INSTALLATION

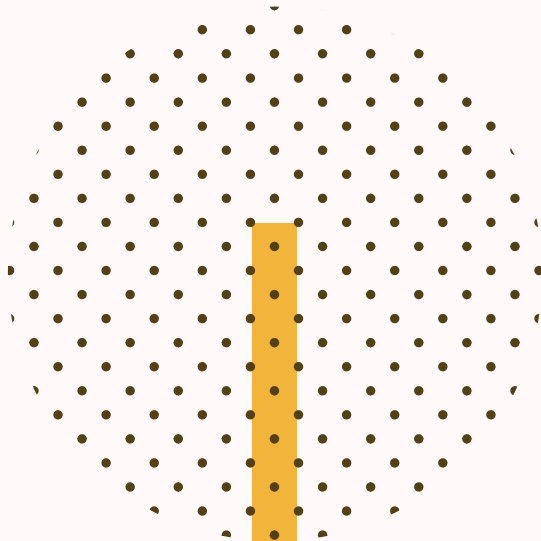## BRONZE-PROJECTQ

Welcome to QBronze-ProjectQ!

This workshop consists of a collection of Jupyter notebooks

We use Python 3 (3.6+) as our programming language and we will be working on the library ProjectQ!

This is a beginners guide to install ProjectQ!

Note: If you have already installed ProjectQ on your system, you may skip this guide and move on to the Start notebook

If you have Jupyter notebook/lab already installed, you may skip to the Install ProjectQ section for the installation part
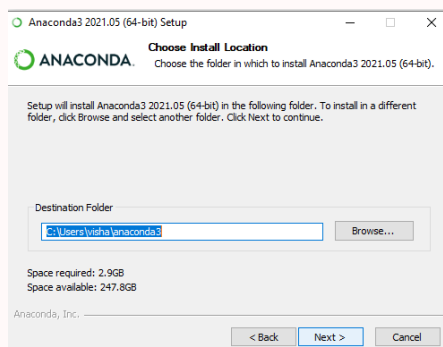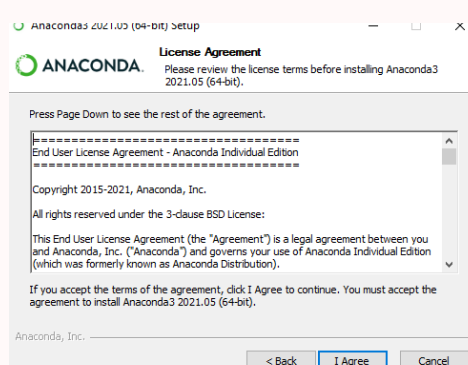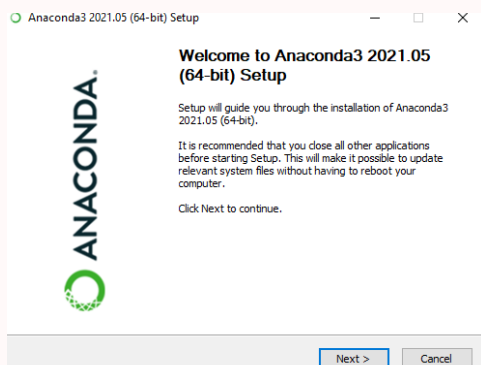
Installing Anaconda®

Installing Anaconda® will install the required Python compiler and libraries you need with one click! It will also make it easy to install Jupyter notebooks
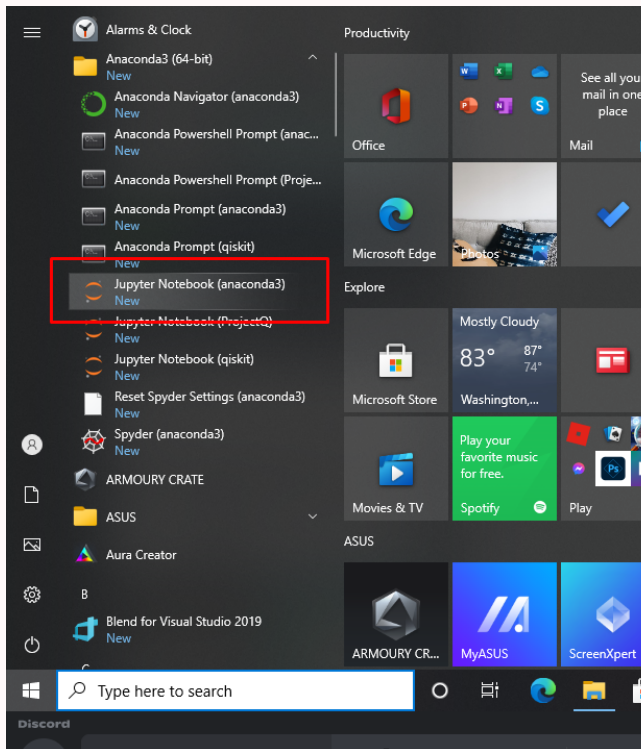
Click here to Download Anaconda

