

Classiq Challenge for the MIT iQuHack Hackathon 2025

Welcome to the Classiq challenge for the MIT iQuHack 2025!

Follow these simple steps to load your challenge and start working on your solution:

- 1. Sign up to the Classiq Platform
- 2. Initiate the Web-SDK environment
- 3. Upload the challenge notebook to your persistent workspace
- 4. Set your pre-installed python kernel
- 5. Solve and submit your code

1. Sign up to the Classiq Platform

At <u>platform.classiq.io</u>, click Sign Up. Approve the terms of use and register with your Google/Microsoft account or any other email.

2. Initiate the Web-SDK environment

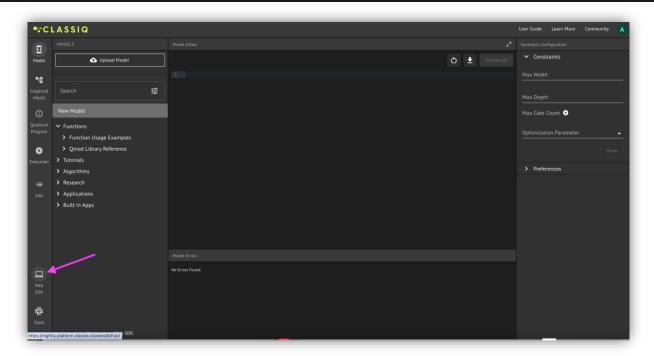
The newly launched **Classiq Web-SDK** is a VSCode environment part of the Classiq platform, eliminating the need to install the Python package and its dependencies, and includes the complete and updated Classiq Library git repository of quantum functions, algorithms, applications, and tutorials.

- A personalized and customized VSCode environment with Jupyter notebook extension.
- Pre-installed with the latest Classiq SDK python kernel and required dependencies.
- Includes a persistent user workspace to save and manage code and projects.

Once logged into the platform - click "Web SDK" from the left side menu.

(If you wish to run your notebook in a local environment – See Appendix A)



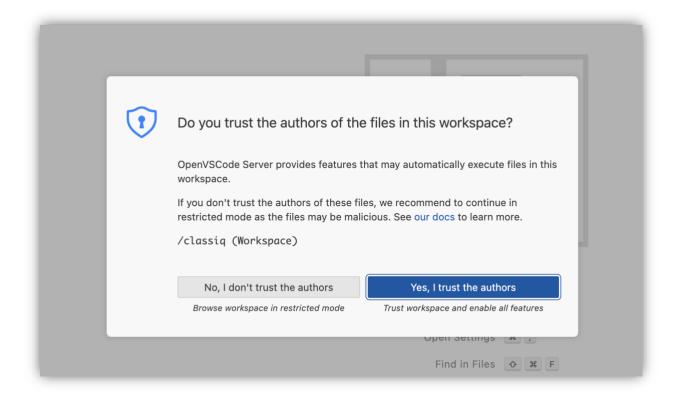


Your environment will be loaded on a new tab (it could take up to a few minutes upon initial setup).





Once the Web-SDK loads, trust the Classiq workspace author to open the Classiq extension and load your workspace.

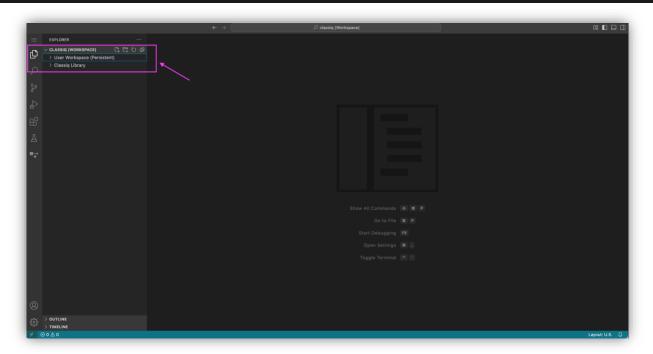


Now your Web-SDK should be ready for use.

Your workspace will be available through the "Explorer" icon on the top left. Your workspace consists of 2 sections:

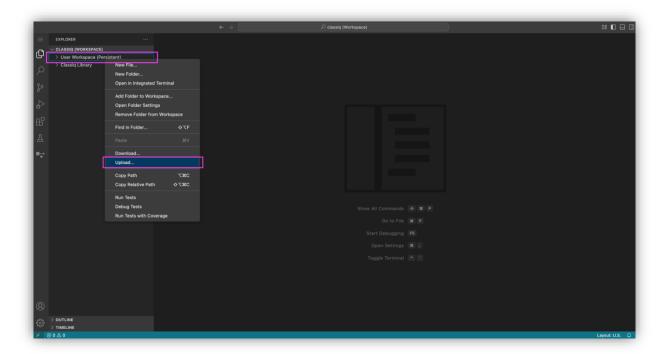
- 1. User Workspace: A persistent area to maintain code
- Classiq Library: The entire Classiq Library ready to explore and run.
 You can edit the code and run it as you wish. Changes in this section are not preserved, so make sure you move changes you wish to preserve into your personal user workspace.





