

GeoStat

Analysing Global
Socio-economic Patterns

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Agenda

- Introduction
- Data Used
- Application Features
- R Shiny Features Used
- Demo



GeoStat

Informed Policy Development

To create effective strategies for poverty reduction, education improvement, and healthcare enhancements.

Analyse Inequalities

To uncover and mitigate disparities among different regions or groups.

A comprehensive tool to analyse global socio-economic patterns using the 2023 Global Country Information Dataset.

Guide Economic Planning

To predict economic trends and prepare for future needs in infrastructure and workforce.

International Comparisons

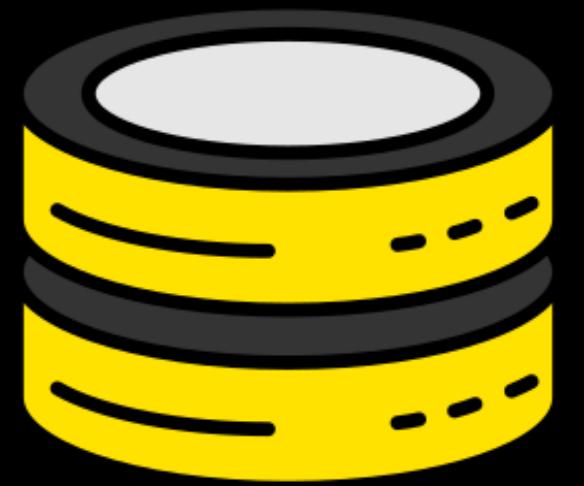
To learn from successful strategies and foster global cooperation.

Efficient Resource Allocation

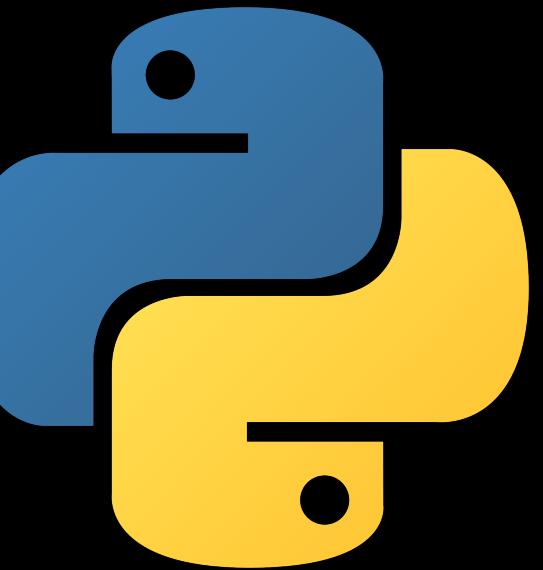
To distribute resources fairly and effectively in health, education, and social services

Support Business Strategy

To make informed decisions on market entry, investments, and corporate social responsibility.



kaggle +



Global Country Information Dataset 2023

Country, Density(P/Km2), Abbreviation, Agricultural Land(%),
Land Area(Km2), Armed Forces size, Birth Rate, Calling Code,
Capital/Major City, Co2-Emissions, CPI, CPI Change (%),
Currency-Code, Fertility Rate, Forested Area (%), Gasoline
Price, GDP, Gross primary education enrollment (%), Gross
tertiary education enrollment (%), Infant mortality, Largest city
Life expectancy, Maternal mortality ratio, Minimum wage
Official language, Out of pocket health expenditure, Physicians
per thousand, Population, Population: Labor force participation
(%), Tax revenue (%), Total tax rate, Unemployment rate,
Urban_population, Latitude, Longitude

Continents Data

36 Variables



World geo json
Shapes Data



GeoStat



GeoStat Features

Dashboard

Global Data

- Global Country Data 2023
- Data Summary View

Data Visualisation

- Pairs Plot
- Data Correlation
- Homogeneity of Data
- Heatmaps
- Scatter Plots
- Box Plots

Advance Charts

- Economic Impact Analysis
- Social Impact Analysis

About

Understanding global socio-economic trends requires the efficient analysis and interpretation of extensive country-level data. This capability is essential for policymakers, researchers, and organizations to make informed decisions. The Global Country Information Dataset 2023 encompasses a wide range of indicators across demographic, economic, environmental, and healthcare spheres. This dataset offers a valuable opportunity to explore various aspects across all countries and derive meaningful insights.

Socio-economic data analysis enables stakeholders to identify patterns and trends that can inform policy decisions, economic strategies, and social interventions. By examining indicators such as GDP, employment rates, literacy rates, and life expectancy, we can gain a comprehensive understanding of a country's development status and potential areas for improvement.

