



Website Displaying Covid Related Information

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Abstract – In recent times, a tremendous need for a website that consolidates all the information regarding the pandemic that India has been facing since the past two years, i.e. Covid'19 was observed. The thought behind creating a website, in the first place, was to provide information to users around the country, or the world. Developing a Covid website was important to make people aware of everything related to Covid and India, at one single destination. Our website consolidates many aspects that Covid entails, focusing mainly on India. It involves, firstly, a home page, on which the user lands, on opening the website. Here, we have provided useful information regarding symptoms, precautions, treatment, and more, in a very illustrative way. Other interactive pages that we have linked are the hospitals' locator page, the vaccination centers' page, and the live case update. This has all been achieved by the use of API. This user-friendly website can be used to access a lot of information, and also can be used as an idea to develop other health-related websites. One of the many advantages, this website poses over other websites is that the user can access almost all the information regarding Covid at one single place.

Keywords – COVID- 19, CSS, html, India, JavaScript, vaccination, website.

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I. INTRODUCTION

In March 2020, Covid - 19 hit the globe, spreading like wildfire, infecting millions, especially, in India. In 2021, during the second wave, there was an increased need for hospital beds, Remdisivir, and oxygen cylinders for the common man, in India. There was a need for an authorized, verified website that could provide the users updated, and true information. In any such national health emergency, this brings up the need of a user-friendly and legitimate website that displays all valid information to the user.

The reason for choosing to make a website firstly is to try to provide users with some valid and important information. Closing in on our decided topic, COVID - 19 was the need of the hour. There existed, and still does exist, a need for a properly consolidated, verified, and updated destination, where the user can become aware, and/or get any of the needful related to health, or specifically, COVID - 19.

Our website includes a home page, and four other pages, namely -

the hospitals' locator, vaccination centers, live case update, and a COVID variants page. The information on these pages is government-provided, i.e. we have used API for obtaining information. This ensures that the data and information displayed are true, updated, and verified. On the home page, we have described symptoms, precautions, treatments, etc. in an illustrative way.

This paper contains the description of this COVID-19 website, the methodology behind it, writing and studying the codes and conducting a proper literature review. It also contains the results and discussions, conclusions, and references.

LITERATURE REVIEW

The more colors and visual effects that you add, the more people will get attracted to the website. The navigation bar should be at the top of the tab. Instead of just displaying the information to the user, we should take input from the user about what exact information the user is seeking, and hence the desired information would be displayed [1].



The mainstream of webpages are explained in HTML, and the last briefing of web pages is done in Cascading Style Sheets (or CSS). Javascript language is used along with HTML for bilaterality of web pages [2]. API is defined as a code that helps two different software to communicate and exchange data with each other. Application Programming Interfaces (APIs) are important in modern software development. Sometimes the developers get hurdle because of the shortfall of API reference documentation with usage scenarios [3]. The government of Jakarta applied such a website address which made it easy for people to remember it anytime. Also, the website was continuously under development to improve quality and user satisfaction [4]. As the COVID-19 pandemic increased around the world, a system of proper monitoring became necessary for making accurate decisions regarding the pandemic. In Sudan, a simple dashboard was designed to keep track of COVID – 19, which was understandable and visually appealing to the users. This helped in keeping track of the cases in various areas. A major limitation of this paper is the lack of available data of COVID – 19 cases in Sudan [12].

It is mentioned how web-scraping can be used for the extraction of data related to covid cases from websites like GitHub. The data of how many total covid cases have been raised to date, total deaths, and recovered cases is extracted on a daily basis and worldwide. This data is studied and cumulated to predict the nature of growing and decreasing cases of covid [9]. This paper illustrated building of a website that would particularly be used by the principal. The website contained managing the organizational resources, administrative skills, committed to their duties [10]. This paper contained building of a e-government multilingual website by means of HTML and DOM parser where all the regional languages would be taken as input and the desired language would be the output. The main purpose of this website was to remove the social linguistic [11].

