Getting Started with Python

In the programming assignments you will be working with Python and Jupyter Notebooks. This document will guide you through the setup process.

Setup

Jupyter Notebooks allow you to run and modify Python code in your browser. Make sure you have a modern browser to run it. Mozilla Firefox, Safari or Google Chrome should work fine. Try to avoid MS Explorer.

Install Python with Jupyter Notebooks

Anaconda

The easiest way to install Python with all the required libraries (including the Jupyter Notebook App) consists in installing a scientific python distribution which includes them. We recommend you install Anaconda. Make sure to select the Python 3.8 version, since the assignments will use this version of Python. Check your installation as follows from the command-line:

```
$ which python
/Users/YOUR_USERNAME/anaconda3/bin/python
```

The default python should now point to the version installed by Anaconda.

See here if you need help with the installation.

PIP

If you are familiar with Python, feel free to use `pip` instead to install the required packages. We advise you to make use of virtualenv in this case.

A possibly incomplete list of required packages:

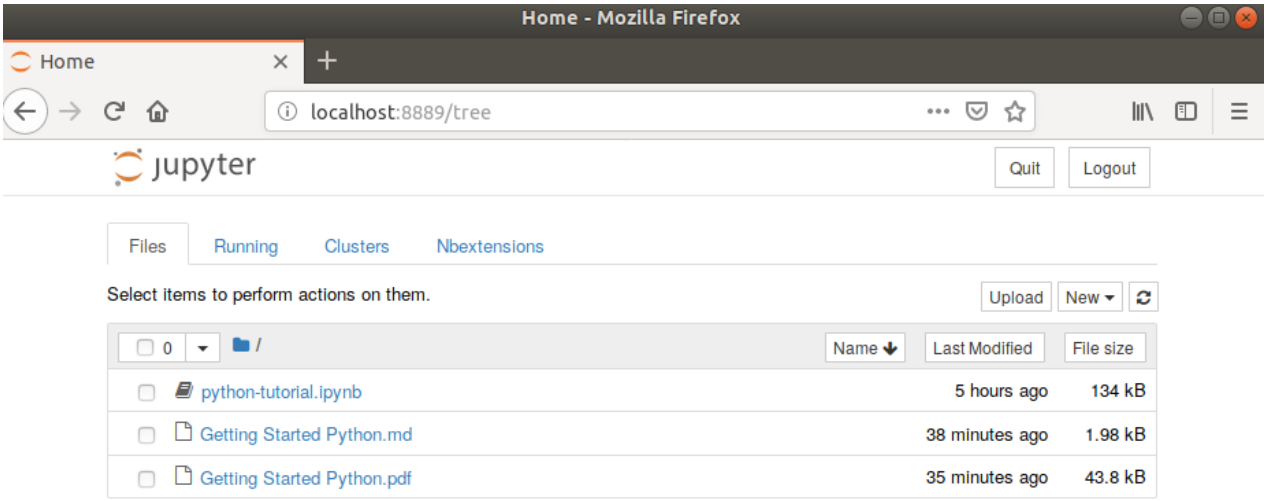
- numpy
- jupyter
- matplotlib
- scipy
- scikit-learn

Start the Jupyter Notebook

After you succesfully installed Anaconda, download the Python tutorial from ILIAS and start it from the command-line like so:

```
cd <folder with python-tutorial.ipynb>
jupyter notebook
```

Open http://localhost:8888 in your browser and you should see something like the following:



Open **python-tutorial.ipynb** and work through the tutorial.

For more info on Jupyter Notebooks visit here.