Project 1: Proposal

Team Members:

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Project 1 - Happiness Explained: An Exploration of Happiness Scores by Country

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OVERVIEW/OUTLINE

Our main objective is to analyze happiness scores from 2017-2019. Specifically, we are interested in understanding what might explain variations in happiness scores based on subjective well-being (SWB) measures included in a Gallup world survey. We will explore which SWB measures correlate most highly with higher happiness scores. We also intend to identify any significant contributing factors that may help to explain these correlations.

HYPOTHESES or CORE MESSAGE:

-According the the world happiness report there are several subjective well-being measures (SWB) that were studied. What we want to examine is the different factors to determine the correlation, if any, of each of these with overall happiness. We also want to dive into which of these is most likely to influence happiness.

RESEARCH QUESTIONS:

- 1. Which countries had the lowest happiness score? highest happiness score?
- 2. Which of the measures of SWB (i.e., social support, healthy life expectancy, generosity, freedom to make life choices, GDP per capita, and perception of corruption) are most highly correlated with a higher happiness score?
- 3. Which of these measures are most likely to influence the happiness score?

DATASET(S):

World Happiness Report: Overview World Happiness Datasets Github Repository

TASK BREAKDOWN:

- Set up Github Repository: @Nathan B
- ✓ Create API Key: @doc
- Setting up Jupyter Notebooks: @Teshanee W
- ✓ Retrieve and Review Data: @doc
- ✓ Create Dataframes: @Arlette V @Nathan B
- Clean Data Appropriately: @Arlette @Nathan B
- General Summary Stats: @Teshanee W @Niru S
 - ✓ Create a new data frame based on the average of three years @Teshanee W @Niru S @Arlette V @Nathan B
 - ✓ Identify lowest/highest happiness scores @Teshanee W & @Niru S
 - ✓ Create a visualization @Teshanee W @Arlette V
- ✓ Dive into Research Questions: @doc
- Comment and annotate methodology
- ✓ Create a boxplot for each SWB @Teshanee W
- Run linear regression(s) @Niru S @Teshanee W
 - ✓ Create scatter plots- @Niru S @Nathan B
 - Run correlations @Teshanee W @Niru S @Nathan B
 - ✓ Multivariable regression! @Teshanee W
 - ✓ Create visualization @Teshanee W
- Clean up, plot and summarize questions: @doc
 - ✓ Comment out code and create headers and sections: @Arlette V @Niru S
- Overview Writeup: @Nathan B @Arlette V

- ✓ Pull overview instructions from Gitlab; format accordingly.
- ✓ Presentation Outline: @Arlette V @Nathan B
- ✓ Assure data answers our questions: All
- ✓ Push and merge final docs/folder(s) to Github: @doc
- ✓ Create slides for presentation: All
- ✓ Present: Team

Link:

- +Write-Up Summary
- +Presentation Outline