"NHPC With Arogya Setu"

A Website Created by the IT Department of NHPC

to Help Preventing Covid-19

Submitted by:
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(Roll no. 1913341)

Submitted in partial fulfillment of the requirements for the award of degree of

BACHELOR OF TECHNOLOGY

in

EEE

Under the Supervision of:
Mr. Harendra Pratap Singh
Dy. General Manager
IT & C Division
NHPC Limited, Faridabad

SCHOOL OF AUTOMATION

BANASTHALI VIDYAPITH RAJASTHAN

(Duration: 21 June 2021 – 02 August 2021)

<u>CERTIFICATE</u>

I hereby submit the internship report entitled **NHPC With Arogya Setu :**

A Website Created by the IT Department of NHPC to Help Preventing Covid-19 in the **School of Automation** of the Banasthali Vidyapith, under the supervision of Mr. Harendra Pratap Singh, Dy. General Manager, IT & C Division, NHPC Limited, Faridabad.

<div align="right">

Akshima Sinha

(Roll No. 1913341)

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The Internship report is hereby approved for submission.

Name of Mentor

Mr. Harendra Pratap Singh

Date: 03 Aug. 2021

<u>ACKNOWLEDGEMENT</u>

I have taken efforts in this project. However, it would not have been possible without the kind support and help of many individual. I would like to extend my sincere thanks to all of them.

I extend my thanks to **Ms. Shailly Sharma, Dean, School of Automation, Banasthali Vidyapith, Jaipur** for giving me an opportunity to carry out the project work through an esteemed organization, **National Hydroelectric Power Corporation (NHPC) Limited.**

I am highly indebted to **Mr. Harendra Pratap Singh, Dy. General Manager, IT & C Division, NHPC Limited, Faridabad.** for their guidance and constant supervision as well as for providing necessary information regarding the project & also for their support in completing the project.

I would like to express my gratitude towards my parents & member of NHPC for their kind co-operation and encouragement which help me in completion of this project. My thanks and appreciations also go to my colleague and my friends in developing the project and people who have willingly helped me out with their abilities.

ABSTRACT

The Company :

NHPC Limited (**National Hydroelectric Power Corporation**) is an Indian government hydropower board under the ownership of Ministry of Power , Government of India that was incorporated in the year 1975 with an authorised capital of ₹2000 million and with an objective to plan, promote and organise an integrated and efficient development of hydroelectric power in all aspects. Later on NHPC expanded its objects to include other sources of energy like Solar, Geothermal, Tidal, Wind etc.

As on date NHPC Limited has become the largest organisation for hydropower development in India, with capabilities to undertake all the activities from conceptualization to commissioning in relation to setting up of hydro projects. NHPC Limited has also diversified in the field of Solar & Wind power. NHPC Limited presently has an installation base of 7071.2 MW from 24 power stations on ownership basis including projects taken up in Joint Venture. Considering the impediments faced during execution of these projects such as unfavourable geological conditions, difficult law and order problems, inaccessible and remote locations, the achievement so far is commendable. The generation performance of these stations has been outstanding.

NHPC is presently engaged in the construction of 6 projects aggregating to a total installed capacity of 5774 MW which includes 2 hydro electric projects viz., 2000 MW Subansiri Lower HEP and 800 MW Parbati-II HEP being executed on ownership basis and 4 projects being executed through Subsidiary/ JV Companies viz., 500 MW Teesta-VI HE Project, 1000 MW Pakal Dul HE Project, 624 MW Kiru HE Project & 850 MW Ratle HE Project. In addition, 16 Projects with aggregate capacity of 10382 MW are under clearance stage which includes 10 Schemes of NHPC's own and 6 in JV mode. Further, 4 projects with aggregate capacity of 1628 MW are in S&I stage.

During the financial year 2020-2021, NHPC Power Stations achieved the generation of 24471 MU.

At present, NHPC is a Mini Ratna Category-I Enterprise of the Govt. of India with an authorised share capital of ₹150,000 Million . With an investment base of over ₹387,180 Million Approx., NHPC is among the top ten companies in the

country in terms of investment. Baira Suil Power station in Salooni Tehsil of Chamba district was the first project undertaken by NHPC.

Main headquarters of NHPC is located in Faridabad, from where all the hydropower stations are controlled and managed.

MISSION :

- To achieve excellence in development of clean power at international standards.
- To execute & operate projects through efficient and competent contract management and innovative R&D in environment friendly and socio-economically responsive manner.
- To develop, nurture and empower the human capital to leverage its full potential.
- To practice the best corporate governance and competent value based management for a strong corporate identity and showing concern for employees, customer, environment and society.
- To adopt & innovate state-of-the-art technologies and optimize use of natural resources through effective management.

OBJECTIVE OF THE PROJECT :

To make a website which will help preventing COVID-19 by providing vaccines and by spreading awareness among people.

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__INTRODUCTION__

This report is a description of my 6 weeks internship carried out as a compulsory component of the second year's course at Banasthali Vidyapith. In the following chapters, overviews of the details of my works are given. Finally, a conclusion is drawn from the experience.

METHODOLOGY :

This project is to provide awareness and support to the public to prevent the Global Pandemic COVID-19 and to make the vaccination procedure easier and fast. The user should Signup first by creating an account for the registeration of first dose of vaccine and then select area pin code and date as per the convenience of the user. After the first dose, the Admin will confirm the vaccination by their profile by entering the AADHAR NUMBER of the User. Then, the user profile will show the number of days left for the second dose of the vaccine and "PARTIALLY VACCINATED!"

After 84 days of the first dose confirmation, the user page will show "REGISTER HERE FOR SECOND DOSE" and after the second dose confirmation, the page will show "COMPLETELY VACCINATED!"

TECHNICAL ASPECT :

This project is implemented using HTML for the construction of the layout, CSS for the designing of the layout, Javascript for the dynamic functioning, Bootstrap for making the website responsive on every type of devices and browsers, JSON and jQuery as the Front-end & NODEJS, EXPRESSJG, Mongoose for accessing databse, passportjs as authentication and authorization and REST API on Back-end.

