

Project Name: Covid Tracker

Members:

- Tejas Siddaramaiah
- Ken Lin
- Daniel Kibatullin

Applications:

1. Countries Application: Country Statistics about COVID-19
2. Notification Application: Sending alerts and updates about COVID-19.
3. Core Application: Basic Stuff

Components:

1. Dashboard Application:

- Components to display real-time data such as case numbers, recoveries, and deaths.
- Interactive charts and maps for visual representation.
- Integration with the COVID-19 API by API-SPORTS for data retrieval.

2. Information Application:

- Data about the deaths of a country at a given date: new, total, 1M_pop
- Data about the tests of a country at a given date: new, total, 1M_pop
- Data about the cases of a country at a given date: active, new, total, critical, recovered, 1M_pop
- Health guidelines and safety measures related to COVID-19.
- FAQs and expert advice on COVID-19.

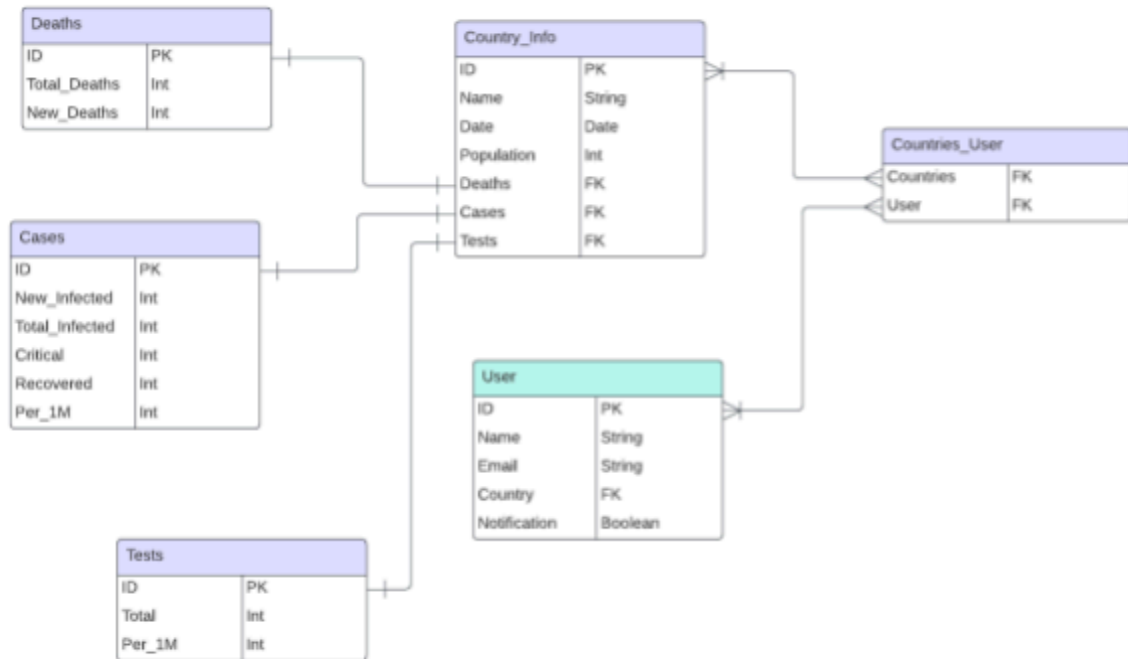
3. Notification Application:

- System for push notifications and email alerts.
- Configuration options for frequency and types of notifications.

