

Turn Your Jupyter Notebook Into Interactive Presentation Slides Using Anaconda

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65M



In our “[Learn Python From Zero For Absolute Beginner](#)” series, you have learnt how to use Python to do some data manipulation tasks and create interactive charts using Plotly within Jupyter Notebook. After completing your analysis, it is common that you will need to deliver a **presentation** to present your findings.

Traditionally, this might involve manually capturing screenshots of your notebook’s code and charts, and creating static slides using PowerPoint or Canva for your presentation. However, there is a more time-saving and dynamic approach, allowing you to **convert your Jupyter Notebook into interactive slides**. You can **showcase your code**, visualizations, and insights while **retaining the interactivity of the Plotly charts** you created.

Give a try to this approach and captivate your audience with an interactive presentation experience derived directly from your Jupyter Notebook! At the end of this article, you will be able to **convert your Jupyter Notebook (.ipynb file) to one single HTML file**.

By double clicking the HTML file, you can view your Jupyter Notebook content as below in the browser:



Turn your Jupyter Notebook into interactive Presentation Slides

This is demo. If you're looking for a more detailed understanding and want to **follow along step by step with thorough explanations**, we highly recommend you to read our article below:

👉 <https://digitalhumanities.hkust.edu.hk/tutorials/turn-your-jupyter-notebook-into-interactive-presentation-slides/>





Download our sample and try it yourself

Before we proceed with configuring the settings in Anaconda to transform cells into slides, let's first walk through the straightforward process of **converting an .ipynb file to an HTML file**.

To help you grasp the speed and simplicity of this conversion, please download our sample Jupyter Notebook (.ipynb file) [here](#) and follow the steps outlined below.

You may find the content in this .ipynb file familiar if you have been following our [“Learn Python From Zero For Absolute Beginners” series](#) as we have taken code snippets from the first two lessons and compiled them into this .ipynb file.





7.15 MB



Code 55% faster with GitHub Copilot



Turn your Jupyter Notebook into interactive Presentation Slides

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In [1]:

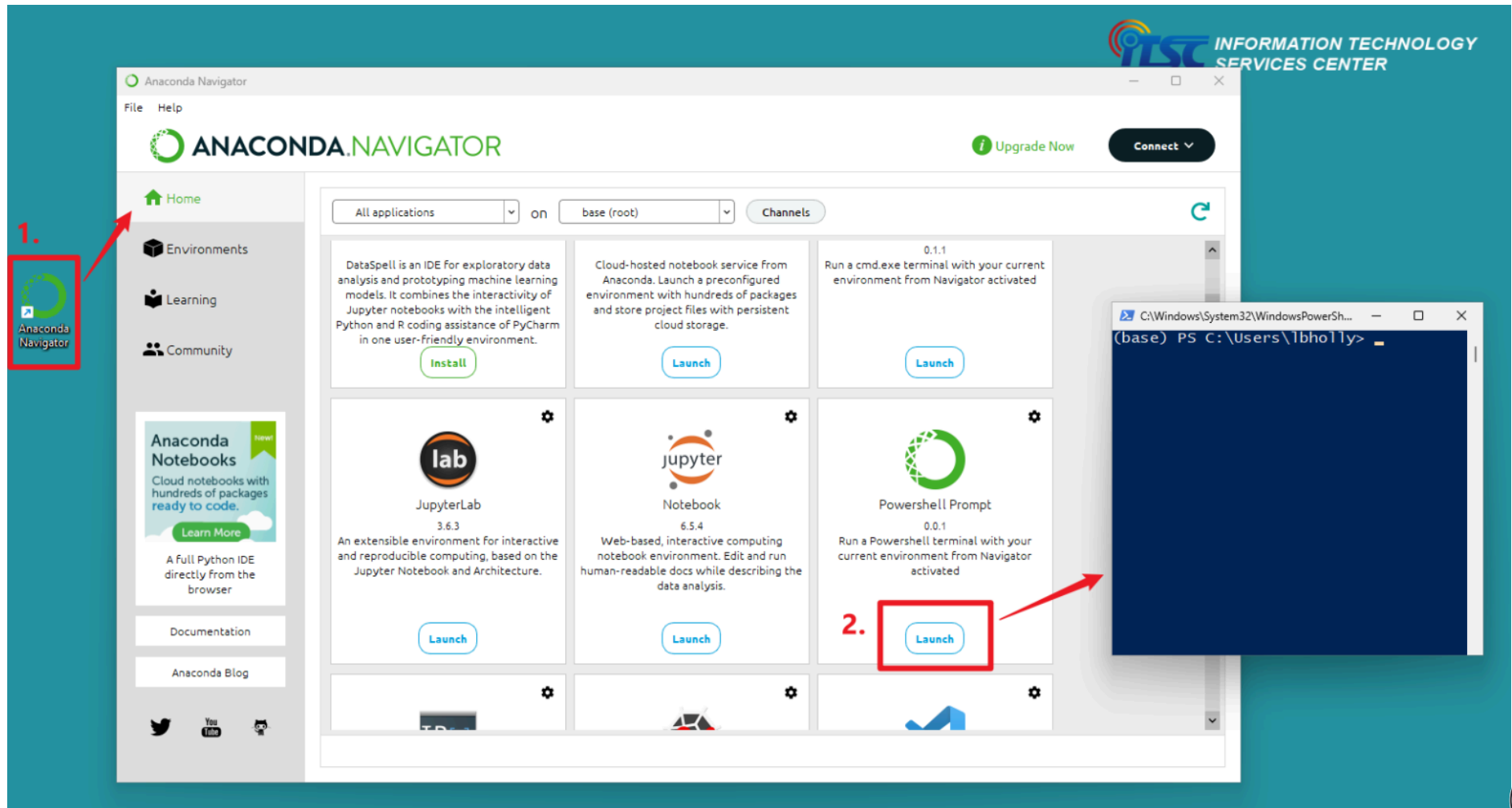
```
#  Slide type of this cell: Skip  
  
import sys  
if sys.executable == 'python':  
    !pip install pandas
```

Download our sample Jupyter Notebook (.ipynb file) [here](#)



■ Convert ipynb file to HTML file

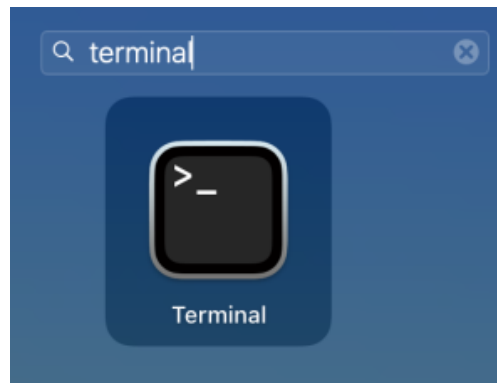
1. Open Powershell Prompt in Anaconda



Screenshot that illustrates how to launch Powershell Prompt in Anaconda

If you need guidance on how to install or use Anaconda, you can refer to [our previous article here](#).

If you are a Mac user, you have the advantage of utilizing the Terminal directly on your Mac for the subsequent steps.



Terminal in Mac

- **Windows user:** Powershell Prompt in Anaconda
- **Mac user:** Terminal in Mac

2. Change directory to current folder

In the Powershell Prompt window or Terminal, use the `cd` command to change directory to the folder that you stored the .ipynb file.

