DYNAMIC WEB PAGE DESIGNING USING REACT

A SUMMER INTERNSHIP REPORT

Submitted by

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In Partial fulfillment for the award of the degree Of

BACHELOR OF ENGINEERING

in

Information Technology



Sardar Vallabhbhai Patel Institute of Technology, VASAD. **Gujarat Technological University, Ahmedabad**

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SARDAR VALLABHBHAI PATEL INSTITUTE OF TECHNOLOGY, VASAD.

INFORMATION TECHNOLOGY ENGINEERING



CERTIFICATE

Date:12/8/2023

This is to certify that the Summer Internship Work entitled "DYNAMIC WEB PAGE DESIGNING USING REACT" has been carried out by BANI ANJALI (200410116101) under my guidance in fulfillment of the degree of Bachelor of Engineering in Information Technology (7th Semester) of Gujarat Technological University, Ahmedabad during the academic year 2023-24.

Internal Guide Prof. Priyanka shah Asst. Prof. SVIT, VASAD

Head of the Department Dr. Mala Mehta IT Dept. SVIT, VASAD



COMPLETION CERTIFICATE OF SUMMER INTERNSHIP

DATE:11-08-2023

Enrollment: 200410116101

Semester: 7th, Information Technology

Sardar Vallabhbhai Patel Institute of Technology, Vasad

This is to certify that **Anjali Naranbhai Bani**, pursuing her Information Technology Engineering 7th semester at Sardar Vallabhbhai Patel Institute of Technology, Vasad has completed the internship at **Pavans Group Techsoft Pvt Ltd** from 17th July, 2023 to 10thAugust, 2023.

We found her sincere, hardworking, technically sound and result oriented. She worked very well in her project – Static Website with HTML, CSS, BOOTSTRAP also covered the fundamentals of JS And ES6 and React JS.

We take this opportunity to thank her and wish her all the best for her future.

Yours sincerely,
For Pavans Group Techsoft Pvt Ltd

Director

Naresh Chauhan

Pavans Group Techsoft Pvt. Ltd. 502, Notus IT Park, Sarabhai Campus, Vadiwadi, Vadodara, Gujarat - 390 023





ACKNOLEDGEMENT

This report has been prepared for the Summer Internship Project on topic Dynamic web page designing using React to implement the theory in the real field with the purpose of fulfilling the requirements of this course.

The aim of this project is to make familiar to the practical aspect and uses of theoretical knowledge and clarifying the career goals, so we have successfully completed the Internship and compiled this report as the summary and the conclusion that we have drawn from the project.

We would like to express our sincere gratitude to our Project Guide Mr. Naresh chauhan who had given his valuable time and given us chance to learnsomething despite having his busy schedule.

Anjali Bani (200410116101)

ABSTRACT

In this internship we are going to work on dynamic webpage designing. React is JavaScript web framework which is very popular and one of the most important parts of full stack web development. Application Programming Interface (API) is one of the most important data sources. In this internship we will going to work onsome live APIs to create real time dynamic web page. In order to fetch some live data, we will use some concepts of http (request - response mechanism) and ES6.

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Chapter - 1 Introduction

Website Development has gotten a lot of focus in recent years in the attempt of improving the user experience for brands & their target audiences. Any modern website development company aims to design sites that are more intuitive & have the option of viewing on multiple platforms- desktops, laptops, smartphones, etc., and a lot more. One such exciting upgrade to website development happened through the creation of dynamic websites. A dynamic website, also known as a data-driven site requires web programming & database designs. It contains content and information that changes based on various factors such as the viewer of the site, the time and the time zone, the language of the country viewer resides in, etc. The text & the images used are stored on a content management system or a database. When the info is modified, changed, or updated within the database, it reflects the same on the site. React js is future React is growing fast and getting its popularity since 2013, as it has been addressing a lot of difficult and frustrating parts of web development. From being flexible, unique, versatile library for web development it also has helped a lot in mobile application development with React Native.

1) Code reusability and data binding:

React JS can create an Android web application and supports code reusability. Also it can create an Android web application. It uses one side data binding and also flux which is an application architecture to controls the flow of the data from one point. 2)Reliable Performance:

The concept virtual Document Object Model is regarded as one of the greatest advantages of React in comparison with established frameworks.

Chapter - 2 Tools and Technology

These are the necessary tools and materials needed to build the website.

These include software and open-source materials.