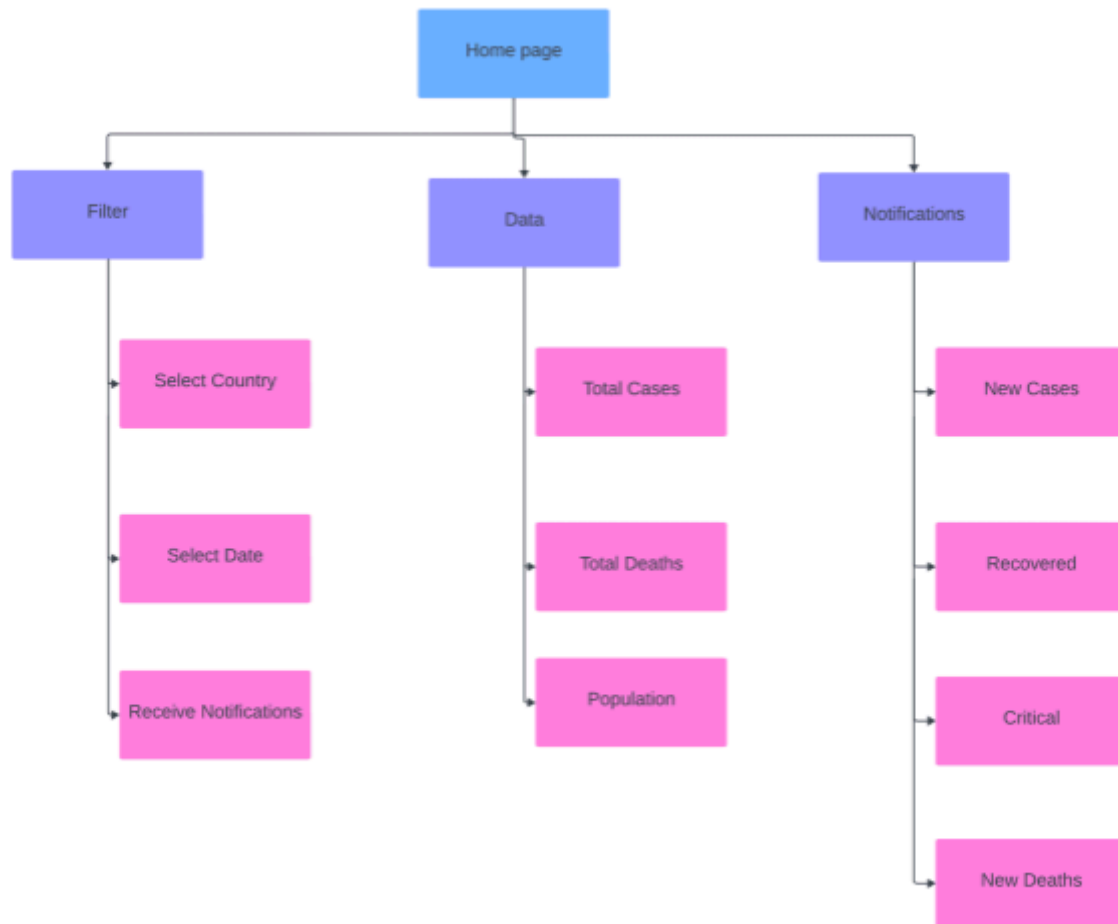
Relationships Between Components:

- The Dashboard and Notification applications will be interconnected through the COVID-19 API data.
- The Information application will provide detailed insights that can be linked in notifications for further reading.

Database Design:



Site Map:



Task Breakdown:

1. Frontend Development:

- Dashboard UI: Daniel
- Information Page UI: Ken

2. Backend Development:

- API Integration and Data Management: Tejas

3. Testing and QA:

- Functionality and Performance Testing: Tejas, Ken, Daniel

APIs:

- 1.) COVID-19 data API by API-SPORTS on RapidAPI
(<https://rapidapi.com/api-sports/api/covid-193>)

Base URL: 'https://api-sports.io/v1'

Rate Limit: 500,000 per month

Endpoints and Usage:

1. Statistical Data Endpoint:

- Path: '/statistics'
- Method: 'GET'
- Parameters:
 - 'country': The name
 - Description: Retrieves COVID-19 statistics such as cases, deaths, and tests for a specific country.
- Response Format: JSON

Error Handling:

- Errors returned from the API will be logged and displayed to the admin user for troubleshooting.
- Appropriate user-friendly messages will be displayed to the end-users in case of an API error.