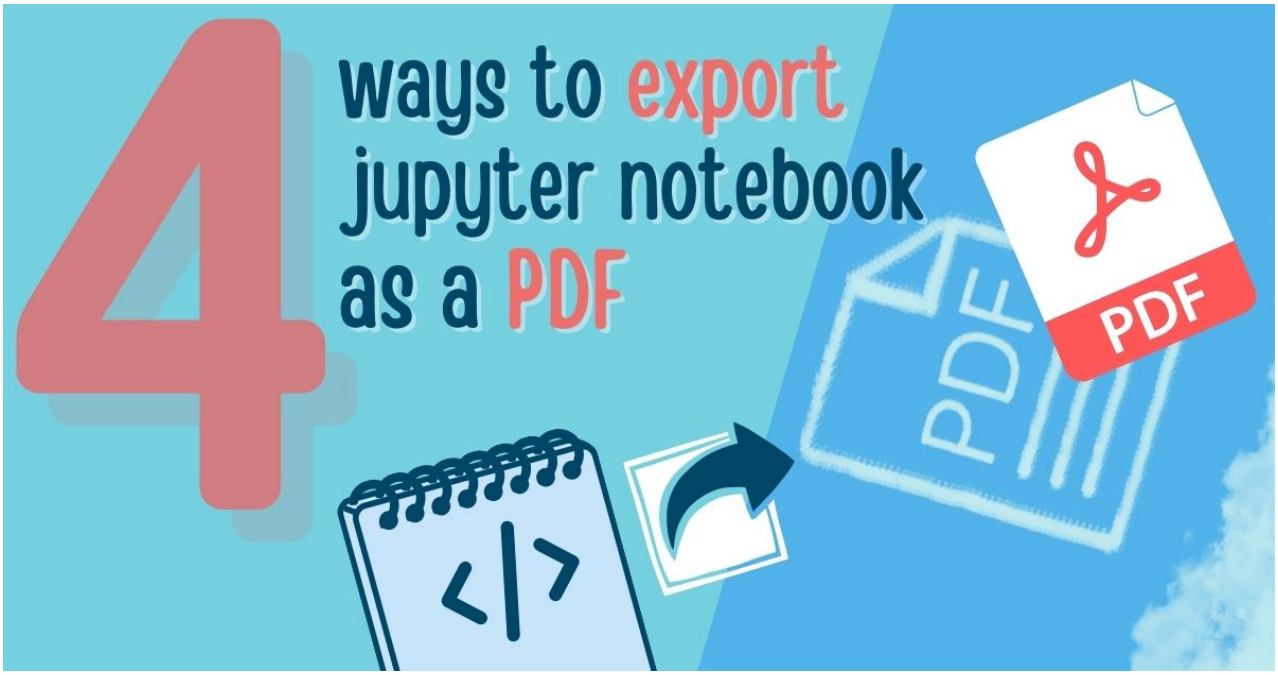
4 ways to export Jupyter Notebook as PDF

