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# ABSTRACT


## Background :-

COVID-19 outbreak was first reported in Wuhan, China and has spread to more than 50 countries. WHO declared COVID-19 as a Public Health Emergency of International Concern (PHEIC) on 30 January 2020.

Naturally, a rising infectious disease involves fast spreading; endangering the health of large numbers of people, and thus requires immediate actions to prevent the disease at the community level.

Therefore, CoronaTracker was born as the online platform that provides latest and reliable news development, as well as statistics and analysis on COVID-19. This paper is done by the research team in the CoronaTracker and aims to predict and forecast COVID-19 cases, deaths, and recoveries through predictive modelling.

The model helps to interpret patterns of public sentiment on disseminating related health information, and assess political and economic influence of the spread of the virus.

## Methods :-

Real-time data query is done and visualized in our website, then the queried data is used for Susceptible-Exposed-Infectious-Recovered (SEIR) predictive modelling. We utilize SEIR modelling to forecast COVID-19 outbreak within and outside of China based on daily observations. We also analyze the queried news, and classify the news into negative and positive sentiments, to understand the influence of the news to people's behavior both politically and economically.

## Conclusions :-

COVID-19 is still an unclear infectious disease, which means we can only obtain an accurate SEIR prediction after the outbreak ends. The outbreak spreads are largely influenced by each country's policy and social responsibility. As data transparency is crucial inside the government, it is also our responsibility not to spread unverified news and to remain calm in this situation. The CoronaTracker project has shown the importance of information dissemination that can help in improving response time, and help planning in advance to help reduce risk. Further studies need to be done to help contain the outbreak as soon as possible.

## Keywords :-

COVID-19, data analysis, sentiment analysis, predictive modeling.

# CHAPTER 1

# INTRODUCTION

On 31 December 2019, the first reported case in the COVID-19 outbreak was reported in Wuhan, China. The first case outside of China was reported in Thailand on 13 January 2020. Since then, this ongoing outbreak has now spread to more than 50 other countries.

WHO declares COVID-19 outbreak as a Public Health Emergency of International Concern (PHEIC) by WHO on 30 January 2020. An infectious disease outbreak is the occurrence of a disease that is not usually expected in a particular community, geographical region, or time period. Typically, a rising infectious disease involves fast spreading, endangering the health of large numbers of people, and thus requires immediate action to prevent the disease at the community level. COVID-19 is caused by a new type of coronavirus which was previously named 2019-nCoV by the World Health Organization (WHO). It is the seventh member of the coronavirus family, together with MERS- nCoV and SARS-nCoV, that can spread to humans.
The symptoms of the infection include fever, cough, shortness of breath, and diarrhea. In more severe cases, COVID-19 can cause pneumonia and even death. The incubation period of COVID-19 can last for 2 weeks or longer. During the period of latent infection, the disease may still be infectious.

The virus can spread from person to person through respiratory droplets and close contact. An 'infodemic' has accompanied the COVID-19 outbreak which is essentially an over-abundance of information regarding the outbreak. As some of the information available to the public may not be accurate, it becomes hard for people to find reliable sources and trustworthy guidance when they need it. Because of the high demand for appropriate and trustworthy information about 2019-nCoV, WHO technical risk communication and social media teams have been working closely to track and respond to myths and rumors via its headquarters in Geneva, its six regional offices and its partners. The organization is working continuously to identify the most widespread rumors that can possibly harm the public's health, such as inaccurate prevention measures or claims of cures. These myths are then rebutted with evidence-based information.

WHO is making public health information and advice on the COVID-19, including myth busters, accessible on its social media channels (including Weibo, Twitter, Facebook, Instagram, LinkedIn, Pinterest) and on their website. Communication during emerging pandemics presents a distinctive public health education task. Health consumers must be informed about an impending health threat. However, there may be difficulties in providing accurate information regarding the outbreak in the initial stage. This is mainly related to the high degree of uncertainty about the exact route of transmission, treatment of the infections, and prospects of recovery in an outbreak. All countriesneed to prepare existing public health communication networks, media and community engagement staff for a possible case in their country, as well as for the appropriate response if it happens. The governments should coordinate communications with other response organizations and include the community in response operations.

WHO stands ready to coordinate with partners to support countries in their communication and response to community engagement. To ensure a people-centered response to COVID-19, an expanding group of global response organizations such as the United Nations Children's Fund (UNICEF) and the International Federation of Red Cross and Red Crescent Societies (IFRC) are coordinating efforts with WHO to apply biomedical recommendations at the community level.

These organizations are active at the global, regional and country level to ensure that affected populations have a voice and are part of the response. Ensuring that global recommendations and communication are tested and adapted to local contexts will help countries to gain better control over the COVID-19 outbreak.

Peoples' response to the news about a spreading contagious disease is likely to lead to increased anxiety and amplification of risk perceptions. Social media networks have functioned as channels for firsthand information from which the public can acquire disease-related information during infectious disease outbreaks. These platforms also enable simple and quick sharing of information with family, friends, and neighbors in real time. This is important when traditional forms of media are unable to provide relevant and timely information to the public. Social media now serves as a major, immediate information source but while the focus of latest information has been on the role of social media during infectious disease outbreaks, the question that should be brought to light is still, how the use of social media may trigger the public's emotional or noncognitive response, affect perception of risk, and preventive behaviors. Therefore, CoronaTracke was born as the online platform that provides the latest and verified news development, statistics and analysis on COVID-19.

# CHAPTER 2

# OBJECTIVE

**Project Title :-** Coronavirus Live Tracker

**Objective :-** The main goal had been to tackle misinformation about the Coronavirus outbreak, and put out facts and data quickly and accurately for the public to check without having to go on government websites to check the data for each state of our country.

# CHAPTER 3

# TECHNOLOGY USED

**Software and Hardware Requirements :-**

**Software Requirements :-**

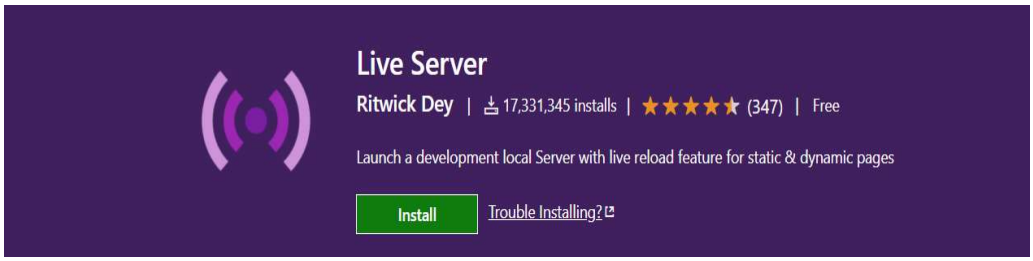
**Visual Studio Code :-**

Visual Studio Code is a streamlined code editor with support for development operations like debugging, task running, and version control. It aims to provide just the tools a developer needs for a quick code-build-debug cycle and leaves more complex workflows to fuller featured IDEs, such as Visual Studio IDE.

**Live Server :-**

### Features

- A Quick Development Live Server with live browser reload.
- Start or Stop server by a single click from status bar.
- Open a HTML file to browser from Explorer menu.
- Support for excluding files for change detection.
- Hot Key control.
- Customizable Port Number, Server Root, default browser.
- Support for any browser *(Eg: Firefox Nightly)* using advance Command Line.
- Support for Chrome Debugging Attachment.
- Remote Connect through WLAN (E.g.: Connect with mobile)
- Use preferable host name *(localhost or 127.0.0.1)*.
- Customizable Supporting Tag for Live Reload feature. (Default is Body or head)
- SVG Support
- https Support.
- Support for proxy.
- CORS Enabled
- Multi-root workspace supported.
- Support for any file even dynamic pages through *Live Server Web Extension*.



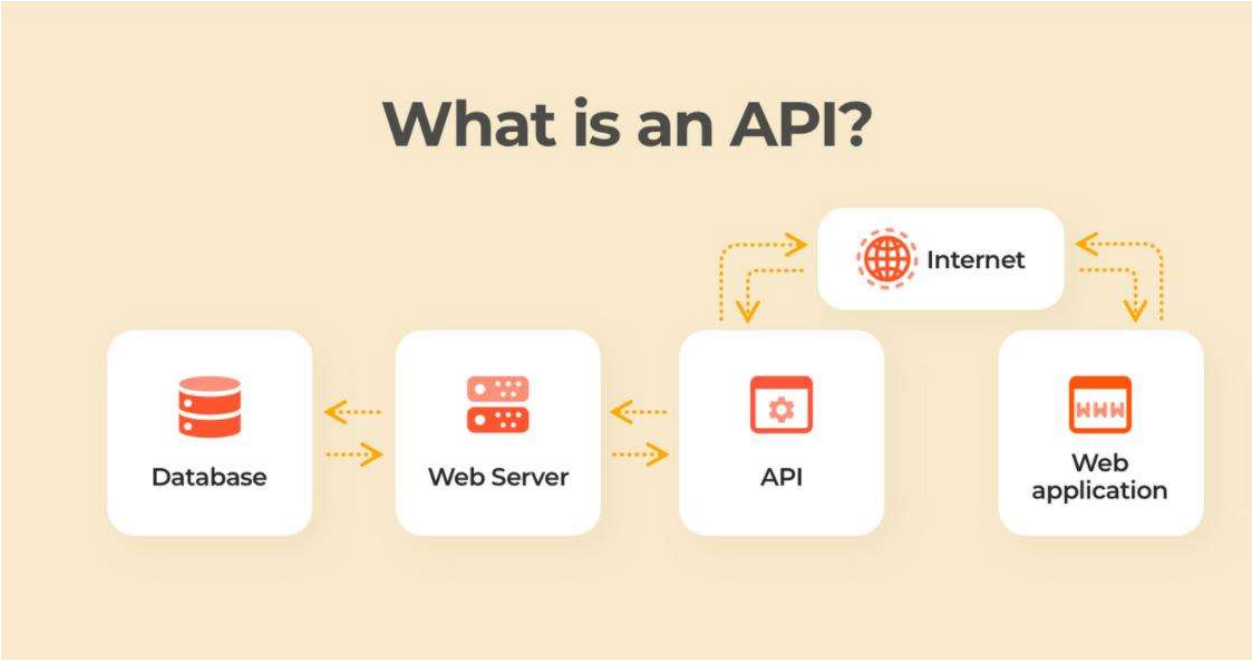

### Installation :-

Open VSCode and type ctrl+P, type ext install ritwickdey.liveserver.

**API :-**

An application programming interface (API) is a connection between computers or between computer programs. It is a type of software interface, offering a service to other pieces of software. A document or standard that describes how to build or use such a connection or interface is called an API specification. A computer system that meets this standard is said to implement or expose an API. The term API may refer either to the specification or to the implementation.

**Purpose :-** In building applications, an API (application programming interface) simplifies programming by abstracting the underlying implementation and only exposing objects or actions the developer needs. While a graphical interface for an email client might provide a user with a button that performs all the steps for fetching and highlighting new emails, an API for file input/output might give the developer a function that copies a file from one location to another without requiring that the developer understand the file system operations occurring behind the scenes.



