

Jupyter Notebook

Launch it.

- Start a command window
- Go to the root directory where the notebook needs to be opened.
For test and in order to be able to follow all that's going on, use a completely empty directory
- Type: `jupyter notebook` and hit [Enter]
- While the notebook opens in the web browser of your computer, it might be that the output in the command windows is:

- ```
[w 10:08:38.454 NotebookApp] Error loading server extension
jupyter_nbextensions_configurator
Traceback (most recent call last):
 File "C:\caetools\python\lib\site-packages\notebook\notebookapp.py",
line 1572, in init_server_extensions
 mod = importlib.import_module(modulename)
 File "C:\caetools\python\lib\importlib__init__.py", line 127, in
import_module
 return _bootstrap.gcd_import(name[level:], package, level)
 File "<frozen importlib._bootstrap>", line 1006, in _gcd_import
 File "<frozen importlib._bootstrap>", line 983, in _find_and_load
 File "<frozen importlib._bootstrap>", line 965, in
_find_and_load_unlocked
ModuleNotFoundError: No module named 'jupyter_nbextensions_configurator'
[I 10:08:38.460 NotebookApp] Serving notebooks from local directory:
C:\Projects\Python\MyHd1\Notebooks
[I 10:08:38.461 NotebookApp] The Jupyter Notebook is running at:
[I 10:08:38.461 NotebookApp] http://localhost:8888/?
token=2bb13de400af2f125680f03dcc026430a2a1155fc6997dde
[I 10:08:38.461 NotebookApp] Use Control-c to Stop this server and shut
down
all kernels (twice to skip confirmation).
[C 10:08:38.572 NotebookApp]
```

- When the above is the case and ... to stop the complaint use pip to install following:

```
pip install jupyter_nbextensions_configurator
```

- To be sure, quit the notebook in the web browser, close the command window and launch it again.
- Type as above `jupyter notebook` and hit [Enter]
- As before the notebook should open in the web browser but now the status messages in the command window should look as:

```

[I 10:38:23.165 NotebookApp] [jupyter_nbextensions_configurator] enabled
0.4.1
[I 10:38:23.165 NotebookApp] Serving notebooks from local directory:
c:\Projects\Python\MyHd!\Notebooks
[I 10:38:23.165 NotebookApp] The Jupyter Notebook is running at:
[I 10:38:23.165 NotebookApp] http://localhost: 8888/?
token=b6c3f4466c09e303eeba87bc2d27189b0F7e6d85ccb684bc
[I 10:38:23.165 NotebookApp] Use Control-C to stop this server and shut
down
all kernels (twice to skip confirmation).
[c 10:38:23.274 NotebookApp]
 To access the notebook, open this file in a browser:

file:///cC:/Users/defossez/AppData/Roaming/jupyter/runtime/nbserver- 9688-
open. htm!

 Or copy and paste one of these URLs:
 http://localhost: 8888/?
token=b6c3f4466c09e303eeba87bc2d27189b0F7e6d85ccb684bc

```

## Using it

- Hit [New] and add a kernel, select Python 3 from the fall down menu.
- To find your way around, click [Help] and hover buttons to discover their function.
- For a non-mac machine, click [ctr1][Shift][P] for a list of all possible commands.
- The notebook has no title, so better give it one. Click right of **Jupyter** the title **Untitled1**. In the popup give the notebook a meaning full name and click then the [Rename] button.
- Start adding stuff to the notebook.  
A notebook has two modes: command mode [hit esc key] and Edit mode [hit Enter key].  
Edit mode is also invoked when clicking in a cell, then the cell turns green.  
Edit mode is also indicated by a pencil icon in the right-top of the window.  
Command mode, by hitting esc turns a cell blue and removes the pencil icon from the window.
- Test coding python:  
Click the available cell and type: print ('Hello world')  
To execute the code in the cell, click the [Cell] tab in the upper menu. Options to run the cell are presented:
- [Run Cells]: just execute the code and presents the output below the cell.
  - [Run Cells and Select Below]: Runs the code in the cell and select the cell below after execution.
  - [Run Cells and Insert below]: Runs the code in the selected cell and inserts a new cell below.
  - [Run All]: run all available cells.
- Add some text in the notebook:
  - Text is written in markdown and later on translated to HTML.
  - To add text, add a new cell by clicking the [Insert] tab button and select one of the two options, insert a cell above or below the selected cell.
  - Select the new cell and click the [Cell] tab button and select [Cell Type] as [Markdown].
  - Enter some markdown text and then run or translate the markdown to HTML by hitting [Ctrl Enter]

- This is the short introduction to notebooks.  
Find listed below some useful things:
  - Enter ! in a cell to execute bash commands.
  - % and %% lines for bash commands and magic command.  
To list all possible commands enter in a cell %1smagic
- For a lot more and a very good tutorial or introduction go here.  
<https://www.youtube.com/watch?v=HW29067qVWk>  
Type in a web browser: Notebook galleries.

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