

Pre-class Installation Requirements for Intro to Python and Webscraping

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1 Introduction

2 How to Share Ipython Notebooks

3 How to share your vagrant box

4 How to use virtualenv & pip

Virtualenv allow you to create environments.

```
1 ## run this on the command line
3 ## assuming you are in your projects folder, create a new folder
5 mkdir projects1
7 cd projects1
9 ## now create your virtualenv environment
  ## this will create a folder called "env".
11 ## this will house a local version of python.
13 virtualenv env
15 ## IMPORTANT.
  ## Now you need to activate your environment.
17 source env/bin/activate
19 ## now you will be using a local version of python instead of your
21 ## system's python
```

```
23 ## to deactivate , simply type
25 deactivate
```

Now once virtualenv is installed, you can start installing modules locally.
The program to do this is called pip. New versions of python may come with it already installed, but older version may require manual installation.

```
1 ## again, these should be run on the command line.
3 ## first, let's activate your virtual environment, if you haven't
  ## already
5 source env/bin/activate
7
9 ## first, let's inspect what command are available in pip
11 pip help
13 ## from this, we see that there are a number of commands we will
  ## find useful
15 pip list # this shows what programs are already installed
17 pip search numpy # this searches for packages named "numpy"
19 pip install numpy # this installs the numpy package.
21 ## if you have many packages you want to install, you can
  ## create a requirements list
23 ## this will create a file with a list of modules to install
25 ## you can use your editor of choice to install this.
27 echo "numpy\nbeautifulsoup" > requirements.txt
29 ## this will install all the packages in the text file.
  ## NOTE: you can specify the versions of module too. Sometimes
31 ## this is important.
33 pip install -r requirements.txt
35 ## now let's confirm that they installed correctly
37 pip list
39 ## now if you are done with virtualenv remember to deactivate it
41 deactivate
```

5 Testing Diagrams