# **Installing Python**

Go to this website, <a href="https://www.python.org/downloads/release/python-2715/">https://www.python.org/downloads/release/python-2715/</a>, and choose the appropriate installer for your laptop.

If you are using a Mac click on the highlighted area:

Files									
Version	Operating System	Description	MD5 Sum	File Size	GPG				
Gzipped source tarball	Source release		045fb3440219a1f6923fefdabde63342	17496336	SIG				
XZ compressed source tarball	Source release		a80ae3cc478460b922242f43a1b4094d	12642436	SIG				
macOS 64-bit/32-bit installer	Mac OS X	for Mac OS X 10.6 and later	9ac8c85150147f679f213addd1e7d96e	25193631	SIG				
macOS 64-bit installer	Mac OS X	for OS X 10.9 and later	223b71346316c3ec7a8dc8bff5476d84	23768240	SIG				
Windows debug information files	Windows		4c61ef61d4c51d615cbe751480be01f8	25079974	SIG				
Windows debug information files for 64-bit binaries	Windows		680bf74bad3700e6b756a84a56720949	25858214	SIG				
Windows help file	Windows		297315472777f28368b052be734ba2ee	6252777	SIG				
Windows x86-64 MSI installer	Windows	for AMD64/EM64T/x64	0ffa44a86522f9a37b916b361eebc552	20246528	SIG				
Windows x86 MSI installer	Windows		023e49c9fba54914ebc05c4662a93ffe	19304448	SIG				

If you are using Windows click on the highlighted area:

Version	Operating System	Description	MD5 Sum	File Size	GPG
Gzipped source tarball	Source release		045fb3440219a1f6923fefdabde63342	17496336	SIG
(Z compressed source tarball	Source release		a80ae3cc478460b922242f43a1b4094d	12642436	SIG
nacOS 64-bit/32-bit installer	Mac OS X	for Mac OS X 10.6 and later	9ac8c85150147f679f213addd1e7d96e	25193631	SIG
macOS 64-bit installer	Mac OS X	for OS X 10.9 and later	223b71346316c3ec7a8dc8bff5476d84	23768240	SIG
Nindows debug information files	Windows		4c61ef61d4c51d615cbe751480be01f8	25079974	SIG
Nindows debug information files for 64-bit binaries	Windows		680bf74bad3700e6b756a84a56720949	25858214	SIG
Nindows help file	Windows		297315472777f28368b052be734ba2ee	6252777	SIG
Windows x86-64 MSI installer	Windows	for AMD64/EM64T/x64	0ffa44a86522f9a37b916b361eebc552	20246528	SIG
Windows x86 MSI installer	Windows		023e49c9fba54914ebc05c4662a93ffe	19304448	SIG

In both cases follow the installer instructions and stick with the default options.

To check if you properly installed python go to your command prompt (for Windows) or terminal (for Mac) and type: python Then hit Enter You should see the following:

```
C:\Spython
Python 2.7.14 (v2.7.14:84471935ed, Sep 16 2017, 20:25:58) [MSC v.1500 64 bit (AM D64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
```

Congrats you've installed python 2.7!

# PIP

PIP is a package management system for python. This will allow you to install and update packages that aren't included in the default python download.

#### Checking PIP Version

If you installed python following the above instruction you should already have PIP. To check if you have python installed go to your command prompt (for Windows) or terminal (for Macs) and type: pip show Jinja2 then hit enter. You should see the something like the following if you have pip installed.

```
888
                                   Command Prompt
Già.
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.
C:\Users\Matthew Osborne>cd\
C:\>pip show Jinja2
Name: Jinja2
Version: 2.10
Summary: A small but fast and easy to use stand-alone template engine written in
pure python.
Home-page: http://jinja.pocoo.org/
Author: Armin Ronacher
Author-email: armin.ronacher@active-4.com
License: BSD
Location: c:\python27\lib\site-packages
Requires: MarkupSafe
Required-by: bokeh
C:\>
```

#### **Installing PIP**

Open your command prompt (or terminal for Macs), and go to the directory that holds python, it should be Python27. Type the following:

```
curl https://bootstrap.pypa.io/get-pip.py -o get-pip.py
```

And hit enter. (Note this will only work if you are connected to the internet) When that is done running type:

```
python get-pip.py
```

#### And hit enter.

Once it is done running you can check to make sure it is installed by following the instructions under <u>Checking PIP Version</u>.

