

Welcome to “Jupyter Kernels.”

After watching this video, you will be able to  
define a kernel, and  
describe how to work with kernels.

A notebook kernel is a computational engine that executes the code contained in a Notebook file.  
Jupyter Kernels for many languages exist,  
and we will explore some that are relevant in Data Science.

When a Notebook document opens, the related kernel launches automatically.

When the Notebook is executed, the kernel performs the computation and produces the results.

Depending on your settings,

you may need to install other notebook languages in your Jupyter environment.

In the Skills Network lab environment, a few languages have been pre-installed for you.

The first one is the Python kernel.

When you launch a notebook, pick the language you are interested in for your Data Science project.

The Python kernel allows you to run python cells.

You can run the Python script in the cells to produce an output.

The top right corner of the Notebook shows the name of the kernel.

Here it shows the Python kernel.

You have the option to run other kernels.

The Skills Network virtual Jupyter environment has Apache, Julia, R, and Swift.

You can use any language to execute your code, either by selecting the kernel on the  
launch page or clicking the top right icon and selecting the kernel from the drop-down menu.

If running the kernel on your local machine,

you will need to manually install the languages through your command line interface (CLI).

In this video, you learned that

The kernel acts like a computational engine and executes the code in a Notebook file.

Jupyter Notebook supports different languages, and

you can switch to a different kernel as per your requirement.