

Machine Learning In Practice

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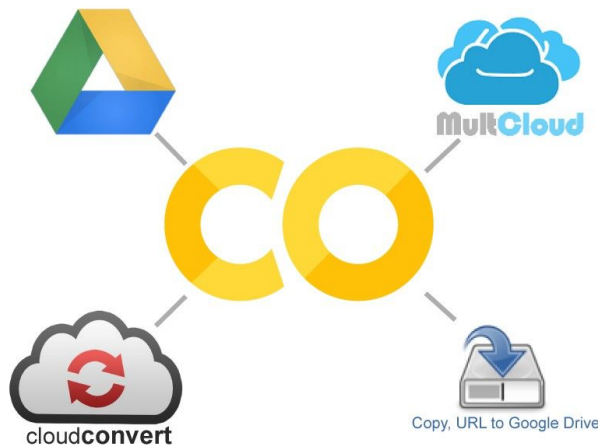
Data Science 101 Series: Machine Learning with Python



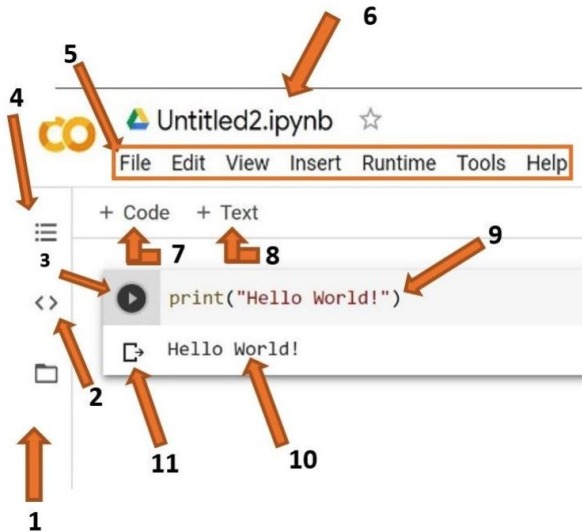
AltaML

Google Colab

- Google Colab is a free Jupyter Notebook environment hosted by Google.
- It has all the features of Jupyterlab and more.
- It is a great platform used by data scientists and machine learning programmers because it takes away the hassle of having to do installations on your own machine.
- Colab has many data science libraries pre-installed and allows you to save your files on Google Drive.



Google Colab



1. **Files:** Here you will be able to upload datasets and other files from both your computer and Google Drive
2. **Code Snippets:** Here you will be able to find prewritten snippets of code for different functionalities like adding new libraries or referencing one cell from another.
3. **Run Cell:** This is the run button. Clicking this will run any code that is inserted in the cell beside it. You can use the shortcut shift+enter to run the current cell and exit to a new one.
4. **Table of Contents:** Here you will be able to create and traverse different sections inside of your notebook. Sections allow you to organize your code and improve readability.
5. **Menu Bar:** Like in any other application, this menu bar can be used to manipulate the entire file or add new files. Look over the different tabs and familiarize yourself with the different options. In particular, make sure you know how to upload or open a notebook and download the notebook (all of these options are under "File").
6. **File Name:** This is the name of your file. You can click on it to change the name. Do not edit the extension (.ipynb) while editing the file name as this might make your file unopenable.
7. **Insert Code Cell:** This button will add a code cell below the cell you currently have selected.
8. **Insert Text Cell:** This button will add a text cell below the cell you currently have selected.
9. **Cell:** This is the cell. This is where you can write your code or add text depending on the type of cell it is.
10. **Output:** This is the output of your code, including any errors, will be shown.
11. **Clear Output:** This button will remove the output.

Google Colab

12. **Ram and Disk:** All of the code you write will run on Google's computer, and you will only see the output. This means that even if you have a slow computer, running big chunks of code will not be an issue. Google only allots a certain amount of Ram and Disk space for each *user*, so be mindful of that as you work on larger projects.
13. **Link to Cell:** This button will create a URL that will link to the cell you have selected.
14. **Comment:** This button will allow you to create a comment on the selected cell. Note that this will be a comment on (about) the cell and not a comment in the cell.
15. **Settings:** This button will allow you to change the Theme of the notebook, font type, and size, indentation width, etc.
16. **Delete Cell:** This button will delete the selected cell.
17. **More Options:** Contains options to cut and copy a cell as well as the option to add form and hide code.

