Test Score Analysis Platform

User Manual

Overview

The Test Score Analysis Platform helps educators, trainers, NGOs, and researchers analyse Pre-Test and Post-Test assessments. The system measures knowledge gain, generates charts, and produces narrative reports exportable as Word and PDF.

Dataset Requirements

Your dataset must contain 'pre_test' and 'post_test' columns. Optional columns include 'gender', 'name', and 'class' for advanced visualisations.

Key Metrics

Mean Pre-Test: Baseline knowledge level. Mean Post-Test: Knowledge after intervention. Mean Gain: Average improvement. Percent Gain: Relative improvement. Improvement Rate: Percentage of participants with increased scores.

Charts

Bar Chart compares overall averages. Slopegraph shows individual journeys (requires name). Grouped Bar Chart compares classes (requires class). Dumbbell Plot emphasises knowledge gaps. Stacked Gain Chart compares metrics.

Gender Disaggregation

If a gender column exists, the system can compare Male vs Female performance and knowledge gain.

Exporting Reports

Users can download reports as Microsoft Word (.docx) or PDF (.pdf).

Common Errors

Ensure column names are correct and scores are numeric. Use consistent gender labels (Male/Female).