

COVID-2K19 TRACKER USING WEB DEVELOPMENT

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ABSTRACT - COVID-19 is a pandemic linked to the same family of viruses as Severe Acute Respiratory Syndrome (SARS). The recent outbreak of covid-2K19 has taken the world by straining public health care systems. COVID-19 tracker was born as a virtual platform that provides the latest and reliable news development, as well as statistics on this pandemic. So, this tracker is very useful for this pandemic. Using web development techniques, easy to track the total cases, recovered cases, and deaths in every country(worldwide) and at the same time easily find the background of affected countries.

Key Words: COVID-19, SARS, ARI, WHO

1.INTRODUCTION

The concept of COVID-19 tracker is generally used in many areas but this may different as compare to other. This project gives the statistics in the type of Graph representation. There are many statistics to check cases in India. But this is different as compared to others because to track cases worldwide at the same time easy to find the background of affected ones. The site is useful for tracking in the context of spreading cases at anytime and anywhere.

2. RELATED WORK

Gitanjali R. Shinde, Asmita B.Kalamkar, Parikshit N.Mahalle, Nilanjan Dey [1].The algorithm is one based on the data accessed from the WHO and the local weather database.

Kakodhkar P, Kaka N, Baig M [2]. The algorithm is based on Modes of transmission traced in imported cases are through droplet transmission, fecal-oral route, conjunctiva and viruses. A Vast amount of misinformation is present due to scarcely sourced social media.

Kaminski A, Albus M, Mohseni M [3]. The algorithm is based on Bedside ultrasound may facilitate early diagnosis and management of COVID-19 associated pericarditis. The mortality rates associated with COVID-19 infection are difficult to calculate with a high degree of accuracy.

Alan L. Porter, Yi Zhang, Mengjia Wu [4]. The algorithm is based on the dramatic growth of COVID-19. It has been accomplished by the emergence of multiple research resources.

Fandy Setyo Utomo, Wiga Maulana Baihaqi, Dwi Ayu Mutiara [5]. The analysis is based on Quick Application Improvement (RAD) could be an advancement cycle outlined which can give

speedier development, higher quality comes about than those accomplished with traditional life series.

3.PROPOSED SYSTEM

The proposed system explain about how to track total, recovered & death cases daily all over the world-wide and at the same time people can check the background of affected countries due to this crucial disease. In the existing system, unable to search all the countries in the world and it's difficult to check the background of affected countries.

A. Technologies

As there are many virtual platforms become more popular nowadays, it is a common responsive interface for mobile and laptop/desktop users. We have decided to create a website using front-end web: HTML, CSS, JAVASCRIPT. The external libraries and APIs that were used:

- Chart JS is used to represent the number of total cases, recovered cases, and death rate in graphical form.
- The Change country JS API is to change the country among the world accordingly.

B. Working Principle

The main features of this website are:

- Statistics on the number of total cases in worldwide and check the background of affected countries.
- User details are secure and private.
- It doesn't track our location.

- Works in both mobile and laptop/desktop. Using script language, the data is acquired in a graph. The JSON file is used to load the data from COVID-19 API. The user has to open the site and enter the country which they want. It loads the data by showing (LOADING.....), taking the time of 3-4 seconds, and displays the data according to country cases.

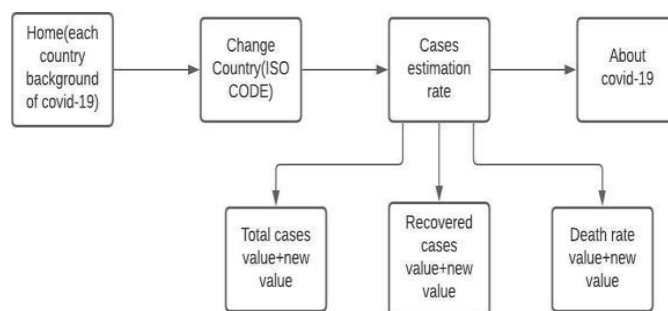


Figure 1. Architecture diagram for covid-19 tracker

C. Background of Affected Countries

While searching statistics of COVID-19 results, it is easy to check the background of countries that are affected due to this severe pandemic. This gives the data like how many people are infected with this virus and the lack of global income of the country. It is on the right side of the website, the user has to click on that and it will display all countries



Figure 2. To check background of affected countries

D. Change Country by using ISO Code

Country code defines codes for the names of countries. In a graph, there is an option to change any country in worldwide. But it's easy to detect a country when the country code is given in JS. So, easily we can change any country and check total cases, recovered and death rates respectively. To change country, they represented by prefixing the country code with a two-letter (US) for the USA.



