

PROCESS BOOK

24/05/2023

What I worked on: Reading up the documentation given about Bokeh and visualization, finding datasets (which took much longer than I thought), making a plan for the upcoming days and set an idea for the website (what do I want the final product to look like).

Problems I encountered: On that first day, my biggest issue was really finding reliable datasets, but also that had good data (fitting my time-frame and the variables I am checking for).

What I learned: I did learn a great deal on visualization, what may seem futile details are actually important widely accepted uses for presenting data and optimizing an audience's understanding.

Which resources did I use: I really started with the ones given by <https://data.proglab.nl/project/development>, then for my data I went on several websites (Statista, World Bank, Kaggle, Knoema, etc.) and finished by reading additional information on Bokeh to set my website's idea.

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25/05/2023

What I worked on:

Selecting, transforming and arranging my data (each dataset).

... and still wasn't done...

Problems I encountered: Making the data readable was tricky and

required a lot of back and forth between the files. The names of the

countries were a big issue and whether they existed or not according to

the set: Somaliland and Somalia, DRC or Zaïre, etc.

What I learned: I don't think I learned much, rather I applied a lot of

knowledge I got from the previous exercises on data-frames, dictionaries

and such. I definitely saw how useful each functionality became when

treating with tricky data.

Which resources did I use: I went back on the previous exercises to

check I was doing things right, or get inspiration on what is best to use in

order to transform the data into something readable/useful for my project.

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26/05/2023

What I worked on: First and foremost, I started by making a nice looking process book that I would actually want to fill up. Then I went back on processing my data...

Problems I encountered: I realized I made a bad job at organizing my data, so I had to come back on much of the code I had made so far, which was quite demoralizing.

What I learned: Clean up and comment my code often. Definitely. Because I don't really do it, but when I have hundreds of cells in Jupyter Notebook and I don't remember what is what, it becomes time consuming.

Which resources did I use:

I took inspiration again from the past assignments, mainly the ones we had on Jupyter Notebook.

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27/05/2023

What I worked on: I started making graphs! Finally I can have a visual idea of what I can or not produce. I started by making the graphs by region, then selected the data for the religion one and I stopped after struggling for hours on the currencies, I will deal with that tomorrow.

Problems I encountered: Putting all my code in one page is very long when I need to restart or if I need to retrace the origin of some mistake. Also, trying to make something really nice is not necessarily accessible to my amateur level in bokeh, so I may have aimed too high on the currencies.

What I learned: Many more things about bokeh (color palettes, transparency, hovering, etc.) and the possibility of somehow mixing up python code and html (I was surprised). I am getting quicker at understanding my issues, and at coding.

Which resources did I use: The bokeh website is all over my search history now, and a few YouTube tutorials to get the hang of some things I've missed (how to add an image when hovering on a map for instance) and some news articles to keep my countries' selections coherent.

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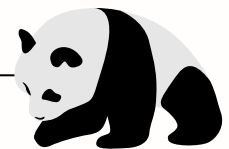
28/05/2023

What I worked on: I tried starting making the interactive map, but it represents a much bigger challenge than the two first interactive graphs. I decided I would go on and rearrange my notebook in 3 different parts to be able to see clearer. Then, I wrote my project description.

Problems I encountered: I think it was too much to think I could actually do an interactive map... Having to research each element and then trying to figure out how to link them together is just very hard.

What I learned: The interactive maps are not made from images, they are a set of polygons drawn according to coordinates.

They are accessible in geopandas.



Which resources did I use: I read about how vectors do not get pixelized and why they are used rather than images to make graphs on <https://www.learn datasci.com/tutorials/geospatial-data-python-geopandas-shapely/>.

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30/05/2023

What I worked on: My currencies map... again. I mean, I managed to make it work individually, now I am missing the interactivity, which is the whole point of this whole thing, but also the hardest bit.

Problems I encountered: Different tutorials propose ways that correspond to different versions of bokeh. I had to check specifically those that were similar to mine. Also, I realized that the further I go, the less adequate documentation I manage to find useable.

What I learned: On housekeeping: even if I want to "clean up" by deleting things/closing tabs, I should not until I am completely done, otherwise I might loose precious information...

Which resources did I use:

Bokeh website, "Stackoverflow", "Github" and "Towards Data Science" were unknown to me before this project and are now my best allies.

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31/05/2023

What I worked on: I am finished on my interactive map. The new challenge was figuring how to save it, because of all the exchange between datasets and the possibility to select variables. I quickly discarded the idea of using flask: it was too late for me to learn how to make a full application.

Problems I encountered:

It was very fun, I really like HTML and making websites, but highly time consuming and I hoped to be done by yesterday, so I was a bit rushed.

What I learned: That an interactive map quickly becomes very dense, my last map uses at least 10 times more bites than the first ones. Then, how to modify carefully a thousands lines HTML file to make my site.

Which resources did I use: I downloaded and tried to use HoloViews <https://holoviews.org/>, but was disappointed only few parts got saved https://panel.holoviz.org/api/panel.__init__.html#panel.__init__.Column.save helped me figure out an other way.

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01/06/2023

What I worked on: I started doing my website yesterday, but just quickly
put everything together, today's challenge is to make it look better, but
also explain the results and whether they matched my expectations.

Problems I encountered: I wanted to do too much, so I stepped back and
check what was the priority and how to make it look as good as I could.
Also, I was not sure how to include the different elements, so I added a
download option to allow whoever needs it to get the access.

What I learned:

How to add the possibility to download a document from a web page, I did
not think it was possible in such an easy way. I was expecting worse.

Which resources did I use:

The previous HTML work and the W3Schools website.

That's it. I am done.