2.1 Html

HTML means Hypertext Markup Language. This language is used in creating web pages. This language also supports other languages such CSS, PHP, JavaScript, Python etc. in creating interactive and responsive pages on the pages. HTML5 is just an updated version of the HTML. It supports new features, new attributes, new HTML elements, full CSS3 support, video and audio, 2D/3D graphics that help users and also help web developers to create new features easily on the website.

2.2 CSS (Bootstrap)

CSS is simply referred to as Cascading Style Sheets.CSS is used to define styles for web pages, including the design, layout, and variations in the display for different devices and screen sizes. The general structure of CSS Basic syntax: selector {property: value} HTML tag you want to modify the property you want to change the value you want the property to take.

Example: p {text-align: center; color: black; font-family: arial} CSS can be used in a separate style sheet or used in the webpage.

2.3 JAVASCRIPT

JavaScript is a high-level language which could be used independently or inculcated into the webpage. It can be used to, handle requests and responses and also add dynamic behavior and also store information on a website.

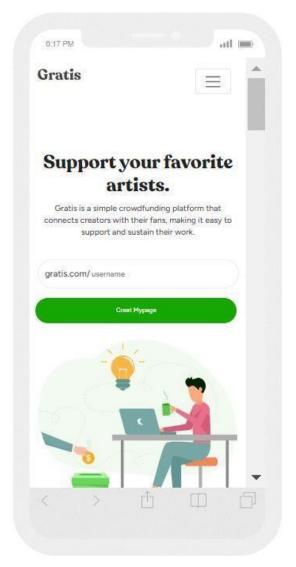
2.4 React

React is a JavaScript library for building user interfaces. React is modern JavaScript Library which is developed by Facebook. React is used for making Morden website Web Apps.

2.5 API

API is the acronym for Application Programming Interface, which is a software intermediary that allows two applications to talk to each other. Each time you use an app like Facebook, send an instant message, or check the weather on your phone, you're using an API.

2.6 Made responsive layout using html, CSS, bootstrap Live link: https://pavansgroup.in/intern1/gratis/ Output:



iPhone eXpensive portrait · width: 375px

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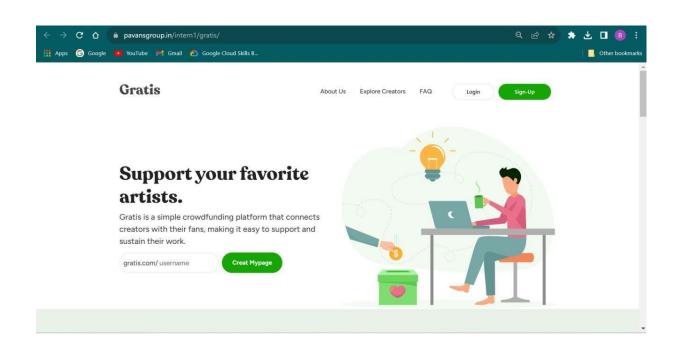


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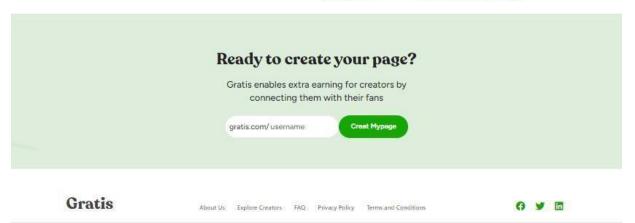


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Chapter – 3 Learn about the new ES6 features

- ❖ JavaScript ES6 (also known as ECMAScript 2015 or ECMAScript 6) is the newer version of JavaScript that was introduced in 2015.
- ❖ ECMAScript is the standard that JavaScript programming language uses. ECMAScript provides the specification on how JavaScript programming language should work.
- ❖ It is the specification defined in ECMA-262 for creating a general-purpose scripting language. In simple terms it is a standardization for creating a scripting language. It was introduced by Ecma International, and is basically an implementation with which we learn how to create a scripting language.

3.1 JavaScript Arrow Function

 Arrow function is one of the features introduced in the ES6 version of JavaScript. It allows you to create functions in a cleaner way compared to regular functions. For example,

1.