RESPONSIVE WEB DESIGN:

Responsive web design (RWD) is an approach to web design aimed at crafting sites to provide an optimal viewing and interaction experience—easy reading and navigation with a minimum of resizing, panning, and scrolling—across a wide range of devices (from desktop computer monitors to mobile phones). A

site designed with RWD adapts the layout to the viewing environment by using fluid, proportion-based grids, flexible images, and CSS3 media queries, an extension of the @media rule, in the following ways:

- The fluid grid concept calls for page element sizing to be in relative units like percentages, rather than absolute units like pixels or points.
- Flexible images are also resized in relative units, so as to prevent them from displaying outside their containing element.
- Media queries allow the page to use different CSS style rules based on characteristics of the device the site is being displayed on, most commonly the width of the browser.

I built website of NHPC for Covid-19 vaccine registration with a very popular front-end framework called Boostrap3. It has natively a grid system to adapt to different screen size devices. Beside many adjustments are also employed to resolve some issues that Boostrap3 can't well handle. By using Media queries of CSS, I defined style rules based on screen size of the website viewer's device.

CODE :

Views:

- ## Partials

Footer.ejs :

```html
</div><!-- /.container -->
<footer style="background-color: #eee ; margin-bottom : 0px ">
  <div class="container">
      <div class="row justify-content-center">
          <div class="col-4 offset-1 col-sm-2">
              <h5>Links</h5>
              <ul class="list-unstyled">
                  <li><a href="/">Home</a></li>
              <li><a href="http://www.nhpcindia.com/Default.aspx?id=33&lg=eng&">AboutUs</a></li>
                  <li><a href="/signin">Signin</a></li>
                  <li><a href="/signup">Signup</a></li>
              </ul>
          </div>
          <div class="col-7 col-sm-5">
              <h5>Our Address</h5>
              <address>
              NHPC <br/>NHPC Office Complex Sector-33<br/>  Faridabad - India <br/>
              Haryana- 121003 <br/>
              <i class="fa fa-phone fa-lg"></i>: +91 -129-2588500/2588110<br />
              <i class="fa fa-envelope fa-
lg"></i>: <a href="mailto:webmaster@nhpc.nic.in">NHPC</a>
              </address>
          </div>
          <div class="col-12 col-sm-4 align-self-center">
              <div class="text-center">
                  <a class="btn btn-social-icon btn-
facebook" href="https://www.facebook.com/NHPCIndiaLimited/"><i class="fa fa-facebook"></i></a>
                  <a class="btn btn-social-icon btn-
instagram" href="https://www.instagram.com/nhpclimited/"><i class="fa fa-instagram"></i></a>
                  <a class="btn btn-social-
icon" href="mailto:webmaster@nhpc.nic.in"><i class="fa fa-envelope fa-lg"></i></a>
              </div>
          </div>
      </div>
      <div class="row justify-content-center">
          <div class="col-auto">
              <p>© Copyright 2021 NHPC</p>
          </div>
      </div>
  </div>
</footer>
        <!-- jQuery CDN -->
        <script
          src="https://code.jquery.com/jquery-3.1.1.min.js"
          integrity="sha256-hVVnYaiADRTO2PzUGmuLJr8BLUSjGIZsDYGmIJLv2b8="
          crossorigin="anonymous"></script>
         <!-- Bootstrap JS CDN -->
        <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js" integr
ity="sha384-
Tc5IQib027qvyjSMfHjOMaLkfuWVxZxUPnCJA7l2mCWNIpG9mGCD8wGNIcPD7Txa" crossorigin="anonymous"></scri
pt>
    </body>
</html>
```

Header.ejs :

```html
<!DOCTYPE html>
<html lang="en">
  <head>

    <meta name="viewport" content="width=device-width,initial-scale=1,maximum-scale=1,user-scalable=no">
    <meta http-equiv="X-UA-Compatible" content="IE=edge,chrome=1">
    <meta name="HandheldFriendly" content="true">
    <title>NHPC</title>
    <link rel="shortcut icon" type="image/jpg" href="https://upload.wikimedia.org/wikipedia/en/thumb/e/eb/NHPC_Logo.svg/1920px-NHPC_Logo.svg.png"/>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">
    <link rel="stylesheet" type="text/css" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.4.0/css/font-awesome.css">
  <style type="text/css">
    body{
      background-image: url('https://images.unsplash.com/photo-1626420925443-c6421f87daa9?ixid=MnwxMjA3fDB8MHxwaG90by1wYWdlfHx8fGVufDB8fHx8&ixlib=rb-1.2.1&auto=format&fit=crop&w=760&q=80');
      min-height:100vh;
      display: flex;
      flex-direction: column;
      background-size: cover;
      background-repeat: no-repeat;
      height: 100%;
    }
    .active{
      color: lightseagreen;
    }
    footer{
      margin-top: auto;
    }
    body {font-family: Arial, Helvetica, sans-serif;}
    * {box-sizing: border-box;}

    /* Full-width input fields */
    input[type=text], input[type=password] {
      width: 100%;
      padding: 15px;
      margin: auto;
      display: inline-block;
      border: none;
      background: #f1f1f1;
    }

    /* Add a background color when the inputs get focus */
    input[type=text]:focus, input[type=password]:focus {
      background-color: #ddd;
      outline: none;
    }

    /* Set a style for all buttons */
    button {
      background-color: #04AA6D;
      color: white;
      padding: 14px 20px;
      margin: 8px 0;
      border: none;
      cursor: pointer;
```

```css
        width: 100%;
        opacity: 0.9;
    }

    button:hover {
        opacity:1;
    }

    .uinfo{
        background-color: white;
        margin: 5% auto 15% auto; /* 5% from the top, 15% from the bottom and centered */
        border: 1px solid #888;
        width: 80%;
        border-radius: 7px;
        font-family: 'Times New Roman', Times, serif;
    }
    /* Modal Content/Box */
    .modal-content {
        background-color: #fefefe;
        margin: 5% auto 15% auto; /* 5% from the top, 15% from the bottom and centered */
        border: 1px solid #888;
        width: 80%; /* Could be more or less, depending on screen size */
        padding: 16px 16px 16px 16px;
    }

    /* Style the horizontal ruler */
    hr {
        border: 1px solid #f1f1f1;
        margin-bottom: 25px;
    }

    /* Clear floats */
    .clearfix::after {
        content: "";
        clear: both;
        display: table;
    }

    /* Change styles for cancel button and signup button on extra small screens */
    @media screen and (max-width: 300px) {
        .cancelbtn, .signupbtn {
            width: 100%;
        }
    }
    }
  </style>
</head>
<body>

  <nav class="navbar navbar-default">
      <div class="container">
          <div class="navbar-header" style="margin-left: auto;">
              <button type="button" class="navbar-toggle collapsed" data-toggle="collapse" data-
target="#navbar" aria-expanded="false" aria-controls="navbar">
                  <span class="sr-only">Toggle navigation</span>
                  <span class="icon-bar"></span>
                  <span class="icon-bar"></span>
                  <span class="icon-bar"></span>
              </button>
          </div>
          <div id="navbar" class="collapse navbar-collapse">
            <ul class="nav navbar-nav">
              <li class="<%= typeof page !== 'undefined' && page === 'home' ? 'active' : '' %>">
<a href="/">Home</a></li>
```

```html
                    <li class="<%= typeof page !== 'undefined' && page === 'aboutus' ? 'active' : '' %
>"><a href="http://www.nhpcindia.com/Default.aspx?id=33&lg=eng&">AboutUs</a></li>
                    <li class="<%= typeof page !== 'undefined' && page === 'contact' ? 'active' : '' %
>"><a href="http://www.nhpcindia.com/nhpc-contact.htm">Contact</a></li>
                </ul>
                <ul class="nav navbar-nav navbar-right">
                    <% if(!curr){ %>
                        <li class="<%= typeof page !== 'undefined' && page === 'signin' ? 'active' :
 '' %>"><a href="/signin">Login</a></li>
                        <li class="<%= typeof page !== 'undefined' && page === 'signup' ? 'active' :
 '' %>"><a href="/signup">Sign Up</a></li>
                    <% } else { %>
                    <% if(curr.isAdmin) { %>
                        <li><a href="/admin/<%=curr._id%>">Admin</a></li>
                    <% } %>
                        <li><a href="/users/<%=curr._id%>">Hello <%= curr.name %></a></li>
                        <li><a href="/logout">Logout</a></li>
                    <% } %>
                </ul>
            </div>
        </div>
    </nav>
<div>
<div class="container jumbotron" style="text-align: center;width: 80%;">
    <div class="col-12">
        <a href="http://www.nhpcindia.com/home.aspx"><img src="http://www.nhpcindia.com/images/logo.
png" alt="img" style="width:auto;height: auto;max-width: 250px;"/></a>
        <a href="https://www.aarogyasetu.gov.in/"><img style="width: auto;height: auto;max-
width: 250px;" src="https://www.aarogyasetu.gov.in/wp-
content/themes/setu/assets/images/aarogya_logo.png" alt="img"/></a>
    </div>
</div>
<div class="container">
    <% if(error && error.length>0){%>
        <div class="alert alert-danger" role="alert"><%=error%></div>
    <% }%>
    <% if(success && success.length>0){%>
    <div class="alert alert-success" role="alert"><%=success%></div>
    <%}%>
</div>
```