Setting up Anaconda®

Select your preferred operating system and download the setup file. Run the setup file after downloading
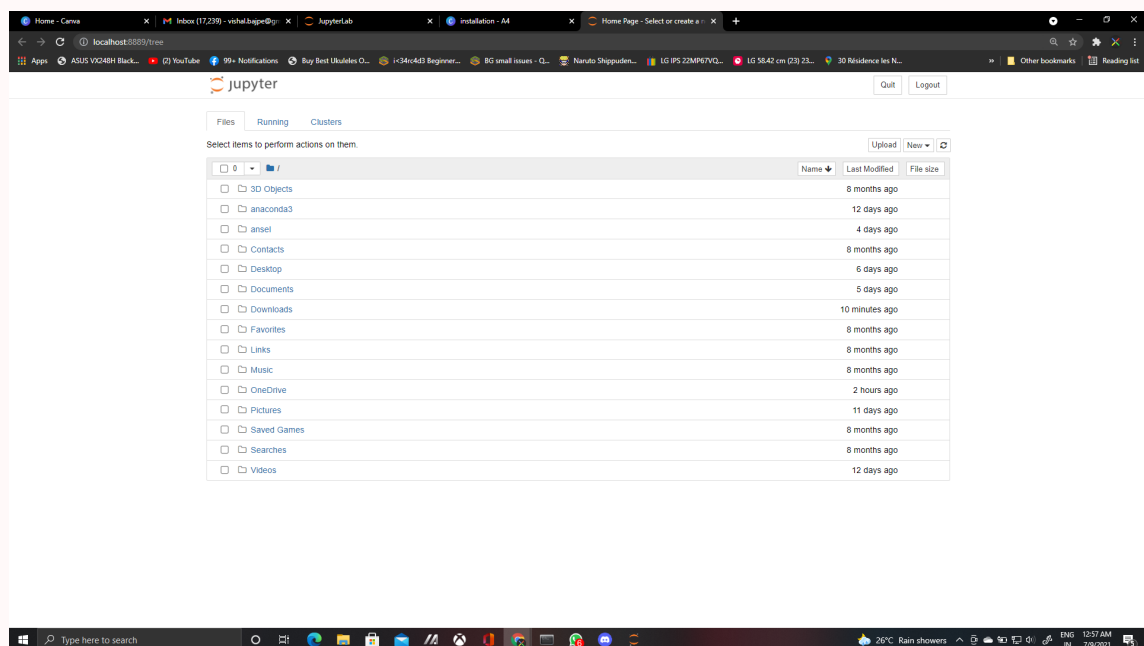
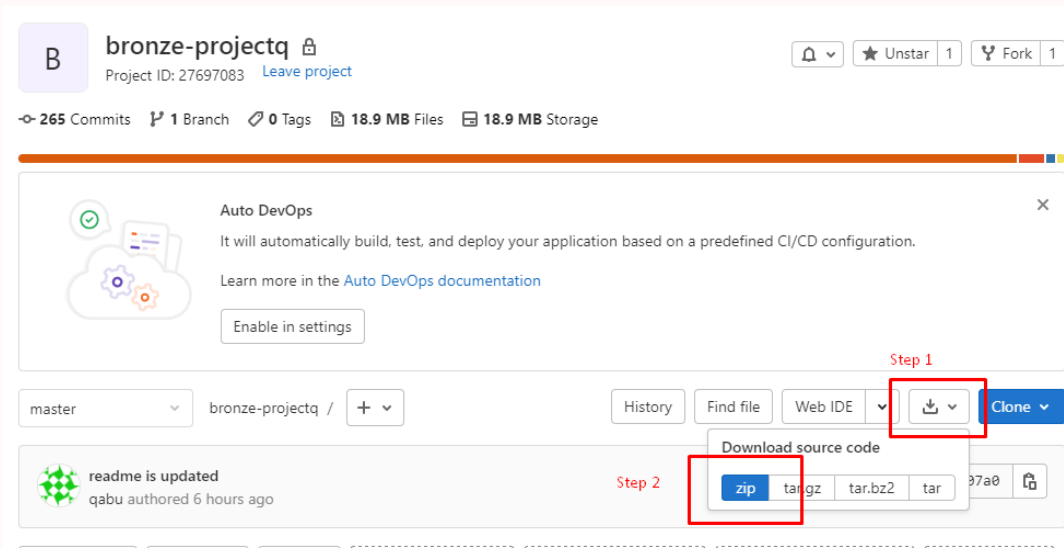# Setting up Jupyter notebooks

