

Beyond Borders: Empowering Communities Against Human Trafficking

Murali Krishna Sundari,Nagesh Aluri,Nikhil Varma Pakalapati,Nithin Kunal
Reddy Mandadi,Jeevan Kumari Chevula

1 Project Idea

Conduct in-depth research to gather comprehensive data on human trafficking trends, routes, and vulnerable demographics across countries. Utilize advanced data analytics to identify patterns and key areas of concern. So, through this project we intend to discover and analyze patterns in different demographics, where it is happening, the age groups which are being targeted and are the perpetrators being identified by the court of law.

2 Technology Summary

Data Analysis: Python (Pandas, NumPy)

Visualization: Tableau for generating insightful charts and visualizations

3 Architecture Diagram

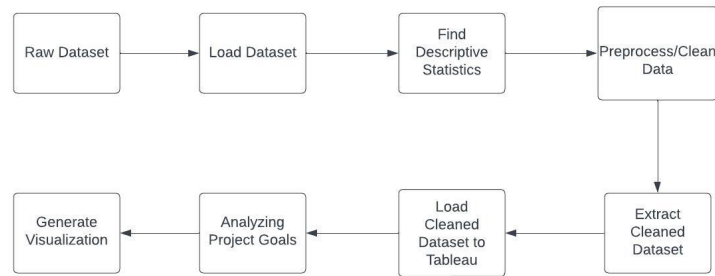


Fig. 1. Architecture Diagram

4 Architecture Summary

4.1 Collect Dataset

This process represents gathering data from various sources or databases.

4.2 Load Dataset

Using the Pandas library in Python, the collected dataset is loaded for further analysis.

4.3 Find Descriptive Statistics

Descriptive statistics and exploratory data analysis are performed on the loaded dataset to understand its characteristics.

4.4 Preprocess/Clean Data

Unwanted columns and data are removed, and necessary data cleaning operations are performed to prepare the data for analysis.

4.5 Extract Cleaned Dataset

The cleaned dataset is extracted after preprocessing, ready for visualization and analysis.

4.6 Load Cleaned Dataset to Tableau

The cleaned dataset is loaded into Tableau, a data visualization tool, for creating interactive visualizations.

4.7 Load Cleaned Dataset to Tableau

The cleaned dataset is loaded into Tableau, a data visualization tool, for creating interactive visualizations.

4.8 Analyzing Project Goals and Generate Visualization

Project goals are analyzed to determine the key metrics and insights to be visualized. Interactive visualizations are generated in Tableau based on the analyzed data.

5 Project Goals

5.1 Goal-1

Distribution of different cases grouped by gender and age

5.2 Goal-2

Geographical representation of cases by origin of trafficking and where the destination of exploitation.

5.3 Goal-3

Cases of adults and minors over the years and the trend.

5.4 Goal-4

Finding which countries are hotspots for different age groups and genders.

5.5 Goal-5

Number of cases registered using different platforms(case management or hot-line).

5.6 Goal-6

Reasons for trafficking, threats, and psychological abuse.

□