

Icebreaker Project: *African Economic Indicators Data Explorer*

Context

Africa's economies are diverse, and access to reliable economic insights is key for governments, businesses, and NGOs. This project allows interns to practice **Python, Pandas, and visualization**, while uncovering trends in GDP, inflation, and employment across African countries.

Objectives

- Practice Python for data handling (Pandas, NumPy).
- Clean and preprocess messy real-world data.
- Create basic visualizations with Matplotlib/Seaborn.
- Tell a simple data story from African economic indicators.

Dataset (Possible Sources)

- World Bank Open Data (GDP, population, inflation, unemployment).
- African Development Bank stats.
- Or a curated CSV.

Features Example:

- Country
- Year
- GDP (USD)
- Inflation Rate (%)
- Unemployment Rate (%)
- Population (millions)

Tasks

1. Load and inspect dataset with Pandas.
2. Handle missing values (drop, fill, or interpolate).
3. Perform basic descriptive statistics (mean, median, min, max).
4. Visualize:
 - GDP growth over time for 3 countries.
 - Inflation trends compared across regions.

- Scatterplot of GDP vs Unemployment.
5. Create a **short “Insight Report”** (2–3 slides or notebook cells) summarizing findings.

Deliverables

- Jupyter Notebook with:
 - Cleaned dataset.
 - At least 3 clear visualizations.
 - Short analysis (bullet points).
- 5-minute presentation on “Economic Insights from African Data.”