mljar.com/blog/jupyter-notebook-pdf

Aleksandra Płońska, Piotr Płoński May 28, 2022

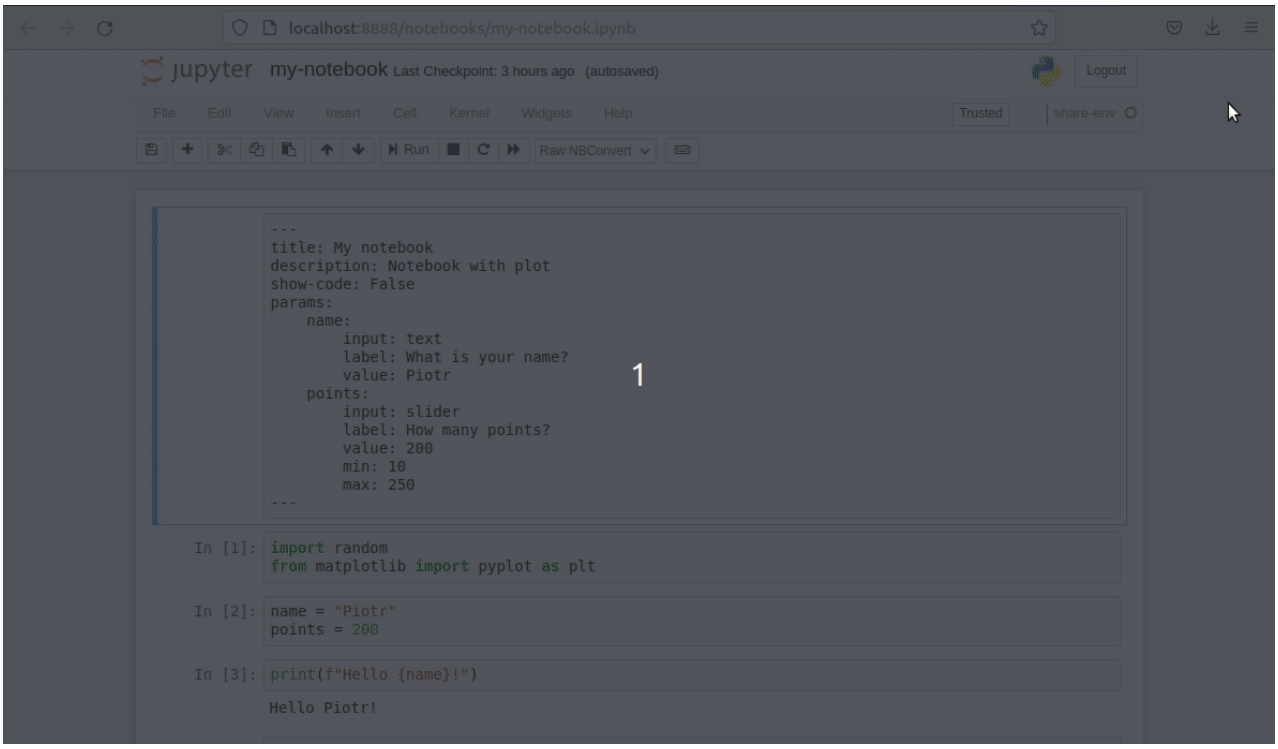
May 28, 2022 by Aleksandra Płońska, Piotr Płoński Jupyter



Have you ever wanted to export your Jupyter Notebook to PDF file? The PDF is an abbreviation for Portable Document Format. It can be displayed on any operating system. That makes it format of choice for many who wants to share their results. In this post I will show you 4 different ways how to export Jupyter Notebook as PDF file.