Run jupyter notebook from the start menu. A command prompt or powershell window should appear following an opening of a web browser page that looks like one below.

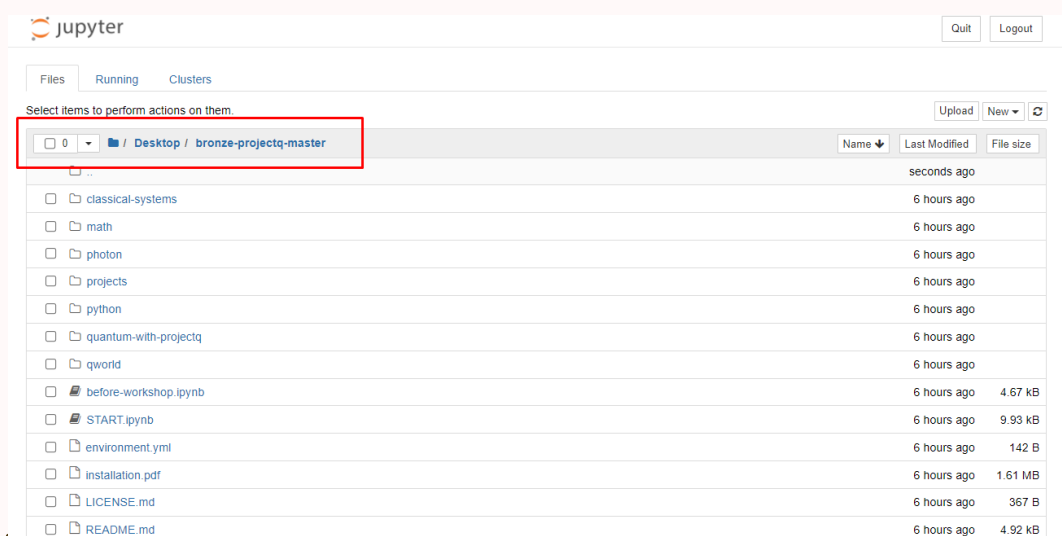*Note: Keep the command prompt window open while working*

Setting up QBronze files

Download the QBronze-ProjectQ files from this link

Extract the files to one of the accessible directories e.g. Desktop, Documents, Downloads etc.

We have extracted our files in the Desktop here and we can access it from the dashboard as shown

