

**TECH
TALENT**
SOUTH

Jupyter Notebook

What is Jupyter Notebook?

The Jupyter Notebook interface is a Web-based application for authoring documents that combine live code with narrative text, equations and visualizations.

Jupyter Notebooks can support a few popular coding languages for data science. In this class, we'll be using them for Python. Later on, we'll use them for R.

What is Jupyter Notebook?

Code in Jupyter Notebook is run in individual cells. These cells contain a block of code that is run individually, unlike a normal Python program that runs the entire application all at once.

Data created/modified in one cell can be accessed in subsequent cells.

This allows to create and debug portions of your code in a more modular manner. You will not need to run the entire application to fix one individual function.

Jupyter Notebooks also have a user-friendly view, making them useful to display data and processes.

Installing Jupyter Notebook

To install Jupyter Notebook, you will need Python installed onto your machine. Python can be downloaded here:

<https://www.python.org/downloads/>

Alternatively, you can install Anaconda, which comes preloaded with many data science packages (and tools to install more as needed). It can be downloaded here at the bottom of the page:

<https://www.anaconda.com/products/individual>

Installing Jupyter Notebook

Anaconda comes with Jupyter Notebook. Awesome!

If you chose not to use Anaconda, you can install it using pip, the package installer for Python. For this course, you should use Python 3, the latest version.

You can install Jupyter Notebook using the following pip3 commands:

First, make sure you have the most recent version of pip3.

```
1 pip3 install --upgrade pip
```

Then, install Jupyter Notebook.

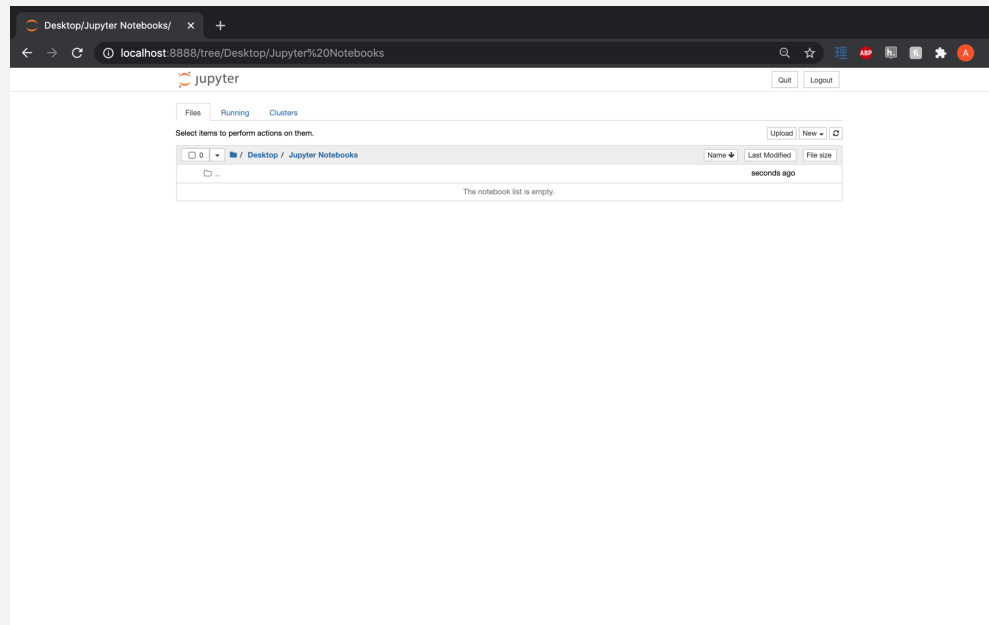
```
1 pip3 install jupyter
```

Using Jupyter Notebook

You can now start Jupyter Notebook with this command:

```
1 jupyter notebook
```

Your internet browser should then open the Notebook Dashboard hosted locally on your computer.



Using Jupyter Notebook

If you already have a notebook you want to open and don't want to find it in the dashboard, you can open it up directly using this command.

```
1 jupyter notebook YOUR_FILE_NAME.ipynb
```

You may have never seen a .ipynb file. This is an IPython file, and they're used by Jupyter Notebooks.

You can create new notebooks from the Notebook Dashboard.

For today's class though, we'll be using some notebooks that have already been prepared.

Let's step away from the slides and open up the first one to get started!