Conda

Conda is an open-source package management system and environment management system that runs on Windows, macOS, and Linux. *Conda* quickly installs, runs, and updates packages and their dependencies. *Conda* easily creates, saves, loads, and switches between environments on your local computer.

Install *Conda*

Go to the *Conda* installation web page and find the instructions for your operating system under the *Regular installation* section.
You have the choice between the full *Anaconda* application or the lightweight *Miniconda*. For the purpose of this workshop, installing *Miniconda* should be enough.
Select an installer suited to your platform.

Create a *Conda* environment

Run the following commands in a terminal (the active directory for the terminal should be the one where you've put the file requirements.txt):

1. Create the conda environment
   ```
   conda create --name workshop-qml python=3.9 pip
   ```
2. Activate the environment
   ```
   conda activate workshop-qml
   ```
3. Install the dependencies with pip
   ```
   pip install -r requirements.txt
   ```
4. Test your environment
   ```
   python test_imports
   ```

Here `workshop-qml` will be the name of your *Conda* environmnent. You could use anything else but we will refer to this name during the workshop.

Use the `requirements.txt` file that was given to you for this workshop.

If you need to deactivate the `workshop-qml` environment at the end of your session, then type

```
conda deactivate
```

Typical workflow for the workshop

1) Start a terminal and navigate to the folder containing the code for the workshop
2) To activate the environment, type

   ```
   conda activate workshop-qml
   ```

3) To start a *jupyter* server, type

```
jupyter-notebook
```

This command should automatically open a web page in your browser that is served by the local *jupyter* server you started.

References

- If you are new to *Conda* environments, please read the following guide.
- If you are new to jupyter notebooks, please read the following guide.