Figure 3. Countries list to change the country

E. Covid-19 related cases in any country in the world.

TOTAL CASES:

Using JavaScript, total cases can check-in a graph. It displays in white color in a graph. If total cases are increasing day by day, the graph may increase. Otherwise, the graph is in a constant position.

Total cases=Active cases+ Recovered cases+ Death rate.

RECOVERED CASES:

Recovered cases are used to know, how many people are recovering daily from this pandemic and it is stated in green color in a graph. These cases are high as compared to deaths which were seen daily.

Recovery rate = (number of recoveries / total confirmed cases) *100.

DEATH RATE:

Except for current and recovered cases, all are passed away because of crucial diseases i.e., death cases. Deaths are displayed in red color, so that identification was easy to find which is death in a graph. Many number of people are suffered due to this virus and easily track the death rates anywhere and at any time.

Death rate= (number of deaths/total confirmed cases) *100.



Figure.4. Total, recovered and death cases

F. Analyzing the data in form of a graph

Collection, manipulation, and processing of collected data for the required use are known as data processing. It is a technique normally performed by a computer; the process includes retrieving, transforming, or classification.

Data collection:

All the covid related data should be collected and start the preparation to process the data. Collecting data is major phase in the data processing. Data is taken from variable sources which is related to covid.

Data preparation:

After collecting the data, it is used to prepare the data and store it, often referred to as pre-process in which it will clean and process the data for next stage.

Processing the data:

After preparing the data, it is used to process and display output. **Chart JS API** is used to give the number of total cases, recovered cases, and death rate in graphical form.

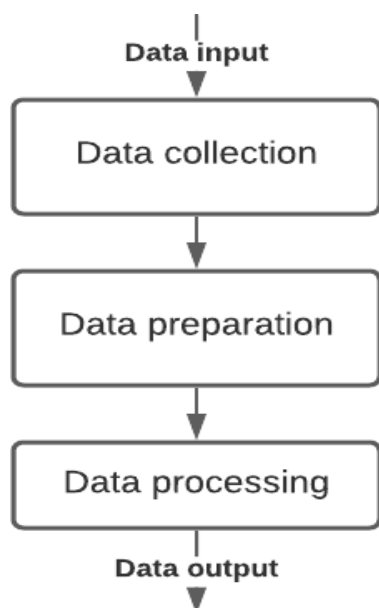


Figure 5. Web Data Processing

G. Covid-19 Statistics

So many statistics are there to check covid cases, but this technique gives the data with the background of countries that are affected due to this pandemic. Whenever needed, easily track all the cases worldwide by using each country's ISO code. It was useful to track and prevent the cases and people are safe after seeing these statistics if the cases are reduced day by day.

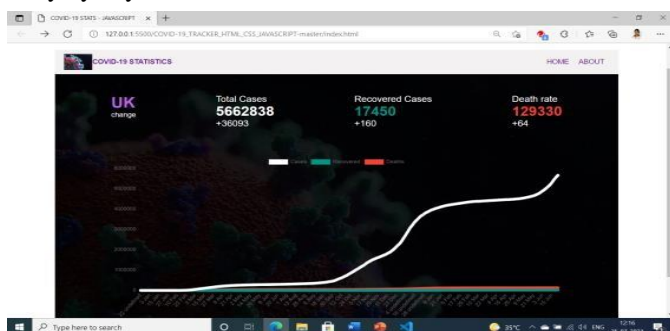


Figure 6. COVID-2K19 tracker

4.CONCLUSION

This project involve an analysis of COVID-19 cases worldwide and gives the result of data. The data is store & load by using JSON. At first, we can search the country and it gives the cases and displays in graph form, and at the same time, we can see the background of affected countries. It is most useful for the people who are scaring of this infectious disease and everyone should track it anywhere and anytime.

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