

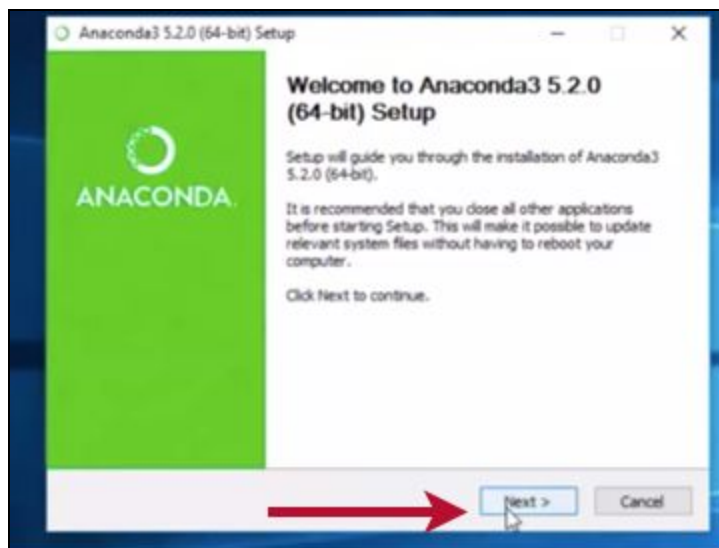
Windows Installation Guide

For Windows, it's highly recommended to Install the Anaconda package for hassle-free complete installation. This requires approx **3GB** of space. Link for Anaconda is [here](#). (Remember to download the windows version, By default the link will open MacOS version of ANACONDA)

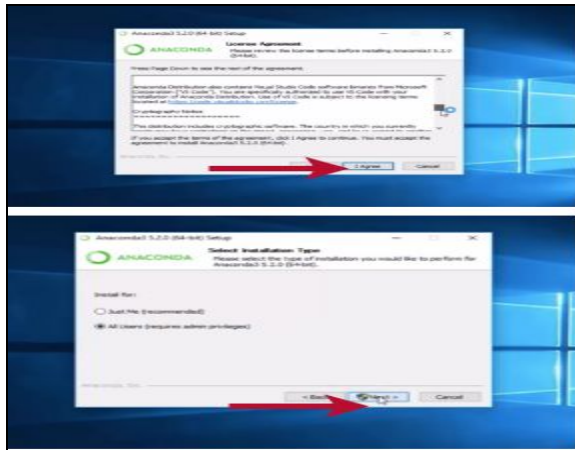
Download the 3.7 version and follow the below steps.

(The latest ANACONDA version that will appear on your screen may not be the same as the document.)

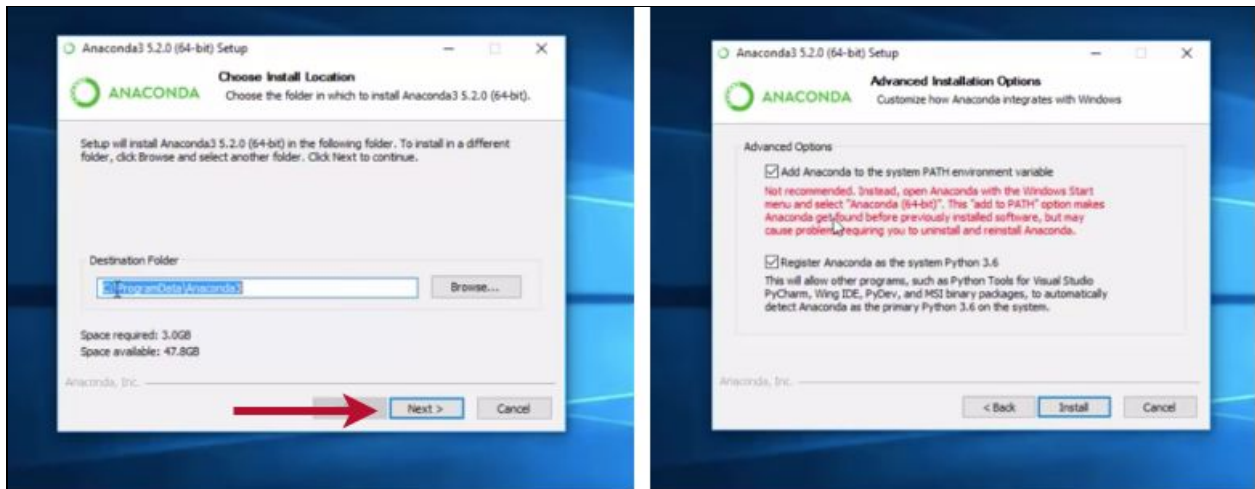
After clicking on the Downloaded Executable File, the following window will appear. Click on **Next**.