Output:

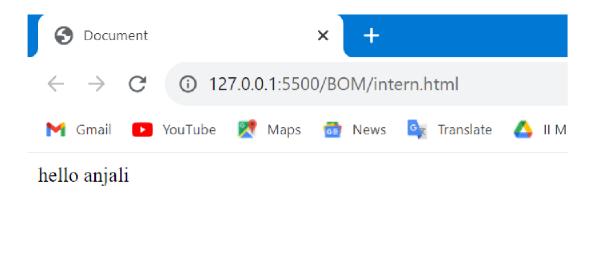
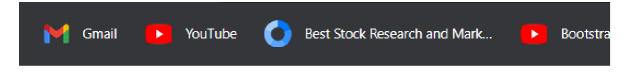


Figure 1JavaScript Arrow Function Output

<u>2.</u>

Output:

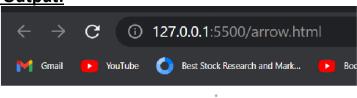


50hi

Figure 2JavaScript Arrow Function Output 2

<u>3.</u>

Output:

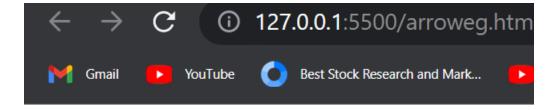


40

Figure 3 JavaScript Arrow Function Output 3

<u>4.</u>

Output:



odd

Figure 4 JavaScript Arrow Function program 4

3.2 Function

```
<!DOCTYPE html>
 2 <html lang="en">
    <head>
        <title>Document</title>
 4
   </head>
   <body>
        <script>
            function msg() {
 8
                document.write("anjali bani")
10
            msg();
11
        </script>
12
13 </body>
   </html>
14
```

Figure 5 Function

OutputL:

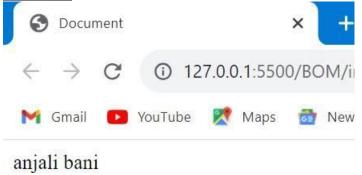


Figure 6 Function Output

Javascript Object:

```
<!DOCTYPE html>
  <head>
   link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@3.3.7/dist/css/bootstrap.min.css" integrity="sha384-
BVYiiSIFeK1dGmJRAkycuHAHRg320mUcww7on3Rydg4Va+PmSTsz/K68vbdEjh4u"
crossorigin="anonymous">
   <!—Optional theme >
   <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@3.3.7/dist/css/bootstrap-</pre>
theme.min.css" integrity="sha384-
rHyoN1iRsVXV4nD0JutlnGaslCJuC7uwjduW9SvrLvRYooPp2bWYgmgJQlXwl/Sp"
crossorigin="anonymous">
   <!—Latest compiled and minified JavaScript >
   <script src="https://cdn.jsdelivr.net/npm/bootstrap@3.3.7/dist/js/bootstrap.min.js"</pre>
integrity="sha384-Tc5Iqib027qvyjSMfHjOMaLkfuWVxZxUPnCJA7l2mCWNIpG9mGCD8wGNlcPD7Txa"
crossorigin="anonymous"></script>
  </head>
  <body>
   <script>
     var myobject = {"15ajkot15":"ahmedabad","15ajkot15htra":"15ajkot","rajastahn":"jaipur"}
for(var I in myobject) {
       document.write("State name is "+i+" city name is "+myobject[i]+" <br/>");
     }
     var cases =
{"ahmedabad":[1500,1600,2],"15ajkot":[500,650,1],"surat":[1200,1350,4],"VAPI":[50,75,0]};
     for(var I in cases){
       document.write(i+": new cases "+cases[i][0]+" recovered cases "+cases[i][1]+" <br/>");
     }
   </script>
   City Name 
       New Cases
       recovered Cases
       Death Cases 
     <script>
       for(I in cases){
         if(cases[i][0]>=1000){
```

```
document.write("<tr
style='color:red'>"+i+""+cases[i][0]+""+cases[i][1]+
          ""+cases[i][2]+"");
        }
        else{
          document.write(""+i+""+cases[i][0]+""+cases[i][1]+"
          ""+cases[i][2]+"");
     var players = {
                         "virat":[25,15,7,12,65],
                         "rohit":[55,15,33,7,45],
                         "dhoni":[15,32,0,75,65],
                         "shikhar":[50,20,25,75,45],
                         "pant":[10,25,22,55,75],
                         "rahane":[15,25,55,45,0],
                   }
      }
     </script>
   </body>
</html>
```

Output:



State name is rajastahn city name is jaipur

ahmedabad: new cases 1500 recovered cases 1600

ajkot: new cases 500 recovered cases 650 surat: new cases 1200 recovered cases 1350 /API: new cases 50 recovered cases 75

City Name	New Cases	recovered Cases	Death Cases
ahmedabad	1500	1600	2
rajkot	500	650	1
surat	1200	1350	4
VAPI	50	75	0

