COVID -19 Tracker

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Abstract— COVID-19 tracker is a React based responsive web application which provides you the real time data of current COVID-19 cases all across the world. It will show you how many cases are recently recorded and how many recovered as well as the total cases being recorded in a particular country. The app will have a leaflet package of React which will provide us the interactive map thus we will try to make it different and more interactive than other trackers present out there. These maps will enable the user to see real time data of total cases in any given country. The easy to use GUI clubbed with the interactive maps and graphs will help us to provide the vital information that the users need in order to stay updated with the COVID-19 situation that is rocking the world and subsequently affecting the economy at a global scale. The web application will be accessible through desktop or mobile to provide the user with ease of access. We aim to provide accurate data with graphs. Our aim is to alleviate some stress from the user who feels anxious about being uninformed about what might be happening without them. Our app also serves as a learning opportunity for the members along with a great incentive to help people.

Keywords - COVID -19, Web Application, Real time data, Maps, GUI, Graphs.

INTRODUCTION

The Covid-19 Tracker is a react based application which gives us the track of current Covid -19 cases and recovered cases as well as the number of deaths recorded. It has worldwide data and country data.The maps will enable the user to see real time data of total cases in any given country.

EASE OF USE:

The web application will be accessible through desktop or mobile to provide the user with ease of access. We aim to provide accurate data. Our aim is to alleviate some stress from the user who feels anxious about being uninformed about what might be happening without them. Our app also serves as a learning opportunity for the members along with a great incentive to help people.

Literature Reviews:

As we already know, in early December 2019, an outbreak of coronavirus disease 2019 (COVID-19), caused by a novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), occurred in Wuhan City, Hubei Province, China. On January 30, 2020 the World Health Organization declared the outbreak as a Public Health Emergency of International Concern. As of February 14, 2020, 49,053 laboratory-confirmed and 1,381 deaths have been reported globally. Perceived risk of acquiring disease has led many governments to institute a variety of control measures. We conducted a literature review of publicly available information to summarize knowledge about the pathogen and the current epidemic. In this literature review, the causative agent, pathogenesis and immune responses, epidemiology, diagnosis, treatment and

management of the disease, control and prevention strategies are all reviewed.

We are still affected by the disease and facing the problems. It is a global threat and we do have to keep track of it now, and even in the future as well. Scientists all across the world are already trying their best to get a vaccine. It is controlled now in some countries, but not in India. The recovery rate is better than before but that's not enough, the problem is that it still exists. It is necessary to take precautions even if the conditions are better, but doing work is also important, we can't just sit around forever. For that we *need a tracker* so that we can keep track of cases around us and also stay updated with the data in order to be safe.

Problem Formulation:

THERE ARE TWO MAIN COMPONENTS:

    1.Getting Real time data

    2.Deploying data into database

    Real time data ,news and information related Covid is tough to get as not all the countries share their true stats.

Required tools:

Major tools required for the development of the applications:

1.React - React (also known as React.js or ReactJS) is an open-source JavaScript library for building user interfaces or UI components. It is maintained by Facebook and a community of individual developers and companies. React can be used as a base in the development of single-page or mobile applications.

2.HTML - Hypertext Markup Language, a standardized system for tagging text files to achieve font, color, graphic, and hyperlink effects on World Wide Web pages.

3.CSS - CSS describes how HTML elements are to be displayed on screen, paper, or in other media. CSS saves a lot of work. It can control the layout of multiple web pages all at once. External style sheets are stored in CSS files.

4. An IDE (Integrated Development Environment) - For the complete development and management for the source code and libraries. It's also used for final compilation of the software.

Feasibility Analysis:

There are a number of trackers present out there, but then what makes our project different from them?

- Simply put you can stay up to date by listening to the news and just looking at the data on some random website. Our app just provides the same with a much better GUI so that wherever you tap on the map you can get the data of that particular country, you can search individually by country name, enable your location to get the data of your country and more.

- Graphs and tooltips are available so that you can just hover your mouse over the slopes of data and get the record in tooltips which make it more responsive while you are on desktop.

- It is going to be mobile responsive so just simply adding it the home screen will save your time and you can use it as an app in your handsets.

- Our feasibility is attainable as the library used is apt and our goal of providing the users with accurate, and easily accessible data at their fingertips will be achieved.

Figures and Tables:
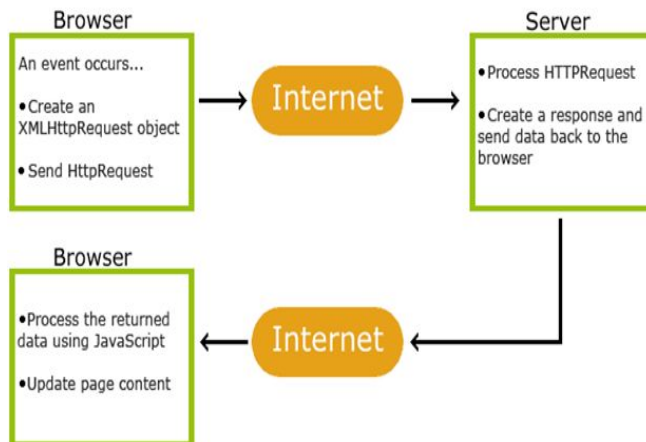
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