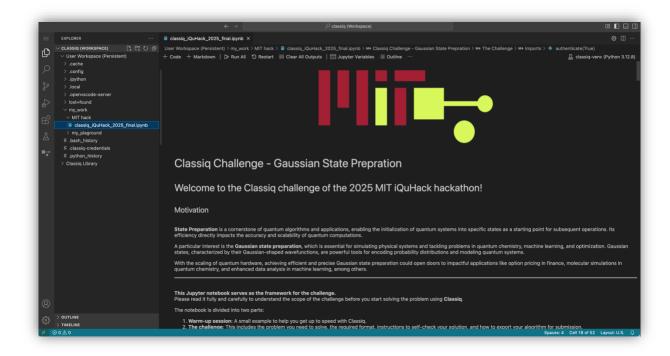
3. <u>Upload the challenge notebook to your persistent workspace</u>

Right-click the "User Workspace" and select "Upload".



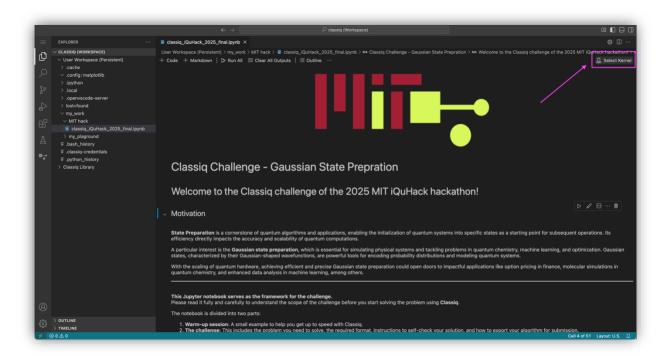
The challenge notebook should be loaded to the persistent workspace:



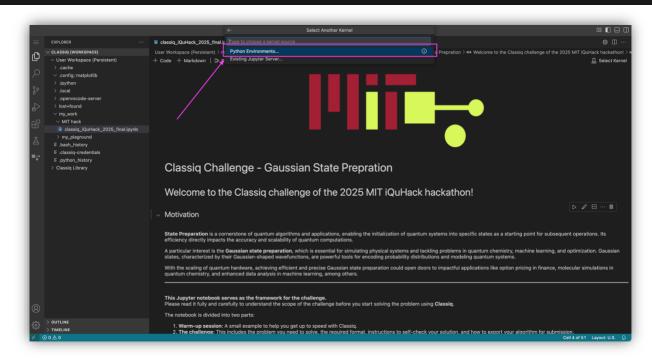


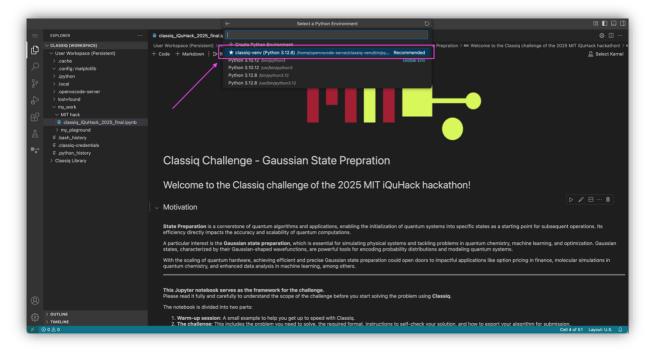
4. Set your pre-installed python kernel

If you are running the notebook for the first time, choose the recommended python kernel (3.12.8).



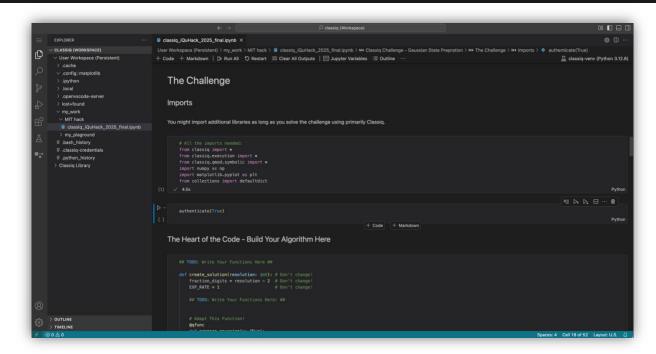






If required upon first time use, call the "authenticate()" method





5. Solve and submit your code

According to the guidelines provided in the challenge notebook.





Appendix A – Alternative setups

If you wish to run your notebook in a local environment, refer to the installation guide here.

Alternatively, you can also use the Google Colab environment (and install the Classiq python SDK there), but keep the following in mind:

- You will need to re-install and authenticate each time the kernel restarts.
- Pop-ups, following the "show()" and "authenticate()" commands, do not open automatically in a new tab so you will need to manually click the link displayed below the relevant cell.