1. Print Jupyter Notebook to PDF

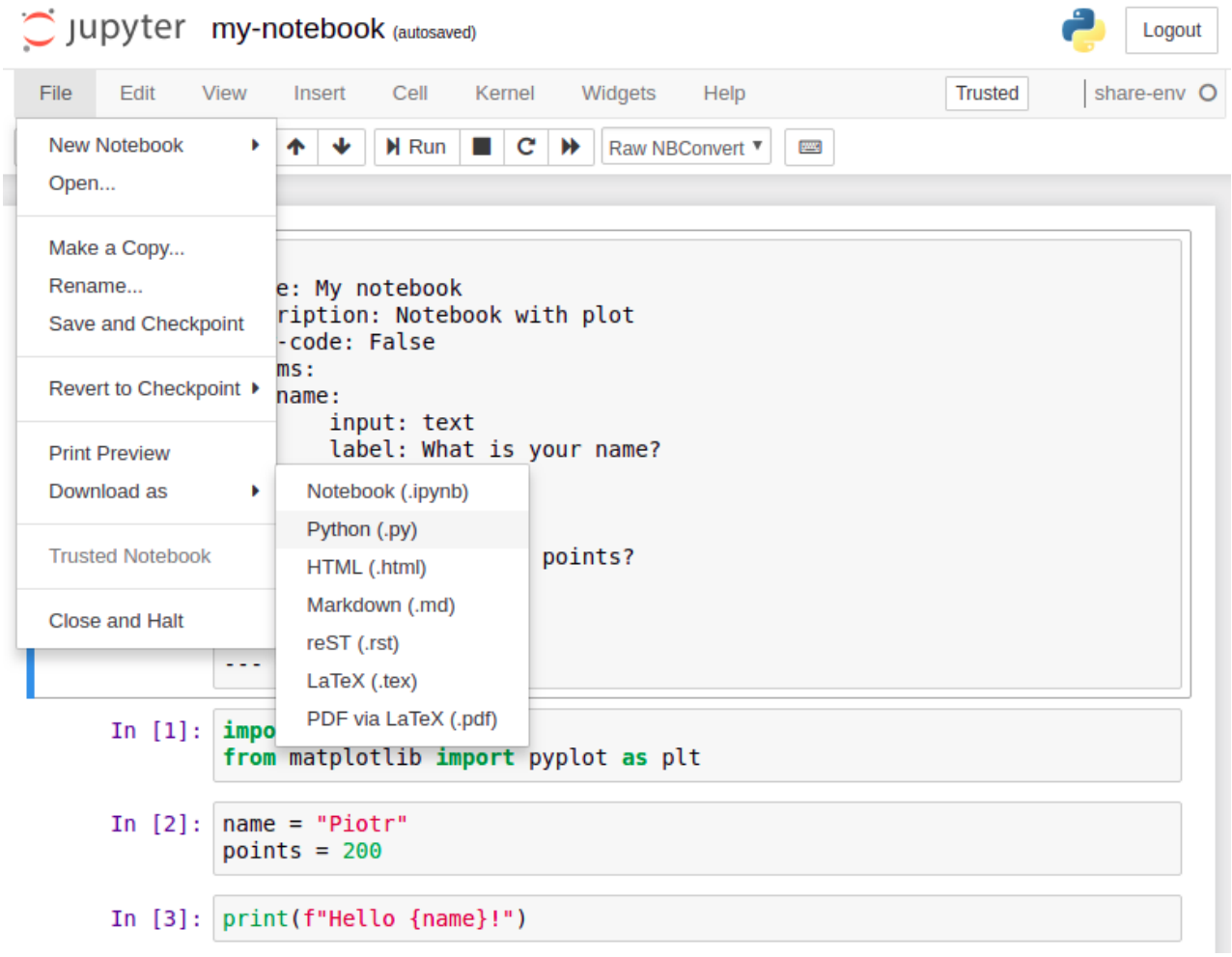
The most straightforward way is just to use web browser feature of print to PDF. There is no need to install any additional packages.



The big advantage of this approach is that we don't need to install additional libraries to make it works! However, it is manual approach - hard to automate. What is more, we can't control the process of export (for example, we can't hide code in the exported file).

