## **Project Proposal - Analyzing Global Suicide Rates**

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Project Overview –

For our group project we will be analyzing global data to get the suicide rates by Country, gender, age, GDP and generation for 10 years (2006-2016). We want to look into the overall suicide rates across the globe (about 100 countries) at a high-level, and then primarily focus on top 10 countries with higher suicide numbers for a thorough analysis of trends and various measures. We would drill down specifically into United States data briefly to find any country specific trends.

Questions to be answered –

* What are the countries with higher suicide rates?
* Is there any impact of GDP on the suicide rates in the top countries?
* Are there any generational trends, age or gender factors that can be identified?

Dataset to be used –

After exploring several datasets we picked the Kaggle dataset on “Suicide Rates Overview 1985-2016”

You can find more details of the dataset here:

[suicide-rates-overview-1985-to-2016](https://www.kaggle.com/russellyates88/suicide-rates-overview-1985-to-2016)

Overview of Visualizations and Analysis –

Global

1. Heatmap depicting overall suicide totals, 10 years combined

Top 10 Countries

1. Bar Graph: Suicide raw total by country (countries separate, 10-years combined)
2. Scatter Plot: Correlation between suicides and GDP
   1. Combines 10 years
   2. X-axis: total population (in 100K bins)
   3. Y-axis: GDP (in 100K bins, average of 10 years)
   4. Size of bubbles: Raw suicide numbers (per 100K)
3. Pie Chart: Gender (top 10 combined) (combined over 10 years)
4. Pie Chart: Age Buckets (top 10 combined) (combined over 10 years)
5. Histogram: Suicide Rates for genders by combined 10 Countries
   1. X-axis: age buckets
   2. Y-axis: suicide totals
   3. Bars: Gender

United States

1. Stacked Bar Chart: Generations (United States) (separated by years), generations make up the stack of each year