



FULL-STACK ENGINEER TECHNICAL ASSESSMENT

Local Government Ranking Dashboard – Interactive Weighted Scoring System

1. Overview

You are required to build a **responsive, interactive web application** that displays and ranks Lagos State Local Governments (LGAs) based on three weighted indicators:

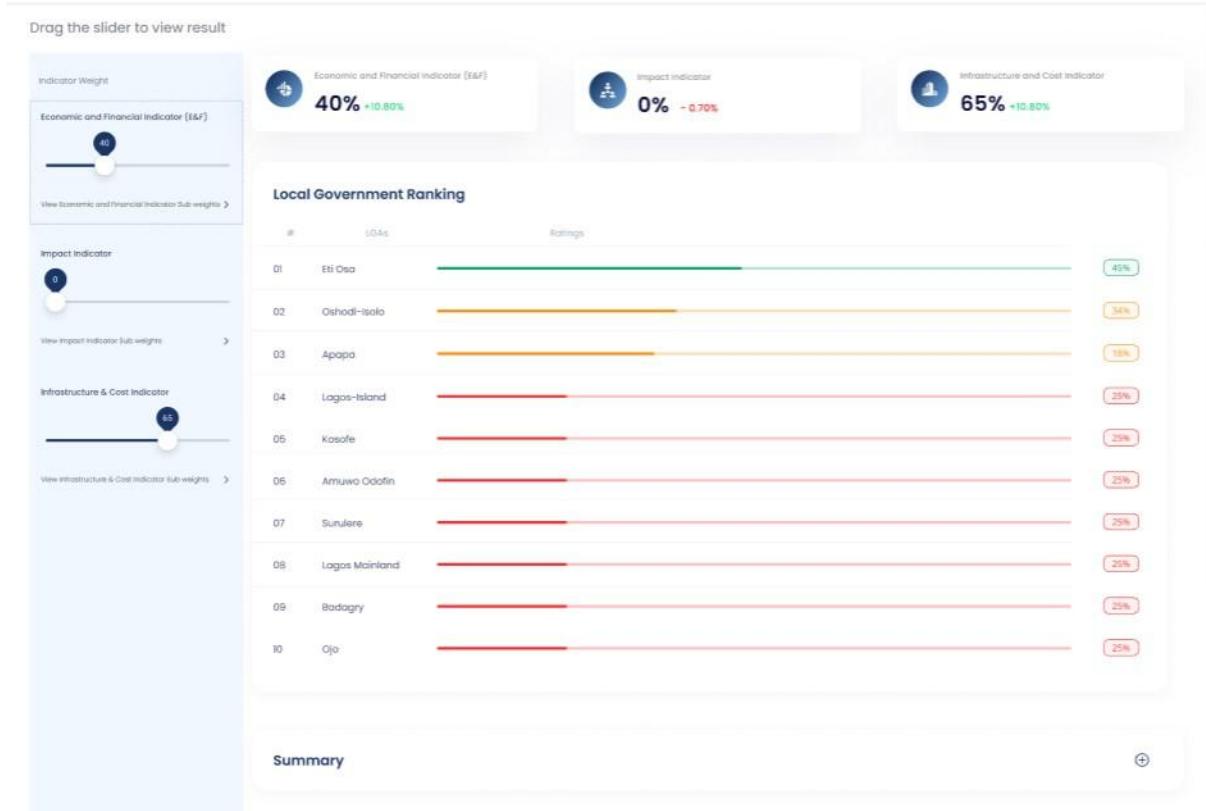
- **Economic & Financial Indicator**
- **Impact Indicator**
- **Infrastructure & Cost Indicator**

The final score and ranking **must automatically update** whenever the user adjusts the indicator weight sliders.

Your task is to replicate the layout, logic, and functionality of the sample UI shown in the images below.

Reference Images

- **UI Screenshot:**



Dataset:

The dataset has been attached to the doc. (Lga_scores_over_100)

2. Requirements

A. Core Features

You must build a web application that includes:

1. Three Weight Sliders

- Economic C Financial Weight (0–100)
- Impact Weight (0–100)
- Infrastructure C Cost Weight (0–100)

Default values may be:

- **Economic:** 40
- **Impact:** 0
- **Infrastructure:** 65

Each slider must:

- Dynamically modify the weighted score.
- Trigger a recalculation of rankings in real time.
- Update displayed percentages for each indicator.

2. Data Table Processing

You are provided with 20 LGAs, each with: economic

3. Weighted Scoring Formula

For each LGA:

FinalScore =

$$\begin{aligned} & (\text{EconomicScore} * \text{EconomicWeight}) + \\ & (\text{ImpactScore} * \text{ImpactWeight}) + \\ & (\text{InfrastructureScore} * \text{InfrastructureWeight}) \end{aligned}$$

4. Dynamic Ranking

- LGAs should appear from **highest to lowest score**.
- Use colors:
 - **Green** for high rating
 - **Yellow/Orange** for medium

- **Red** for low performance

5. Responsive UI

Your design must:

- Look clean and modern.
- Work on mobile, tablet, and desktop.
- Reflect the layout of the reference screenshot.

6. Extra Components

- Mini-cards at the top showing final percentage per indicator (as seen in the sample UI).

3. Technical Requirements

Use any stack you are comfortable with

4. What to Submit

Your final submission must include:

A. Live URL

Working deployed version of the dashboard.

B. GitHub Repository

Containing:

- /frontend and /backend folders (if separate)
- Clear, readable code
- README.md explaining:
 - Setup C installation instructions
 - Technologies used
 - How scoring is calculated
 - How to run locally

5. Evaluation Criteria

You will be assessed based on:

✓ UI/UX Quality

Clean, responsive, visually appealing, and close to the reference.

✓ Functionality

Sliders must update scores and rankings correctly.

✓ Code Quality

Readable, well-structured, and maintainable.

✓ Architecture

Clear separation of components; scalable design.

✓ Deployment

Clean, publicly accessible deployment.

✓ Test

Unit or Integration.

✓ Documentation

Clear explanation of how your system works.