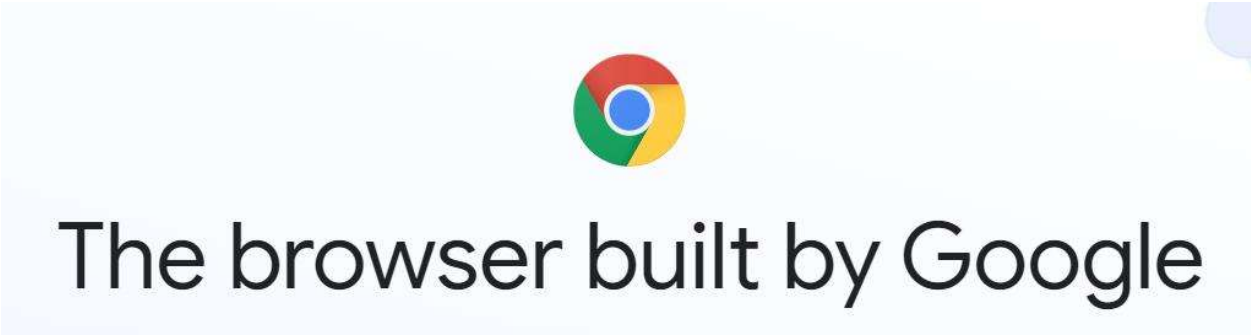
**Browser :-**

A web browser (commonly referred to as a browser) is application software for accessing the World Wide Web. When a user requests a web page from a particular website, the web browser retrieves the necessary content from a web server and then displays the page on the user's device.

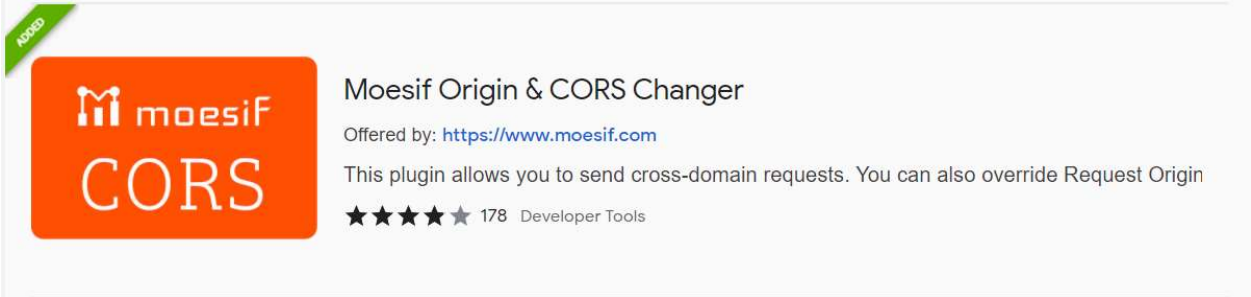
A web browser is not the same thing as a search engine, though the two are often confused. A search engine is a website that provides links to other websites. However, to connect to a website's server and display its web pages, a user must have a web browser installed.

Web browsers are used on a range of devices, including desktops, laptops, tablets, and Smartphone's.

**Google Chrome :-** Take control of your online safety Chrome works hard to protect your data and privacy online. With easy-to-use privacy controls, Chrome lets you customize your settings and browsing experience to how you see fit. Fast, easy-to-use tools for browsing From password check, dark mode, and the Google address bar, Chrome helps you get things done and stay safe online.




In This Browser, We Add This Extension **Moesif Origin & CORS Changer**



**Language Used :-**

**HTML :-** HTML stands for Hyper Text Markup Language, HTML is the standard markup language for creating Web pages. HTML describes the structure of a Web page, HTML consists of a series of elements. HTML elements tell the browser how to display the content.

**CSS :-** CSS is the language we use to style an HTML document. CSS describes how HTML elements should be displayed.

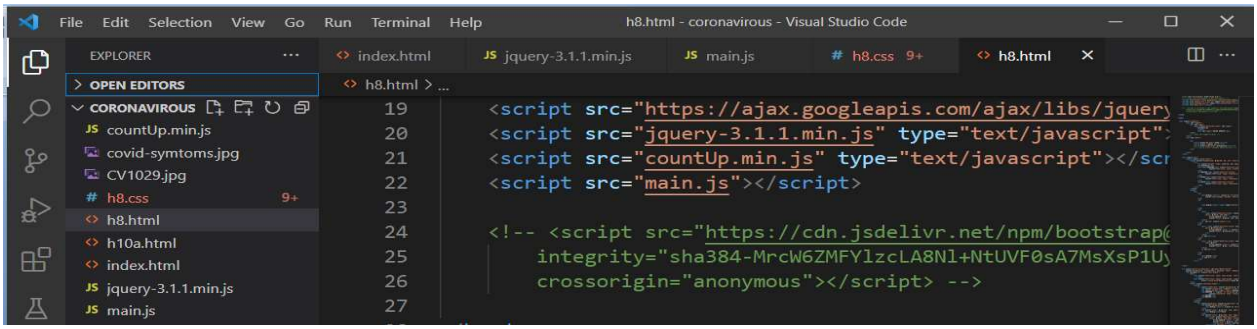
**JavaScript :-** JavaScript is the world's most popular programming language. JavaScript is the programming language of the Web.
**jQuery :-** jQuery is a lightweight, "write less, do more", JavaScript library. The purpose of jQuery is to make it much easier to use JavaScript on your website.

jQuery takes a lot of common tasks that require many lines of JavaScript code to accomplish, and wraps them into methods that you can call with a single line of code.

jQuery also simplifies a lot of the complicated things from JavaScript, like AJAX calls and DOM manipulation.

The jQuery library contains the following features:

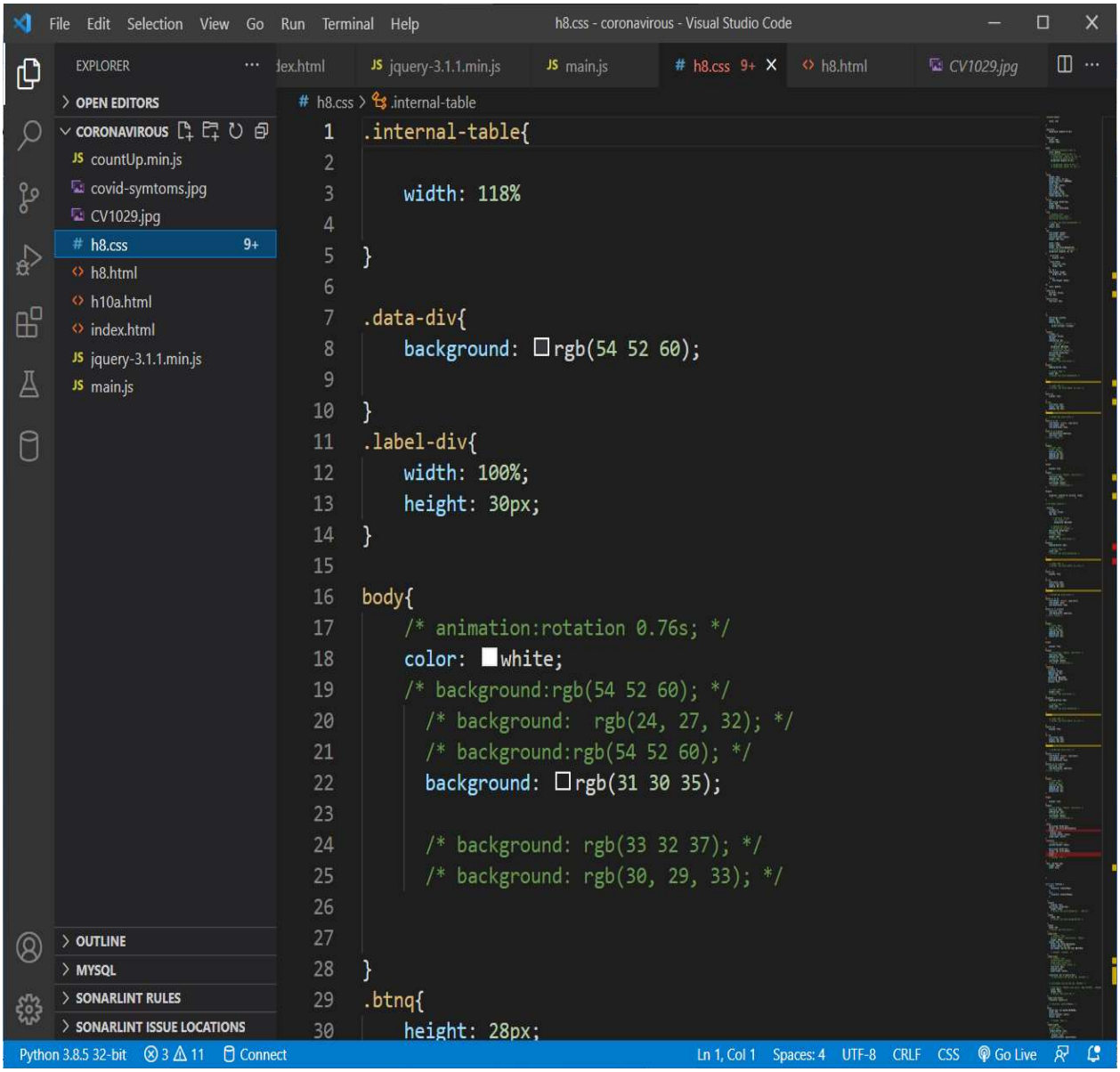
- HTML/DOM manipulation
- CSS manipulation
- HTML event methods
- Effects and animations
- AJAX
- Utilities