METHODOLOGY/EXPERIMENTAL

A. Source of data of the website

We have used API Setu to provide information about our website. API is a type of software-to-software interface that enables applications to work seamlessly with each other and share data.

This platform promotes innovation by allowing users to quickly access and manage their data. An API is a secure and standardized way for software developers to deliver their applications without requiring user intervention. First, we demanded the request to the Co-win API of API Setu. The request proceeds to the API Setu server, then additional information is delivered to the client. The data is taken from API and then displayed on the website.

To access the information about our website, users must first request the Co-win API of API Setu. This process takes place on the server side. After receiving the requested information, the data is then displayed on the website.

B. Symptoms tab

Firstly, a CSS file on notepad.css is to be created. (.css is the extension where the file is saved). Then, a class has to be made. A class defines HTML elements to apply unique style and formatting to those elements with CSS. By the “.class” selector, all the paragraph elements with class="hometown" are styled - all the formats defined in hometown class are being applied to the paragraph.

C. Prevent tab

When different content is to be added on a different subject, that too on the same web page, then the best way is to use HTML CSS Tab. In today's time, all websites use Tabs somewhere on their web pages.

This website contains a “prevent” tab since it is about COVID- 19. (an informative website that displays everything related to covid) Therefore precautions that one should take are given :

- Washing your hands
- Maintaining appropriate distance
- Not touching one's face without washing hands
- Using a napkin while sneezing or coughing
- Wearing a mask

We have created this tab using HTML. To create the design of the prevention tab, firstly CSS file on notepad.css is to be created.(.CSS is the extension where the file is saved). Then we have to create a class. A class defines an HTML element to apply unique style and formatting to those elements with CSS.

D. Home tab

This website has five sections in the navigation bar. A class for navigation sections by the navigation bar is added. A navigation bar is a set of buttons or an image which serves as a control point to link the user to various sections on the website.

The <a> HTML anchor element, with its href attribute, creates a hyperlink to such web pages that URL can inscribe like files, email addresses, locations on the same page.

Here, a link is included that redirects to Youtube, it displays precautions to be taken during COVID - 19. [7]

E. Vaccination status

Display of vaccine availability -

User has to enter the pin code of his/her respective city to see the vaccine status. When the user clicks on the search button, it will automatically be redirected to the script, and hence the output data will be taken from the script and displayed on the website in the form of name, address, vaccine type, date, available slots, minimum age limit, area, district, and slots timings.

Live update of vaccinated till date -

On this page, the amount of population that are vaccinated to date, with the first dose and second dose respectively are displayed. This data is updated on a regular basis by the use of API. API of 'India Today' is used to display the total number of vaccinations done till date.

In the coverage - widget class background of the vaccination, the status tab is defined. Data of vaccination status is fetched from 'India Today', and then displayed on the website.

F. Hospital List

A hospital page is created where the details of the hospitals, number of remaining oxygen beds in the hospital, the remaining beds, the number of ICU beds in the hospital, and the number of ventilator beds in the hospital are displayed. All this information is linked through government API, and is updated live, at regular intervals of

time. Thus, users get all the hospital-related information through this website.

We have incorporated the location search box in the hospital list tab through which one can search for the availability of oxygen beds, ICU beds, and ventilators in a particular hospital by accessing its location so that one can get several hospital options in a particular area.

JavaScript is used to link the website with API and CSS is used in styling and designing the elements of the website.

G. Live Case Update

On this page, the number of covid cases are displayed up to date, along with the total number of cases, the total active cases, and number of deaths. This information is displayed state - wise, and is frequently updated by the API . The API that we use is taken from 'mygov.in' and 'NDTV'. Its display is in a tabular format.

H. Doctors tab

A "Doctors' tab" is added, as this website is about COVID- 19. (an informative website that displays everything related to covid) Therefore various doctors' information has been included. The displayed data contains their contact numbers, email-ids and the addresses to their respective hospitals through redirection [13]. The tab is designed in a similar way to 'Prevent tab'. Refer to 'Prevent tab' for more details.