Admin.ejs :

```
<%- include('./partials/header'); -%>
<div>
    <form class="modal-content" action="/admin/<%=curr._id%>" method="POST">
      <div class="container">
         <h1>Vaccination</h1>
         <p>Please fill in this form to mark the person Vaccinated</p>
         <hr>
         <label for="aadhar"><b>Aadhar</b></label>
         <input type="text" placeholder="XXXX-XXXX-XXXX" name="aadhar" required>
         <div class="clearfix">
           <button class="btn btn-lg btn-primary btn-block">Confirm</button>
           <a href="/">Go Back</a>
           <hr/>
         </div>
      </div>
    </form>
  </div>

<%- include('./partials/footer'); -%>
```

Home.ejs :

```
<%- include('./partials/header'); -%>
<div class="row" style="text-align:center;">
  <div class="col-12">
     <h1 style="color: rgb(255, 255, 255);font-family: 'Times New Roman', Times, serif; font-
weight: bolder; padding-left: 5px;">NHPC With Arogya Setu.</h1>
     <p style="color: white; font-
weight: bold;">A Website Created by the IT Department of NHPC to Help Preventing Covid-19.</p>
  </div>

  <div class="col-12">
    <% if(curr) { %>
    <a href="/users/<%=curr._id%>" class="btn btn-primary btn-lg active" role="button" aria-
pressed="true" style="margin-bottom: 20px;">Get Vaccinated</a>
    <% } %>
  </div>
  <div class="col-12">
    <img src="https://www.cowin.gov.in/assets/images/largest-vaccine-banner.jpg" style="margin-
bottom: 16px;width: 100%;height: auto;"></img>
  </div>
<%- include('./partials/footer'); -%>
```

Signin.ejs :

```html
<!DOCTYPE html>
<html>
<head>
    <title>NHPC</title>
    <link rel="shortcut icon" type="image/jpg" href="http://www.nhpcindia.com/images/logo.png"/>

    <!--Made with love by Mutiullah Samim -->
    <link href="//maxcdn.bootstrapcdn.com/bootstrap/4.1.1/css/bootstrap.min.css" rel="stylesheet"
 id="bootstrap-css">
    <script src="//maxcdn.bootstrapcdn.com/bootstrap/4.1.1/js/bootstrap.min.js"></script>
    <script src="//cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
    <!--Bootsrap 4 CDN-->
    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstra
p.min.css" integrity="sha384-
MCw98/SFnGE8fJT3GXwEOngsV7Zt27NXFoaoApmYm81iuXoPkFOJwJ8ERdknLPMO" crossorigin="anonymous">

    <!--Fontawesome CDN-->
    <link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.3.1/css/all.css" integr
ity="sha384-
mzrmE5qonljUremFsqc01SB46JvROS7bZs3IO2EmfFsd15uHvIt+Y8vEf7N7fWAU" crossorigin="anonymous">

    <!--Custom styles-->
    <link rel="stylesheet" type="text/css" href="/stylesheets/signin.css">
</head>
<body>
<div class="container">
    <div class="d-flex justify-content-center h-100">
        <div class="card">
            <div class="card-header">
                <h3>Sign In</h3>
                <div class="d-flex justify-content-end social_icon">
                    <a href="https://www.facebook.com/NHPCIndiaLimited/"><span ><i class="fab fa
-facebook"></i></span></a>
                    <a href="mailto:webmaster@nhpc.nic.in"><span><i class="fa fa-
envelope "></i></span></a>
                    <a href="https://www.instagram.com/nhpclimited/"><span><i class="fab fa-
instagram"></i></span></a>
                </div>
            </div>
            <div class="card-body">
                <form action="/signin" method="POST">
                    <div class="input-group form-group">
                        <div class="input-group-prepend">
                            <span class="input-group-text"><i class="fas fa-user"></i></span>
                        </div>
                        <input type="email" class="form-
control" placeholder="abc@gmail.com" name="username">

                    </div>
                    <div class="input-group form-group">
                        <div class="input-group-prepend">
                            <span class="input-group-text"><i class="fas fa-key"></i></span>
                        </div>
                        <input type="password" class="form-
control" placeholder="password" name="password">
                    </div>
                    <div class="row align-items-center remember">
                        <input type="checkbox">Remember Me
                    </div>
```

```html
                    <div class="form-group">
                        <input type="submit" value="Login" class="btn float-right login_btn">
                    </div>
                </form>
            </div>
            <div class="card-footer">
                <div class="d-flex justify-content-center links">
                    Don't have an account?<a href="/signup">Sign Up</a>

                </div>
                <a href="/">Go back!</a>
            </div>
        </div>
    </div>
</div>
</body>
</html>
```