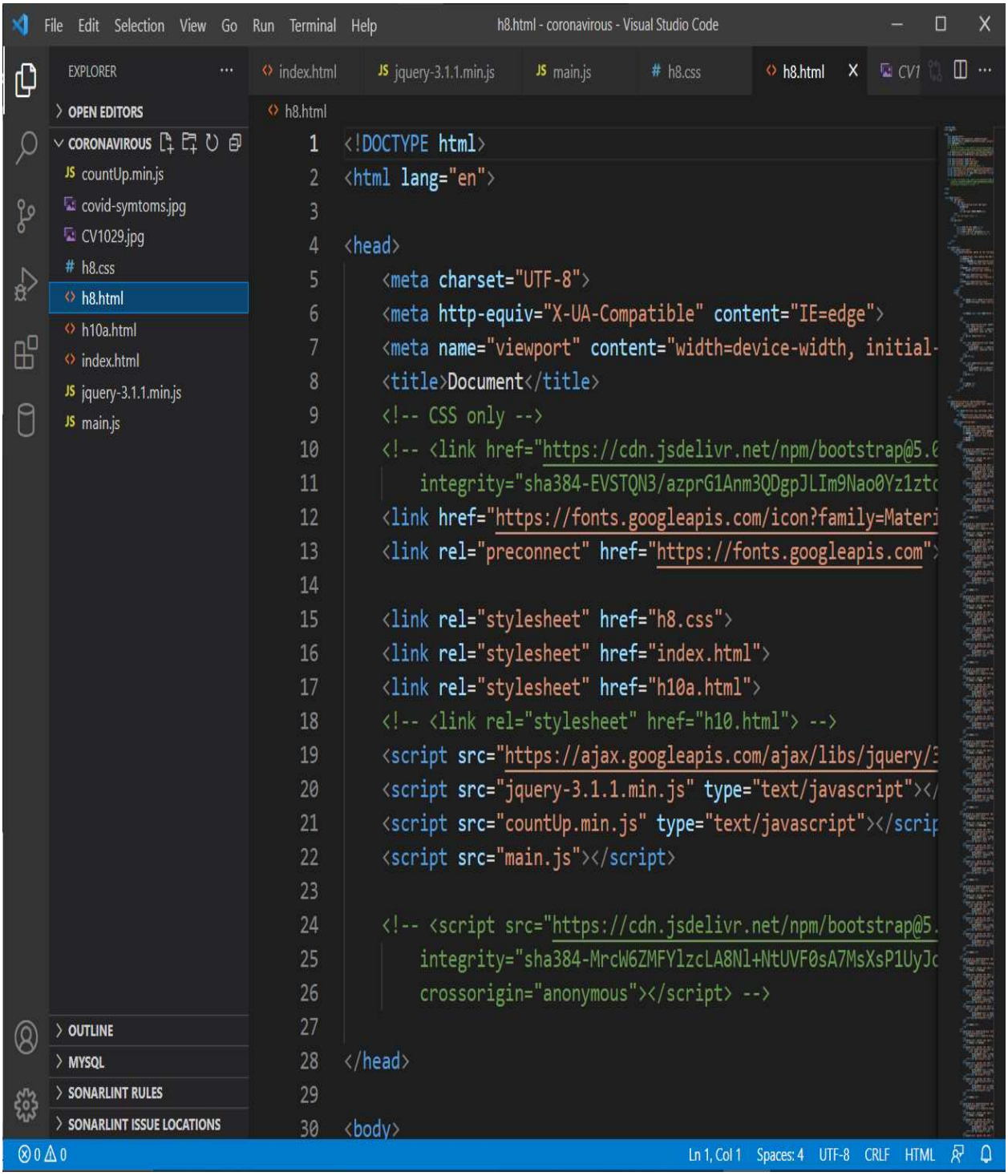


# CHAPTER 4

# PROJECT CODE (Partially)

**Snap Shot Of Code :-**

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h8.html - coronavirous - Visual Studio Code
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countUp.min.js
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CV1029.jpg
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h8.html
h10a.html
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h8.html
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3
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6 <meta http-equiv="X-UA-Compatible" content="IE=edge">
7 <meta name="viewport" content="width=device-width, initial-
8 <title>Document</title>
9 <!-- CSS only -->
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11 integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztc
12 <link href="https://fonts.googleapis.com/icon?family=Materi
13 <link rel="preconnect" href="https://fonts.googleapis.com">
14
15 <link rel="stylesheet" href="h8.css">
16 <link rel="stylesheet" href="index.html">
17 <link rel="stylesheet" href="h10a.html">
18 <!-- <link rel="stylesheet" href="h10.html"> -->
19 <script src="https://ajax.googleapis.com/ajax/libs/jquery/3
20 <script src="jquery-3.1.1.min.js" type="text/javascript"></
21 <script src="countUp.min.js" type="text/javascript"></scrip
22 <script src="main.js"></script>
23
24 <!-- <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.
25 integrity="sha384-MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJo
26 crossorigin="anonymous"></script> -->
27
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29
30 <body>
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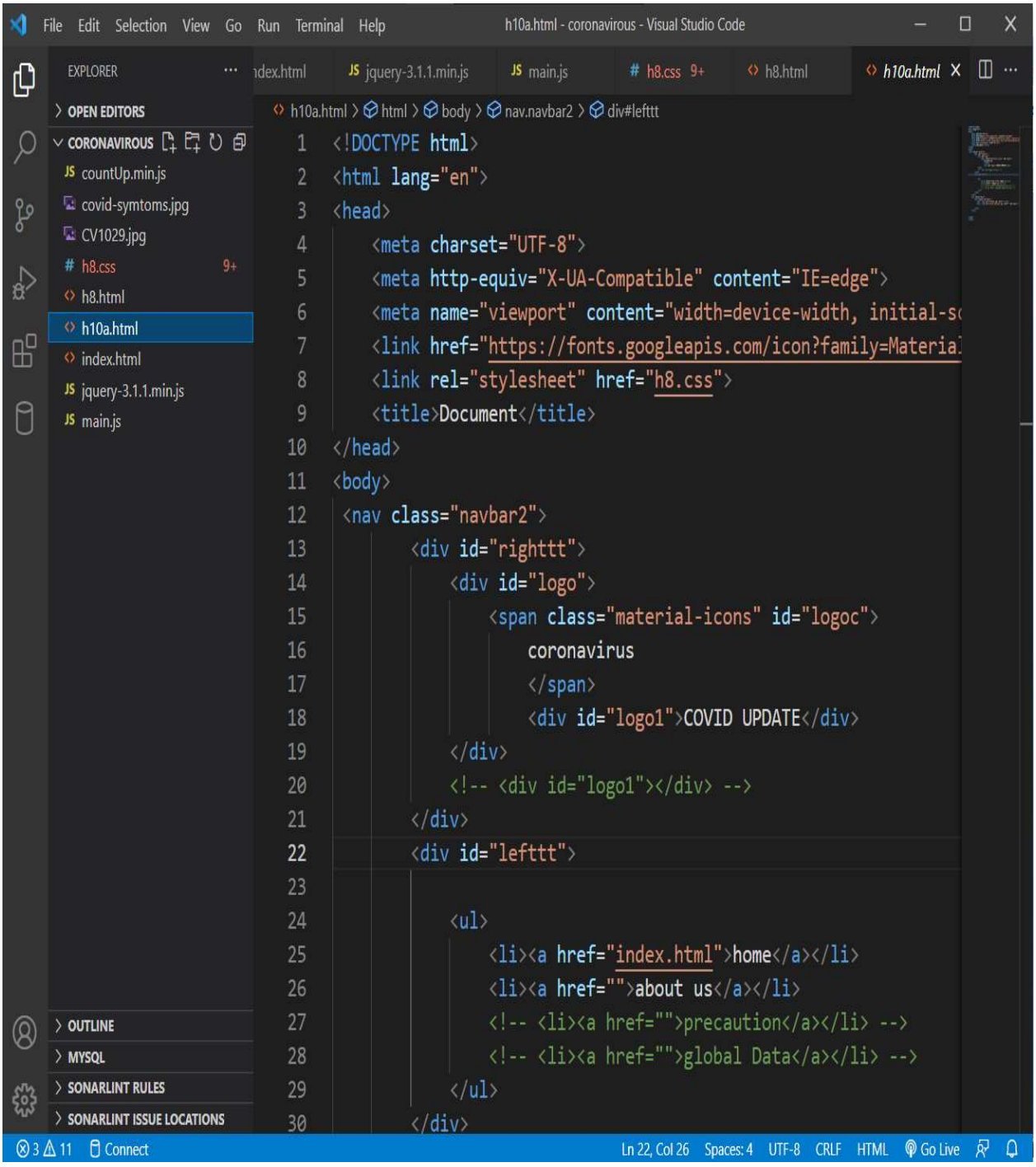
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h10a.html > html > body > nav.navbar2 > div#lefttt
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<html lang="en">
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<meta charset="UTF-8">
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<title>Document</title>
</head>
<body>
<nav class="navbar2">

coronavirus

COVID UPDATE

<!-- <div id="logo1"></div> -->

<ul>
<li><a href="index.html">home</a></li>
<li><a href="">about us</a></li>
<!-- <li><a href="">precaution</a></li> -->
<!-- <li><a href="">global Data</a></li> -->
</ul>

