**Project 2: World Happiness Report**

The purpose of our project is to analyze data provided by the World Happiness Report (<https://worldhappiness.report/>). The World Happiness Report is a landmark survey of the state of global happiness that ranks 156 countries by how happy their citizens perceive themselves to be. The factors that seek to determine happiness for each country are categorized as economy, family, health, freedom, and trust in government. While these factors don’t directly affect the country’s score, they do provide an explanation for why a country has that specific score. The project is powered by data from the Gallup World Poll.

**Data Set**

Although the World Happiness Report publishes its findings for each year individually on their website, we found a consolidated dataset on Kaggle (<https://www.kaggle.com/unsdsn/world-happiness>). This dataset has data for the years 2015-2019.

**Visualizations**

The data lends itself to a geographic visualization perfectly. We plan to overlay happiness scores over the 156 countries included in the data. Furthermore, we are hoping to apply a new plugin for Leaflet (<https://github.com/nerik/Leaflet.Emoji/>) to overlay emojis based on the happiness score. For example, a country with a score of 10 would be a smiley face emoji, while a country with a score of 3 would have a frowny face emoji.

We want to apply various filters to our data that the user can use to interact with the map. Some of the filters we will use are filters for each factor (economy, family, health, etc.), filters for year, and a top 10 countries filter.

In addition, we will allow the ability to “drill down” into a specific country when it is clicked. This will take the user to a page that shows a line chart for that specific country comparing the happiness score rating (or individual factor) over the timeframe.

Lastly, we will include several scatter plots that will attempt to draw correlation between the happiness score and the various factors that contribute to the score.