Signup.ejs :

```html
<!DOCTYPE html>
<html>
<head>
    <title>NHPC</title>
    <link rel="shortcut icon" type="image/jpg" href="http://www.nhpcindia.com/images/logo.png"/>

  <link href="//maxcdn.bootstrapcdn.com/bootstrap/4.1.1/css/bootstrap.min.css" rel="stylesheet"
id="bootstrap-css">
  <script src="//maxcdn.bootstrapcdn.com/bootstrap/4.1.1/js/bootstrap.min.js"></script>
  <script src="//cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
   <!--Made with love by Mutiullah Samim -->

    <!--Bootsrap 4 CDN-->
    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstra
p.min.css" integrity="sha384-
MCw98/SFnGE8fJT3GXwEOngsV7Zt27NXFoaoApmYm81iuXoPkFOJwJ8ERdknLPMO" crossorigin="anonymous">

    <!--Fontawesome CDN-->
    <link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.3.1/css/all.css" integr
ity="sha384-
mzrmE5qonljUremFsqc01SB46JvROS7bZs3IO2EmfFsd15uHvIt+Y8vEf7N7fWAU" crossorigin="anonymous">

    <!--Custom styles-->
    <link rel="stylesheet" type="text/css" href="/stylesheets/signin.css">
</head>
<body>
<div class="container">
    <div class="d-flex justify-content-center h-100">
        <div class="card">
            <div class="card-header">
                <h3>Sign Up</h3>
                <div class="d-flex justify-content-end social_icon">
                    <a href="https://www.facebook.com/NHPCIndiaLimited/"><span ><i class="fab fa
-facebook-square"></i></span></a>
                    <a href="mailto:webmaster@nhpc.nic.in"><span><i class="fa fa-
envelope "></i></span></a>
                    <a href="https://www.instagram.com/nhpclimited/"><span><i class="fab fa-
instagram"></i></span></a>
                </div>
            </div>
            <div class="card-body">
```

```html
                    <form method="POST" action="/signup">
                        <div class="input-group form-group">
                            <div class="input-group-prepend">
                                <span class="input-group-text"><i class="fas fa-user"></i></span>
                            </div>
                            <input type="text" class="form-control" placeholder="John" name="name">

                        </div>
                        <div class="input-group form-group">
                            <div class="input-group-prepend">
                                <span class="input-group-text"><i class="fas fa-envelope-
open"></i></span>
                            </div>
                            <input type="email" class="form-
control" placeholder="john@gmail.com" name="email">

                        </div>
                        <div class="input-group form-group">
                            <div class="input-group-prepend">
                                <span class="input-group-text"><i class="fas fa-key"></i></span>
                            </div>
                            <input type="password" class="form-
control" placeholder="password" name="password">
                        </div>
                        <div class="input-group form-group">
                            <div class="input-group-prepend">
                                <span class="input-group-text"><i class="fas fa-id-card"></i></span>
                            </div>
                            <input type="text" class="form-control" placeholder="XXXX-XXXX-
XXXX" name="aadhar">
                        </div>
                        <div class="form-group">
                            <input type="submit" value="Sign Up" class="btn float-right login_btn">
                        </div>
                    </form>
                </div>
                <div class="card-footer">
                    <div class="d-flex justify-content-center links">
                        Already have an account?<a href="/signin">Sign In</a>
                    </div>
                    <a href="/" style="color: rgb(2, 11, 19);">Go back!</a>
                </div>
            </div>
        </div>
</div>
</body>
</html>
```

User.ejs :

```ejs
<%- include('./partials/header'); -%>
<div class="container uinfo row" style="padding: 16px;">
  <div class="col-12">
    <h1 style="text-align: center; color: darkblue; font-weight: bold;">Account Details</h1>
    <hr/>
    <h4>Registered Aadhar Number: <%= curr1.aadhar %></h4>
    <h4>Name: <%= curr1.name %></h4>
  </div>
    <div class="col-12">
      <div>
        <% if(!curr1.firstdose.taken.is){ %>
          <% if(curr1.firstdose.register.is){ %>
           <h3 style="color: crimson;text-align: center; font-style: italic; font-
weight: bold;">Already Registered</h3>
          <% }else { %>
           <h2 style="color: darkred;text-align: center; font-style: italic; font-
weight: bold;">Not Vaccinated</h2>
            <button class="btn btn-lg btn-primary" data-toggle="modal" data-
target="#exampleModalCenter" name="dose" value="1">Register Here For First Dose </button>
        <% }}else if(curr1.firstdose.taken.is && !curr1.seconddose.taken.is) { %>
          <% if(curr1.seconddose.register.is){ %>
            <h3 style="text-align: center; color: rgb(67, 103, 221); font-
weight: bold;">Already Registered</h3>
          <% }else if(temp1) { %>
            <h2 style="color: greenyellow;text-align: center; font-style: italic; font-
weight: bold;">Partially Vaccinated</h2>
             <button class="btn btn-lg btn-success" data-toggle="modal" data-
target="#exampleModalCenter" name="dose" value="2">Register Here For Second Dose </button>
          <% } else{ %>
             <h3 style="color: rgb(50, 68, 230);text-align: center;  font-style: italic; font-
weight: bold;"><%= day %> Days Left for Second Dose</h3>
        <% }} else {%>
          <h2 style="color: green;text-align: center;font-style: italic; font-
weight: bold;">Completely Vaccinated</h2>
          <% } %>
      </div>
    </div>

    <!-- Modal -->
    <div class="modal fade" id="exampleModalCenter" tabindex="-1" role="dialog" aria-
labelledby="exampleModalCenterTitle" aria-hidden="true">
      <div class="modal-dialog modal-dialog-centered" role="document">
        <div class="modal-content">
          <div class="modal-header">
            <h2 class="modal-title" id="exampleModalCenterTitle" style="text-align: center;font-
family: 'Times New Roman', Times, serif; font-weight: bold;color: indigo;">Register Here</h2>
            <button type="button" class="close" data-dismiss="modal" aria-label="Close">
              <span aria-hidden="true">&times;</span>
            </button>
          </div>
          <div class="modal-body">
            <form class="modal-
content" action="/users/register/<%=curr1._id%>" method="POST" style="padding: 16px;">
              <div>
                <label for="code"><b>Area Code</b></label>
                <input type="text" placeholder="Pincode" name="code" required>

                <label for="date"><b>Date</b></label>
                <input type="date" name="date" min="<%= today %>" required>
                <div class="clearfix">
```

```
                                <button class="btn btn-lg btn-primary btn-block">Submit</button>
                        </div>
                    </div>
                </form>
            </div>
        </div>
    </div>
</div>
<%- include('./partials/footer'); -%>
```