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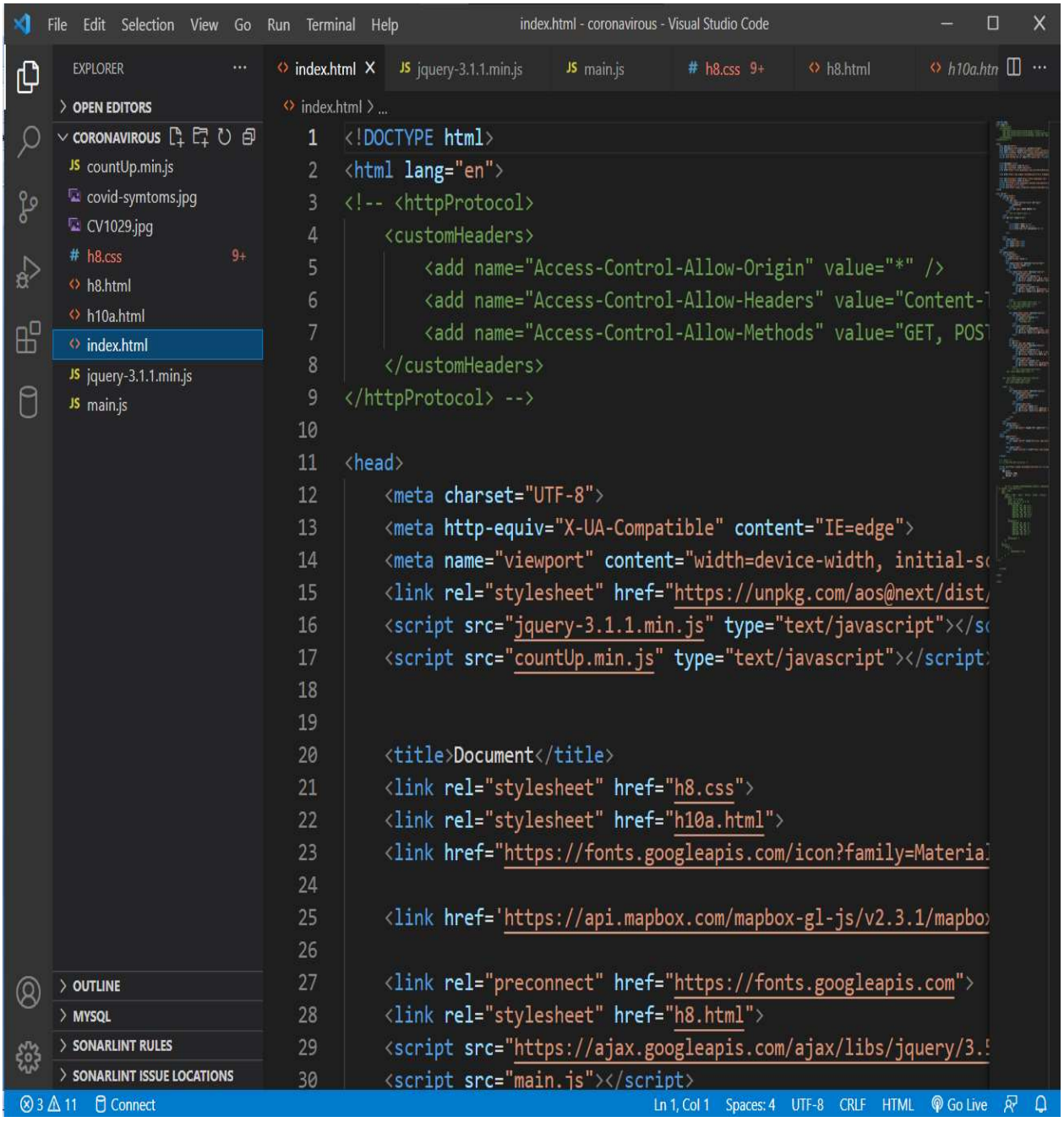
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index.html > ...
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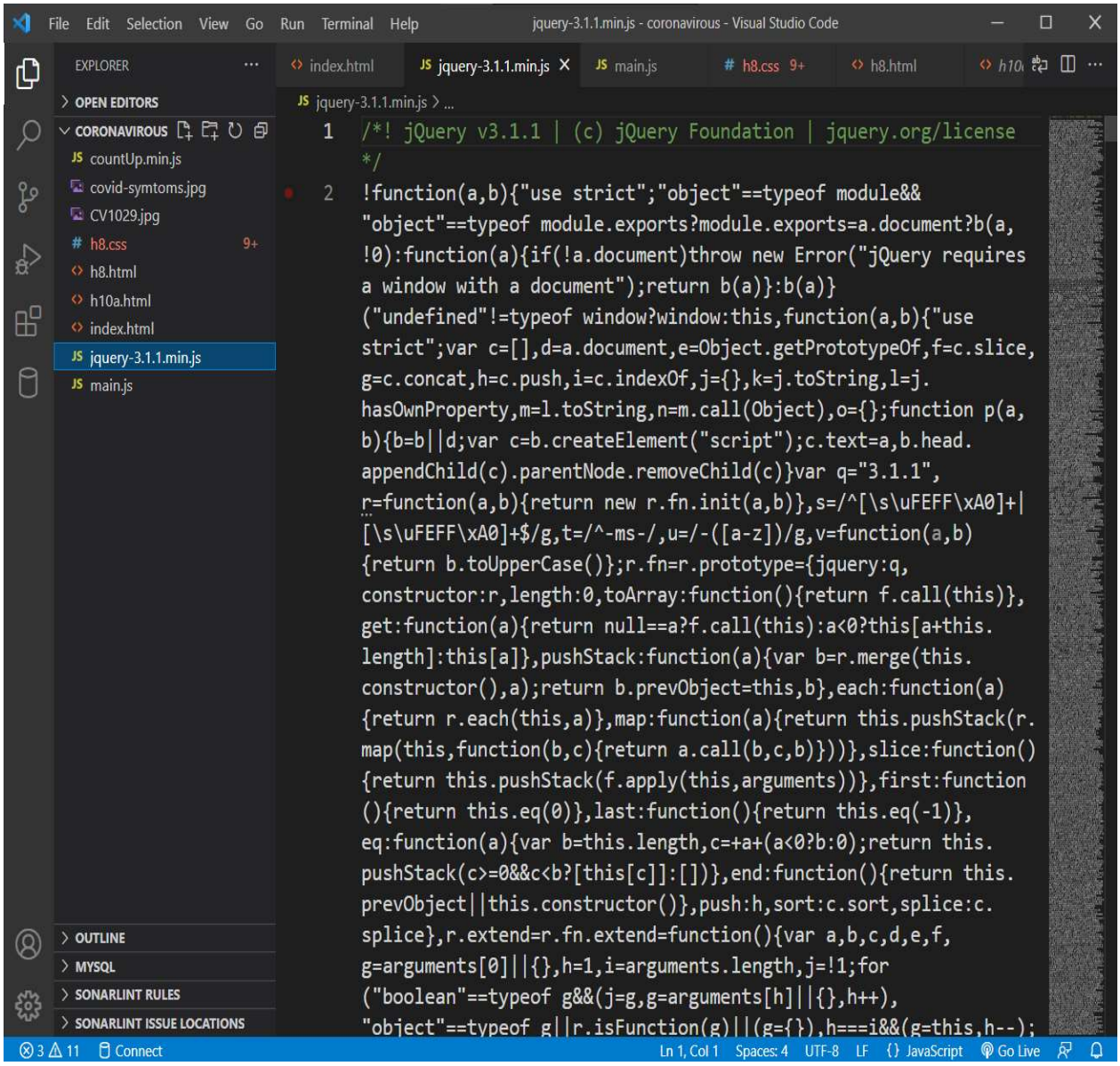
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jquery-3.1.1.min.js - coronavirous - Visual Studio Code
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h8.html
jquery-3.1.1.min.js > ...
1 /*! jQuery v3.1.1 | (c) jQuery Foundation | jquery.org/license */
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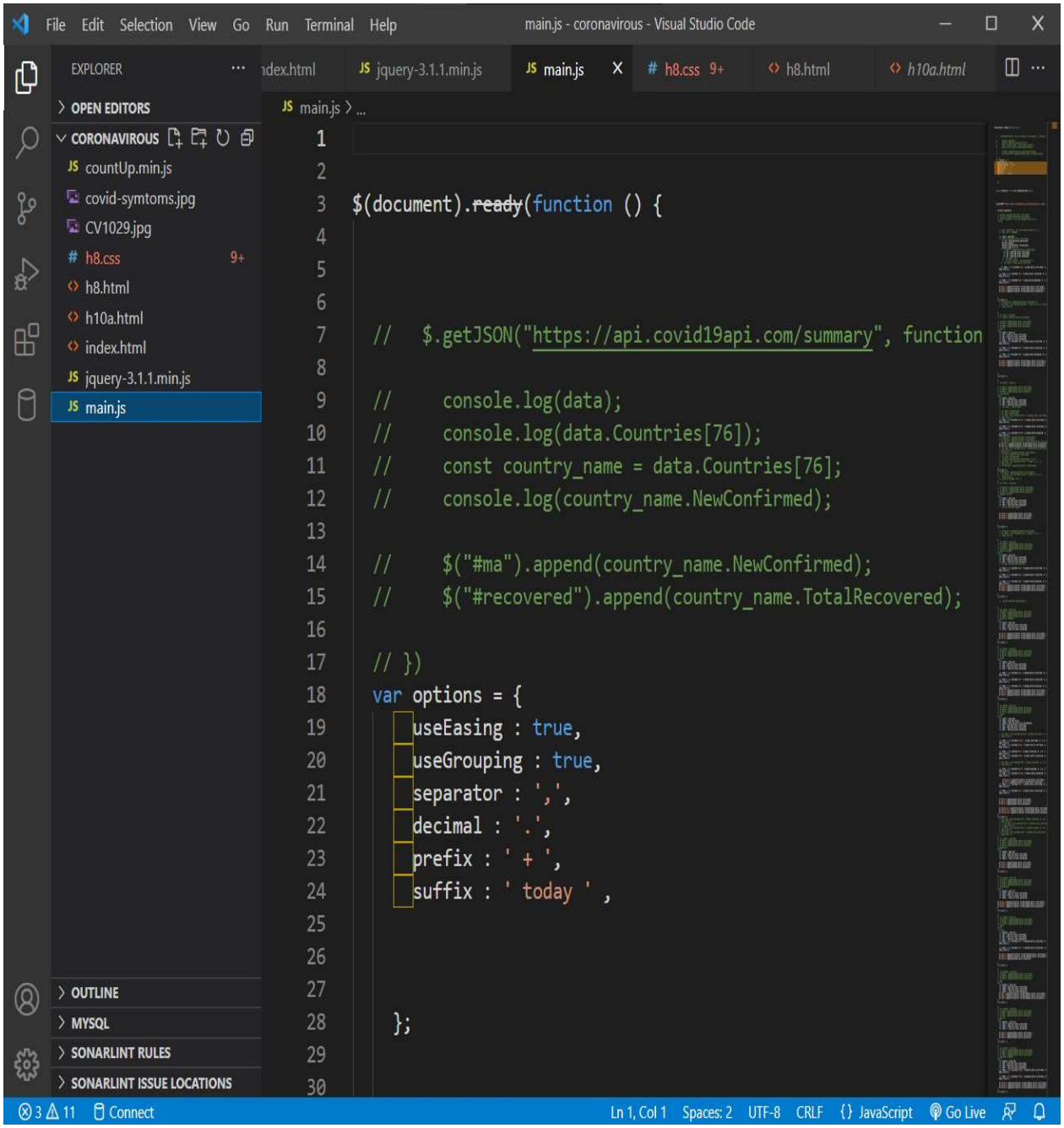
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covid-symtoms.jpg
CV1029.jpg
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h8.html
