Instructions to run the Julia sheets on mybinder.org:

WARNING: MYBINDER DOES NOT STORE YOUR MODIFICATIONS TO THE NOTEBOOKS! PLEASE DOWNLOAD THE NOTEBOOKS BEFORE CLOSING YOUR SESSION.

You can find the instructions to download and re-upload notebooks below.

- 1. Click on the "launch binder" badge launch binder in the readme section of the GitHub repository https://github.com/StephanieWehner/IntroQCryptoBook. This launches an online Jupyter notebook environment where you can run the Julia sheets.
 - Sometimes mybinder may recompile the build for the repository. This may take up to 15 minutes. If it takes longer, please try relaunching through the same badge.
- 2. After a successful launch, you should land at a Jupyter notebook interface that looks like this:



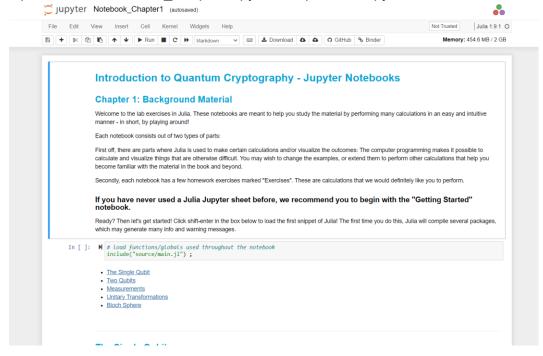
3. Navigate to the folder for the relevant chapter and open the Jupyter sheet (.ipynb file) for that chapter.

e.g.: For chapter 1,

Navigate to the "Chapter1" folder



• Open the file "Notebook Chapter1.ipynb" to open the Jupyter notebook



We would advise you to first get used to the interface with the notebook "IntroQCryptoBook/JuliaSheets/Getting Started-BOOK.ipynb".

- 4. Go through the Jupyter notebook, understanding the existing blocks and completing the exercises.
- 5. Have fun! And don't forget to save your notebooks!

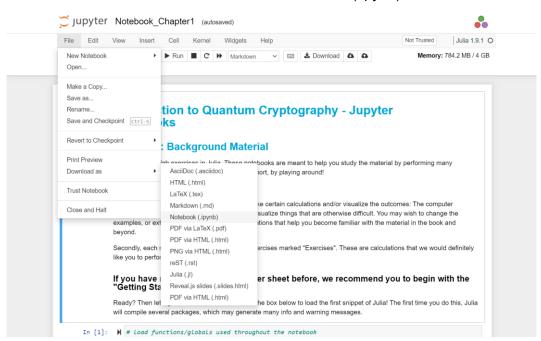
Saving and re-uploading notebooks from/to mybinder.org

Mybinder does not remember changes you make to a notebook. For example, let's say you completed half of all exercises for Chapter 1 on mybinder.org, and decide to finish the remaining on the next day. If you close and re-open mybinder, you will lose the code for the exercises you had completed.

To avoid re-doing the exercises again, you can save the notebook from mybinder, and reupload it for your next session, so that you can directly continue your work.

Saving a (partially) completed notebook:

Once you are about to close your session, you can save the notebook to your PC by selecting



File > Download as > Notebook (.ipynb)

Re-opening a (partially) completed notebook:

When you start a new session at mybinder.org, you may need to upload a saved sheet. **This must be done in the correct folder.** E.g.: Notebook_Chapter1.ipynb must be reuploaded inside the folder JuliaSheets/Chapter1. Otherwise the notebook may not work as intended.

For opening your saved work for ChapterX,

1. Navigate to the folder JuliaSheets/ChapterX.

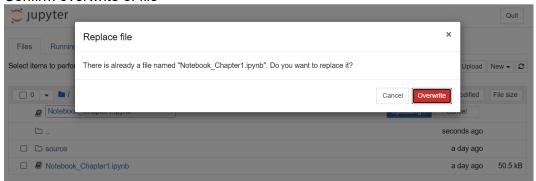
2. Click upload in the Jupyter-notebook interface



- 3. Select the file Notebook_ChapterX.ipynb from your PC. You should only have this file if you saved it in your previous session.
- 4. Click the new blue upload button in the file list



5. Confirm overwrite of file



IF YOU DO NOT SEE THIS MESSAGE, YOU ARE PROBABLY UPLOADING THE FILE TO THE WRONG FOLDER.

6. Wait for it to upload, then open Notebook_ChapterX.ipynb from the file list.

<u>Jupyter-lab vs Jupyter-notebook on MyBinder</u>

This part becomes relevant only when you want to create a new mybinder link for the repository yourself.

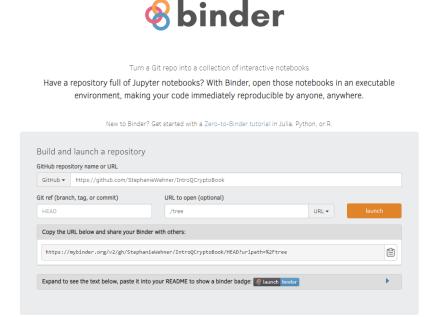
Note that the interactive elements from Julia do not work very well on Jupyter-lab, while they work perfectly on Jupyter-notebook. We highly recommend sticking to the Jupyter-notebook interface for this reason. However, if you are forced to use the Jupyter-lab interface, refreshing the page may help the interactive elements work:

- 1. Run a block of code with interactive elements, and try changing the values in the slider. If it works, congrats!. If it does not affect the output,
- 2. Refresh the page, but do not restart the kernel

3. Re-run the same block of code that had the interactive element.

You only have to refresh the page once per session, so it is not very cumbersome. However, it does lead to some extra steps, and it is not guaranteed to work on every system, so sticking to Jupyter-notebooks may be your best bet.

If you want to create a new mybinder link for the repository yourself, it will lead you to a Jupyter-lab interface by default. You can get a Jupyter-notebook interface by changing the "File" option to an "URL" option, and then including "/tree" as the "URL to open". It should look like this:



Please refer https://discourse.jupyter.org/t/classic-notebook-instead-of-jupyterlab-on-mybinder-org/10714/17 for more details.

Please read the disclaimer about technical support at https://github.com/StephanieWehner/IntroQCryptoBook.