

COVID-19 Tracker – Project Architecture

The COVID-19 Tracker is a responsive web-based dashboard application that visualizes global and country-wise COVID-19 data. It presents real-time statistics, charts, and safety tips using dynamic data fetching and visualization techniques.

1. **Frontend Layer**: - Built with HTML5, CSS3, JavaScript, and Bootstrap. - Responsive layout with SCSS for modular styling. - Uses JavaScript to fetch data from APIs and dynamically update the DOM. - UI components include: Global Stats Panel, Country Stats Table, Trend Graphs, and Safety Tips. 2. **Data Layer**: - COVID-19 data is fetched using public APIs (e.g., disease.sh or covid19api.com). - Asynchronous JavaScript (`fetch`` API) handles the API requests. - Data includes confirmed cases, recoveries, deaths, and last updated timestamps. 3. **Visualization**: - Uses Chart.js (or similar JS libraries) to render bar charts and line graphs. - Displays country-wise comparisons and trends over time. 4. **Deployment & Hosting**: - Hosted on GitHub Pages or Netlify for static deployment. - Fully client-side; no backend server involved. - Lightweight and mobile-optimized. 5. **Optional Enhancements** (Planned or Future Scope): - Add dark mode toggle. - Include region-wise heatmap using Leaflet.js or Google Maps. - Notifications/alerts based on thresholds.