

**Global Remittance Explorers** analyzes overseas Pakistani data to uncover remittance trends, population insights, and economic contributions through visualization.

**Global Remittance Explorers**

Project Proposal Due Date  
November 20, 2024

|  |  |
| --- | --- |
| \*Talha Bangyal | 22F-3194 |
| Sardar Sameer | 22F-3162 |
| Rai Ali Faizan | 22F-3061 |
| Abdul Rafey | 22F-3386 |
| Ahmed Hassan Gondal | 22F-3848 |

MT2005-Probability and Statistics

Mr. Muhammad Ahmed Hassan

**Global Remittance Explorers**

**Problem Statement**

The **Global Remittance Explorers** project aims to analyze and visualize data related to overseas Pakistanis, focusing on remittance trends, population distribution by country and continent, and changes over the years. The goal is to uncover patterns and insights about the overseas Pakistani community and their economic contributions. Through data analysis and visualization, the project seeks to address the following questions:

* How has remittance from overseas Pakistanis changed over the years? Are there noticeable trends or fluctuations?
* Which countries have the highest overseas Pakistani population, and how does it vary across continents?
* Is there a correlation between the year and remittance amount?
* Can a regression model predict future remittance based on historical trends?
* How does the distribution of remittance values look? Are there significant clusters or outliers?

**Objectives**

1. Collect and import overseas Pakistani data from a CSV file into the **Global Remittance Explorers'** Shiny application.
2. Display the data in an interactive table for easy exploration.
3. Generate histograms to visualize distributions of remittance, population by country, continent, and year.
4. Create pie charts to depict proportions of remittance, population by country, continent, and year.
5. Construct bar plots to compare and visualize remittance, population by country, continent, and year.
6. Compute summary statistics, including central tendency and variability measures.
7. Implement a regression model to analyze the relationship between remittance and year, predicting future trends.
8. Develop distribution plots to visualize density and shape of remittance values.
9. Customize the Shiny application with intuitive layouts and color schemes.
10. Make the application user-friendly, enabling users to upload and analyze their own datasets.
11. Provide clear labels, titles, and axis descriptions for all visualizations.
12. Document key insights and findings from the analysis concisely.
13. Test the application to ensure functionality and resolve any issues.
14. Present the results, emphasizing key insights and implications.

This project by **Global Remittance Explorers** aims to facilitate a comprehensive understanding of overseas Pakistani data through analysis and visualization, highlighting their significant role in Pakistan's economy.