Jupyter

Project Jupyter exists to develop open-source software, open-standards, and services for interactive computing across dozens of programming languages.

The Jupyter Notebook
The Jupyter Notebook is an open-source web application that allows you to create and share documents that contain live code, equations, visualizations and narrative text. Uses include: data cleaning and transformation, numerical simulation, statistical modeling, data visualization, machine learning, and much more.

Language of choice
The Notebook has support for over 40 programming languages, including Python, R, Julia, and Scala.

Share notebooks
Notebooks can be shared with others using email, Dropbox, GitHub and the Jupyter Notebook Viewer.

Interactive output
Your code can produce rich, interactive output: HTML, images, videos, LaTeX, and custom MIME types.

Big data integration
Leverage big data tools, such as Apache Spark, from Python, R and Scala. Explore that same data with pandas, scikit-learn, ggplot2, TensorFlow.

Install The Jupter

For a local installation, make sure you have pip installed and run:

$ pip install notebook

Running in a local installation

Launch with:

$ jupyter notebook

Running Code

First and foremost, the Jupyter Notebook is an interactive environment for writing and running code. The notebook is capable of running code in a wide range of languages. However, each notebook is associated with a single kernel. This notebook is associated with the IPython kernel, therefor runs Python code.

Code cells allow you to enter and run code

Run a code cell using `Shift-Enter` or pressing the


button in the toolbar above:

```
In [2]: a = 10

In [3]: print(a)
        10
```

There are two other keyboard shortcuts for running code:

- `Alt-Enter` runs the current cell and inserts a new one below.
- `Ctrl-Enter` run the current cell and enters command mode.

Cell menu

The "Cell" menu has a number of menu items for running code in different ways. These includes:

- Run and Select Below
- Run and Insert Below
- Run All
- Run All Above
- Run All Below

Restarting the kernels

The kernel maintains the state of a notebook's computations. You can reset this state by restarting the kernel. This is done by clicking on the


in the toolbar above.