# Optional: Jupyter notebooks



Jupyter notebooks are documents that contain computer code and rich text elements – such as comments, links, or descriptions of your analysis and results. You will find them used in a variety of online tools, including Project Jupyter, Kaggle, and Google Colaboratory ("Colab" for short). These notebooks can be executable documents that you can run to perform an analysis.

Jupyter notebooks can come in handy with everything from data cleaning and transformation, to statistical modeling and visualizations. They are compatible with R, so you can consider them as an alternative to R Markdown. And just like R Markdown documents, you can easily share Jupyter notebooks with team members and stakeholders.

## Jupyter notebooks in Kaggle

If you are working in Kaggle, there are two types of notebooks available: Jupyter notebooks and scripts (including R Markdown scripts). For more information, refer to the [How to Use Kaggle Notebooks](https://www.kaggle.com/docs/notebooks) page.

## Jupyter notebooks in Google Colab

Google Colab is a product from Google Research. Colab is a hosted Jupyter notebook service that requires no setup to use. For more information, refer to the [Welcome to Colaboratory](https://colab.research.google.com/notebooks/intro.ipynb) page.

## Additional resources

To learn more about Jupyter notebooks, check out these resources:

* [Project Jupyter](https://jupyter.org/): This is the home of Jupyter notebooks, as well as JupyterLab – the web-based interactive development environment for Jupyter notebooks, code, and data.
* [Jupyter Notebook: An Introduction](https://realpython.com/jupyter-notebook-introduction/): This detailed introduction of Jupyter notebooks comes from the people at Real Python, a tutorial-based site devoted to all things Python. You can take a video course or follow the written tutorial to get started with Jupyter notebooks and learn about its features and capabilities.

A​nd, just like R Markdown, Jupyter notebooks include basic formatting tools and rules that will help you keep your work organized and user-friendly. In fact, Jupyter uses R Markdown as its language for writing and formatting text in a notebook.

To learn about basic formatting in Jupyter notebooks, check out these resources:

* [The Jupyter Notebook](https://jupyter-notebook.readthedocs.io/en/stable/notebook.html): This resource provides an overview of Jupyter notebooks, including information about the structure of the user interface and notebook document. You’ll also learn about the basic workflow for using a notebook document, along with information about keyboard shortcuts and other features that will help you format your work.
* [Using Jupyter Notebook for Writing](https://gtribello.github.io/mathNET/assets/notebook-writing.html): This resource focuses on how to use Markdown to format your writing in a Jupyter notebook. Use this as a guide to manage the syntax of your writing, including making titles and subtitles and adding links.
* [The Jupyter Notebook Formatting Guide](https://medium.com/analytics-vidhya/the-jupyter-notebook-formatting-guide-873ab39f765e): This resource includes a wide variety of formatting options for Jupyter notebooks. You’ll learn about the basics as well as some more advanced options, like embedding PDF documents and videos.

After you know how to apply basic formatting to your notebooks, you can start exploring more advanced options.