Method 1: Using command below





```
1 cd folderpath
```

Method 2: Drag and drop

Drag and drop the folder where storing the .ipynb file to the Powershell Prompt window or Terminal after typing `cd .`

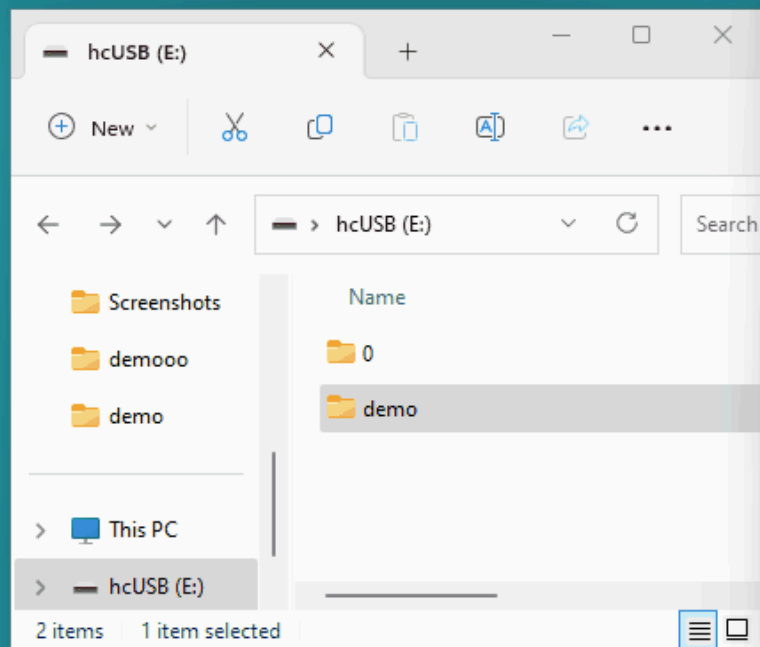


File Edit Search View Encoding Language Settings Tools
Macro Run Plugins Window ?

command.txt

```
1 jupyter nbconvert sample.ipynb --to  
slides --no-prompt  
--TagRemovePreprocessor.remove_input_tags=  
{"to_remove\"} --post serve
```

Ln: 1 Col: 126 Pos: 126 Windows (CR LF) UTF-8 INS



C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe

(base) PS C:\Users\Tbholly>



In the Powershell Prompt, change directory to folder where you stored the .ipynb file.

3. Type jupyter nbconvert command

Type the command below in the Powershell Prompt window. You may change `sample.ipynb` to the filename of your .ipynb file. This command uses [nbconvert tool](#) to convert an .ipynb notebook file into various static formats like HTML.

```
1 jupyter nbconvert sample.ipynb --to slides --no-prompt --TagRemovePreprocessor.remove_input_tags={"to_remove"}  
--post serve
```

If you are using Terminal in Mac, you may need to execute the following command before executing the `jupyter nbconvert` command.



```
1 export JUPYTER_PATH=/opt/homebrew/share/jupyter:$JUPYTER_PATH
```

After executing the `jupyter nbconvert` command, an HTML file will be automatically generated in the current folder (`sample.slides.html` in this case). The generated HTML file retains the content and structure of the ipynb Notebook, now conveniently presented in a slide format. One notable advantage is that the generated HTML file has a relatively small file size, which is beneficial for sharing and transferring files.

If you have a good understanding of HTML, you can further customize the generated HTML file, making modifications to the styling or content of the slides.