Vaccineuser.ejs :

```
<%- include('./partials/header'); -%>
<div>
    <form class="modal-
content" style="padding: 16px;" action="/admin/vaccine/<%=userId %>" method="POST">
        <div class="container">
            <h1>Vaccination</h1>
            <p>User Details As Per Aadhar</p>
            <hr>
            <label for="aadhar"><b>Aadhar</b></label>
            <input type="text" name="aadhar" value="<%=user.aadhar %>" readonly>

            <label for="name"><b>Name</b></label>
            <input type="text" name="name" value="<%=user.name %>" readonly>
            <div class="col-12">
                <div>
                    <% if(!user.firstdose.taken.is){ %>
                        <button class="btn btn-lg btn-
primary" name="dose" value="1">Click Here For First Dose Confirmation </button>
                    <% } else if(user.firstdose.taken.is && !user.seconddose.taken.is) { %>
                        <% if(!temp1) { %>
                            <h3 style="color: rgb(97, 80, 114);text-
align: center;"> <%= day %> Days Left for Second Dose</h3>
                        <% }else{ %>
                            <button class="btn btn-lg btn-
success"  name="dose" value="2">Click Here For Second Dose Confirmation </button>
                        <% } %>
                    <% } else {%>
                        <h2 style="color: green;text-align: center;">Completely Vaccinated</h2>
                    <% } %>
                </div>
            </div>
        </div>
    </form>
</div>

<%- include('./partials/footer'); -%>
```

Public\stylesheets :

- ## Signin.css :

```css
@import url('https://fonts.googleapis.com/css?family=Numans');

html,body{
background-
image: url('https://t4.ftcdn.net/jpg/04/32/27/67/360_F_432276738_w4MNSstCOwFGgPJTuHCLJX65SC0MenY
R.jpg');
background-size: cover;
background-repeat: no-repeat;
height: 100%;
font-family: 'Numans', sans-serif;
}

.container{
height: 100%;
align-content: center;
}

.card{
height: 370px;
margin-top: auto;
margin-bottom: auto;
width: 400px;
background-color: rgba(0,0,0,0.5) !important;
}

.social_icon span{
font-size: 60px;
margin-left: 10px;
color: #FFC312;
}

.social_icon span:hover{
color: white;
cursor: pointer;
}

.card-header h3{
color: white;
}

.social_icon{
position: absolute;
right: 20px;
top: -45px;
}

.input-group-prepend span{
width: 50px;
background-color: #FFC312;
color: black;
border:0 !important;
}

input:focus{
outline: 0 0 0 0  !important;
box-shadow: 0 0 0 0 !important;
}
```

```css
.remember{
color: white;
}

.remember input
{
width: 20px;
height: 20px;
margin-left: 15px;
margin-right: 5px;
}

.login_btn{
color: black;
background-color: #FFC312;
width: 100px;
}

.login_btn:hover{
color: black;
background-color: white;
}

.links{
color: white;
}

.links a{
margin-left: 4px;
}
```

Routes:

• Admin.js :

```javascript
var express=require("express");
var router= express.Router(),
User=require("../models/user.js");


function formatDate(date) {
    var d = new Date(date),
        month = '' + (d.getMonth() + 1),
        day = '' + d.getDate(),
        year = d.getFullYear();

    if (month.length < 2)
        month = '0' + month;
    if (day.length < 2)
        day = '0' + day;

    return [year, month, day].join('-');
}

router.get("/:userId",function(req,res){
    User.findById(req.params.userId,function(err,user){
        if(err||!user){
            var str=err.message;
            console.log(str);
            req.flash("error","Access Denied !!");
            res.redirect("back");
        }
        if(user.isAdmin){
            res.render("admin");
        }
        else{
            req.flash("error","Access Denied Please Login First !!");
            res.redirect("/signin");
        }
    })

});

router.post("/:userId",function(req,res){
    User.findById(req.params.userId,function(err,user){
        if(err||!user){
            var str=err.message;
            console.log(str);
            res.redirect("back");
        }
        if(user.isAdmin){
            var uaadhar=req.body.aadhar;
            User.findOne({aadhar: {$gte:uaadhar} }, function (err, fuser) {
                if (err||!fuser){
                    console.log(err)
                    if(!fuser){
                        req.flash("error","Unable to find the user Please check the Aadhar Numbe
r !!");
                    }else{
                        req.flash("error","Something Went Wrong !!");
                    }
                    res.redirect("back");
```

```
                }
                else{
                    if(fuser.firstdose.taken.is){
                        var d2 = new Date();
                        d2=formatDate(d2);
                        var d1= formatDate(fuser.firstdose.taken.date);
                        var days=Math.floor(( Date.parse(d2) - Date.parse(d1) ) / 86400000);
                        days=84-days;
                        var temp= (days<=0);
                        res.render("vaccineuser",{user:fuser,day:days,temp1:temp,userId:req.para
ms.userId});
                    }
                    else{
                        res.render("vaccineuser",{user:fuser,userId:req.params.userId})
                    }
                }
            });
        }
        else{
            req.flash("error","Access Denied You Are not Authorised User !!");
            res.redirect("/signin");
        }
    })

});

router.post("/vaccine/:userId",function(req,res){
    User.findById(req.params.userId,function(err,user){
        if(err||!user){
            var str=err.message;
            console.log(str);
            if(err)
            req.flash("error",str);
            else
            req.flash("error","User Not found !!");
            res.redirect("back");
        }
        if(user.isAdmin){
            var uaadhar=req.body.aadhar;
            console.log(req.body);
            var dose=req.body.dose;
            var today1 = new Date();
            if(dose=='1'){
                User.findOneAndUpdate({aadhar: uaadhar}, {$set:{firstdose:{
                    register:{
                        is:false,
                        date:today1
                    },
                    taken:{
                        is:true,
                        date:today1
                    }
                }}}, {new: true},function (err, fuser) {
                    if (err||!fuser){
                        console.log(err)
                        if(!fuser){
                            req.flash("error","Unable to find the user Please check the Aadhar N
umber !!");
                        }else{
                            req.flash("error","Something Went Wrong !!");
                        }
                        res.redirect("back");
                    }
```

```javascript
                    else{
                        req.flash("success","First Dose Confirmation Successfull !!");
                        res.render("admin");
                    }
                });
            }
            else {
                User.findOneAndUpdate({aadhar: uaadhar}, {$set:{seconddose:{
                    register:{
                        is:false,
                        date:today1
                    },
                    taken:{
                        is:true,
                        date:today1
                    }
                }}},{new: true}, function (err, fuser) {
                    if (err||!fuser){
                        if(!fuser){
                            req.flash("error","Unable to find the user Please check the Aadhar N
umber !!");
                        }else{
                            req.flash("error","Something Went Wrong !!");
                        }
                        res.redirect("back");
                    }
                    else{
                        req.flash("success","Second Dose Confirmation Successfull !!");

                        res.render("admin");
                    }
                });
            }
        }
        else{
            req.flash("error","Access Denied !!");
            res.redirect("/signin")
        }
    });
});



module.exports=router;
```