<u>Installing ProjectQ</u>

1) Open the notebook "before-workshop.ipynb" from the dashboard and open "ProjectQ Installation and Test"
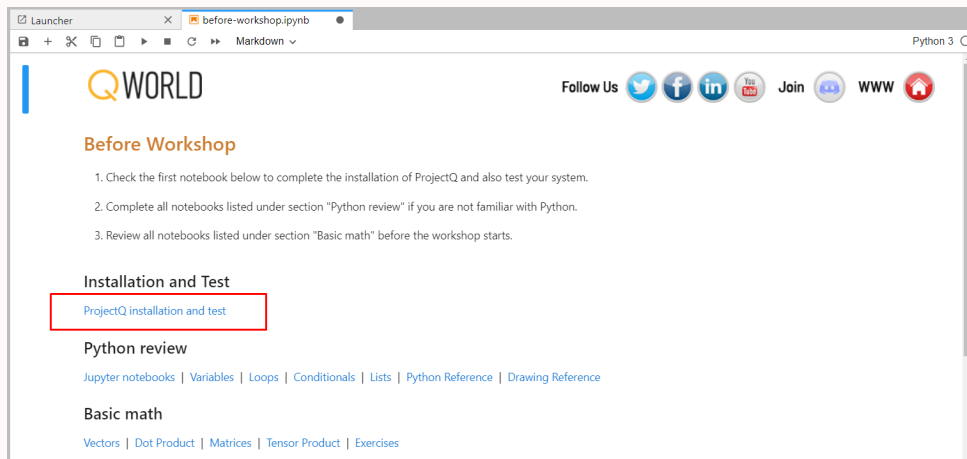
2) Run the first cell to check if you have ProjectQ Installed on your system. If it throws an error, do not worry, proceed to the next step. *To run the cell, click on the Run button on top left*
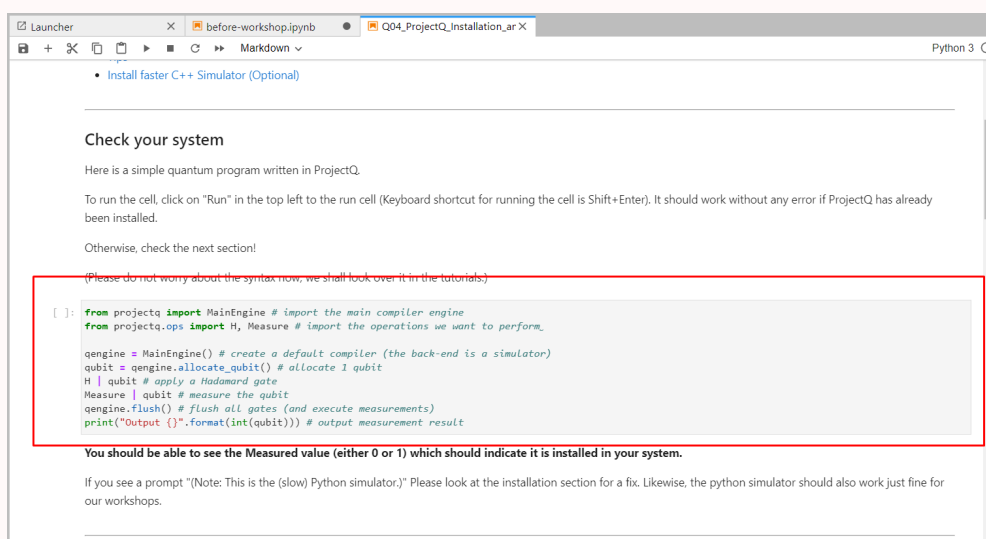
Installing ProjectQ

3) Run this cell to initiate installation of ProjectQ

4) If there are no errors, Restart your kernel to finalise installation

QWORLD | We are working to build an open quantum ecosystem
More information: qworld.net
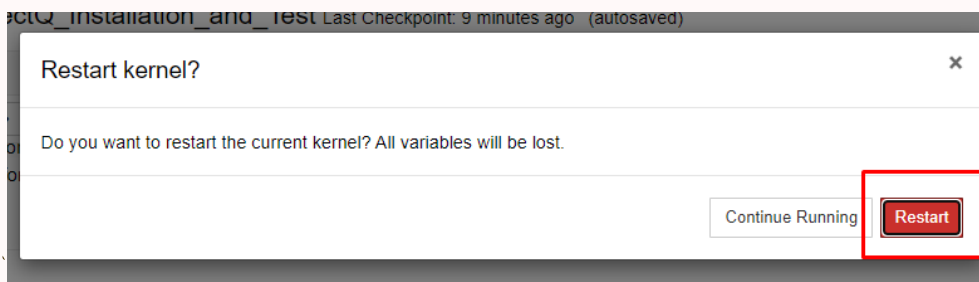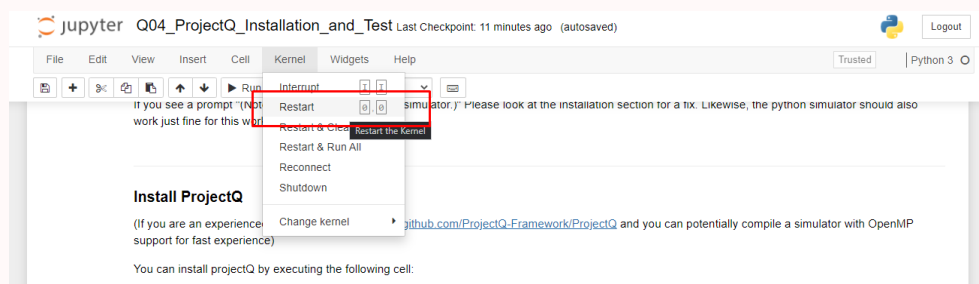
Testing ProjectQ Installation

1) Run the cell below to create a quantum circuit with a qubit in superposition and test out the installation

2) Run the next cell to display the circuit we just ran

If there are no errors, your installation is complete and successful! You can continue onto the further notebooks in the "START" section and start your Bronze journey! :D