Introduction to Jupyter Notebook

Welcome to the Jupyter Notebook introductory session. You'll see the Jupyter IPython Notebook as the main environment for writing Python code throughout this program. The main advantage of using Jupyter Notebook is that you can write both code and normal text (using the Markdown format in Jupyter) in the notebooks. These notebooks are easy to read and share, and can even be used to present your work to others.

You can find the Jupyter IPython Notebook used in this session below:

| 📄 IPYNB **Using the Jupyter IPython Notebook** | ⬇ Download |

Go through the following video to get a quick starter guide on using the Jupyter Notebook and to learn how to use 'Markdown cells' in the notebook.

Here's a brief of what you have learned in the video above.

Headings

- `#` for the tiles
- `##` for the main headings
- `###` for the subheadings
- `####` for the smaller subheadings
- `#####` for the italic subheadings

Emphasis

- `__string__` or `**string**` for bold text
- `_string_` or `*string*` for italic text

Monospace fonts

- A back single quotation mark `` ` `` on both sides to get monospace fonts

Line breaks

- `<br>` wherever you want a line break, as the notebook sometimes doesn't give you the required line break where you want it

Indenting

- `>` to indent the text
- `>>` for further indenting it, and so on

Bullets and numbering

- A single dash, i.e. `-` followed by two spaces to make bullet points
- A number and a dot followed by a space, i.e. `1.` to make numbered lists

Colouring

- `<font color = blue, yellow, red, pink, green, etc.> String </font>` to give your font any colour that you want

LaTeX Equations

- `$` on both the sides of the text to write LaTeX equations

It is also crucial that you know about the various shortcuts while using the Jupyter Notebook. Go through the following video to learn about all these shortcuts that you can use.

Here's a brief of what you learned in the video above.

Command mode shortcuts

- `Esc:` To go into command mode

- `Enter:` To go back to edit mode

- `M:` To convert a cell to a markdown cell

- `Y:` To convert a cell back to a code cell

- `A:` To insert a new cell above

- `B:` To insert a new cell below

- `D + D:` To delete cell

- `Z:` Undo the last operation

- `F:` To find and replace on your code

- `Shift + Up/Down:` To select multiple cells

- `Space:` Scroll notebook downwards

- `Shift + Space:` Scroll notebook upwards

Edit mode shortcuts

- `Shift + Enter:` To execute the code in the current cell and go to the next cell

- `Alt + Enter:` To execute the code in the current cell and insert new cell below

- `Shift + Tab:` To get a brief documentation of the object that you have just typed in the coding cell

- `Ctrl + Shift + -:` To split the cell at the cursor

- `Shift + M:` To merge selected cells

We have also provided a link to all the shortcuts for Mac users below.

- Jupyter Notebook Mac shortcuts

Additional Reading: Jupyter Notebook Magic Commands