# **Installing a Package With PIP**

PIP is used to install packages for python.

Anytime you want to install a package make sure you are connected to the internet. Then type: pip install (name of the package).

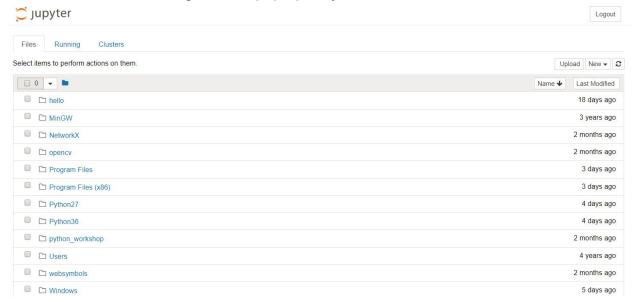
### **Example**

Install jupyter notebooks, a package that allows you to create an easy to read notebook that incorporates regular text and code.

Type: pip install jupyter Then hit Enter

To check if it is properly installed type: jupyter notebook Then hit Enter.

You should see something like this pop up on your internet browser:



# **Install Atom**

Atom is a program that helps you code. It has a number of nice features that make writing python code easier. Go here: <a href="https://atom.io/">https://atom.io/</a> and click on the circled button:



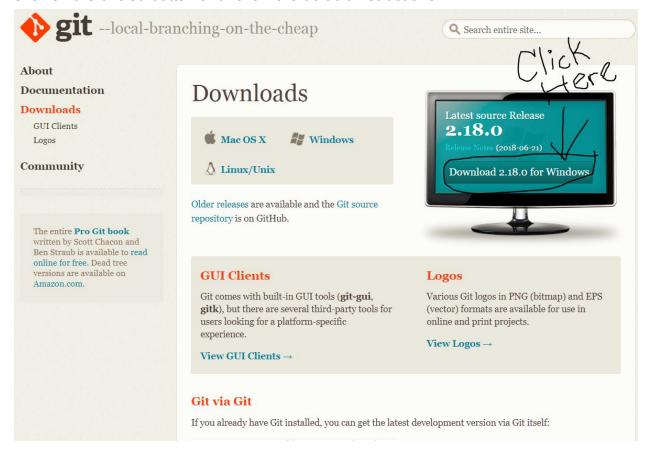
# Git and Github

Git and Github allow for easy version control and code sharing.

#### **Download Git**

Go here: <a href="https://git-scm.com/downloads">https://git-scm.com/downloads</a>

Click on the circled button and follow the default instructions.



To check it is installed properly in the command prompt (or terminal for Mac) type: git --version Then hit Enter.

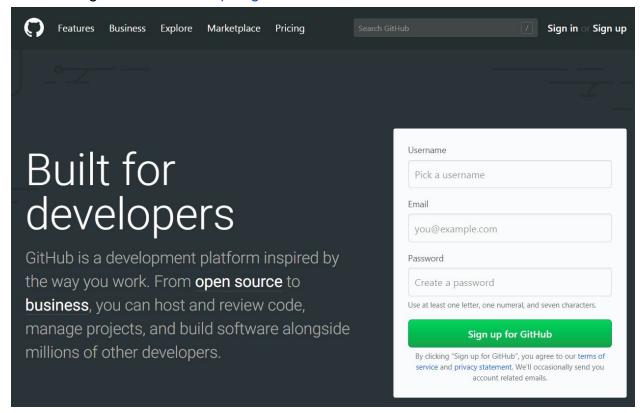
You should see something like the following:

```
C:\>git --version
git version 2.17.0.windows.1
C:\>
```

#### Github Account

You'll need a github account to use git to its fullest potential.

Go here to get an account: https://github.com/



### Clone a repository

A repository is what stores all of your code and files on github. If you want a copy of a repository on your computer you will need to *clone* it onto your computer.

Practice this by cloning the course repository.

Open your command prompt (or terminal). Now go to a folder where you'd like to store the repository for the class. Type in the following:

git clone <a href="https://github.com/matthewosborne71/MastersHeadstartPython">https://github.com/matthewosborne71/MastersHeadstartPython</a> Now you have a copy of the repository!

Now you're ready for class!