Click on **I agree** and in next window click on Radio button **All users** and then click on **Next** button on next pages that comes as shown below:

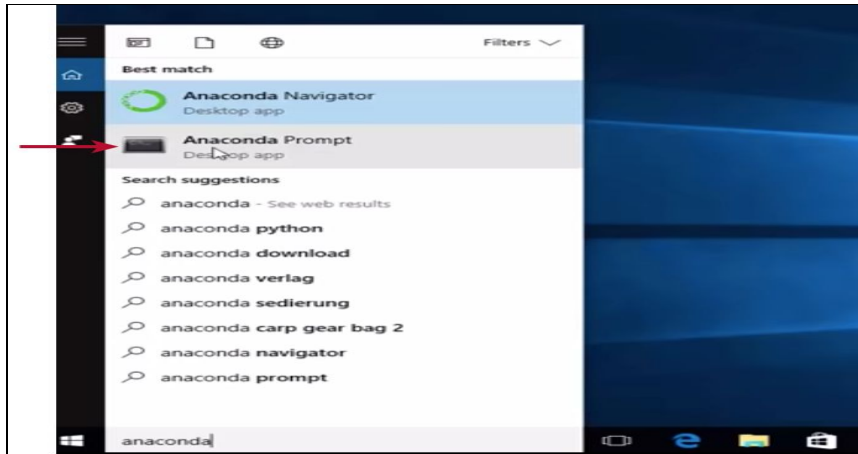


Let the default folder be as given and Click on **Next**. In the Next page, Check the first option if Python is not previously installed, otherwise choose the second option only.



Skip the Visual Studio Installation on next page and Complete the Installation.

After this go to the Navigator, type Anaconda and open the Conda Prompt.



After the Conda Prompt is open, use this guide to install the important packages on your Windows system.

Install pip in the Conda Environment

```
$ conda install git -y
```

Git is a version control system and it is used to download the jupyter notebooks.

To download the code in your current Repository use the command

```
$ git clone https://github.com/yolo2776/labfiles
```

Now change the current directory to the new one we just downloaded from github:

```
$ cd labfiles
```

Install pip in the Conda Environment

```
$ conda install pip
```

Python Packages

We will need certain Python packages throughout the lab sessions. These packages are listed below, with the commands to install them.

We recommend that you go through rest of this section to install the packages, however, if you don't want to install them individually, we provide a *requirements.txt* file, that can be used to download all the dependencies. Once you download the *requirements.txt* file, run the following command, after activating the virtual environment to install the dependencies:

```
$ pip install -r requirements.txt
```

Word Cloud

We use word cloud library to help us generate wordclouds. As the traditional way of installing python dependencies produced error, we provide an alternative command which is as follows:

```
$ python -m pip install wordcloud-1.5.0-cp37-cp37m-win32.whl
```

Spacy

We use Spacy for english NER. Given below are the commands to install Spacy:

```
$ conda install -c conda-forge spacy -y && python -m spacy download en
```

