

## Project 1 Proposal:

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## Goal and Overview:

Create an intuitive and interactive way of exploring the relative wealth of different regions and countries using a variety of economic measures (GDP, HDI, Etc).

In order to achieve this, we plan on creating a custom d3 visualization that will allow users to quickly see different wealth levels of countries- currently, we're thinking of using something similar to a zoomable sunburst (<https://observablehq.com/@d3/zoomable-sunburst>).

## Datasets:

We plan on using a number of different datasets in order to create our visualization. Some datasets that are in contention are:

- <https://api.worldbank.org/v2/countries/all/indicators/NY.GDP.MKTP.CD> (GDP)
- <https://api.worldbank.org/v2/countries/all/indicators/NY.GDP.MKTP.KD.ZG> (GDP Growth)
- <https://api.worldbank.org/v2/countries/all/indicators/SP.POP.TOTL> (Population)
- <https://api.worldbank.org/v2/countries/all/indicators/SL.UEM.TOTL.ZS> (Unemployment)
- <https://www.kaggle.com/worldbank/world-development-indicators#Indicators.csv> (Various Indicators)

## Process:

As mentioned, we plan on using the data listed above to create a variety of charts and visualizations so that users can compare and contrast different countries using different measures easily. Some of the steps for this project are as follows:

- Identify most complete and compatible datasets
- Explore datasets, clean up incomplete or errant values
- Load dataset into a database (MongoDB or PostgreSQL) for easier access and manipulation.
- Sort data into a format usable by the visualizations that we will use.
- Create Flask Application to create visualizations with data.
- Use JS to create ways to effectively compare datasets.