- ## Index.js :

```javascript
var express=require("express");
var router= express.Router(),
passport =require("passport"),
User=require("../models/user.js");
const middleware = require('../middlewares');



router.get("/",function(req,res){
    res.render("home");
});
router.get("/signin",function(req,res){
    res.render("signin");
```

```javascript
});

router.get("/signup",function(req,res){
    res.render("signup");
});

router.post("/signup",middleware.userSignupValidator,function(req,res){
    var newuser=new User({name:req.body.name,username:req.body.email,aadhar:req.body.aadhar});
        User.register(newuser,req.body.password,function(err,user){
            if(err||!user)
            {
                    var str=err.message;
                    console.log(str);
                    if(str[0]==='E')
                      str="Aadhar Number Already Registered";
                    req.flash("error",str);
                    res.redirect("back");
            }
             req.flash("success","Successfully Signed Up !!");
             res.redirect("/signin");

        });
});

router.post("/signin",passport.authenticate("local",{
    successRedirect:"/",
    failureRedirect:"/signin"
}) , function(req,res){
});


router.get("/logout",function(req,res){
    req.logout();
    req.flash("success","Logged Out Successfully !!");
    res.redirect("/");
});


module.exports=router;
```

- # User.js :

```javascript
var express=require("express");
var router= express.Router(),
User=require("../models/user.js");


function formatDate(date) {
    var d = new Date(date),
        month = '' + (d.getMonth() + 1),
        day = '' + d.getDate(),
        year = d.getFullYear();

    if (month.length < 2)
        month = '0' + month;
    if (day.length < 2)
        day = '0' + day;

    return [year, month, day].join('-');
}
```

```javascript
router.get("/:userId",function(req,res){
    User.findById(req.params.userId,function(err,curr){
        if(err||!curr){
            if(err){
                req.flash("error","OOPS Something Went Wrong !!");
            }
            else{
                req.flash("error","Unable to find the User ");


            }
            res.redirect("back");
        }
        if(curr.firstdose.taken.is){
            var d2 = new Date();
            d2=formatDate(d2);
            var d1= formatDate(curr.firstdose.taken.date);
            var days=Math.floor(( Date.parse(d2) - Date.parse(d1) ) / 86400000);
            days=84-days;
            var temp= (days<=0);
            res.render("user",{day:days,temp1:temp,curr1:curr});
        }
        else{
            res.render("user",{curr1:curr});
        }
    });

});

router.post("/register/:userId",function(req,res){
    var d1=req.body.date;
    var dose=req.body.dose;
    d1=d1+"T05:12:41.146Z";
    console.log(d1);
    if(dose=='2'){
        User.findOneAndUpdate({_id: req.params.userId}, {$set:{seconddose:{
            register:{
                is:true,
                date:d1
            }
        }}},{new: true}, function (err, fuser) {
            if (err||!fuser){
                req.flash("error","Unable to register !!");
                res.redirect("back");
            }
            else{
                req.flash("success","Successfully Registered for Second Dose !!");
                res.redirect("back");
            }
        });
    }
    else{
        User.findOneAndUpdate({_id: req.params.userId}, {$set:{firstdose:{
            register:{
                is:true,
                date:d1
            }
        }}},{new: true}, function (err, fuser) {
            if (err||!fuser){
                req.flash("error","Unable to register !!");
                res.redirect("back");
            }
            else{
                req.flash("success","Successfully Registered for First Dose !!");
```

```
                res.redirect("back");
            }
        });
    }
});

module.exports=router;
```

middlewares :

• index.js :

```javascript
var middleware={};

middleware.isloggedin=function(req,res,next){
    if(req.isAuthenticated()){
        return next();
    }
    req.flash("error","Please Login First");
    res.redirect("/signin");
};
middleware.userSignupValidator=(req,res,next)=>{
    req.check('name','Name is required').notEmpty()
    req.check('email','Email must be between 3 to 32 character')
        .matches(/.+\@.+\..+/)
        .withMessage('Email must contain @')
        .isLength({
            min:4,
            max:32
        });
        req.check('aadhar','Aadhar is required').notEmpty();
        req.check('aadhar')
        .isLength(12)
        .withMessage('Aadhar must contain at least 12 digits')
        .matches(/^\d+$/)
        .withMessage('Aadhar only contain numbers')
        req.check('password','Password is required').notEmpty();
        req.check('password')
        .isLength({min: 6})
        .withMessage('Password must contain at least 6 charcters')
        const errors = req.validationErrors();
        if(errors){
            const firstError = errors.map(error=>error.msg)[0];
            req.flash("error",firstError);
            return res.redirect("/signup");
        }
        next();
};
module.exports=middleware;
```

models :

