StarterHacksBot
personal use script

RedditBot

[change icon](#)

secret H

developers StarterHacksBot (that's you!) [remove](#)

name StarterHacksBot

add developer:

description

RedditBot

about url

redirect uri

[update app](#)

[delete app](#)



4. Figuring Out What Your Bot is Going to Do

— — —

Up to you!



5. Setting Up Your Bot

For organisation, create separate files. For our basic demo, we'll have four `config.py`, `bot.py`, `run.py` and a `.txt` file.

config.py - store's your bot's info

bot.py - logic for the bot

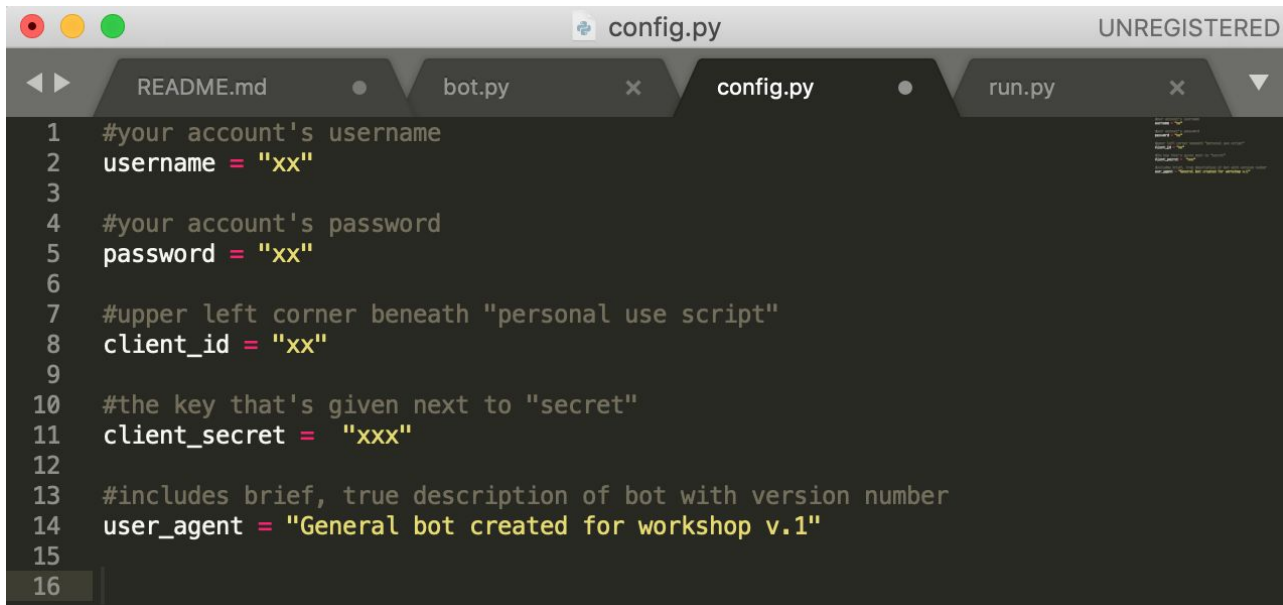
run.py - executes your code to run the bot

.txt file - to keep track of ID's



5. Setting Up Your Bot - config.py

This is where you will store your bot's info

A screenshot of a code editor window titled 'config.py' with a status bar indicating 'UNREGISTERED'. The editor has tabs for 'README.md', 'bot.py', 'config.py', and 'run.py'. The 'config.py' tab is active, showing a Python script with 16 lines of code. The code defines variables for bot configuration: 'username', 'password', 'client_id', 'client_secret', and 'user_agent'.

```
1 #your account's username
2 username = "xx"
3
4 #your account's password
5 password = "xx"
6
7 #upper left corner beneath "personal use script"
8 client_id = "xx"
9
10 #the key that's given next to "secret"
11 client_secret = "xxx"
12
13 #includes brief, true description of bot with version number
14 user_agent = "General bot created for workshop v.1"
15
16
```



5. Setting Up Your Bot - bot.py

Note:

- Reddit limits you to 25 “actions” per seconds – so we are going to set a limit less than or equal to 25, as well as a delay of 60 seconds between loops

Functions you need

- Authentication
- A way to keep track of where the bot performed an action
- The actual action



5. Setting Up Your Bot - bot.py cont.

imports {

authentication {

List of
comments
replied to {

```
1 import praw
2 import config
3 import time
4 import os
5
6 def authenticate():
7     #bot's info
8     login = praw.Reddit(username = config.username,
9                          password = config.password,
10                         client_id = config.client_id,
11                         client_secret = config.client_secret,
12                         user_agent = config.user_agent)
13     return login
14
15 login = authenticate()
16
17
18 def get_comments_replied():
19     #checks if the file exists
20     if not os.path.isfile("comments_replied.txt"):
21         comments_replied = []
22     else:
23         # file reader - with name of file and "r" which means
24         #we'll be reading the file
25         with open("comments_replied.txt", "r") as file:
26             #creates list of comment id's (each line)
27             comments_replied = file.read()
28             #putting comment id's into comments_replied.txt
29             comments_replied = comments_replied.split("\n")
30             #filters out empty lines from the list
31             comments_replied = filter(None, comments_replied)
32
33     #returns the list of comment id's
34     return comments_replied
35
36 comments_replied = get_comments_replied()
37
```



5. Setting Up Your Bot - bot.py cont.

— — —

Running the bot

```
def run(login, comments_replied):  
    #looking in first 25 comments of r/test  
    #limit of 25 "actions" per second  
    for comment in login.subreddit('test').comments(limit=25):  
        #checks if given string is in a comment's body and that  
        #the ID of the comment isn't already in comments_replied.txt  
        if "this text is" in comment.body and comment.id not in comments_replied:  
  
            #replying to comment  
            print("Found applicable comment")  
  
            comment.reply("This is just a demo!")  
  
            print("Replied to applicable comment")  
  
            #adds comment id to comments_replied list  
            comments_replied.append(comment.id)  
  
            #adds comment id to comments_replied.txt  
            #for long term storage  
            with open("comments_replied.txt", "a") as file:  
                file.write(comment.id + "\n")  
  
    #1min delay due to limits  
    time.sleep(60)
```



5. Setting Up Your Bot - run.py

```
1  import praw
2  import bot
3
4  #getting the list of comments id's replied to
5  comments_replied = bot.get_comments_replied()
6
7  #logs in and authenticates your bot
8  #login is in the bot.py file
9  login = bot.authenticate()
10
11 #runs forever so long as you are running
12 #your script
13 while True:
14     bot.run(login, comments_replied)
15
16
```



6. Running Your Bot

Enter [Terminal/Command Prompt](#), and enter the directory that has your files.

Then run your bot by typing `python run.py`. To check that it works, put applicable “test” comments in the applicable subreddit (or even better, r/test).



Notes

- The Praw docs has a lot - use them to see what you can do with Praw!
- Be creative! The bot we did today was very very very very simple
- Shout out to busterroni11 on YouTube! - I learned how to make Reddit bots from his videos back in 2017