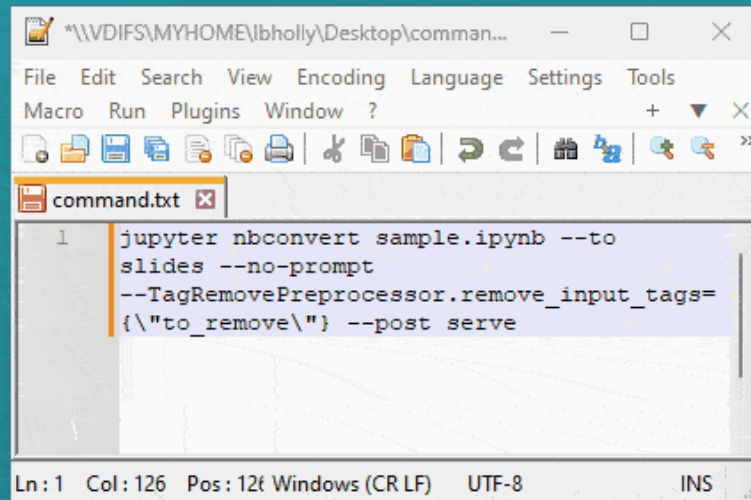




 sample.ipynb	7,323 KB
 sample.slides.html	4,146 KB

