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## Module 11 Project: Stage 1—Project Proposal

### Topic: Analyzing Global Suicide Trends and Economic Factors

#### Project Overview:

This project is dedicated to unraveling the complex interplay between socioeconomic factors and global suicide trends. Given the profound impact suicide has on societies worldwide, understanding these dynamics is crucial for developing effective interventions and policies.

#### Questions and Hypotheses:

The project will focus on answering three pivotal questions, each accompanied by a hypothesis rooted in the preliminary findings of previous studies and the dataset's potential to provide insights:

- **Economic Factors' Influence:** How do economic conditions, indicated by Gross Domestic Product (GDP) per capita, influence suicide rates across different countries?  
**Hypothesis:** There exists a nuanced, potentially inverse relationship between a nation's economic health (as measured by GDP per capita) and its suicide rates. This relationship is anticipated to vary across countries with differing economic statuses, providing insight into how financial prosperity or distress impacts mental well-being on a global scale.
- **Age-Specific Suicide Trends:** What patterns emerge in suicide rates when analyzed across different age groups globally?  
**Hypothesis:** Specific age groups are disproportionately affected by suicide, with the vulnerability of each group influenced by distinct socio-economic and psychological pressures. This project aims to delineate these age-specific trends to inform targeted prevention efforts.
- **Gender Disparities in Suicide Rates:** How do suicide rates differ between genders across various socioeconomic contexts, and what factors contribute to these disparities?  
**Hypothesis:** A "gender paradox" exists in suicide rates, with men exhibiting higher rates of suicide despite lower reported instances of depression compared to women. This disparity is hypothesized to stem from a complex interplay of cultural, societal, and economic factors.

#### Data Acquisition:

The primary dataset for this analysis will be sourced from the "[Suicide Rates Overview 1985 to 2016](#)" dataset available on Kaggle. This dataset offers a comprehensive array of fields such as country, year, gender, age group, number of suicides, GDP for the year, and GDP per capita.

#### Data Source and Utilization:

The chosen dataset provides a rich set of data points spanning over three decades, offering a global perspective on suicide trends. The dataset's breadth, encompassing variables such as

GDP, age, gender, and country-specific suicide counts, allows for a multifaceted analysis of how socioeconomic factors intertwine with demographic variables to influence suicide rates. By employing statistical analysis and data visualization techniques, this project will dissect the dataset to:

- Examine the correlation between economic indicators and suicide rates, shedding light on the economic impact hypothesis.
- Conduct age and gender-based analyses to uncover demographic vulnerabilities and disparities in suicide rates, addressing the age-specific trends and gender disparity hypotheses.
- Perform a comparative analysis across different regions to highlight geographical variances in suicide trends, offering a broader understanding of the global landscape of suicide.

**Conclusion:**

This project aims to contribute to the ongoing discourse on suicide prevention, offering evidence-based insights that could inform policy and intervention strategies. By meticulously analyzing the relationship between socioeconomic factors and suicide rates, the project aspires to unveil patterns that remain obscured within global suicide data, potentially guiding future research and public health initiatives.