



COMP140: Creative Computing — Hacking **Twitter bots**

Your first Twitter bot



Account set up

- ▶ Go to `https://www.twitter.com` and **either**
 - ▶ Create an account, **or**
 - ▶ Sign in to your existing account
- ▶ NB: Twitter **requires** app developers to add a **mobile phone number** to their accounts (don't ask me why...)

Application set up

- ▶ Go to `https://apps.twitter.com`
- ▶ Click on **Create New App**
- ▶ Fill in the required details and agree to the license agreement

Project set up

- ▶ Open **PyCharm** and create a **new project**
- ▶ Go to **File** → **Settings** → **Project** → **Project Interpreter**
- ▶ Click the + button next to the list of packages
- ▶ Search for and install the `tweepy` package

Your first bot

- ▶ Enter the following code, but **don't** run it yet

```
import tweepy

CONSUMER_KEY = '...'
CONSUMER_SECRET = '...'
ACCESS_KEY = '...'
ACCESS_SECRET = '...'

auth = tweepy.OAuthHandler(CONSUMER_KEY, ↵
    CONSUMER_SECRET)
auth.set_access_token(ACCESS_KEY, ACCESS_SECRET)

api = tweepy.API(auth)
api.update_status("Hello, world!")
```

Adding your API keys

- ▶ Go to `https://apps.twitter.com` and click on your app
- ▶ Click on **Keys and Access Tokens**
- ▶ Copy and paste the **Consumer Key** and **Consumer Secret** into the code, replacing the . . .
 - ▶ Do this **carefully** – ensure there are no extraneous spaces or other characters between the ' quotes
- ▶ Click on **Create my access token**
- ▶ Copy and paste the **Access Token** and **Access Token Secret** into the code, replacing the . . .

API keys: best practices

- ▶ Many web APIs require an **API key**
- ▶ This is like a **password** and should be kept **secret**
- ▶ Code in a world-readable GitHub repository is **not secret!**
- ▶ Easy solution: put your API keys in a separate source / header / configuration file, and use `.gitignore` to keep that file out of the repository
 - ▶ NB: For assignment submissions via LearningSpace, please **do** include your API keys so that we can test your code!
- ▶ Other solutions: `http://programmers.stackexchange.com/q/205606`

Fin

- ▶ Run the code
- ▶ Open the twitter app or website and admire your bot's first tweet!
- ▶ You now know how to tweet any text string — integrate this into your Python code as you see fit
- ▶ Refer to the docs on <http://www.tweepy.org> for how to do more interesting things, e.g. reading and replying to other people's tweets

Further reading

- ▶ Twitter, "Automation rules and best practices".
<https://support.twitter.com/articles/76915>
- ▶ Darius Kazemi, "Basic Twitter bot etiquette".
<http://tinysubversions.com/2013/03/basic-twitter-bot-etiquette/>