Jupyter Notebook

Jupyter Notebook is widely used in academia and industry for interactable Python development environment. Although you can work with plain Python scripts as well, we highly recommend that you install it^[3].

```
$ pip install jupyter
```

Once installed, you can run the notebook by:

```
$ jupyter notebook
```

Tweepy

We need a Python wrapper for [Twitter API](#) in order to write code in Python. There are number of Python wrappers available, but we recommend using *tweepy*^[4].

```
$ pip install tweepy
```

Matplotlib

Matplotlib is a popular library used to create visualizations and plots^[5].

```
$ pip install matplotlib
```

NetworkX

NetworkX is used to create, manipulate, and study of the structure and functions of complex networks^[6].

```
$ pip install networkx
```

NLTK

Natural Language Toolkit is used for basic NLP tasks^[7]:

```
$ pip install nltk
```

NumPy

NumPy is majorly used to run computation on high-dimensional arrays and has defined methods for high-level mathematical functions^[8].

```
$ pip install numpy
```

Pandas

Python Data Analysis Library is a common data analysis library^[9].

```
$ pip install pandas
```

SpaCy

SpaCy is another NLP library^[10].

```
$ pip install spacy
```

If there is a problem with spacy installation, do the below troubleshooting.

Troubleshooting: Install spacy by using the binaries by searching for the .whl file on google.

To install a binary via .whl file, run:

```
$ python -m pip install <binary.whl>
```

Gensim

Gensim is used for topic modeling on text^[11].

```
$ pip install gensim
```

Scikit-learn

It is a machine learning library for Python^[12].

```
$ pip install scikit-learn
```

jsonpickle

jsonpickle is a library used for serialization and deserialization of complex Python objects to and from JSON^[15].

```
$ pip install jsonpickle
```

word_cloud

A little word cloud generator in Python^[16].

```
$ pip install wordcloud
```

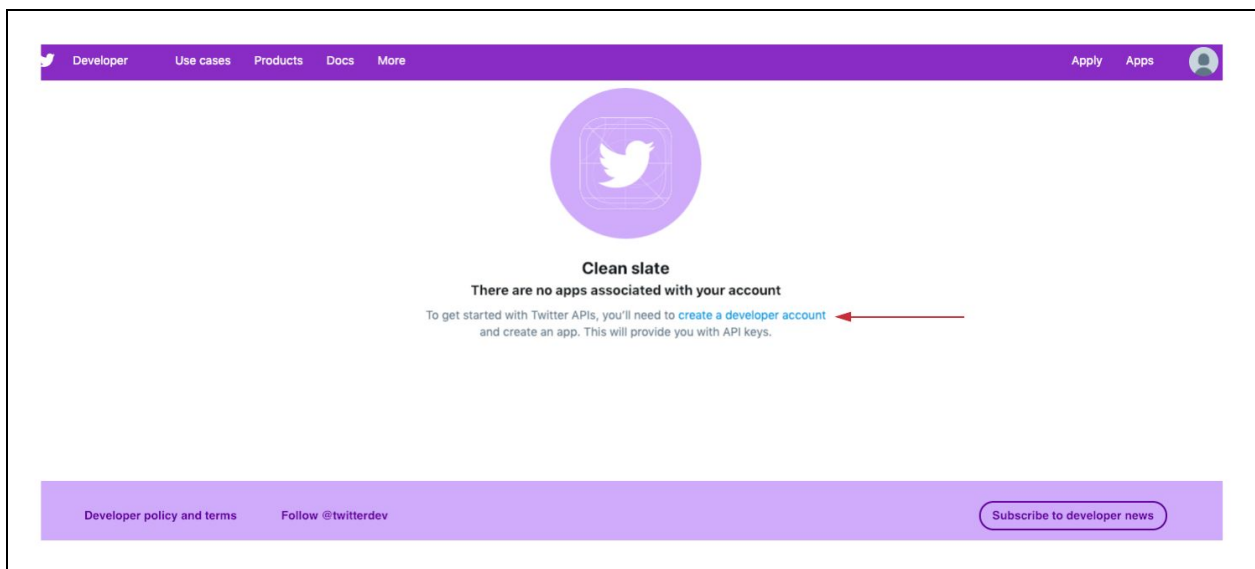
Troubleshooting: https://github.com/amueller/word_cloud/issues/134#issuecomment-228208102

