

Flexdashboard – Student Statistics Visualization

This project presents an **interactive 5-page flexdashboard** developed in R, designed to provide clear insights into student statistics across Sri Lanka. The dashboard is structured to be user-friendly for a general audience, with multiple views categorized by **district, province, grade, gender, and residency**.

Features

- **Overall View** – Key summary statistics with tabs comparing populations by district and province.
- **Schools View** – Heatmaps and interactive maps that display grade-wise student distributions, highlighting differences across provinces and districts.
- **Population View** – Comparative breakdowns of students by **residency (urban/rural)**, **gender**, and overall demographics.
- **Population Arrival** – Time series trends of student arrivals, with filters for gender and age groups.
- **Population Departure** – Insights into student departures, shown overall and by gender (with future scope to expand into age-wise trends).

Technical Notes

- Built with **R Markdown** and **flexdashboard**.
- Visualizations include **heatmaps, interactive maps, and time series charts**.
- Consistent color schemes for gender and residency categories.
- Fully reproducible: all scripts and datasets are provided for replication.
- Known limitation: map rendering issue in **Vavuniya district** and lack of age-group details in departure data.

Future Enhancements

- Expand departure data analysis with **age-and-gender breakdowns**.
- Improve geographic rendering for districts with missing map layers