• user.js :

```javascript
const mongoose = require('mongoose');
var passportLocalMongoose=require("passport-local-mongoose");



const userschema = new mongoose.Schema({
    name:{
        type:String,
        trim:true,
        required: true,
        maxlength:32
    },
    username:{
        type:String,
        trim:true,
        required: true,
        unique:true
    },
    aadhar:{
        type:String,
        trim:true,
        required: true,
        unique:true
    },
    firstdose:{
        register:{
            is:{
                type:Boolean,
                default:false
            },
            date:{
                type:Date,
                default:Date.now
            }
        },
        taken:{
            is:{
                type:Boolean,
                default:false
            },
            date:{
                type:Date,
                default:Date.now
            }
        }
    },
    seconddose:{
        register:{
            is:{
                type:Boolean,
                default:false
            },
            date:{
                type:Date,
                default:Date.now
            }
        },
        taken:{
```

```javascript
            is:{
                type:Boolean,
                default:false
            },
            date:{
                type:Date,
                default:Date.now
            }
        }
    },
    isAdmin:{
        type:Boolean,
        default:false
    }
},{timestamps:true});


userschema.plugin(passportLocalMongoose);

module.exports=mongoose.model("User",userschema);
```

app.js :

```javascript
var express              =require("express"),
    app                  =express(),
    mongoose             =require("mongoose"),
    bodyparser           =require("body-parser"),
    passport             =require("passport"),
    LocalStrategy        =require("passport-local"),
    flash                =require("connect-flash"),
    indexroutes          =require("./routes/index.js"),
    userroutes           =require("./routes/user.js"),
    adminroutes          =require("./routes/admin.js"),
    middleware           =require("./middlewares");
    require('dotenv').config();
const expressValidator = require('express-validator');
const User=require('./models/user.js');


// connecting to database

mongoose.connect(process.env.DATABASE,{ useNewUrlParser: true , useUnifiedTopology: true,
    useCreateIndex: true,
    useFindAndModify: false}).then(()=>console.log("DB connected"))
    .catch(()=>console.log("something went wrong"));
app.set("view engine","ejs");

app.use(expressValidator());
app.use(flash());
app.use(express.static(__dirname+"/public"));
app.use(require("express-session")({
    secret:"Haku Na Matata",
     resave:false,
     saveUninitialized:false
}));

app.use(passport.initialize());
app.use(passport.session());
passport.use(new LocalStrategy(User.authenticate()));
passport.serializeUser(User.serializeUser());
passport.deserializeUser(User.deserializeUser())
app.use(bodyparser.urlencoded({extended:true}));

function formatDate(date) {
    var d = new Date(date),
        month = '' + (d.getMonth() + 1),
        day = '' + d.getDate(),
        year = d.getFullYear();

    if (month.length < 2)
        month = '0' + month;
    if (day.length < 2)
        day = '0' + day;

    return [year, month, day].join('-');
}




app.use(function(req,res,next){
    var today1     = new Date();
    var tomorrow = new Date(today1.getTime() + (24 * 60 * 60 * 1000));
    res.locals.today=formatDate(tomorrow.toISOString());
    res.locals.curr=req.user;
```

```javascript
    res.locals.error=req.flash("error");
    res.locals.success=req.flash("success");
    next();
});


// routes
app.use("/users",middleware.isloggedin,userroutes);
app.use("/admin",middleware.isloggedin,adminroutes);
app.use("/",indexroutes);




app.listen(process.env.PORT,process.env.IP,function(){
    console.log("The NHPC site has started");
});
```

USER INTERFACE OF THE WEBSITE :

HOME PAGE:

1.
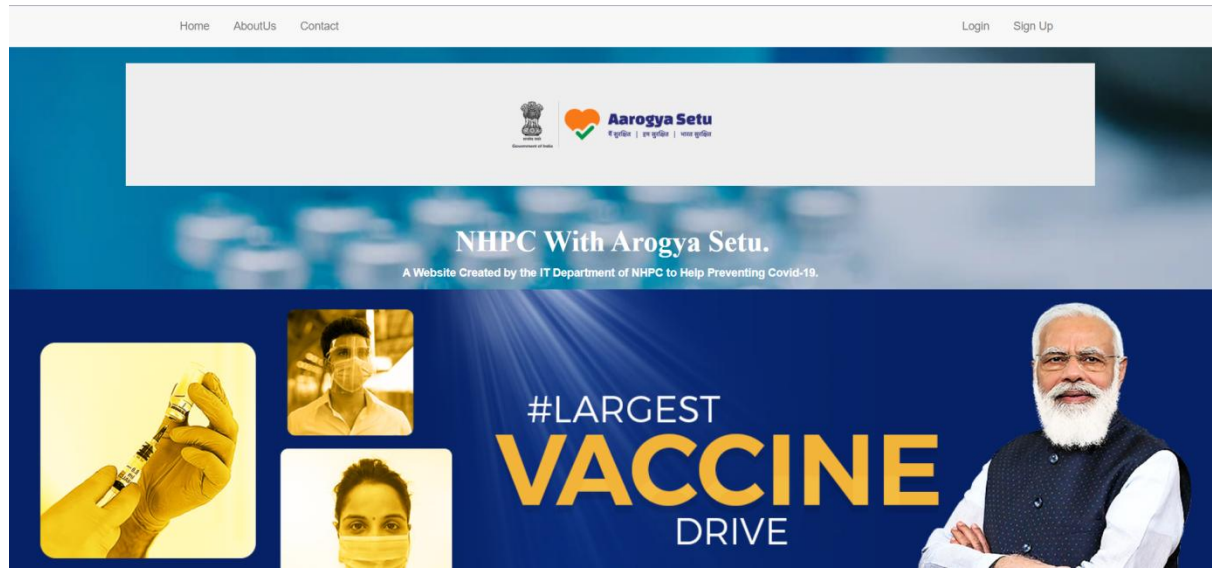
2.