The primary objective of this application is to empower users to conduct their own exploratory data analysis, manipulate data, and visualize outcomes. By providing a user-friendly interface and robust analytical tools, the application aims to facilitate a deeper understanding of global trends. Users can interact with and analyze the data through various computational and visual tools, enabling comparisons and insights across different countries.



GeoStat



GeoStat Features

Data Management

- Joining various datasets
- Filtering rows and Columns

Data Cleaning

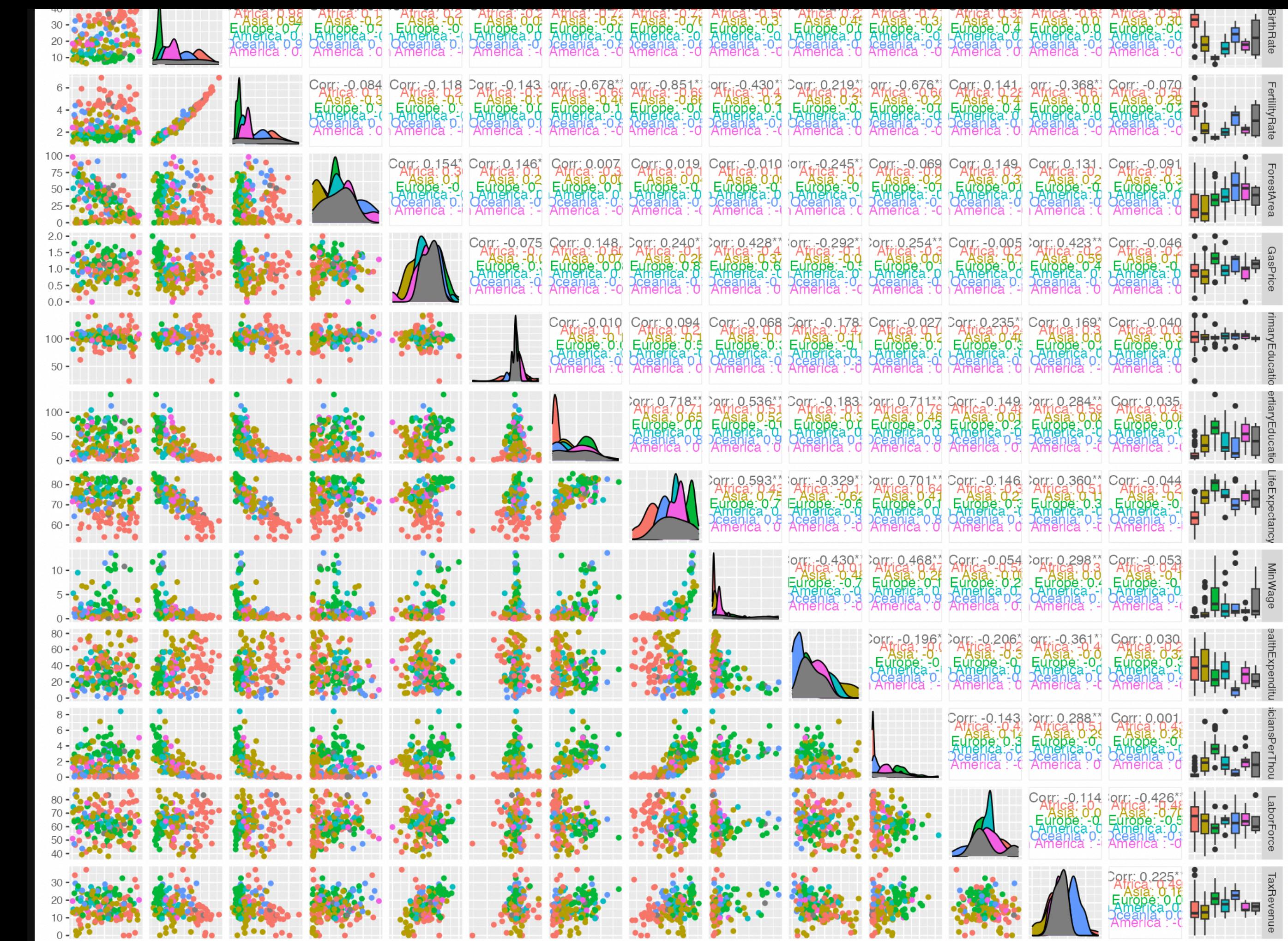
- Unicode Characters
- Special characters (, \$ %)
- Meaningful Column Names

