Reddit

Reddit is a very popular entertainment and social new networking service. It's kind of like Slashdot in that users vote on which stories are the best and they can get promoted to the front page. A few years ago, Digg used to be the big site that did this sort of thing. Reddit has lots of sub-sites called subreddits that are devoted to specific subjects, like gaming, photos, programming languages, etc.

Reddit also has published an API that has been wrapped by some clever Python programmers. It is called **PRAW: The Python Reddit Api Wrapper**. We can install PRAW using pip:

```
pip install praw
```

Now that we have that installed, let's give praw a try. We will try getting the top 25 stories on Reddit right now:
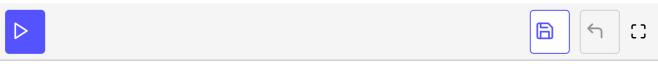
```python
import praw

# NOTE: Pass in your Reddit client_id and
# client_secret for this API to work
red = praw.Reddit(client_id='my client id',
                  client_secret='my client secret',
                  user_agent='pyred')

for i in red.front.hot():
    print(i)

#6807 :: Supreme Court Strikes Down Strict Abortion Law
#5583 :: Grandpa plays a virtual reality game
#5532 :: Our trip to the petting zoo did not go as planned
#5728 :: My pepper looks like a fist
#5501 :: New Samurai Jack receives a TV-MA rating for it's dark tone and viole...
#5868 :: The sunset at Glastonbury Festival on Saturday was incredible.
#5485 :: Let me out of this kennel please!
#5427 :: Good morning, I love you!
#5389 :: TIL an airplane crashed into the Empire State Building in 1945. Among...
#5409 :: Meanwhile in France...
#5340 :: Barclays and RBS shares suspended from trading after tanking more tha...
```

```
#5228 :: The wood grain on this door looks like a damp woman ran into it
#5225 :: Seeing a ceiling fan in action for the first time
#5258 :: Half funny, half disturbing
#5067 :: Old dogs are cute too.
#5036 :: Our veterinary clinic sent us a sympathy card with our dog's paw prin...
#5082 :: Experiments confirm that the barium-144 nucleus is pear shaped
#5340 :: He doesn't like his new bow tie
#4924 :: One of my favorite jokes from Dr. Cox.
#4921 :: Pope says Church should ask forgiveness from gays for past treatment
#4912 :: Hawaii becomes first U.S. state to place gun owners on FBI database
#5043 :: I'll give a million dollars to the man who can do something about mot...
#4836 :: 100 kids have sleepover at Dallas Cowboys' AT&T Stadium as part of As...
#4719 :: TIL illegal income, such as bribes, are considered taxable income. Au...
#4681 :: War Veteran, pencil on paper, A2
```

Here we just imported the **praw** module and created a **Reddit** instance. You will note that we set the user_agent to a custom string. You can basically set the string to anything you want. Next up, we call **get_top** to grab the current top 25 articles. This returns a generator, so we loop over said generator and print out each item.

Most people like browsing Reddit's subreddits. So let's find out how we can do that next!

```python
import praw

# NOTE: Pass in your Reddit client_id and
# client_secret for this API to work
red = praw.Reddit(client_id='my client id',
                  client_secret='my client secret',
                  user_agent='pyred')

python = red.subreddit('python')
submissions = python.get_hot(limit=5)
submissions
#<generator object get_content at 0x7fab632614c0>

for submission in submissions:
    print(submission)

#298 :: Post learning questions to /r/LearnPython
#146 :: Python 3.5.2 is released
#84 :: My peer-to-peer networking module is now on pip
#36 :: WTF! Stop the next line
#0 :: [Advice] What path should I choose for further programming?
```

In this example, we just call the **get_subreddit** method and tell it we want the

python subreddit. This call returnds a **Subreddit** object, so we call its **get_hot**

method and tell it to give us the top 5 results. This too is a generator object, so we quickly write a loop to iterate over the submissions and print them out.

A lot of people enjoy the comments on a submission as much or more than the submission itself. If you happen to open a submission, you will note in the URL that it has a unique identifier such as **4q2lxb**. This is the submission id. We can use that information to get a **Submission** object!

```
id = '4q2lxb'
submission = red.get_submission(submission_id=id)
comments = submission.comments
comments
#[<praw.objects.Comment object at 0x7fab626c2668>]

comments[0].author
#Redditor(user_name='brombaer3000')

comments[0].body
#('[Actual release '
# 'notes](https://docs.python.org/3/whatsnew/changelog.html#python-3-5-2)')

comments[0].replies
#[<praw.objects.Comment object at 0x7fab626c2588>]
```

I ended up clicking on a submission about the latest release of Python for this example and its id was **4q2lxb**. So here we just call our API object's **get_submission** method and pass it the id we want to look up. Then you can grab the comments via the **comments** property of the Submission object. This returns a list of Comment objects. You can loop over the list or you can just access specific items from the list to see what they contain. We go with the latter approach here and print out the author of the comment along with its body. We also check to see if anyone replied to the comment by accessing the comment's **replies** property which also returns a list of Comment objects.

I highly recommend spending some time looking over the documentation for PRAW as it is a very interesting little package. You can use Python's introspection capabilities to learn a lot too. For example, you should try calling **dir** on a Submission or Comment object to see what all you can access.