Figure 7 Javascript Object Output

Userinput:

```
♦ arroweg.html
♦ function.html
♦ userinput.html
X
<!DOCTYPE html>
         <head>
         </head>
         <body>
             <script>
                function data(form){
                    var e = form.ueamil.value;
                    document.getElementById("msg").innerHTML = e;
11
             </script>
             <form>
12
                email : <input type="eamil" name="ueamil" placeholder="Enter email">
13
                <input type="submit" onclick="data(this.form); return flase;">
             </form>
            </body>
     </html>
18
```

Figure 8 Userinput

Output:

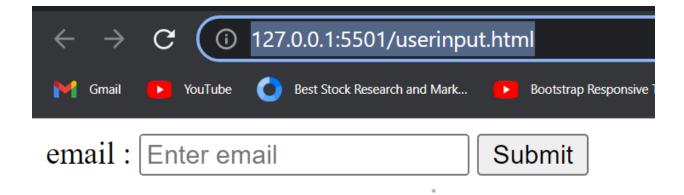


Figure 9 Userinput Output

Chapter:- 4 API

- APIs are used for fetching data from the server and using AJAX and API we
 call data asynchronous and show it in our HTML. You can make API requests
 by using browser build in fetch function or third-party libraries like Axios. You
 can make API requests anywhere but it is totally recommended that you
 should make an API call in componentDidMount() life cycle method.
- Representational State Transfer (REST is an architectural style that defines a set of constraints to be used for creating web services. REST API is a way of accessing web services in a simple and flexible way without having any processing.
- REST technology is generally preferred to the more robust Simple Object Access Protocol (SOAP) technology because REST uses less bandwidth, simple and flexible making it error suitable for internet usage. It's used to fetch or give some information from a web service All communication done via REST API uses only HTTP request.

4.1 React framework Along with API Integration

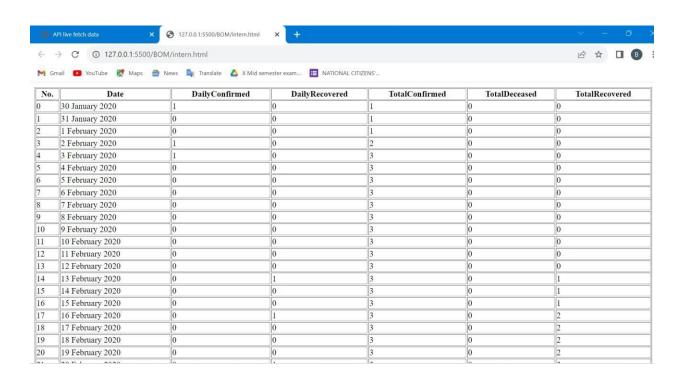
Covid data check

API :- https://data.covid19india.org/data.json

```
<!DOCTYPE html>
<html lang="en">
<head>
   <!-- CSS onlv -->
   <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0-</pre>
beta1/dist/css/bootstrap.min.css" rel="stylesheet"
      integrity="sha384-
@evHe/X+R7YkIZDRvuzKMRqM+OrBnVFBL6DOitfPri4tjfHxaWutUpFmBp4vmVor"
crossorigin="anonymous">
   <!-- JavaScript Bundle with Popper -->
   <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.0-</pre>
beta1/dist/js/bootstrap.bundle.min.js"
      integrity="sha384-
pprn3073KE6t16bjs2QrFaJGz5/SUsLqktiwsUTF55Jfv3qYSDhgCecCxMW52nD2"
      crossorigin="anonymous"></script>
   <title>API live fetch data</title>
   <script>
      async function load() {
          var days = 0;
          let url = 'https://data.covid19india.org/data.json';
          let myobject = await (await fetch(url)).json();
          // document.write(myobject["cases_time_series"][0]["date"]);
          // document.write(myobject["cases_time_series"].length);
          document.write(" ")
          document.write("No." + "Date" +
 DailyConfirmed" + "DailyRecovered" +
 TotalConfirmed" + "TotalDeceased" +
TotalRecovered")
          for (var i = 0; i < myobject["cases_time_series"].length; i++) {</pre>
             if (myobject["casse...."] > 100000) {
                document.write("" + i +
```

```
myobject["cases_time_series"][i]["totalrecovered"] + "");
           days = days + 1;
         else {
           myobject["cases_time_series"][i]["date"] + "" +
myobject["cases_time_series"][i]["dailyconfirmed"] + "" +
myobject["cases_time_series"][i]["totalconfirmed"] + "" +
myobject["cases_time_series"][i]["totaldeceased"] + "" +
myobject["cases_time_series"][i]["totalrecovered"] + "")
       document.write("");
    load();
  </script>
</head>
<body>
</body>
</html>
```