an HTML file is automatically generated

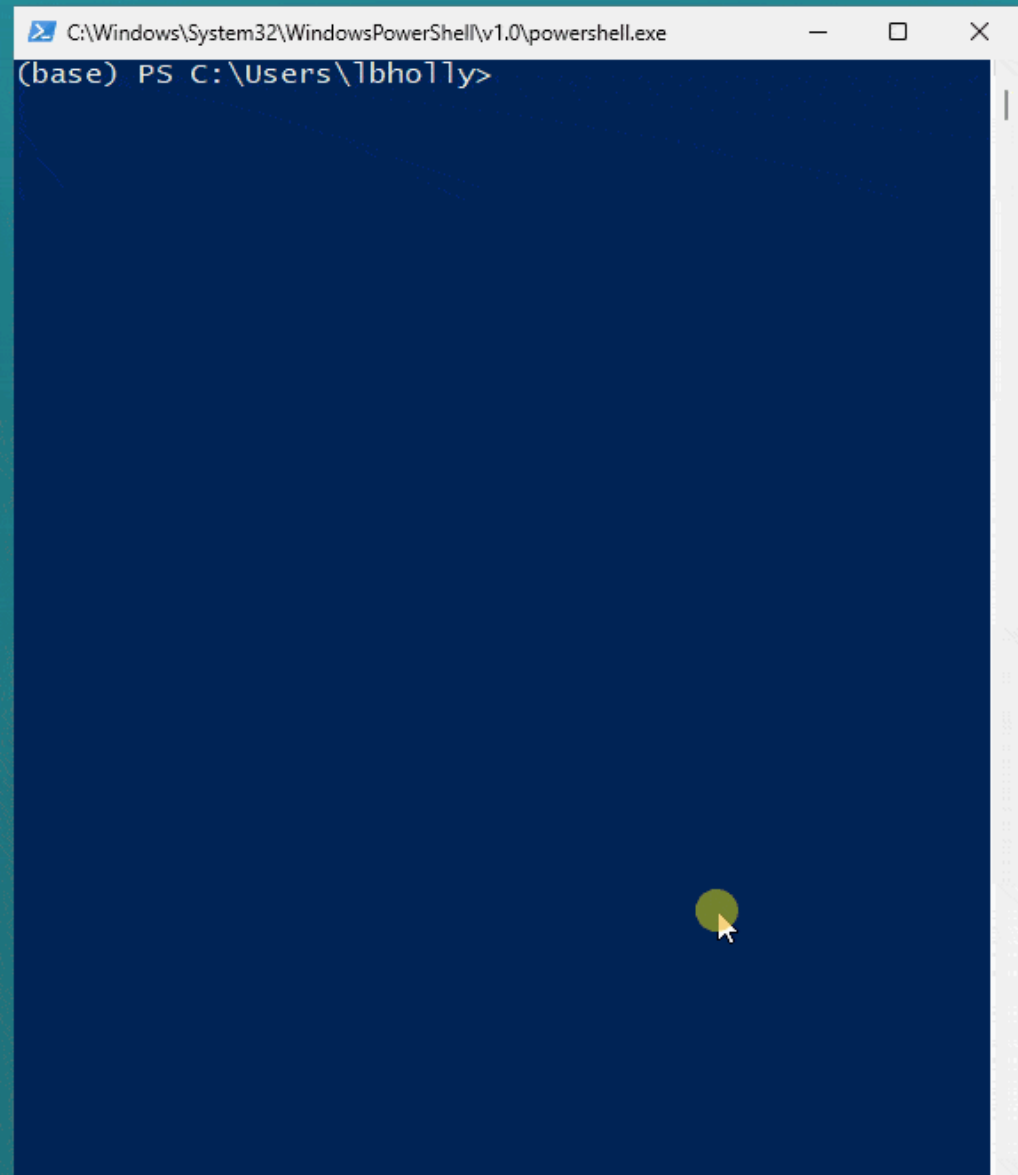
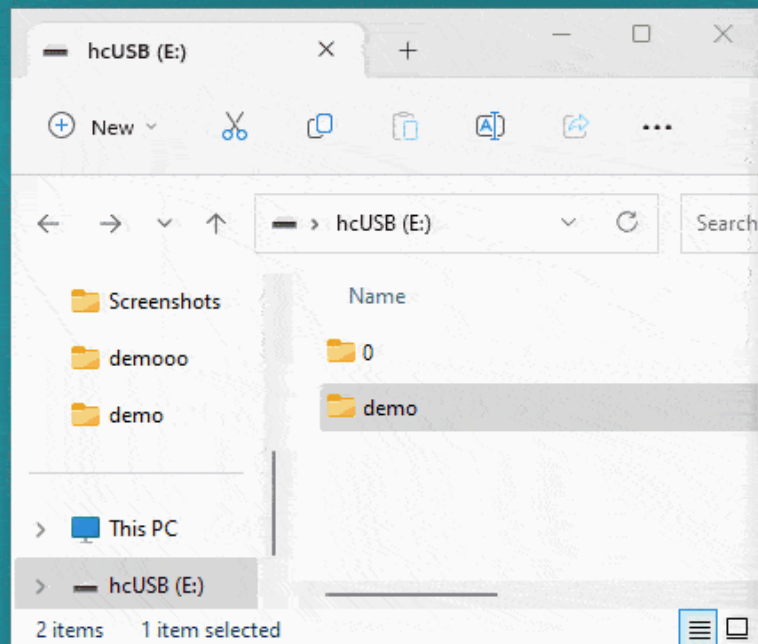