h10a.html
index.html
jquery-3.1.1.min.js
main.js
jquery-3.1.1.min.js
main.js
h8.css 9+
h8.html
h10a.html
main.js > ...
$(document).ready(function () {
// $.getJSON("https://api.covid19api.com/summary", function
// console.log(data);
// console.log(data.Countries[76]);
// const country_name = data.Countries[76];
// console.log(country_name.NewConfirmed);
// $("#ma").append(country_name.NewConfirmed);
// $("#recovered").append(country_name.TotalRecovered);
// })
var options = {
useEasing : true,
useGrouping : true,
separator : ',',
decimal : '.',
prefix : ' + ',
suffix : ' today ' ,
};
OUTLINE
MYSQL
SONARLINT RULES
SONARLINT ISSUE LOCATIONS
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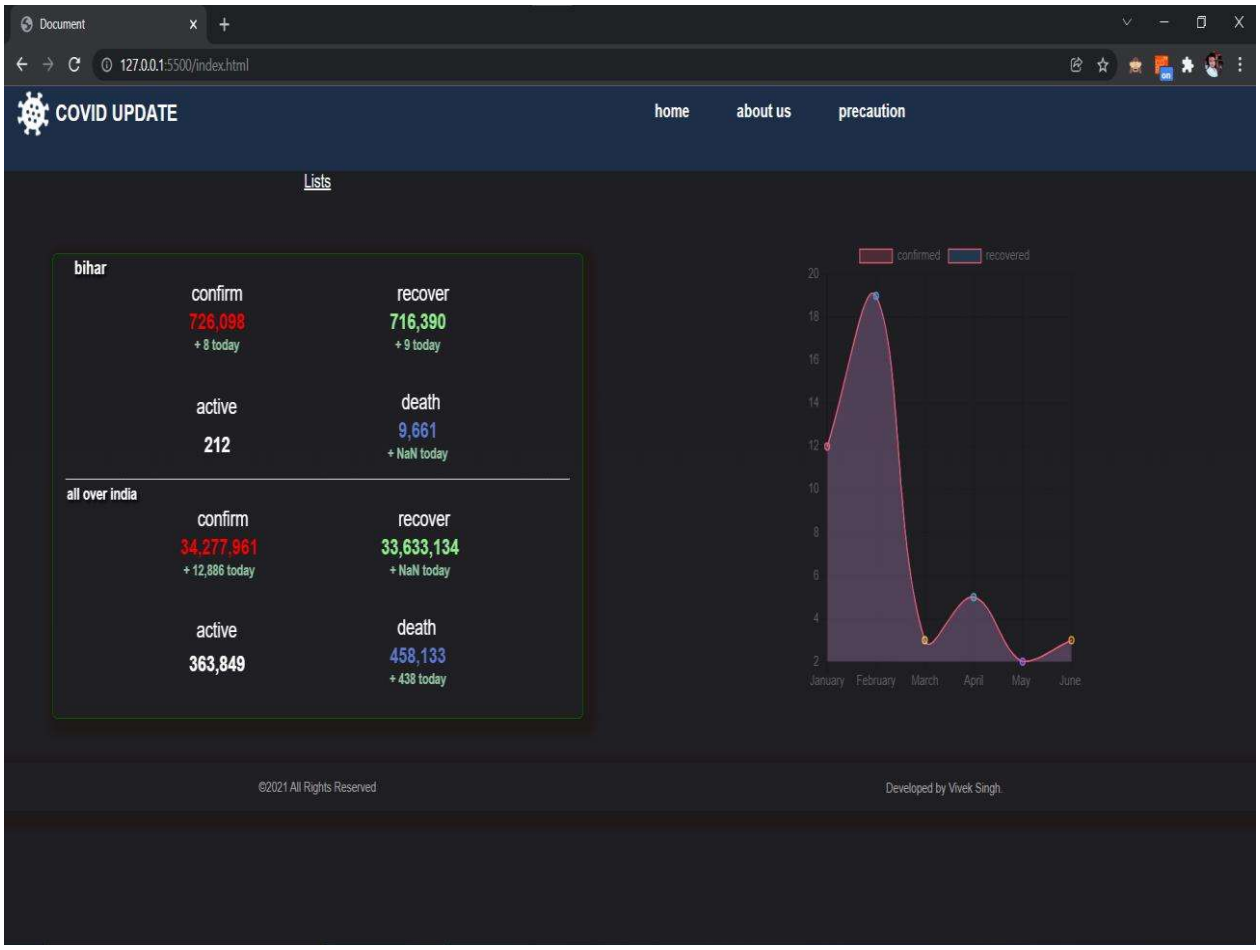
# CHAPTER 5