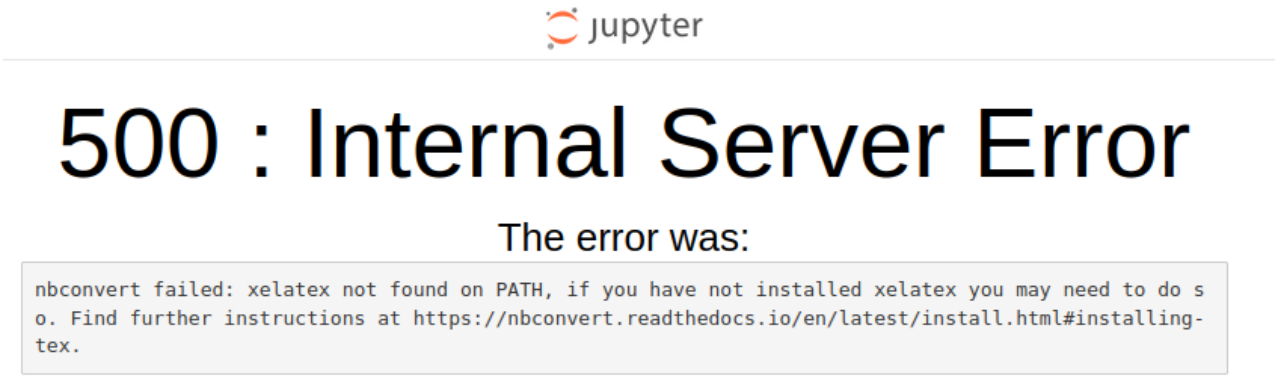
2. Download Jupyter Notebook as PDF

The Jupyter Notebook has an option to export the notebook to many formats. It can be accessed by clicking `File` -> `Download as` -> `PDF via LaTeX` (or `PDF via HTML` - not visible in the screenshot).



This approach requires you to install some additional packages. For me, the option that exports with LaTeX is difficult. It requires you to install much more packages than option of export via HTML. If you don't have required packages you will get the error message:

```
nbconvert failed: xelatex not found on PATH, if you have not installed xelatex you
may need to do so. Find further instructions at
https://nbconvert.readthedocs.io/en/latest/install.html#installing-tex.
```



This is scary, isn't it? The option to export via HTML requires you to download Chromium (headless browser).

I rarely use this approach to be honest. It requires additional installation (that is not trivial) and is manual. This approach under the hood is using `nbconvert` tool.

3. Export to PDF with `nbconvert`

That's one of my favourite approaches. Why? Because it is a command line tool that can be used in the scripts :)

Still you need to install additional packages to make it work. The same as in Jupyter Notebook GUI there are two options:

- export to PDF via LaTex,
- export to PDF via HTML.

The latter is my choice. It requires `pyppeteer` and Chromium to be download. This can be easily achieved by running:

```
pip install nbconvert[webpdf]
```

and adding a flag `--allow-chromium-download` when converting a notebook:

```
jupyter nbconvert --to webpdf --allow-chromium-download your-notebook-file.ipynb
```

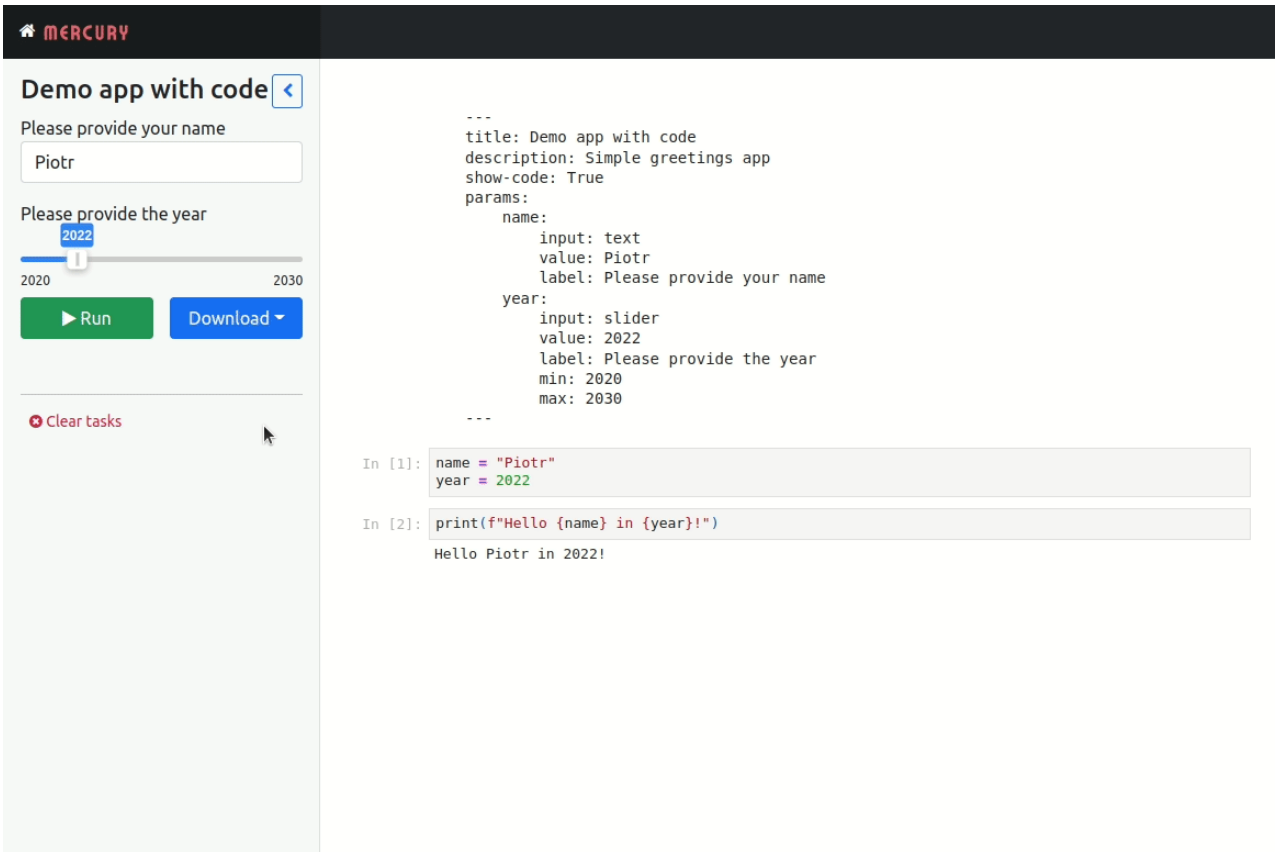
The flag should be added only one time. It is not necessary after Chromium installation. The `nbconvert` has many optional arguments that control the export. For example, you can easily hide the code with `--no-input` flag:

```
jupyter nbconvert --to webpdf --no-input your-notebook-file.ipynb
```