I. Variants page

In this section, declarations of the colour of the background is made.

In html, <tr> and </tr> are used when one wants to insert a table. 'tr' denotes the row of a table. In the first row, the headings of each subsequent column are included. In html, <th> and </th> are used for table headings.

<td> and </td> means the cell in the table, which contains the information. So, the next row contains the name of the variants and other information regarding it, using <td> and </td>.

II. RESULTS AND DISCUSSIONS



Fig 1. Home page of our website

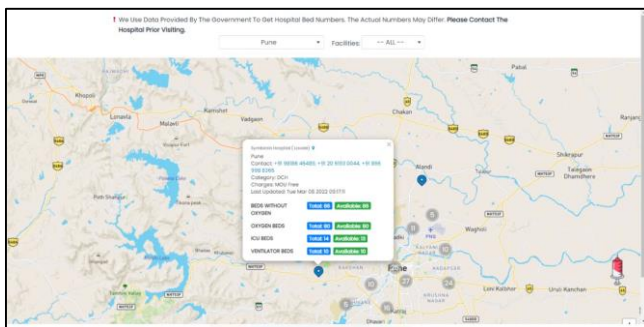


Fig 2. Hospitals' locator

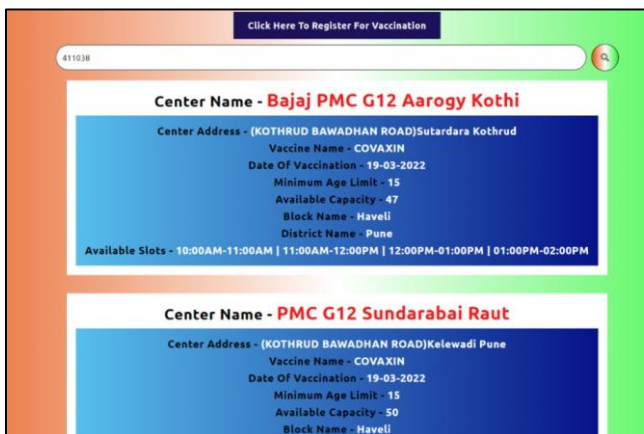


Fig 3. Vaccination Centres

TRACKING SARS-COV-2 VARIANTS		
WHO Label	Earliest Documented Sequence	Date Of Designation
Alpha	United Kingdom, May 2020	01 June 2020
Beta	Spain, March 2020	12 October 2020
Gamma	France, March 2020	09 July 2020
Delta	India, May 2020	13 June 2021
Omicron	Multiple Countries, Nov-2021	11 Nov 2021

Data Source: WHO (Global Health) | (Updated 01)

Fig 4. Variants page

III. FUTURE SCOPE

As our website is about Covid-19, it's important to note down its scope in the future.

We have flexibly created our website, so the idea of this website can be extended to any further disease like cancer, tuberculosis, etc., or in general; any section of the health domain. People can find hospitals, vaccination centers, and get information about the cases of that respective disease.

In case of a further covid wave, this website will be extremely helpful for the people around the country.

Another important point to note is that this database can be obtained and used for any country in the world. We have used API to link and obtain data regarding the various information that is displayed on our website. Every country's government has its own database stored with itself and has an API that can be used to link it with any website.

Conclusion -

This website characterizes a user - friendly website because it contains almost all the information related to COVID - 19 in a single website. This reduces hassle of the user to search information regarding different topics, on different websites. Here, the user can find consolidated and verified data. Through our attempt, we have tried to spread awareness amongst people and tried to help them regarding COVID-19 and in the health domain in general. As already mentioned in the future scope of our project, this idea and implementation can be extended to not only COVID-19 but also any other pandemic that the world may face in the future.

As mentioned before, there exists a need for a legitimate website with a good user interface, which we have tried to implement. This paper further strengthens the idea of a website that provides to the user a well-written, user-friendly database, which is thoroughly verified and real-time.



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