

# Proposal

## The group members (names and UNIs)

Jiaqi Chen (jc5681), Xinran Sun (xs2447), Yiru Gong (yg2832), Yunlin Zhou (yz4184)

## 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 happiness and above factors.

## The intended final products

## The anticipated data sources

We downloaded this dataset from Kaggle.com.

```
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