Additionally, you can apply more options to the export like removing selected cells or change the templates.

4. Share Notebook with Mercury

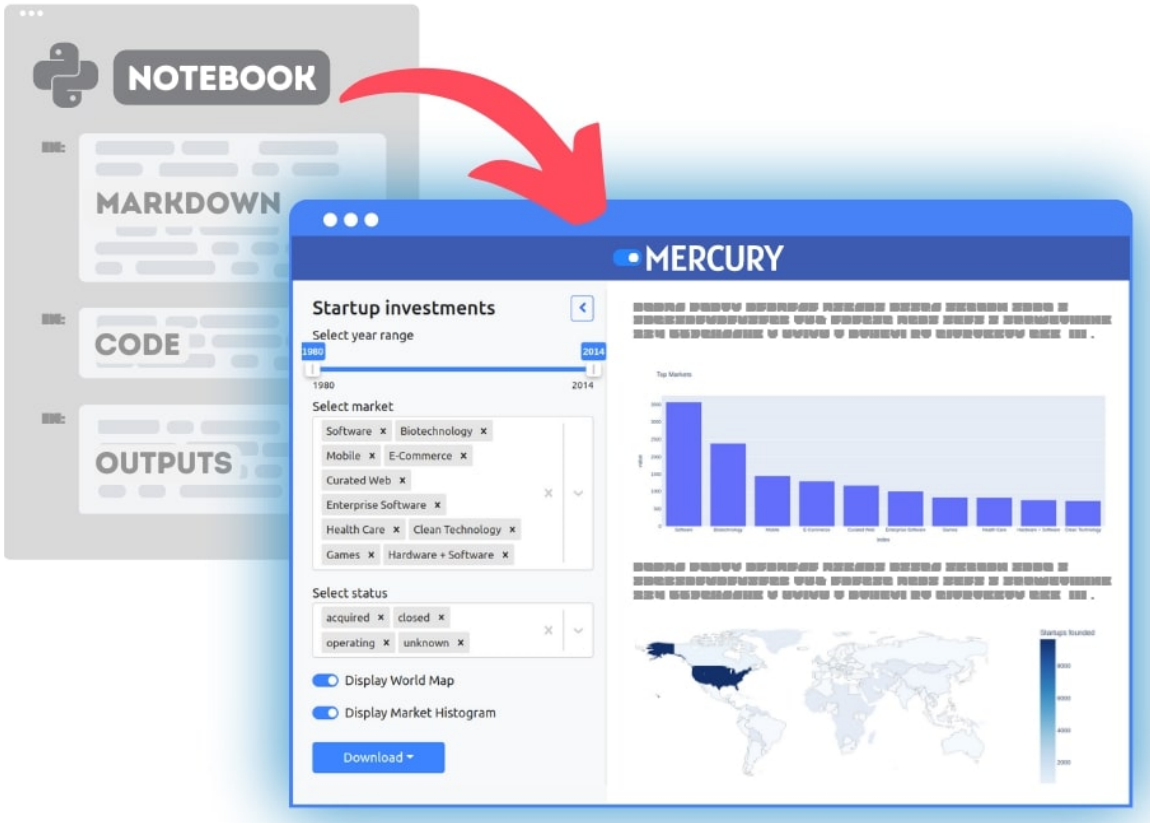
There is an open-source framework `Mercury` that makes Python notebooks sharing painless. It converts notebooks to interactive documents (web apps, reports, slides, dashboards). You can share a notebook with interactive widgets. Your end-users can tweak widgets values and execute the notebook with new values (without changing the code). The `Mercury` allows to export the executed notebook into standalone HTML or PDF file. The end-user just need to clik the `Download` button.



