Proposal

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The tentative project title

World Happiness' Relationship to Social Factors

The motivation for this project

We chose this dataset because we want to analyze what factors affect people's happiness scores. Factors that are included into our consideration are country, year, GDP, healthy life expectancy at birth, freedom to make life choices, generosity, and perceptions of corruption. Our goal is to find out both direct and inverse relationships between people's heappiness and above factors.

The intended final products

A website will be built to present our analysis and conclusion derived from the World Happiness Report data. On this website, first, people could read the background of the World Happiness Report. We would like to focus on which factors contribute most to people's happiness. Second, there would be questions that arose during our process of analyzing the data on the website. Third, we would use plots and other formats to best conclude our result. Finally, we would discuss our findings and our expectations.

The anticipated data sources

We downloaded this dataset from World Happiness Report.

```
library(readxl)
happiness_data = read_excel("DataPanelWHR2021C2.xls")
```

The planned analyses / visualizations / coding challenges

We will first visualize the global happiness score distribution with a world map and a bar plot of happiness rank. Besides, a yearly alteration line plot will be presented. Then we will investigate the relationship between happiness score and GDP, social support, life expectancy, freedom score to make life choices, Generosity, Perceptions of corruption, and scatter plots with fitted curve will be plotted. All plots will be presented by `plotly` interactive plots to ensure readability. The coding challenges remains in data cleaning, visualizing, and relationship analyzing.

The planned timeline

- November 16-19: Project Review Meeting
- November 20-26: Writing Scripts
- November 27-December 3: Report
- December 4-10: Webpage and screencast