Twitter Developer App

In order to collect data from Twitter, we would need to create a Twitter Developer App. To do so, create an account on Twitter (if you don't already have one), and visit the following URL:

<https://apps.twitter.com/>

Click on the **create a developer account**.



If your phone number is not verified, get it verified and click on **Continue** button

STATUS: IN PROGRESS

- ✔ User profile
- Account details
- Use case details
- Terms of service
- Email verification


Interested in a developer account?

Some of our premium APIs are currently in Beta. By applying, you agree to receive emails from our team requesting feedback on your experience.

Select a user profile to associate

By default, this @username will be the admin of this developer account. If you are creating a developer account on behalf of your organization, you may wish to use your organization's @username as it is most likely to own the Apps you will use to access the API endpoints or warrant special permissions. You'll be able to invite teammates and re-assign roles later within your developer account settings.

Associate your current Twitter @username



Continue

[Sign in as a different Twitter @username](#)
[Create new Twitter @username](#)

Select the radio button for **I am requesting access for my own personal use.**

Developer Use cases Products Docs More Apply Apps

STATUS: IN PROGRESS

- User profile
- ✔ Account details
- Use case details
- Terms of service
- Email verification

Add your account details

Who are you requesting access for?

☐ I am requesting access for my organization

I plan to use Twitter's developer platform for projects owned by / in affiliation with a business, organization or institution. Ex: SaaS product, proof of concept, academic research, etc. To enable collaboration, this selection includes additional tools to support team development.

☒ I am requesting access for my own personal use

I plan to use Twitter's developer platform for projects unaffiliated with an existing business, organization or institution. Ex: Side project, hobby, etc. Personal use accounts do not include team development tools.

Tell us about yourself

Account name

e.g., username, project name, etc.

Why the questions?

We empower freedom of expression by providing a platform that protects the voices of our users — both on Twitter, and via our developer products. To help

Fill an account name and click on **Continue**

Email verification

Why the questions?

We empower freedom of expression by providing a platform that protects the voices of our users — both on Twitter, and via our developer products. To help verify that all uses of Twitter data comply with our policies, we require additional information from developers signing up to use this service. Providing thorough answers will help us understand your use cases and will help expedite the evaluation of your application. Learn more about our [restricted use cases](#).

I plan to use Twitter's developer platform for projects unaffiliated with an existing business, organization or institution. Ex: Side project, hobby, etc. *Personal use accounts do not include team development tools.*

Tell us about yourself

Account name
e.g., username, project name, etc.

Primary country of operation
India

[Continue](#)

In use case details, check the text for **Academic Research**.

STATUS: IN PROGRESS

[User profile](#)

[Account details](#)

Use case details

[Terms of service](#)

[Email verification](#)

Why the questions?
We empower freedom of expression by

Tell us about your project

What use case(s) are you interested in?
Select all that apply

☒ Academic research

☐ Advertising

☐ Audience analysis

☐ Chatbots and automation

☐ Consumer / end-user experience

☐ Engagement and customer service

☐ Publish and curate Tweets

☐ Student project / Learning to code

☐ Topic analysis

☐ Trend and event detection

☐ Other

Click on **Resend it now**, if the verification is pending.

