

Life Years Lost — A Visual Dive into the Data of Suicides in the USA

STAR



The project addresses the pressing issue of suicides in the USA, highlighting the significant pain and loss they cause to individuals, families, and communities. With an alarming statistic from the World Health Organization indicating a suicide every 40 seconds globally, the team identified a need for deeper analysis and understanding through data visualization.



The objective was to harness the power of data visualization to provide a comprehensive view of suicide data in the USA. The team aimed to create interactive and informative visualizations that would enable users to explore and understand the complex factors contributing to suicides.



Utilizing a dataset from Kaggle containing mortality data, the team engaged in data cleaning and analysis, focusing on suicides. They employed Python libraries like Seaborn, Matplotlib, and Plotly, alongside webbased tools like D3.js and JavaScript, to develop various visualizations. These included histograms, box plots, time series line charts, bar charts, choropleth maps, time-lapse heatmaps, and story-driven infographics, all aimed at revealing trends, patterns, and insights into suicide data.



The project resulted in the creation of a website hosting a variety of interactive visualizations of suicide data in the USA. These visualizations offered users a detailed and engaging platform to understand the gravity of the issue and explore data on suicides, potentially aiding in awareness and prevention efforts.

Leveraged Knowledge

<u>Data Analysis & Visualization:</u> Proficiency in Python (Seaborn, Matplotlib, Plotly), D3.js, JavaScript for creating interactive visualizations.

<u>Web Development:</u> Skills in web technologies to create an engaging platform for data presentation.

<u>Statistical Analysis:</u> Ability to clean, analyze, and draw insights from complex datasets.

<u>Project Management:</u> Coordinating the development and deployment of a comprehensive data visualization project.

Project Analysis

POSITIVE

STRENGTH

> Innovative approach to presenting suicide data; use of interactive visualizations to enhance user engagement and understanding; focus on a pressing societal issue with potential for impact.

NEGATIVE

WEAKNESS

Limited by the quality and completeness of the dataset; potential challenges in ensuring accessibility and usability of the website for all user groups.

OPPORTUNITY

Potential to expand the project to include data from other countries for a global perspective; opportunity to collaborate with mental health organizations for outreach and impact.

THREAT

The sensitive nature of the topic requires careful presentation to avoid triggering distress; risk of data misinterpretation by users without guidance.