Summary

Saving notebooks to PDF is a great way to persist results in a shareble format. PDFs can be easily published online or send in the email. There are several ways to convert Jupyter Notebook as PDF. The automatic conversion can be easily achieved with `nbconvert` tool. Notebooks shared with Mercury framework can be easily converted to PDF. The PDF notebook can be manually downloaded from the website.

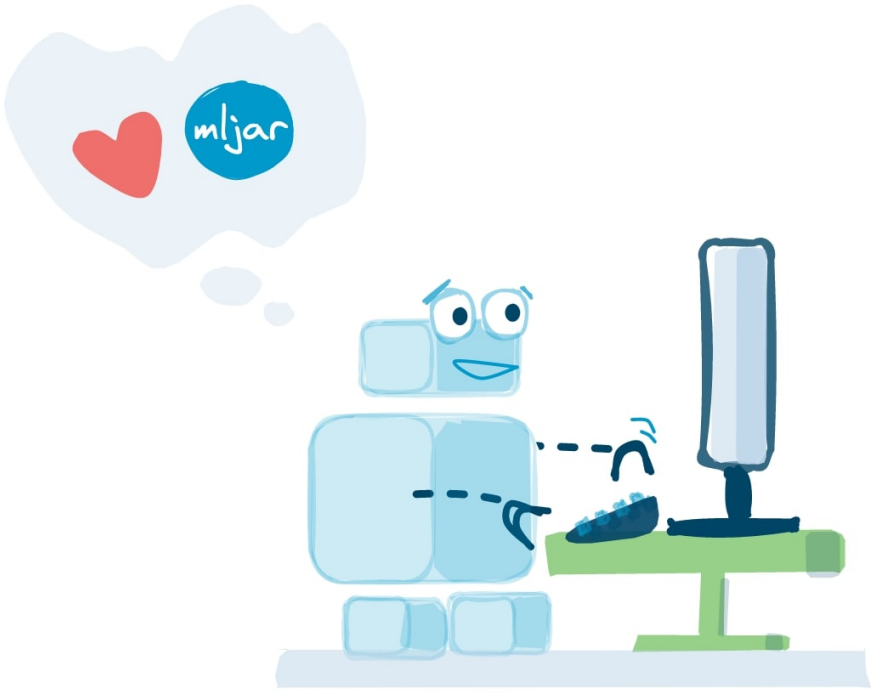
« How to share Jupyter Notebook with non-programmers? How to hide code in Jupyter Notebook? »



Convert Python Notebooks to Web Apps

We are working on open-source framework Mercury for converting Jupyter Notebooks to interactive Web Applications.

Read more



Articles you might find interesing

Join our newsletter

Subscribe to our newsletter to receive product updates

Subscribe