A Notepad++ window titled '*\\VDIFS\\MYHOME\\lbholly\\Desktop\\comman...' is open. The menu bar includes File, Edit, Search, View, Encoding, Language, Settings, Tools, Macro, Run, Plugins, and Window. The toolbar shows various icons for file operations. The active tab is 'command.txt'. The text inside the editor is:

```
1 jupyter nbconvert sample.ipynb --to  
  slides --no-prompt  
  --TagRemovePreprocessor.remove_input_tags=  
  {"to_remove\\"} --post serve
```

The status bar at the bottom indicates 'Ln: 1 Col: 126 Pos: 12 Windows (CR LF) UTF-8 INS'.



A PowerShell window titled 'C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe' is open. The prompt is '(base) PS C:\Users\lbholly>'. The window background is dark blue.

Convery ipynb file to HTML file by using jupyter nbconvert command



Configure settings in Jupyter Notebook to transform cells into slides

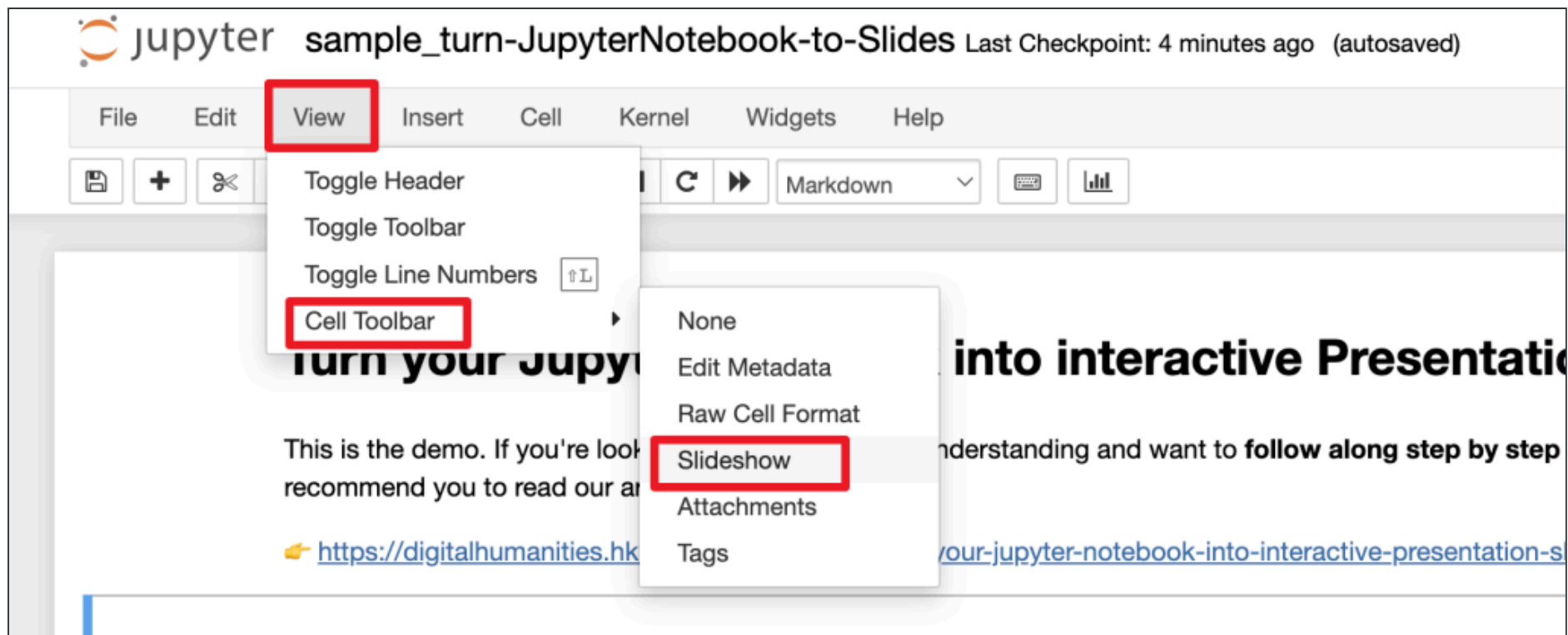
Before proceeding with the conversion process to HTML as outlined above, you need to make some **configurations in Jupyter Notebook using Anaconda**.

This configuration allows you to **selectively choose which cells to display**, ensuring that only the relevant content appears in the HTML output, showcasing the most important code snippets, explanations, and visualizations. This flexibility empowers you to tailor the HTML slides to your specific needs and deliver a concise and impactful presentation to your audience.

1. Enable Slideshow View

In the menu bar, click **“View”** → **“Cell Toolbar”** → **“Slideshow”**.



















2. Select Slide Type for each cell

After enabling the slideshow view, you can now select the “Slide Type” of each cell at the top right hand corner.




jupyter
sample_turn-JupyterNotebook-to-Slides
Last Checkpoint: 5 minutes ago (autosaved)
 Logout

File
Edit
View
Insert
Cell
Kernel
Widgets
Help
Trusted
Python 3











Code



Slide Type
Slide

Turn your Jupyter Notebook into interactive Presentation Slides

Slide Type
Fragment

This is the demo. If you're looking for a more detailed understanding and want to **follow along step by step with thorough explanations**, we highly recommend you to read our article below:

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Slide Type

Slide
Sub-Slide
Fragment
Skip
Notes

```
In [1]:
import sys
!{sys.executable} -m pip install pandas
!{sys.executable} -m pip install plotly

Requirement already satisfied: pandas in /opt/anaconda3/lib/python3.8/site-packages (1.2.4)
Requirement already satisfied: python-dateutil>=2.7.3 in /opt/anaconda3/lib/python3.8/site-packages (from pandas) (2.8.1)
```

Explanation of each “Slide Type”

Type	Explanation
Slide	a main slide





Type	Explanation	
Sub-Slide	a sub-slide which will be shown when using the down arrow navigation (▼)	
Fragment	the cell content will be inside the main slide with a fade-in transition	
Skip	the cell content will not be displayed in the presentation slide	
Notes	speaker notes for the slide, the cell content will not be displayed in the presentation slide	

3. Add Tag to hide code of charts on the slide

If you prefer showcasing charts or visualizations on the slides without including the corresponding code, you can assign specific tags to the desired cells.

