Jupyter Notebooks with DesignSafe-CI

Jupyter Notebooks

Jupyter Notebooks are a powerful way to write and iterate on your Python code for numerical analysis. Rather than writing and re-writing an entire program, you can write lines of code and run them one at a time. Then, if you need to make a change, you can go back and make your edit and rerun the program again, all in the same window.

We will be using Jupyter Notebooks (Python) for some of the exercises in this course. Jupyter Notebooks in support of the lectures in the CE394M course can be viewed on mybinder.org

DesignSafe
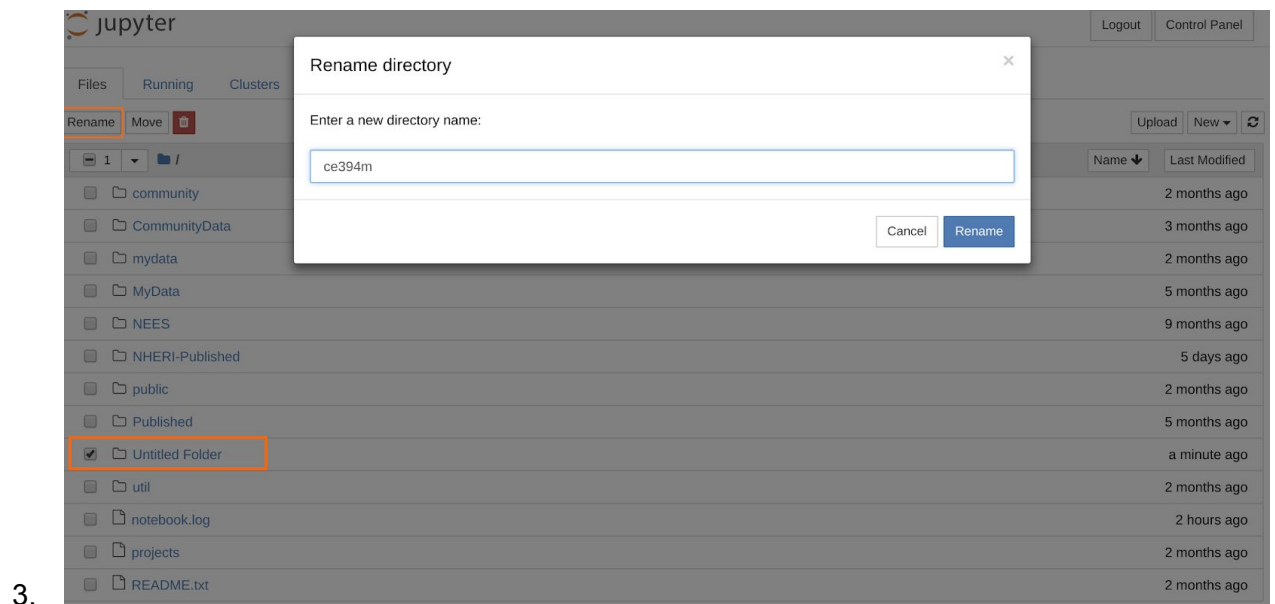
DesignSafe is the web-based research platform that provides computational tools for natural hazards research. We will be using the Jupyter Hub interface provided by the DesignSafe, which doesn't require any installation and is easy to use on a web browser. Please register with DesignSafe and create an account.

Please view the getting started with Design-Safe tutorials to register and be familiar with the infrastructure.

Working with a Jupyter Notebook in DesignSafe

1. On the Jupyter Hub page (sign in with your DesignSafe account)
2. Create a new folder using the '*New Folder*' option **under `mydata`. This is very important otherwise your files will be deleted.** This will create a folder '*Untitled Folder*'. This folder can be renamed to '*ce394m*' (or a name of your preference) by selecting the Untitled Folder and choosing the rename button as shown.

3.

4. Open the newly created '*ce394m*' folder by double-clicking. Inside the folder, upload the Jupyter notebook file provided in this canvas course (e.g., 01-shape-functions.ipynb) using the upload button on the top right side as shown.

5. Launch the example Jupyter notebook by double-clicking. Upon launching the notebook, individual cells in the notebook can be executed by pressing '*Run*' or '*ctrl+enter'* key on the keyboard.