Output:



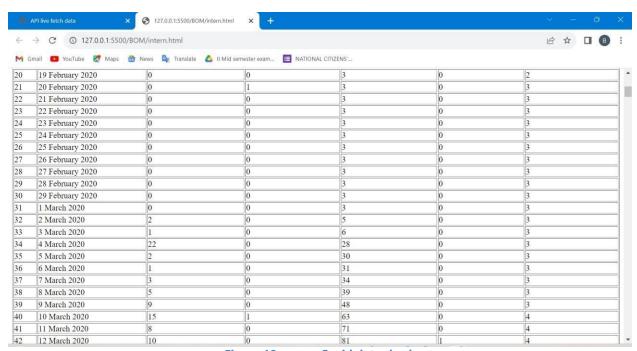
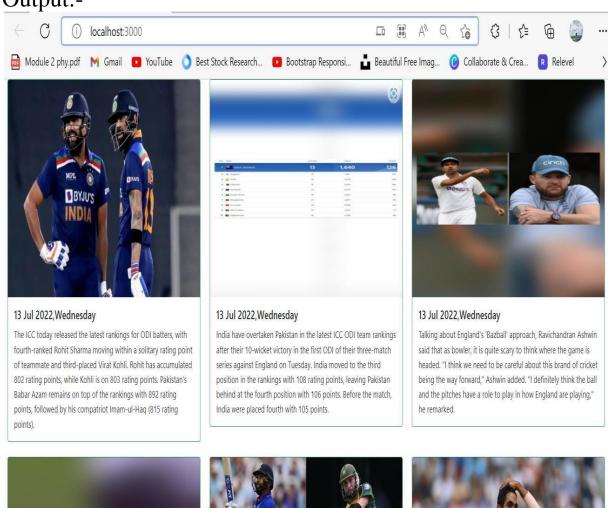


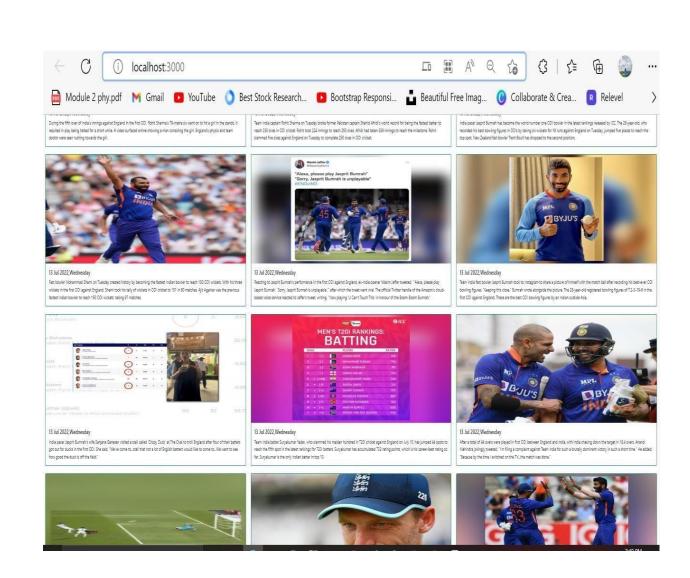
Figure 10 Covid data check

Chapter: - 5 Assignment: 1

> Develop one web page in react with using news api

_API :- https://inshorts.deta.dev/news?category=sports
Output:-





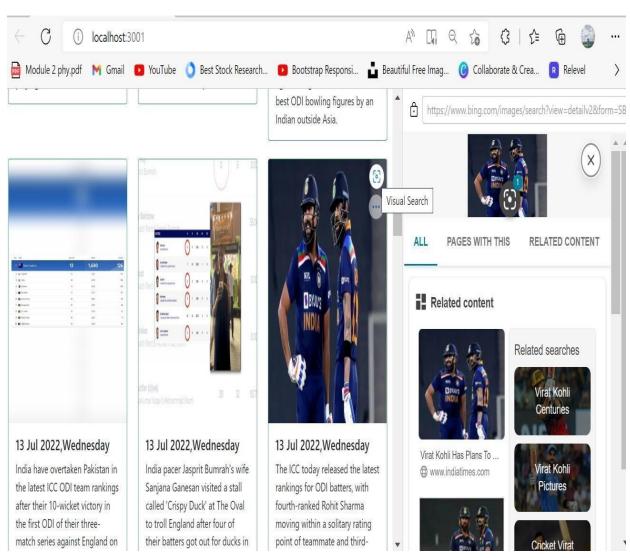


Figure 11 Assignment: 1

Chapter:- 6 Assignment:- 2 6.1 Covid data checker based on user input

API :- https://data.covid19india.org/data.json

Date:	Submit	

Figure 12 Covid data checker based on user input

[Enter date]

Output:

1.