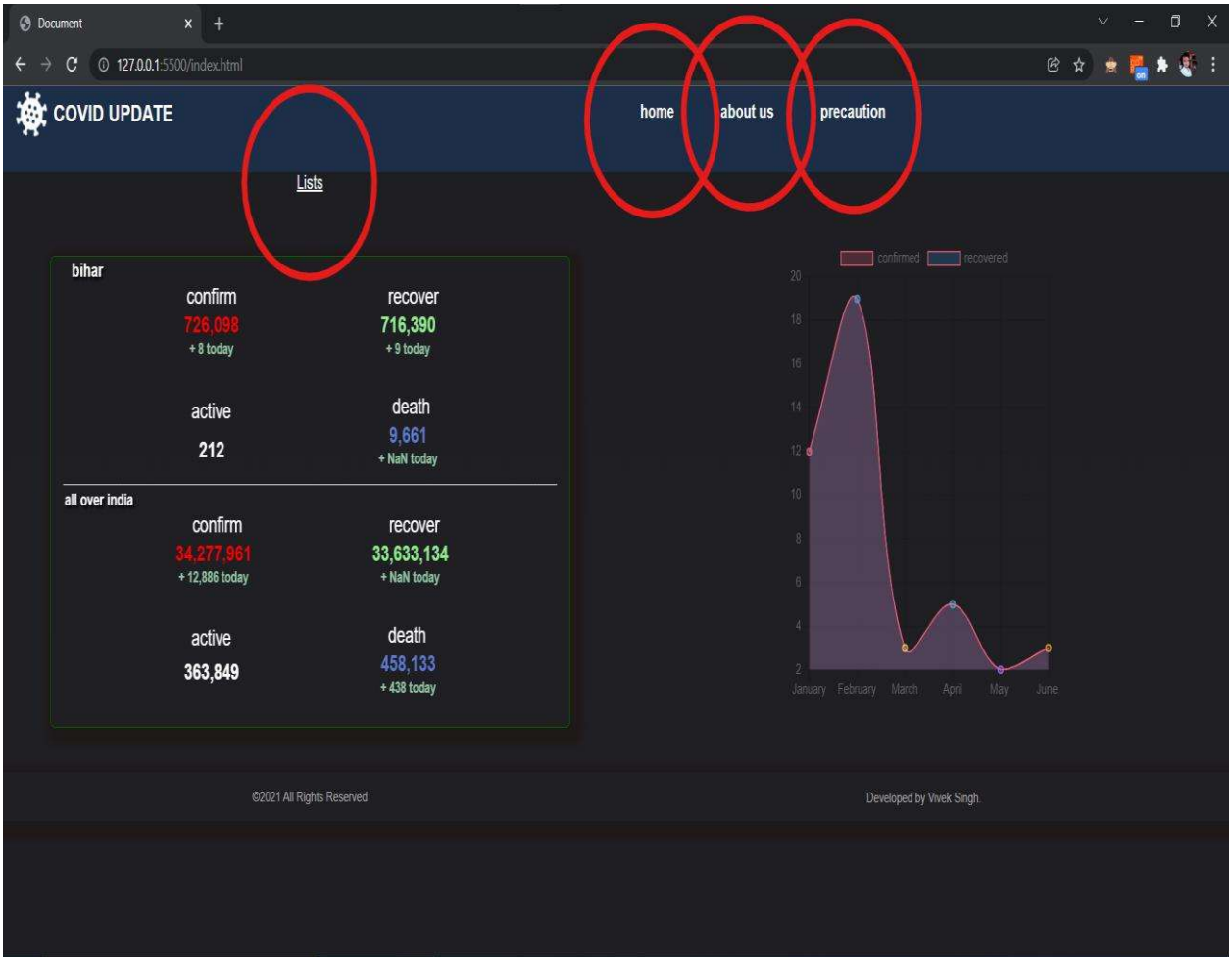
# RESULT (Output)
# (Snap Shot)

## Front Page :-



## Buttons :-

- **Lists Button**
- **Home Button**
- **About Button**
- **Precaution Button**



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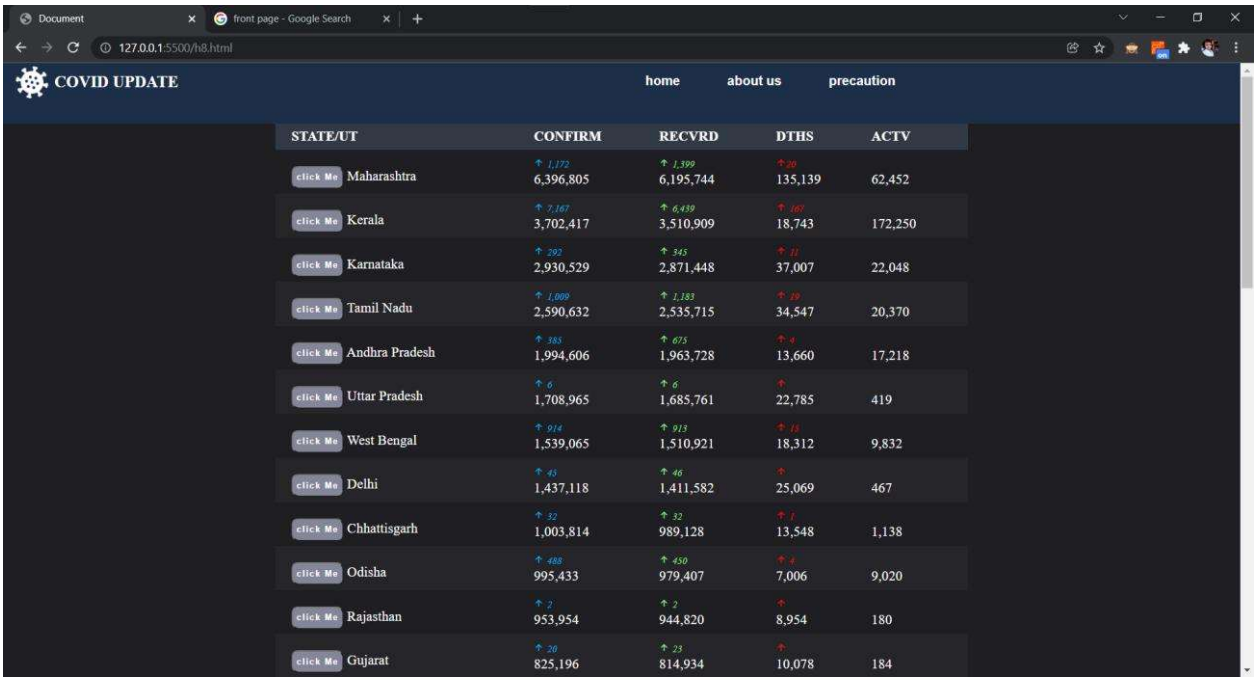
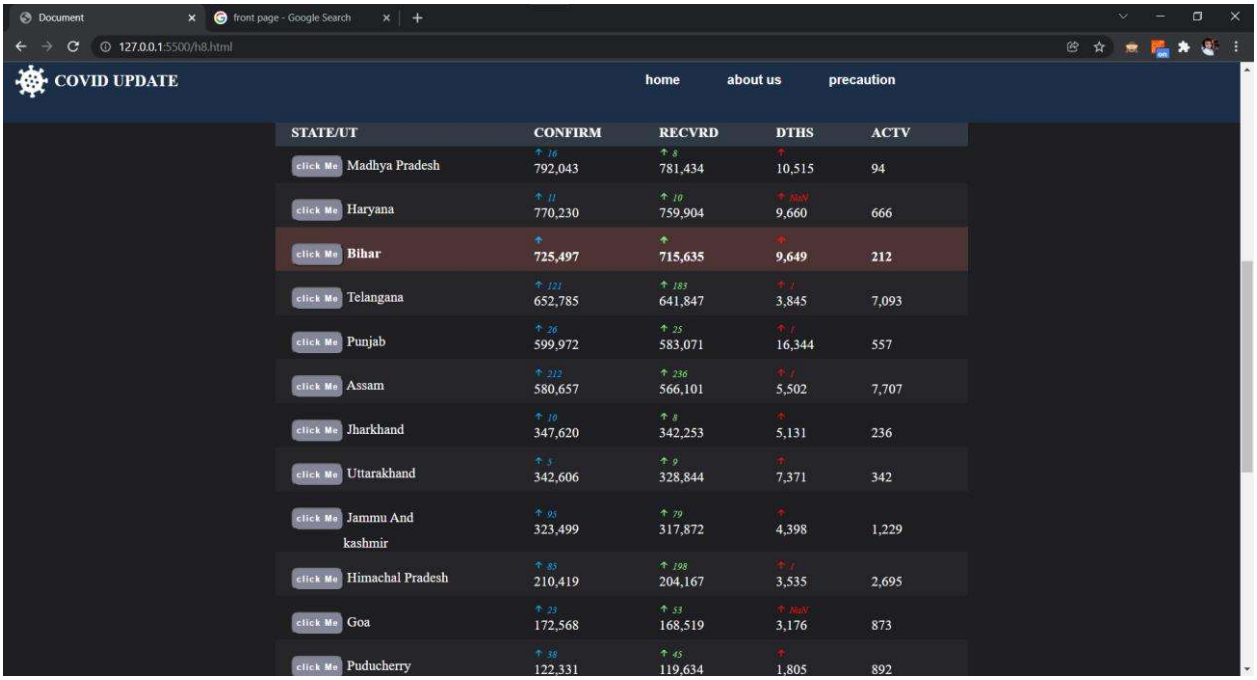
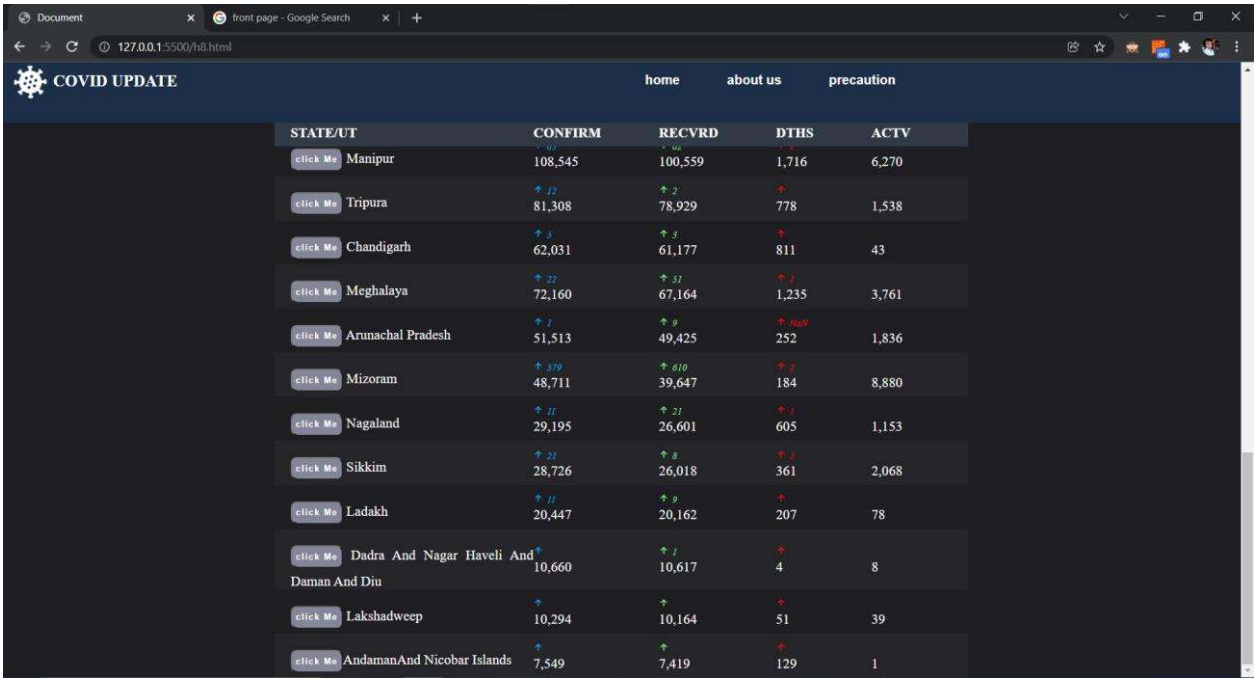
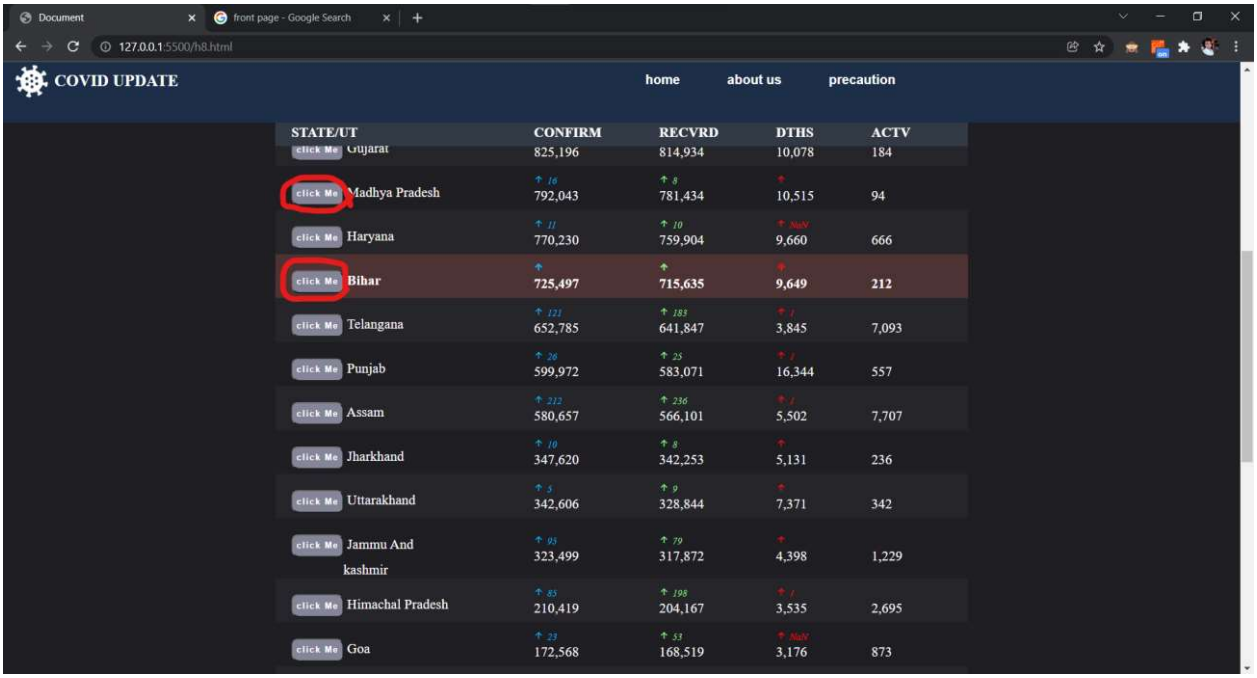


