Project Proposal

Project Title: Drink and be hapPY

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Write this as a brief summary of your interests and intent, including:

Our project is to uncover patterns and correlations between happiness by country and alcohol consumption and weather. We will examine relationships between various countries throughout the world and determine whether there is correlation with amount of alcohol consumed and annual days of sunshine.

The kind of data you'd like to work with/field you're interested in (e.g., geodata, weather data, etc.)

* Alcohol consumption data
* World Happiness Project data
* Weather data

The kinds of questions you'll be asking of that data

* What are the happiest countries?
  + The happiest countries appear to be located in a specific portion of the world, primarily Scandinavia and Europe. With 3 of the top 10 countries being Scandinavian, and 7 of the top 10 countries being in Europe.
* Which countries have the most alcohol consumption? Least?
  + Least alcohol consumption title belongs to Somalia, but it is closely followed by a slew of Middle Eastern and North African countries that are in the surrounding geographical area
  + Most alcohol consumption title belongs to Estonia, with European countries rounding out the top 20 alcohol consumers, all above 10 liters per year consumption.
* Which countries have the most income inequality?
  + South Africa has highest instance of GINI coefficient, but South America appears to have the highest concentration of income inequality, with countries such as Honduras, Brazil, Colombia, Paraguay, and making the top 10.
* Is there a correlation between alcohol consumption and happiness?
  + There data doesn’t suggest that there is a correlation between alcohol consumption and happiness. The data appears to be randomly distributed.
* Is there a correlation between alcohol consumption and income inequality?
  + There appears to be a trend where reduced income inequality leads to higher alcohol consumption.
* Is there a correlation between income inequality and happiness?
  + The data shows a seemingly significant trend indicating that reduced income inequality correlates with increased happiness.

Possible source for such data

* Happiness Index 2017/ 2018
  + http://worldhappiness.report/ed/2018/
* <http://apps.who.int/gho/data/node.main.A1026?lang=en&showonly=GISAH>
* Weather API

Rough breakdown of tasks:

* Look over happiness index and figure out countries
* Google API to find long/lat for countries and plot heat map for the countries based on happiness
* Visualizations