IT31063: Service-Oriented Computing
Mini Project – 2021 V1

Question 1

A)

Use given REST APIs and PHP web scripting to create a web application to display the following information about the COVID19 pandemic and country.

Page 1 (index.php)

Part1.Use the endpoint of the Health Promotion Bureau in Sri Lanka

https://www.hpb.health.gov.lk/api/get-current-statistical

Display local cases as follows

Local Cases

New Cases, New Deaths, Total Cases, Active Cases, Total Deaths, Total Recovered, Number of PCR Testing, Number of Patients in the Hospital, Cases per 100 PCR Testing, Deaths per 1 Million, Cases per 1 Million

E.g.

Covid19 Information
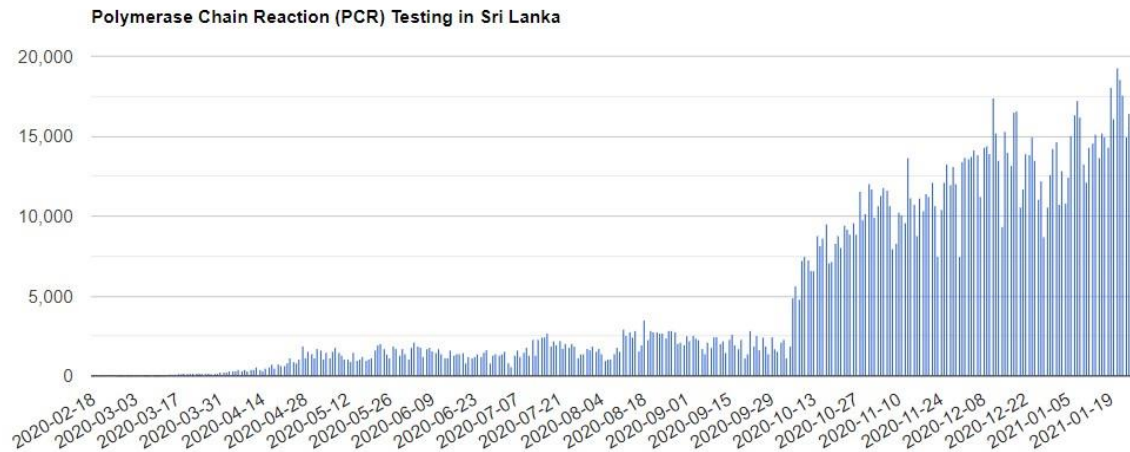
Updated : 2021-01-28 22:38:26

Local Cases

New Cases	New Deaths	Total Cases	Active Cases	Total Deaths	Total Recovered
+892	+7	61,586	6,854	297	54,435

Number of PCR Testing	Number of Patients in the Hospital	Cases per 100 PCR Testing	Deaths per 1 Million	Cases per 1 Million
1,659,725	688	3.71	14	2,937

Part2. Use the Health Promotion Bureau's endpoint in Sri Lanka and **a line or column chart** (Google charts or Fusion Chart or am Chart).

Display daily Polymerase Chain Reaction (PCR) Testing in Sri Lanka.

Polymerase Chain Reaction (PCR) Testing in Sri Lanka

E.g.

Polymerase Chain Reaction (PCR) Testing in Sri Lanka

Part3. Use the endpoint of the Health Promotion Bureau in Sri Lanka

https://www.hpb.health.gov.lk/api/get-current-statistical

Display Global Cases as follows

Global Cases

New Cases, New Deaths, Total Cases, Total Deaths

Global Cases

New Cases	New Deaths	Total Cases	Total Deaths
+585,749	+14,675	96,625,534	2,065,695

Part4. Use the API from https://rapidapi.com/marketplace and search COVID-19 API Documentation the select COVID-19 API (COVID-19 API Documentation (API-sports) | RapidAPI)

Display all countries COVID19 information as follows and link it into the "country.php" page from each country.

All Countries

Country, Continent, New Cases, New Deaths, Total Cases, Total Deaths, Recovered Cases

All Countries

Country	Continent	New Cases	New Deaths	Total Cases	Total Deaths	Recovered Cases
Caribbean-Netherlands	North-America	0	0	360	3	244
Somalia	Africa	30	0	4,784	130	3,666
Fiji	Oceania	0	0	55	2	53
Ireland	Europe	1,463	47	192,645	3,167	23,364
Sudan	Africa	75	10	26,671	1,760	20,936
Oman	Asia	154	2	133,728	1,527	126,572

B)

Page2 (country.php)

Part1. Use REST Countries API.

Select and click a country from the All-Countries list on the "index.php" page and Display a piece of selected country information on "country.php" page as follows.

Country

Country Flag, Capital, Alter Spellings, Region, Sub Region, Population, Area, gini, Currency

e.g,

Spain

Capital	Alter Spellings	Region	Sub Region	Population	Area	gini	Currency
Madrid	ES, Kingdom of Spain, Reino de España	Europe	Southern Europe	46,438,422	505,992	34.7	Euro

Part2. Use COVID-19 API Documentation (COVID-19 API Documentation (api-sports) | RapidAPI) from https://rapidapi.com/marketplace.

Display a selected country COVID-19 situation as follows.

Covid19 Cases

New Cases, Active Cases, Critical Cases, Recovered Cases, Total Cases, Cases per 1M, New Deaths
     Total Deaths, Deaths per 1M, Total Tests, Tests per 1M

Covid19 Cases

New Cases	Active Cases	Critical Cases	Recovered Cases	Total Cases	Cases per 1M	New Deaths	Total Deaths	Deaths per 1M	Total Tests	Tests per 1M
34,899	0	4,608	0	2,792,360	59,710	515	57,806	1,236	32,027,728	684,862

Part3. Use the Google Map API (Get an API Key | Maps JavaScript API | Google Developers)

Display the selected country with a maker.

E.g.

Google MAP – Country

Google MAP - Spain

Question 2

Use the Postman API testing tool and refer to two (2) JSON files from

1. https://www.hpb.health.gov.lk/api/get-current-statistical
2. COVID-19 API Documentation (api-sports) | RapidAPI) from https://rapidapi.com/marketplace.

Design (ERD) and create two (2) databases with relevant tables (SQL files) to store JSON data into databases (Normalized up to 3rd Normal Form).

- Your Mini Project should be a single pdf document that contains the screenshots, source codes, ER Diagrams, SQL files, and the folder of the web application. Name of the zip file: <your_index_number>.zip