**COVID‑19 Global Dashboard**

**Link To Dashboard:**

**Dataset**

The dataset used is the “Coronavirus (COVID-19) Cases (Daily Updates)” dataset obtained from Kaggle.

[Link To Dataset](https://www.kaggle.com/datasets/joebeachcapital/coronavirus-covid-19-cases-daily-updates/data)

The dataset was curated and updated by pulling data from a variety of official sources like the World Health Organization.

**Queries Addressed**

1. What is the global distribution of COVID-19 cases?
2. How have cases and deaths evolved over time in specific countries?
3. What is the vaccination progress across different regions?
4. How do demographic factors correlate with COVID-19 impact?
5. Which countries have the highest case fatality rates?

**Tool Used**

* NextJS using with [Recharts](https://recharts.org/en-US/) library (which is built on top of D3) for creating highly interactive, responsive visualizations.
* Deployed using Vercel

**Visualizations and Visual Encoding**

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**1. Global COVID-19 Distribution Map**

* **Encoding:** Color gradients representing case/death/vaccination metrics.
* **Interactivity:** Clickable countries for detailed views.

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**2. Region-specific Analysis**

* **KPI Cards:**
  + Highlight Primary Insights Regarding the Selected Region

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* **Vaccination Progress Visualization:**
  + Circular progress indicators encoding percentage vaccinated.

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* **Vaccination Coverage Breakdown:**
  + Stacked bar chart clearly distinguishing fully vaccinated, partially vaccinated, and unvaccinated populations.
* **Cases and Deaths Breakdown:**
  + Bar chart with distinct color encoding for cases and deaths.

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* **Full Timeline Visualization:**
  + Area chart representing cumulative or daily cases/deaths/other selected metric, showing temporal trends.

*A graph showing the number of cases

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**3. Comparative Trends**

* **Line Chart:**
  + Comparison between two regions using color-coded lines.

A graph of a number of countries/regions

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**4. Filtering and Customisation**

Users can view all the above described charts to view different metrics such as Total Cases, Total Deaths, New Cases (7-day avg), New Deaths (7-day avg), Total Vaccinations.

Users can also filter the data to view the metrics at a particular point in time or upto that particular point in time.

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