Assignment 4

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Instructions:

1) Use the hosted web app or start a local server by opening the folder and running `python -m http.server 8080`
2) Select a metric by choosing from the dropdown below the map. This will update the line graph with time series data across each year of all countries for that metric.
3) Select a year by choosing from the dropdown below the map.
4) Select a country by clicking a country on the map. This country is the baseline, and will appear in yellow. Other countries will change colors to reflect their value for that metric in that year ***relative to the baseline.*** Green indicates a value higher than the baseline, and red indicates a value lower. Gray indicates a missing datapoint for that country, metric, and year. Additionally, the selected country will have a yellow line in the time series graph.
5) When you hover over a country, you will be able to see the country's name and the value corresponding to it for the selected metric and year. For countries without any data for that metric and year, it will say undefined or null.
6) To view the animation: Click on the play button in the top-left corner of your screen. This will create a staggered animation changing the map to display the values of that metric for all years available for that metric while keeping the baseline country the same. The "years" text on the top-left corner will also change to reflect which year's data is being displayed.
7) Use the pan-zoom feature to drag and/or zoom into different parts of the world map, and view it in greater detail.

Video URL: https://www.youtube.com/watch?v=d--hj8GoZjo
Link to web app: https://vbagchi.github.io/CMSC471_Assignment4/
Link to source code repository: https://github.com/vbagchi/CMSC471_Assignment4

Additional Inputs and Sources:
world-countries.json - Contains all countries and their respective country codes, latitudes, longitudes, etc.
D3 Pan and Zoom - Implements a pan-zoom feature to interact with the visualization
D3 toolkit - Topojson D3 toolkit is used to create the world-map visualization and add in additional interactive features