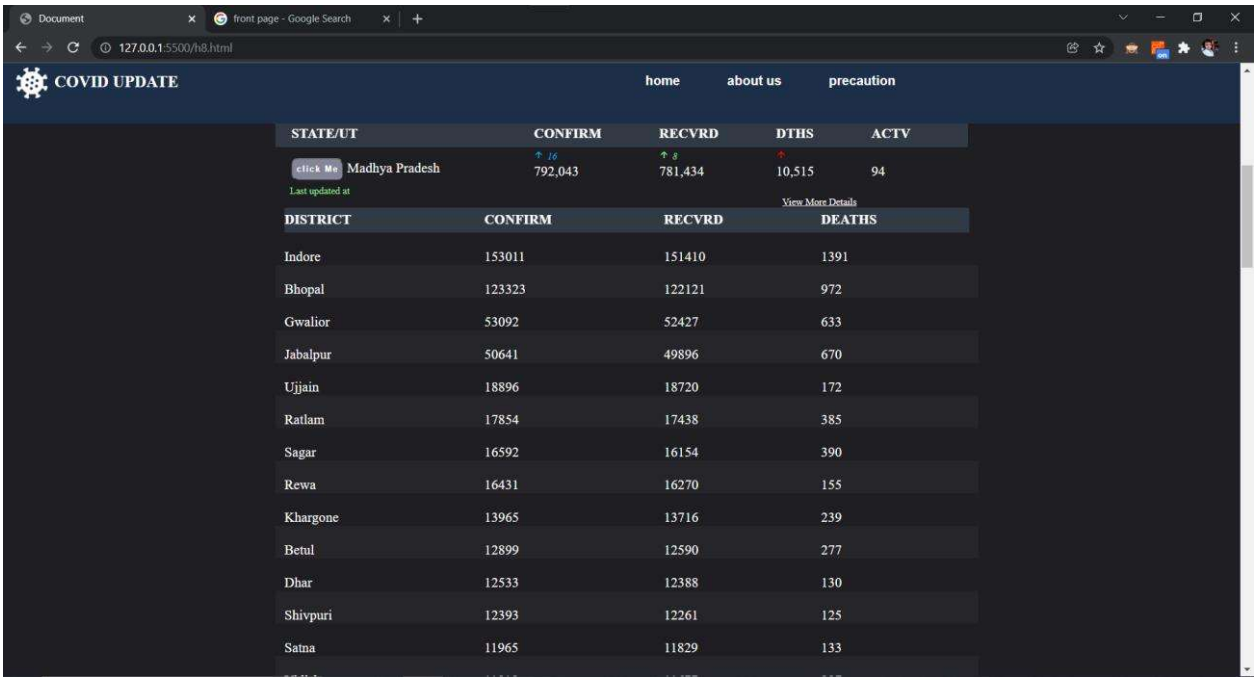



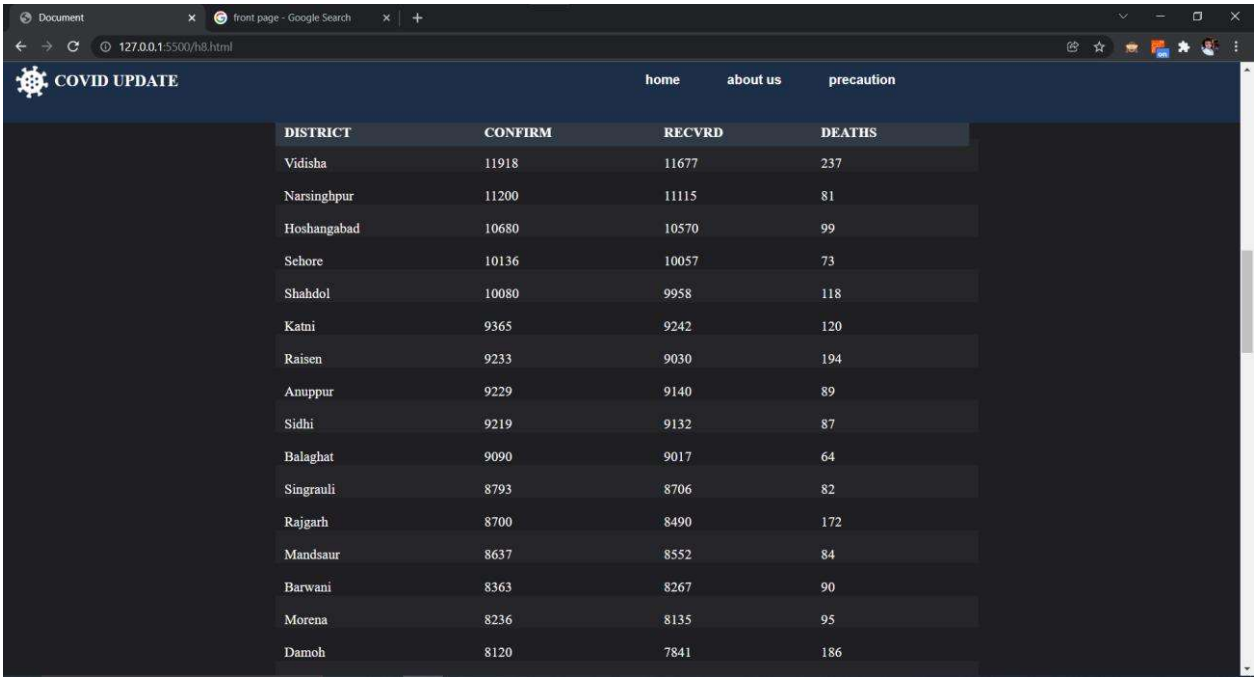


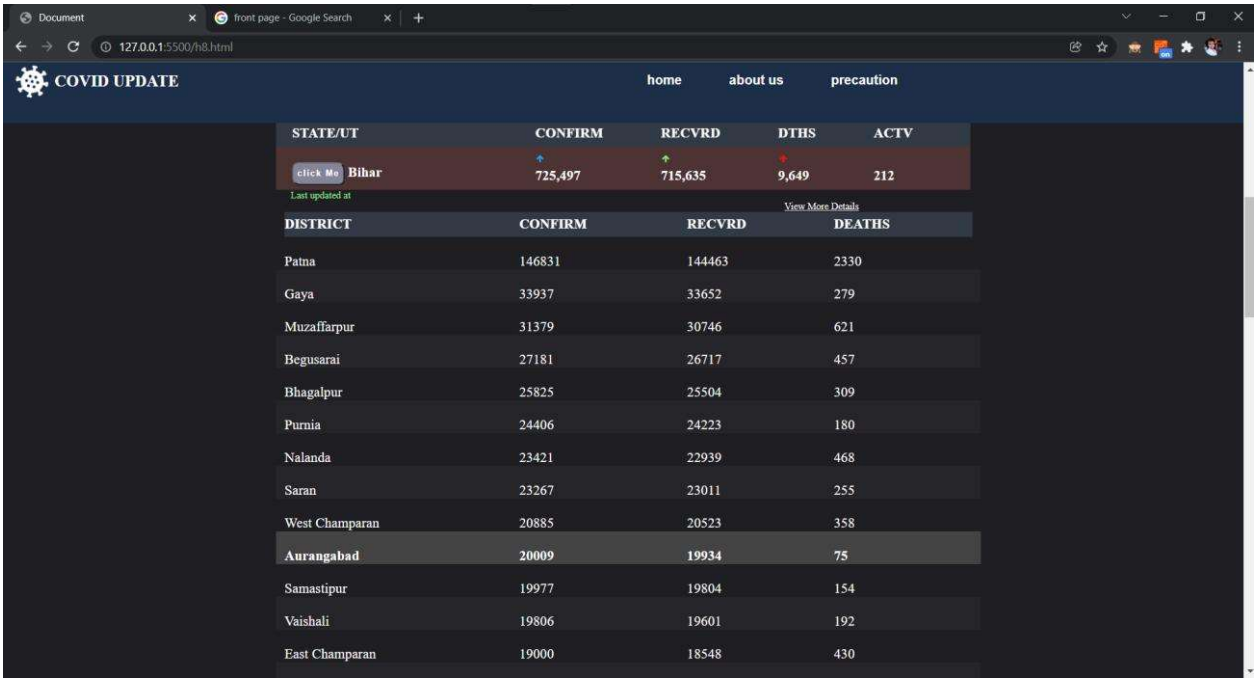

## Click Me Button :-



## Click Me Button :-

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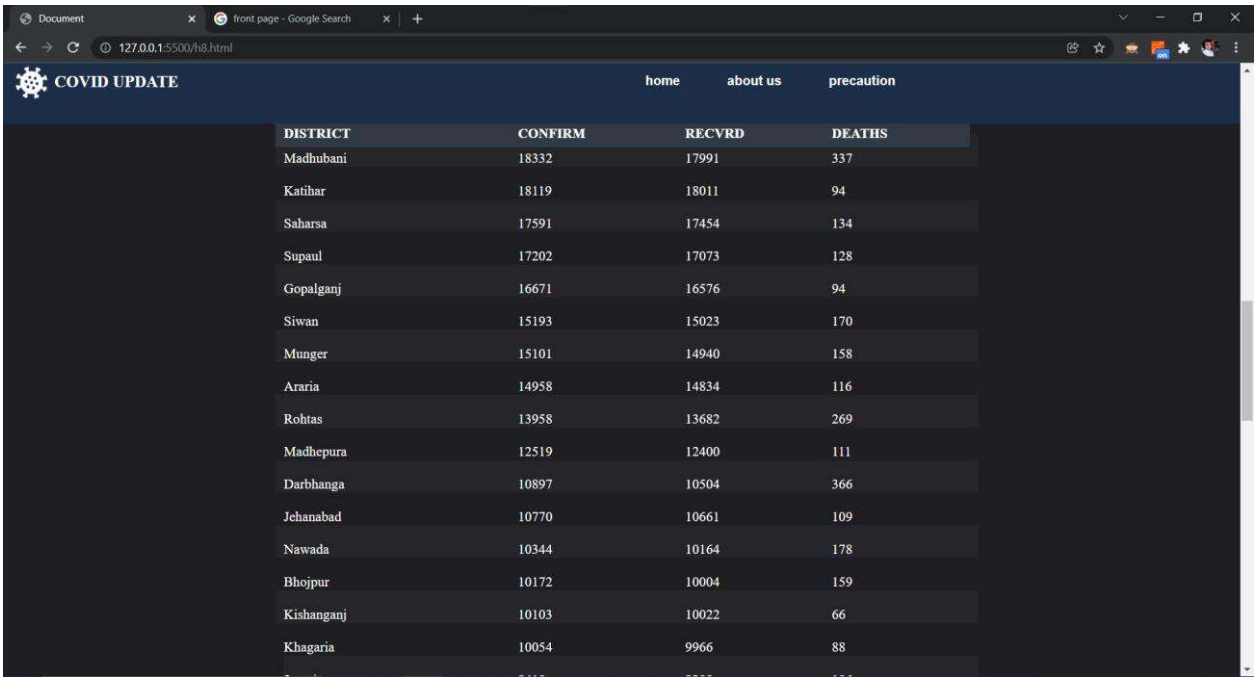
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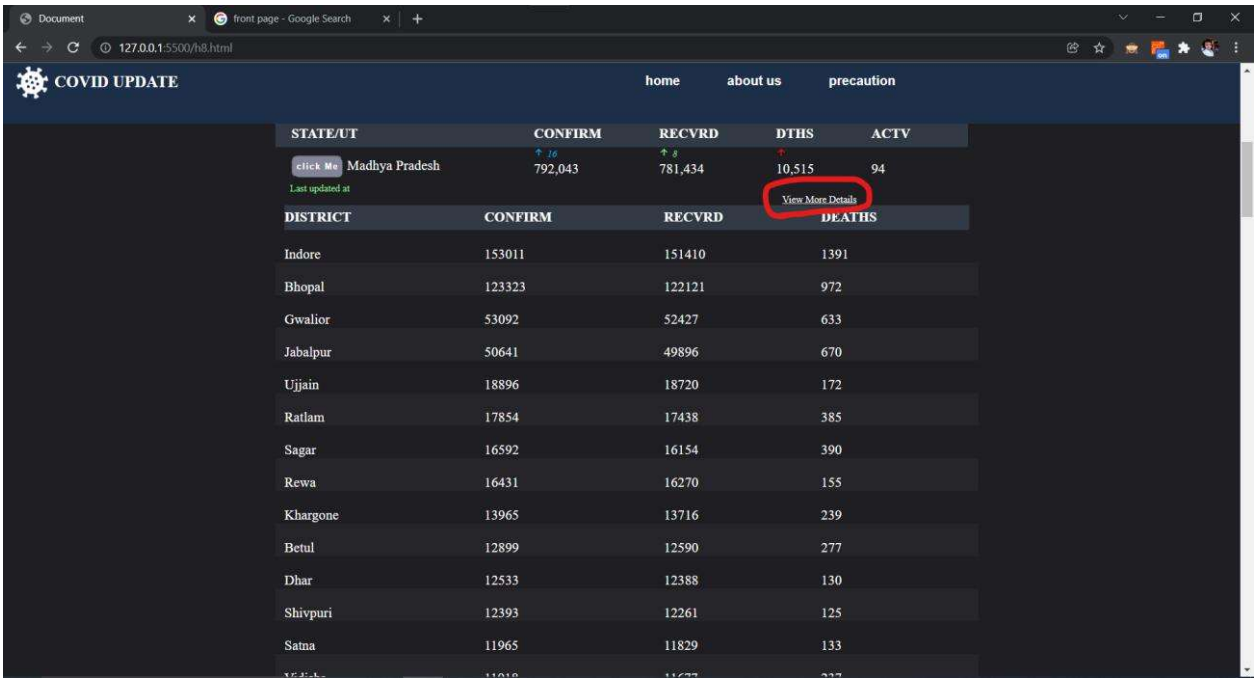