Figure 13 Covid data checker based on user input Output

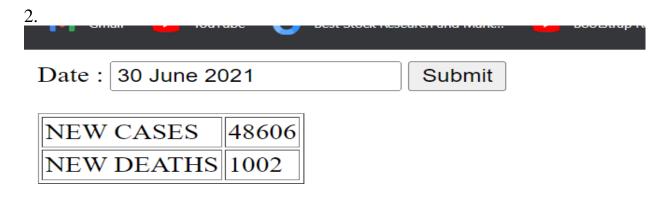


Figure 14 Covid data checker based on user input Output2

6.2 Mutual fund checker based on user input

API :- https://api.mfapi.in/mf

Enter Scheme Name :
show fund
snow lund
Figure 15 Mutual fund checker based on user input
Output: 1.
Seadural Free
Enter Scheme Name : 100034
show fund
Aditya Birla Sun Life Equity Advantage Fund -Regular Dividend
Figure 16 Mutual fund checker based on user input Output 1
2.
2.
Enter Scheme Name: 100085
show fund
DSP Government Securities Fund - Regular Plan - Dividend
251 55 villiment seemines I and Tregular I lan 151 ident

Figure 17 Mutual fund checker based on user input Output 2

Chapter:-7

Create Live Search Weather App using React JS

- To make our weather application work, we need OpenWeatherMap, a third-party API that'll let us fetch the weather data.
- There are many different types of APIs. One of the most common types, and some of the easiest to use, are weather APIs. Weather APIs pair nicely with geolocation APIs and some actually use geolocation behind the scenes. Most give back easy to understand data that can be impressively cheap to access.
- Our app is going to make an HTTP call to a weather API to retrieve data whenever a user enters a city into a form. We are going to use conditional logic, styling, spinners, and error handling to improve the user experience as we wait for that HTTP call to return our data.



Figure 18 Create Live Search Weather App using React JS

Add User Input:-

• The form is going to give the user the option to enter a city name.

User Input



Figure 19 Figure 19 Weather App User input

Enter city name:

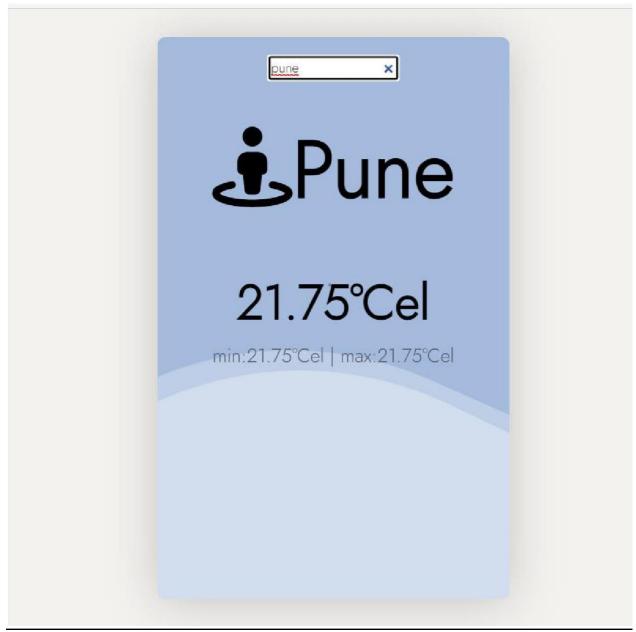


Figure 20 Figure 19 Weather App Output

Chapter :- 8 : Conclusions

In this project we learn the creating weather webapp. But with help some basic knowledge of React js we can create a basic Weather app for user and it will help them to search Weather of any place easily.

Chapter:-9 References

- 1. https://www.w3schools.com/
- 2. https://getbootstrap.com/docs/4.1/content/tables/
- 3. https://reactjs.org/
- 4. https://openweathermap.org/
- 5. https://stackoverflow.com/
- 6. https://javascript.info/

