Project: Learn and Install Jupyter Notebook: Takeaways

Syntax

MARKDOWN SYNTAX

- Adding italics and bold:

```
*Italics*

**Bold**
```

- Adding headers (titles) of various sizes:

```
# header one

## header two
```

- Adding hyperlinks and images:

```
[Link](http://a.com)
```

- Adding block quotes:

```
> Blockquote
```

- Adding lists:

```
*

*

*
```

- Adding horizontal lines:

```
---
```

- Adding inline code:

```
`Inline code with backticks`
```

- Adding code blocks

```
```

code

```
```

JUPYTER NOTEBOOK SPECIAL COMMAND

- Displaying the code execution history:

```
%history -p
```

Concepts

- Jupyter Notebook, often referred to as Jupyter, is much more complex than a code editor. Jupyter Notebook allows us to:
    - Type and execute code
    - Add accompanying text to our code (including math equations)
    - Add visualizations
- Jupyter can run in a browser and is often used to create compelling data science projects that can be easily shared with other people.
- A notebook is a file created using Jupyter notebooks. Notebooks can easily be shared and distributed so people can view your work.
- Types of modes in Jupyter:
    - Jupyter is in edit mode whenever we type in a cell — a small pencil icon appears to the right of the menu bar.
    - Jupyter is in command mode whenever we press `Esc` or whenever we click outside of the cell — the pencil to the right of the menu bar disappears.
- State refers to what a computer remembers about a program.
- We can convert a code cell to a Markdown cell to add text to explain our code. Markdown syntax allows us to use keyboard symbols to format our text.
- Installing the Anaconda distribution will install both Python and Jupyter on your computer.

Keyboard Shortcuts

- Some of the most useful keyboard shortcuts we can use in command mode are:
    - `Ctrl` + `Enter`: run selected cell
    - `Shift` + `Enter`: run cell, select below
    - `Alt` + `Enter`: run cell, insert below
    - `Up`: select cell above
    - `Down`: select cell below
    - `Enter`: enter edit mode
    - `A`: insert cell above
    - `B`: insert cell below
    - `D`, `D` (press D twice): delete selected cell
    - `Z`: undo cell deletion
    - `S`: save and checkpoint

    - `Y`: convert to code cell
- Some of the most useful keyboard shortcuts we can use in edit mode are:
    - `M`: convert to Markdown cell
    - `Ctrl` + `Enter`: run selected cell
    - `Shift` + `Enter`: run cell, select below
    - `Alt` + `Enter`: run cell, insert below
    - `Up`: move cursor up
    - `Down`: move cursor down
    - `Esc`: enter command mode
    - `Ctrl` + `A`: select all
    - `Ctrl` + `Z`: undo
    - `Ctrl` + `Y`: redo
    - `Ctrl` + `S`: save and checkpoint
    - `Tab` : indent or code completion
    - `Shift` + `Tab`: tooltip

Resources

- Jupyter Notebook tutorial
- Jupyter Notebook tips and tricks
- Markdown syntax
- Installing Anaconda