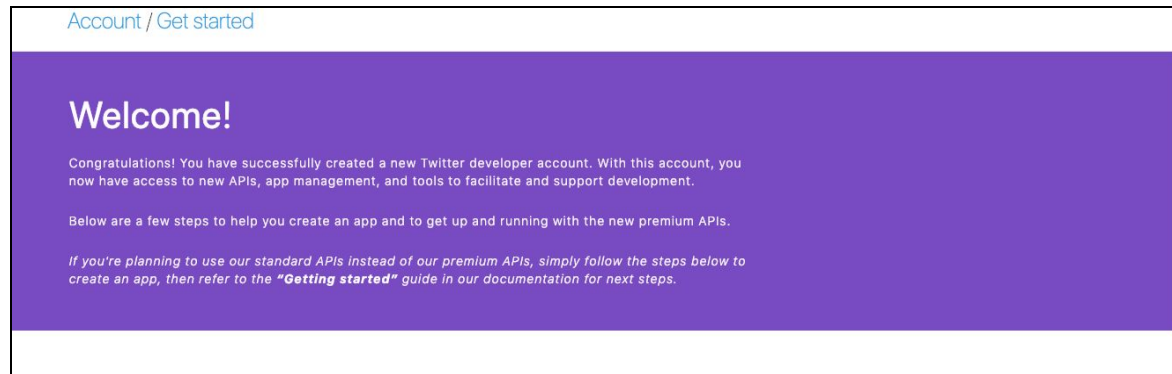
Developer Use cases Products Docs More Apps psosm_19

One more step...

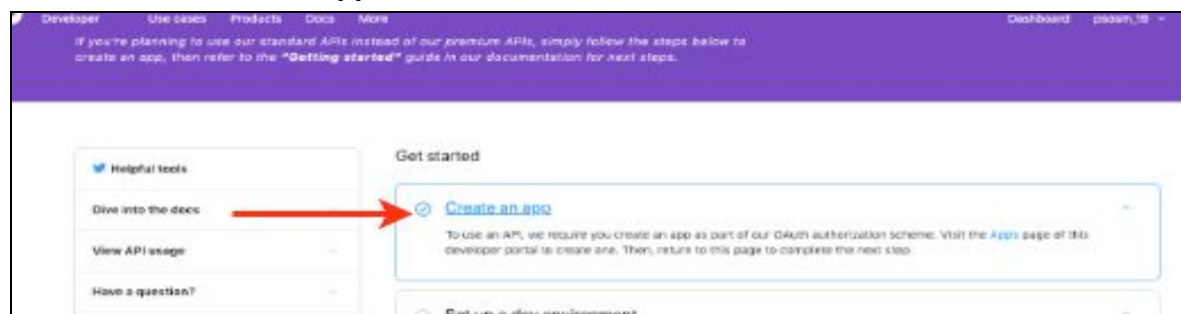
To complete your application, please check your inbox to confirm your email address.

Didn't receive your verification email? [Resend it now](#)

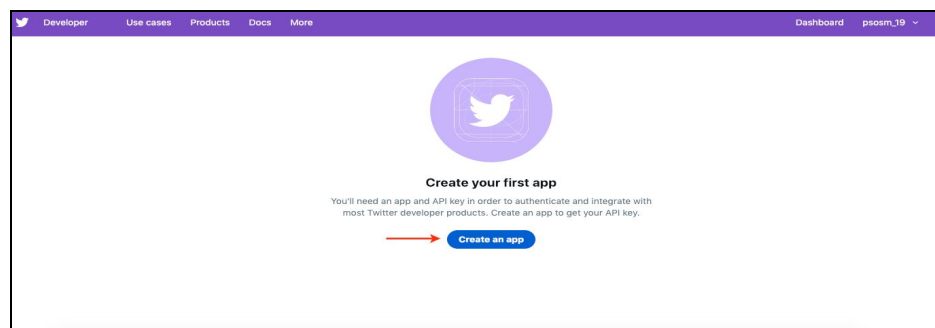
Once this is complete, you will get this Welcome message.



Now click on **Create an app**



Now click on **Create an app** button.



The next page would show up a form. Fill in the required values.