In the menu bar, click **“View”** → **“Cell Toolbar”** → **“Tags”**.



The screenshot shows a Jupyter Notebook titled "sample_turn-JupyterNotebook-to-Slides". The "View" menu is open, with "Cell Toolbar" and "Tags" highlighted. The code cell contains the following Python code:

```
In [6]:  
import plotly.express as px  
  
In [7]:  
plotly_chart1 = px.histogram(data2, x='Period', y='number of items')  
  
# set custom title for x-axis and y-axis  
plotly_chart1.update_layout(  
    title = 'Number of Items by Century',  
    yaxis_title='Number of items',  
    xaxis_title='Century',  
)  
  
plotly_chart1.show()
```

Below the code, the title "Number of Items by Century" is visible.

Type `to_remove` in the top right hand corner of the cell, and click “**Add tag**”.



jupyter sample_turn-JupyterNotebook-to-Slides Last Checkpoint: 4 minutes ago (autosaved) Logout

File Edit View Insert Cell Kernel Widgets Help Trusted Python 3

Run Code

Data Visualization

In [6]:

```
!pip install plotly
import plotly.express as px
```

Plotly chart - example 1

In [7]:

```
plotly_chart1 = px.histogram(data2, x='Period', y='number of items')

# set custom title for x-axis and y-axis
plotly_chart1.update_layout(
    title = 'Number of Items by Century',
    yaxis_title='Number of items',
    xaxis_title='Century',
)

plotly_chart1.show()
```

Number of Items by Century

450

Screenshot that shows how to add tag to the cell in Jupyter Notebook



jupyter sample_turn-JupyterNotebook-to-Slides Last Checkpoint: 5 minutes ago (unsaved changes) Python 3 Logout

File Edit View Insert Cell Kernel Widgets Help Trusted

Run Code

Data Visualization

In [6]:

```
#!/pip install plotly
import plotly.express as px
```

Plotly chart - example 1

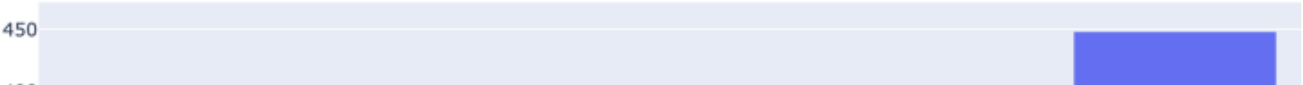
In [7]: to_remove ✕

```
plotly_chart1 = px.histogram(data2, x='Period', y='number of items')

# set custom title for x-axis and y-axis
plotly_chart1.update_layout(
    title = 'Number of Items by Century',
    yaxis_title='Number of items',
    xaxis_title='Century',
)


plotly_chart1.show()
```

Number of Items by Century



Screenshot that showcases the interface after tag is successfully added to the cell





After configured each cell in Jupyter Notebook using Anaconda, you can now follow the steps in the [previous section “Convert ipynb file to HTML file”](#) to turn your Jupyter Notebook into interactive HTML Presentation Slides.

The generated output is a single HTML file, making it incredibly convenient to share and save on a USB drive. Simply double-click on the HTML file to open it in any web browser. This portability and accessibility make it ideal for presenting in a classroom setting too. Good luck on your presentation!

Next article – host HTML file online

As the converted file is in HTML format, you can also choose to host it as a website online like below. In our upcoming article, we will guide you through the process of hosting your HTML file on GitHub Pages. Stay tuned!