Data Transformation

- Datatypes
- Short to Long format

Data Visualisation

- Dynamic Data Visualisation & Interaction
- Interactive Elements (Tooltips, zoom, hover,





Features Used

Shiny Dashboard

- Page, Header, Sidebar, Body, Footer
- Sidebar Menu, MenuItem, MenuSubItem
- fluid Page, fluid Row, column, Box

UI Elements

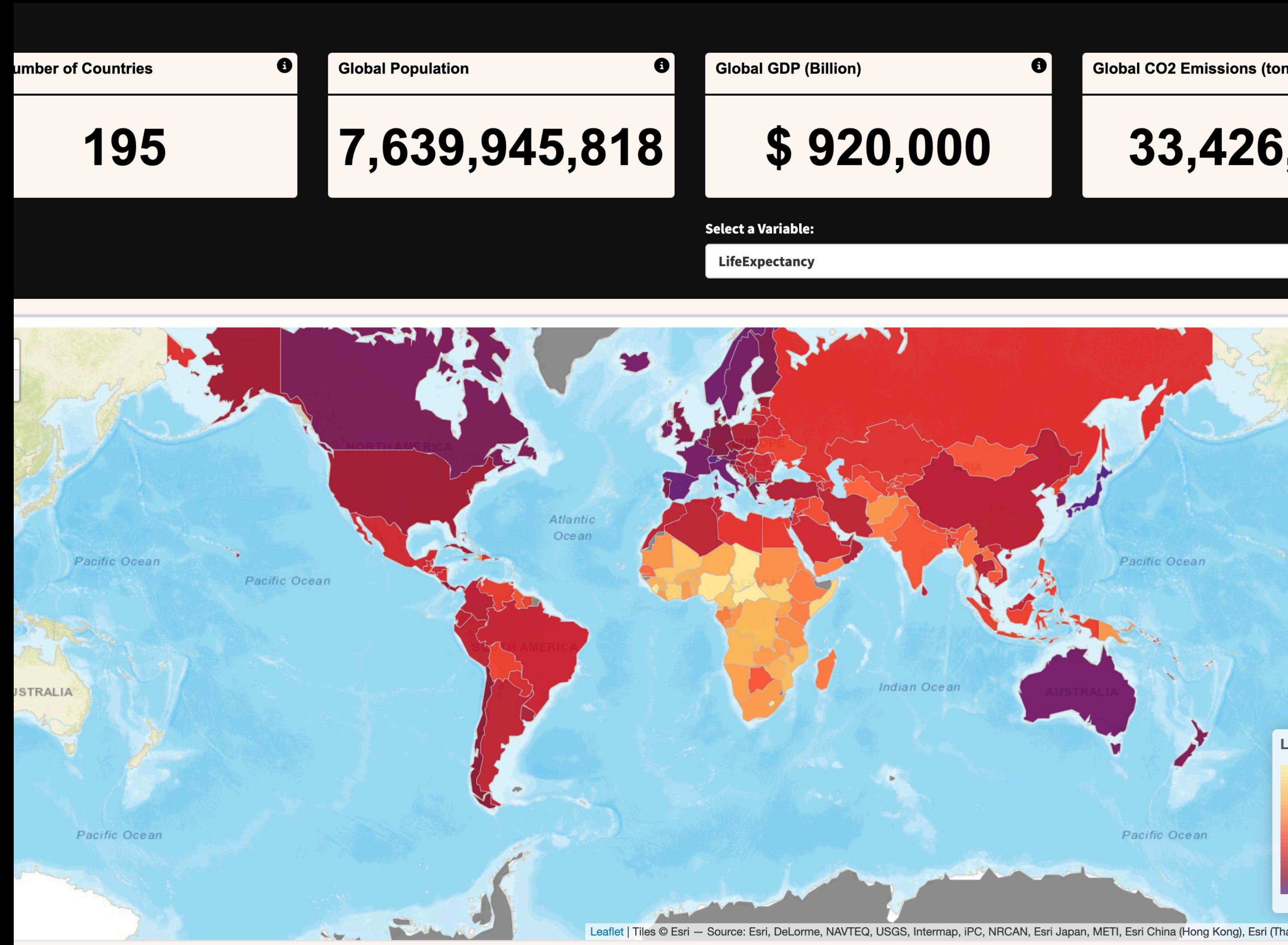
- Select, Picker
- Slider
- Button
- Tabs
- Tiles
- Table

Plots

- Map
- Scatter Plots
- Bar chart, Pie charts, line charts
- Box Plots
- Pairs Plots, Correlation, Heatmaps

Shiny

- Reactivity
- Modal Dialog
- ToolTops



Demo

Thank You