Final Project Proposal

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**Student Name: Student ID:**

Insight to Suicides around the world

**Project Title:**

1. Background Research / Problem Description (200 words max)

*Explain the title and application of your work. Detail the problem(s) you are trying to solve, your proposed solution, and the techniques you will use. Give details of any similar studies, and how your study will differ from these.*

The definition is “Suicide is an act of intentionally causing one’s own death”. It could be for different reasons. Conducting research in this area is quite challenging because I will have to look at different factors which cause people to make a decision to suicide. For example, someone may have psychiatric disorders like bipolar disorder, depression, or even anxiety. Others might be killing themselves because of financial issues. So, the area of study is quite wide and it cannot be studied with few pieces of information. Though It’s hard, I strongly believe using data analytics skills and current analytic technologies, it’s possible to check and find a few things which could be a cause for death.

For example, based on the available dataset, we can understand the optimum age group of people who are more likely to suicide. Even though many studies related to this topic had done in the past, my study is going to create new findings which are essential for stopping people from losing more lives in the future. I will be looking at different aspects of suicide and predicting how much more suicides are going to happen in the coming years in different regions of the world. I will be mostly using time series & statistics to predict future suicides based on the dataset.

I feel proud to choose a topic that will contribute a lot to society and make an impact on everyone’s life. The purpose of this study is to try to understand the reasons for suicide. Suicide news is a regular seen in daily newspapers. The suicide rate in many countries is higher than the total mortality rate. In order to make a change to this scenario, we need to study different patterns and clusters in the data and understand what factors are triggering the tendency for someone to make such decisions leading them to self-slaughter. This is not only a study but also an effort to create a **web-based system** that can dynamically create useful and fruitful visualizations on creative dashboards which is understandable for the general audience. **Psql DB** will be used for these models and migrations. **Mochahost** live server will be used for **SSH Connection** and hosting. From project proposal to final coding will be well documented and updated from time to time on **GitHub** and this repo will be linked to the host so that changes made on the repo will be affected on the website. An admin login section will be given for CRUD Operation on the data loaded to DB. **Python Dash** or **Power BI** will be used for the visualization.

1. List the research questions related to the problem statement. Subsequently list out your project goals.
2. Which Countries have the highest suicide rate?
3. Variation of suicide over the years?
4. Age group of People Suiciding?
5. GDP of countries with lowest and highest suicide rates
6. Check suicide rates in different continents.
7. Population and suicide number ratio
8. Data description, tools and software, references, link to data sources and ethics consideration.

As per the page, the majority of the dataset has been taken from the WHO website.

https://www.kaggle.com/lmorgan95/r-suicide-rates-in-depth-stats-insights/data

1. Gantt Chart
2. Special requirements and deliverables of the project
3. Risks – What risks can you identify? What will be the impact if the risk becomes a reality? What can you do to minimize the impact?

* Contingency plan in case you do not meet your project goals – prioritize the goals.
* Unexpected output – any output – you should report it.
* Loss of data/coding due to system failure – work on cloud/back up your work.
* System compatibility – look for virtual machine options.
* Ethics risks – work under the ethical guidelines detailed on DKIT/ Data protection website.