You can fill any name of your choice. For example:

App name: psosm_19_app

Application Description: This is a demo app made for the social media session.
This can be used to collect the data from the Twitter app.

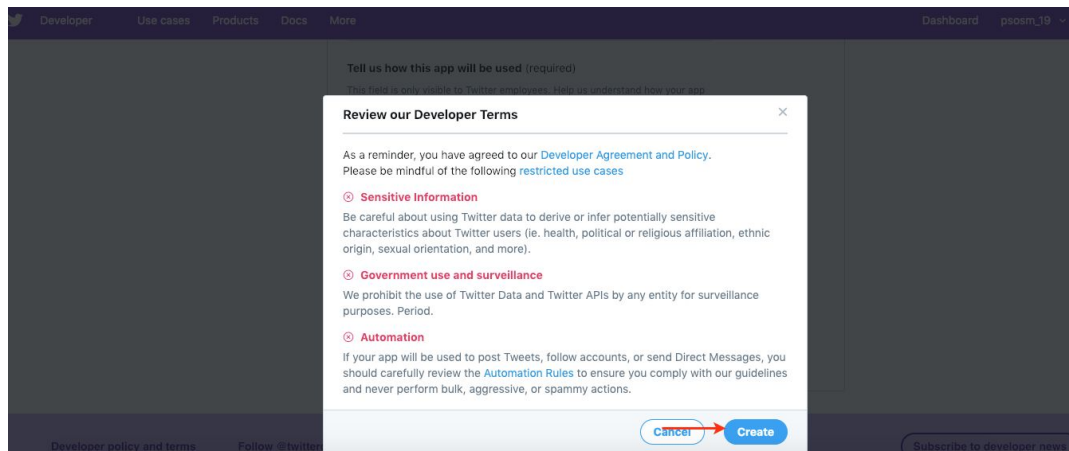
Website URL: <https://twitter.com>

Callback URLs: <https://twitter.com>

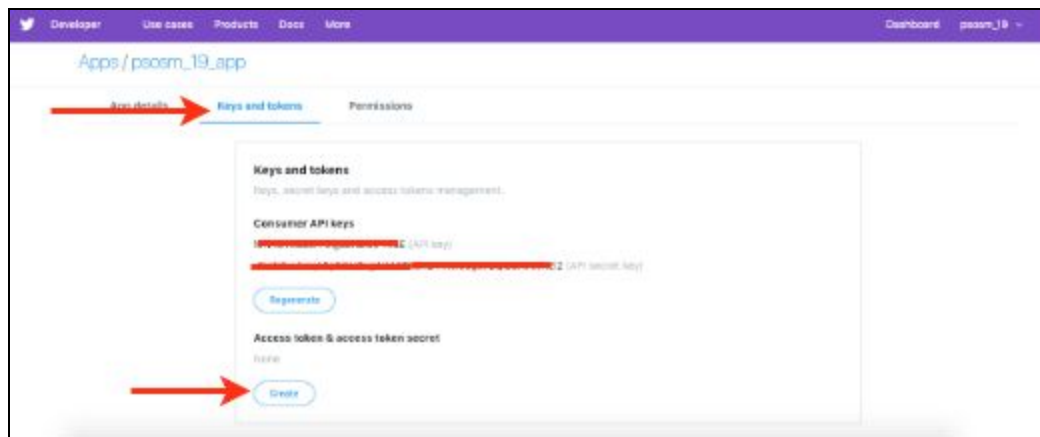
Tell us how this app will be used (required): This app will be used to do some academic level research work. This is not for any industrial purpose. The content that is taken from Twitter will be for study purpose only.

And click on **Create** button.

On the Review our Developer Terms click on **Create**:



Now go to keys and tokens Tab and note your Consumer API keys and click on **create** below Access token & access token secret.



Note the following and keep it with you for the session. Please keep your Keys just generated as a secret and don't share them with anyone.

- API key
 - API secret key
 - Access token
 - Access token secret
-