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■ References

Kam, M. (2020, June 28). *Creating an interactive presentation with Jupyter Notebook and Plotly*. Things Michael Thinks.

<https://www.michaelkam.id/data-visualisation/2020/06/28/creating-an-interactive-presentation-with-jupyter-notebook-and-plotly.html>

Krishnamurthy, D. (2015, December 5). *Jupyter Notebook, Reveal.js and Github Pages*. kdheepak.

<https://kdheepak.com/blog/jupyter-notebook-revealjs-and-github-pages>

Mayeesha, T. (2018, February 12). *Present your data science projects with Jupyter Notebook slides!* Medium.

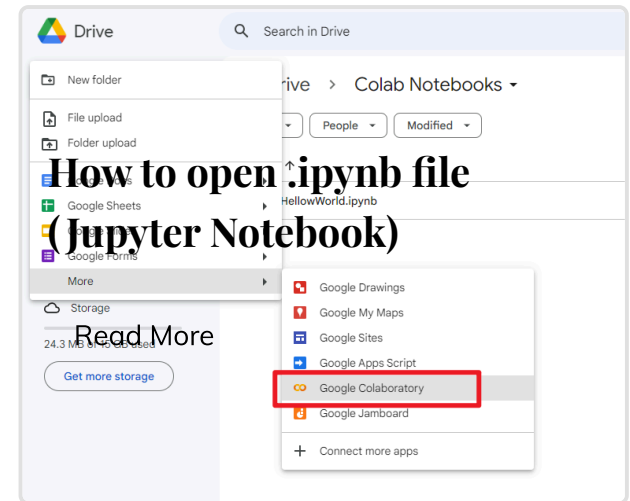
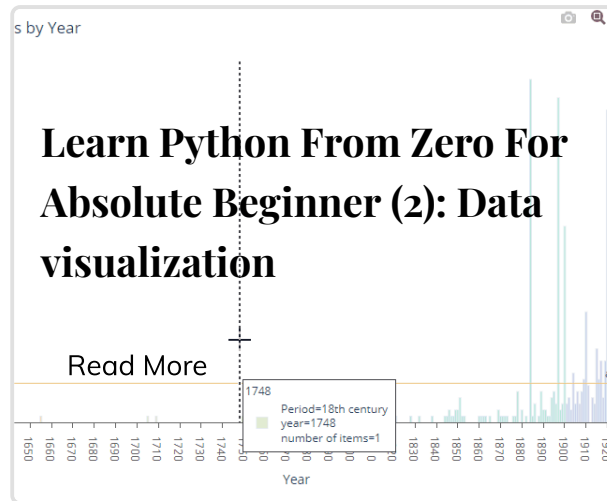
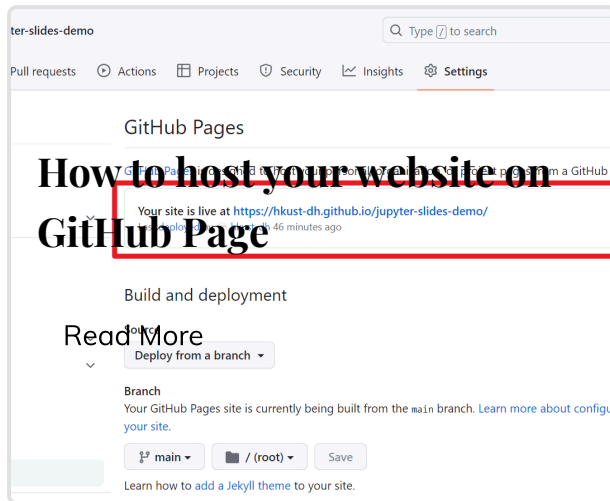
<https://medium.com/learning-machine-learning/present-your-data-science-projects-with-jupyter-slides-75f20735eb0f>

– By [Holly Chan](#), Library

October 6, 2023



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