Analysis and Visualisation with NetworkX and Altair

Pre-work

Python: https://programminghistorian.org/en/lessons/introduction-and-installation
Jupyter Notebooks: https://glam-workbench.github.io/getting-started/

Week 2: Data Visualization with Altair

Helpful Resources

- Altair website: https://altair-viz.github.io/index.html
- Datacamp's tutorial: https://www.datacamp.com/community/tutorials/altair-in-python

Assignment

1. Watch the video *DON'T PANIC – Hans Rosling showing facts about population*: https://www.youtube.com/watch?v=FACK2knC08E

2. Pick a chart from Our World in Data, upload it to the *Week 2 Altair* channel on Teams, and answer the questions below:
   https://ourworldindata.org/charts
   A. Is your data continuous, discrete, nominal, ordinal, or categorical?
   B. How is the data visually encoded in your chart?
   C. Is your chart static, dynamic, or interactive?
   D. If your chart is interactive, what types of interactions can you have with it?
   E. If your chart is dynamic, what how do the data's visual encodings change?
   F. What does the chart tell you? How do you know this?

3. Choose another type of chart to make with Altair in your own Jupyter Notebook, using data from Altair (in the vega_datasets) or using a dataset of your choice!
   A. If you need visualization inspiration, check out Altair's Example Gallery! https://altair-viz.github.io/gallery/index.html
   B. If you're not sure where to find a dataset, try downloading a comma-separated values (CSV) dataset from UN Data: http://data.un.org/Default.aspx

   Hint: if you're not sure how to load a CSV file (spreadsheet) into a Jupyter Notebook, look back to how we used pandas to load our network datasets into the Notebook from last week's course

   Note: as with last week, you can start from the Notebook we demoed in class

Optional

Build a visualization using another Python library called Seaborn, following a tutorial from this website in your own Jupyter Notebook: https://seaborn.pydata.org/tutorial.html

Follow the Altair case study *Exploring Seattle Weather* in your own Jupyter Notebook
https://altair-viz.github.io/case_studies/exploring-weather.html

Read a blog post by an author of Data Feminism, *What would feminist data visualization look like?*
https://medium.com/@kanarinka/what-would-feminist-data-visualization-look-like-aa3f8fc7f96c