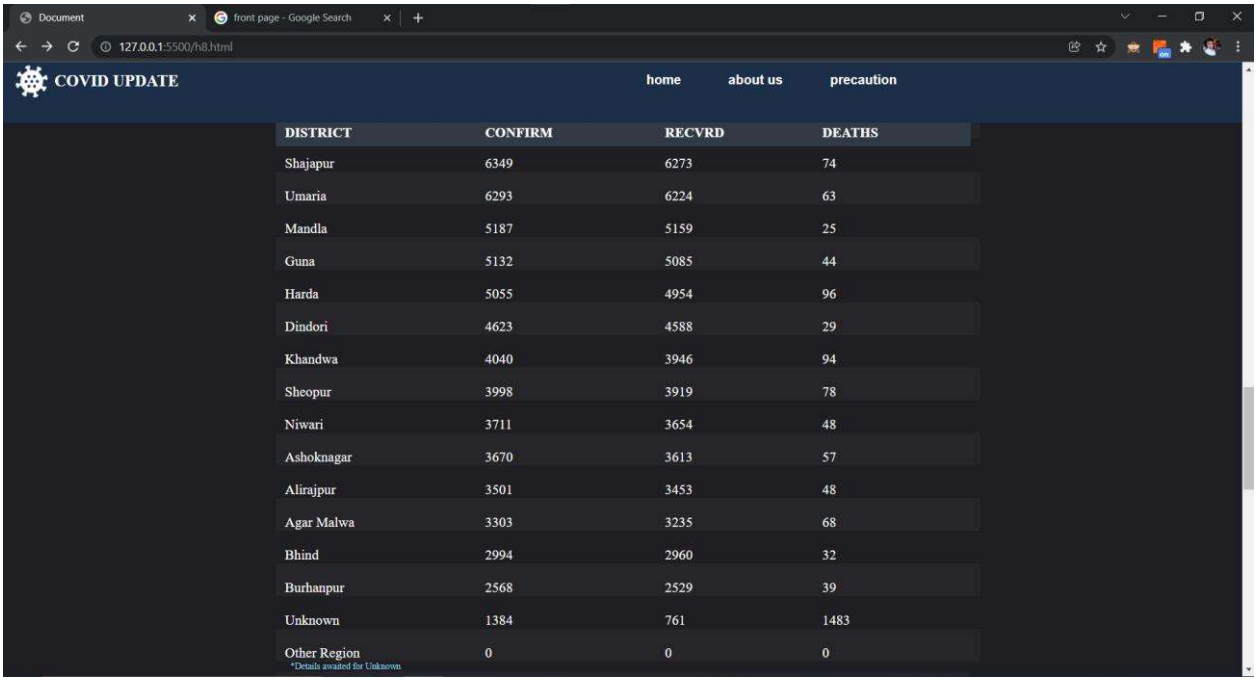

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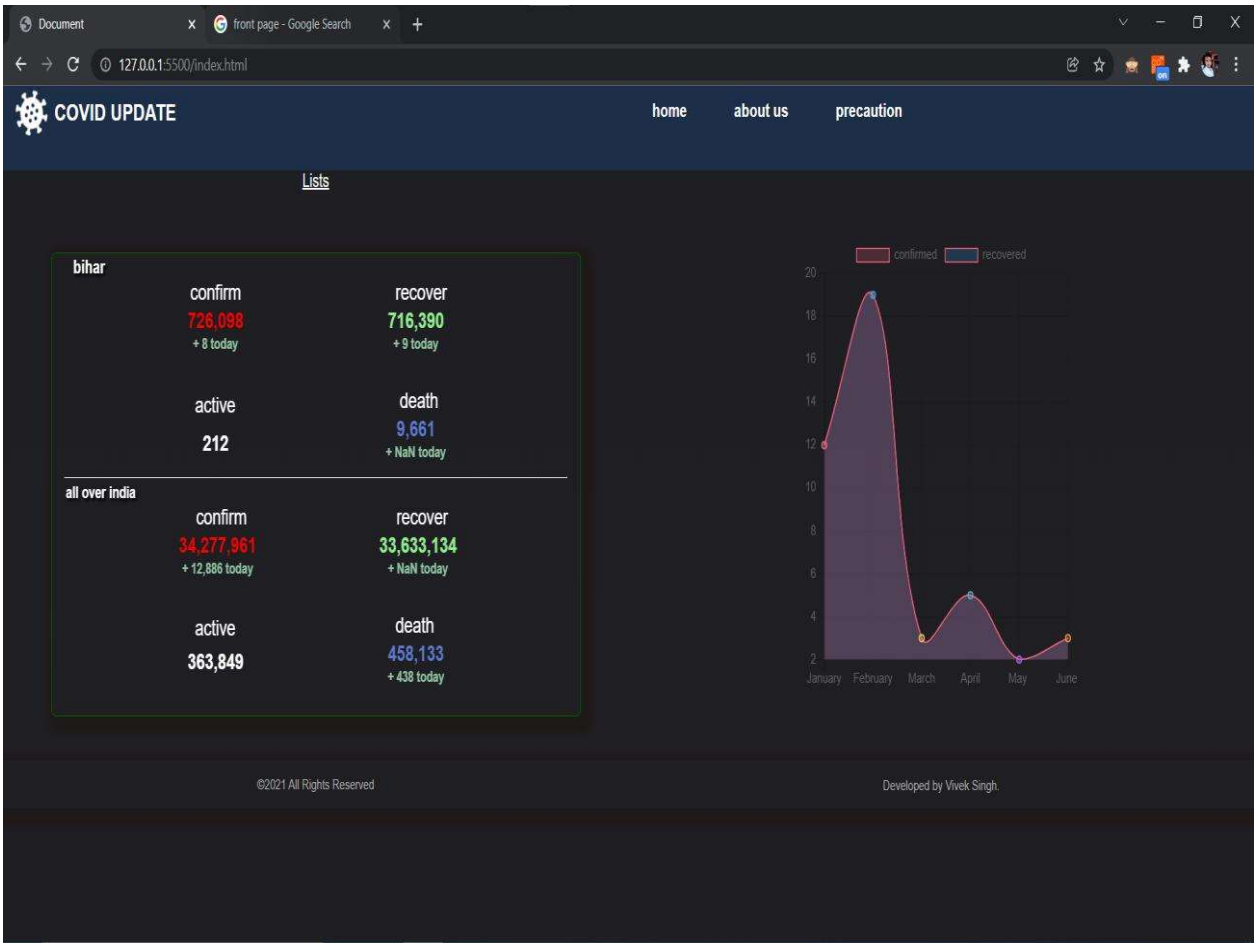

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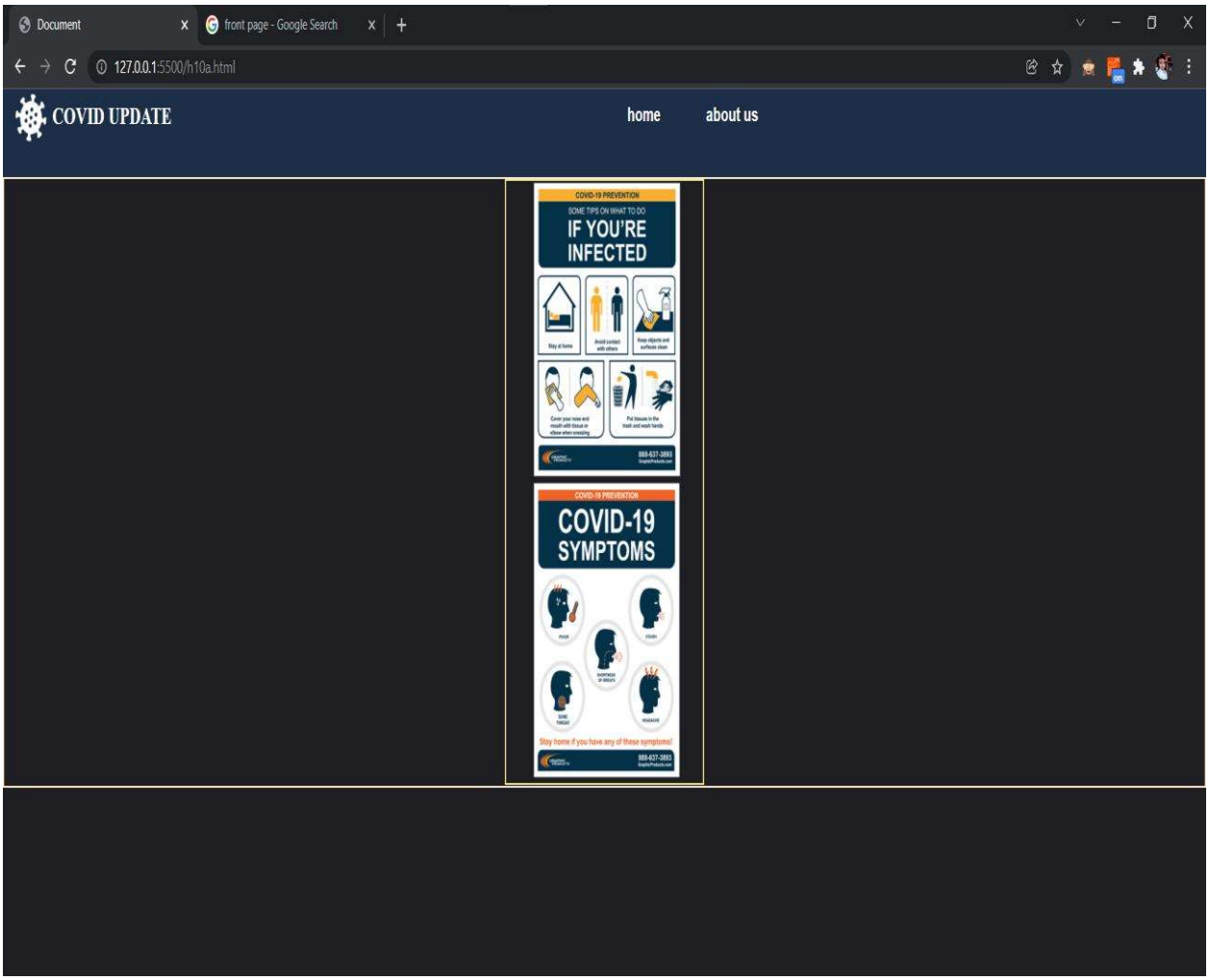


# Chapter 6

# CONCLUSION & FUTURE SCOPE

**Conclusion :-** We also analyzed the sentiments from news extracted by CoronaTracker to further understand people's reaction towards this outbreak. COVID-19 is still an infectious disease with some unclear or unknown properties, which means accurate SEIR prediction can only be obtained once the outbreak has been successfully contained. The outbreak spreads are largely influenced by each country's policy and social responsibility. In a pandemic like this, providing timely information to the public is paramount. A platform like CoronaTracker will assist the government and authorities to disseminate verified articles, provide updates to the situation, and advocate good personal hygiene to the people. CoronaTracker is built out of social responsibility to spread awareness to the common people by providing scientific-based data analysis, prediction and verified news.

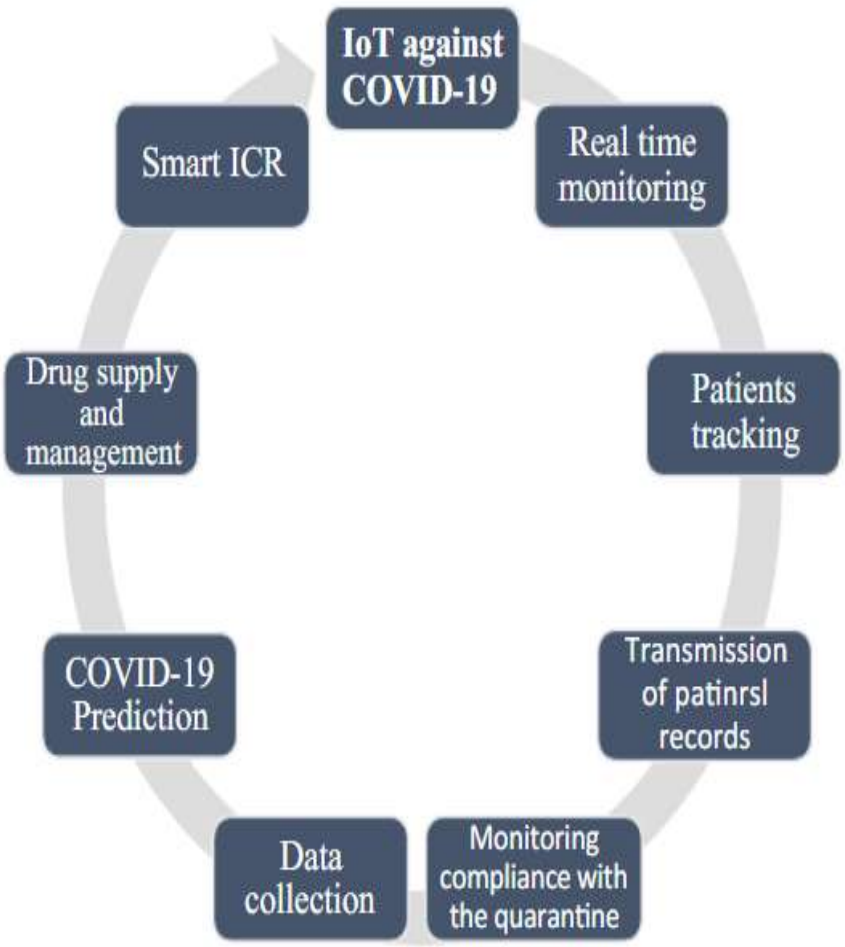
**The Future Scope of Internet of Things for Monitoring and Prediction of COVID-19 Patients :-**

The new outbreak of pneumonia triggered by a novel corona virus(COVID-19) poses a major threat and has been declared a global public health emergency. This outbreak had first been discovered in December 2019 in Wuhan, China and until now has spread to the world. Emerging technology such as the Internet of Things (IoT) and sensor networks (SN) have been utilized widely in our everyday lives in a diversity of ways. IoT has also been an instrumental role in fighting against the COVID-19 pandemic currently out breaking across the globe, where it playas significant role in tracking COVID-19 patients and infected people in hospitals and hotspots. This paper exhibited a survey of IoT technologies used in the fight against the deadly COVID-19 outbreak in different applications and discusses the key roles of IoT science in this unparalleled war. Research directions on discovering IoT's potentials, improving its capabilities and power in the battle, and IoT's issues and problems in healthcare systems are explored in detail.

This study is intended to provide an overview of the current status of IoT applications to IoT researchers and the broader community and to inspire researchers to leverage IoT potentials in the battle against COVID-19.

**Keywords** :- COVID-19, Corona virus, Internet of things, IoT, Healthcare monitoring.

**The Future Scope of Internet of Things for Monitoring :-**




**In Future We Add Word Wide Data, Real Time Mothering and Many more.**

# Thank
# You
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