documentation

June 5, 2023

1 Project Report: Falling Behind: A Global Look at Declining Birth Rates and its Consequences

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Course: Data Visualization 06.06.2023

1.1 Motivation

Just a few months ago, my family joyfully welcomed a new baby boy, making my eldest sister a mother. This is the first time any of my siblings bore a child and it felt for me like starting a new chapter with my family. At the same time, I have came by on my YouTube recommendation feed multiple videos of declining birth rates as if youtube was spying on my whole family. In addition as of late, I had to endure the past life stories of my parents on how many siblings they had. Because of these recent events, my interest in that topic has greatly increased and ultimately decided to write a my report on declining birth rates.

1.2 Story idea and intention

1.2.1 Target audience

1.3 Exploratory work

1.3.1 Datasets

1.4 Chart types

1.4.1 Colors

#00FFFF - This is a cyan color. #9370db - This is a medium purple color. #BA55D3 - This is a medium orchid color. #483D8B - This is a dark slate blue color. #00008B - This is a dark blue color. #FAFAFA - White some *blue* text#0E1117 - Black

1.5 Packages

Pandas Pandas was used to read and process the datasets. I have some experience with Pandas because of prior data science and ML courses.

Plotly I found plotly much easier to use and more pleasing to look at than matplotlib. Interactivity is to an extend already implemented, which made working with the package faster.

Streamlit I have never used streamlit before, but it left a good first impression from just looking at the documentation. Streamlit was used to host the datastory on a browser. It was simple to use and most of the default templates already followed my vision on how the data story should look like.

Matplotlib and PyWaffle I initially planned to only use plotly, however i came across a problem where I wanted to create a pictogram chart. There was a way to implement that chart type, but it was too tedious and in the end I opted to use PyWaffle which is based on matplotlib. Pywaffle is a library that made developing pictogram charts simple.

1.6 Citation