SIGN IN PAGE:
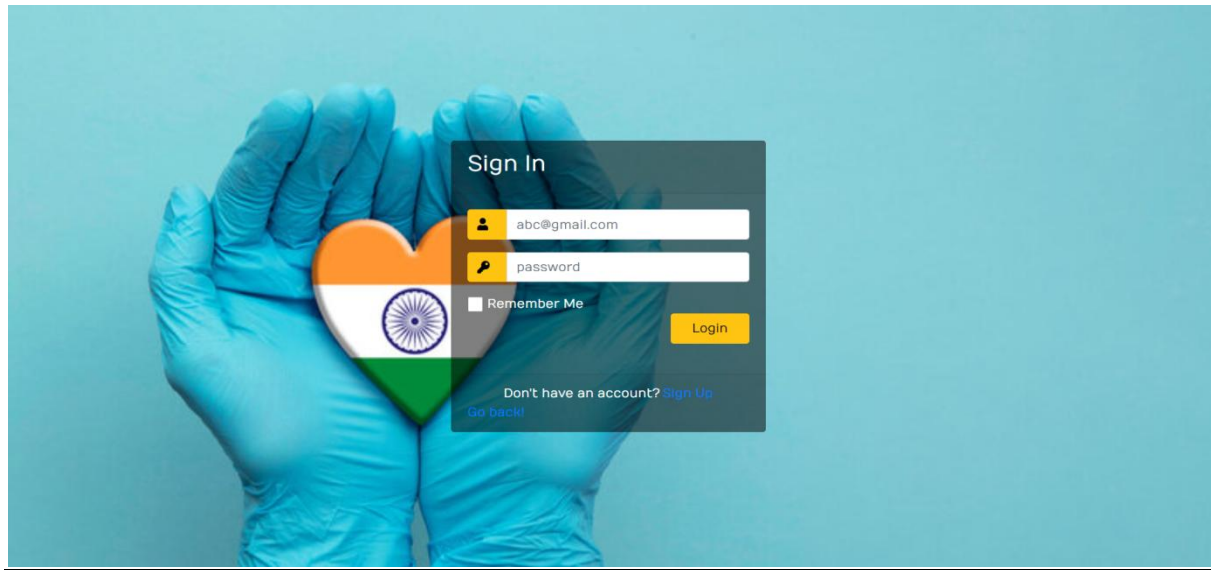
SIGNUP PAGE:
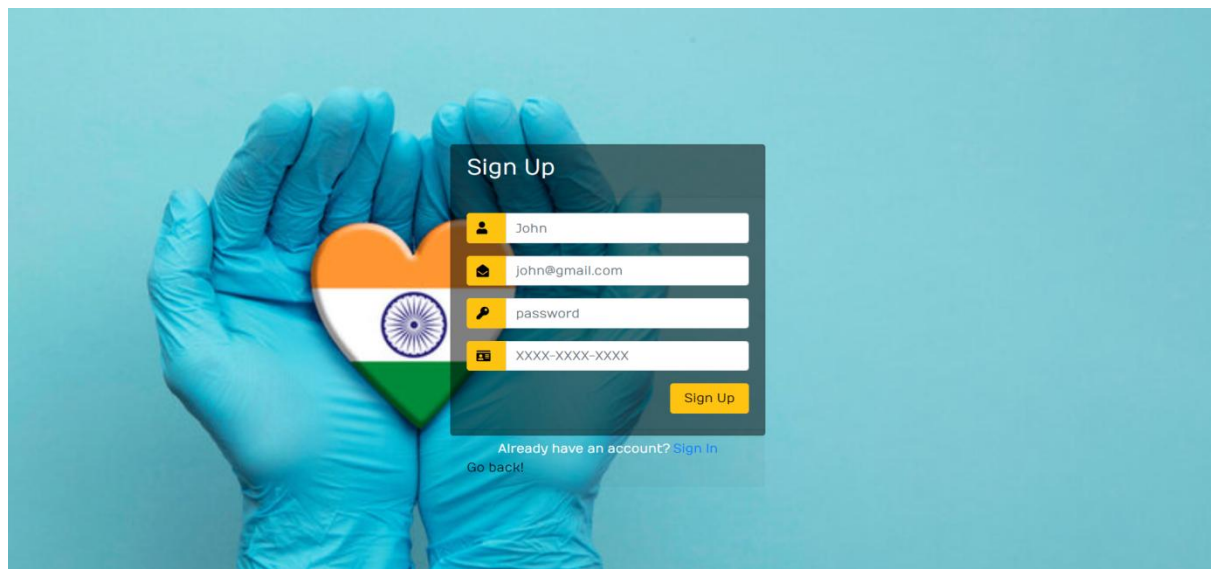
AFTER LOGIN:
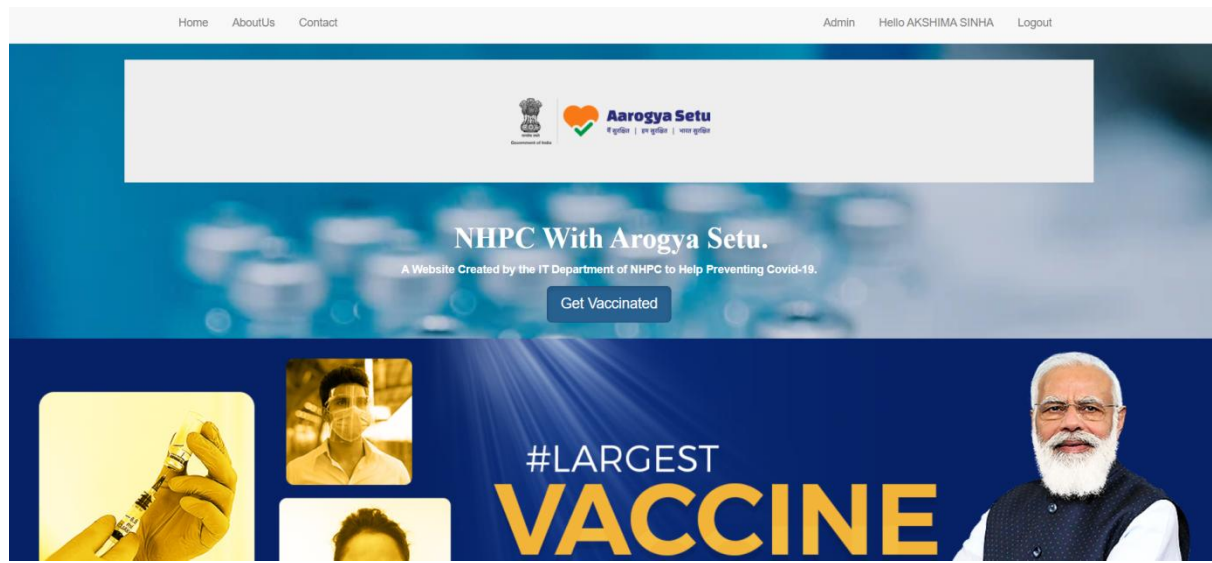
FIRST DOSE REGITERATION PAGE:
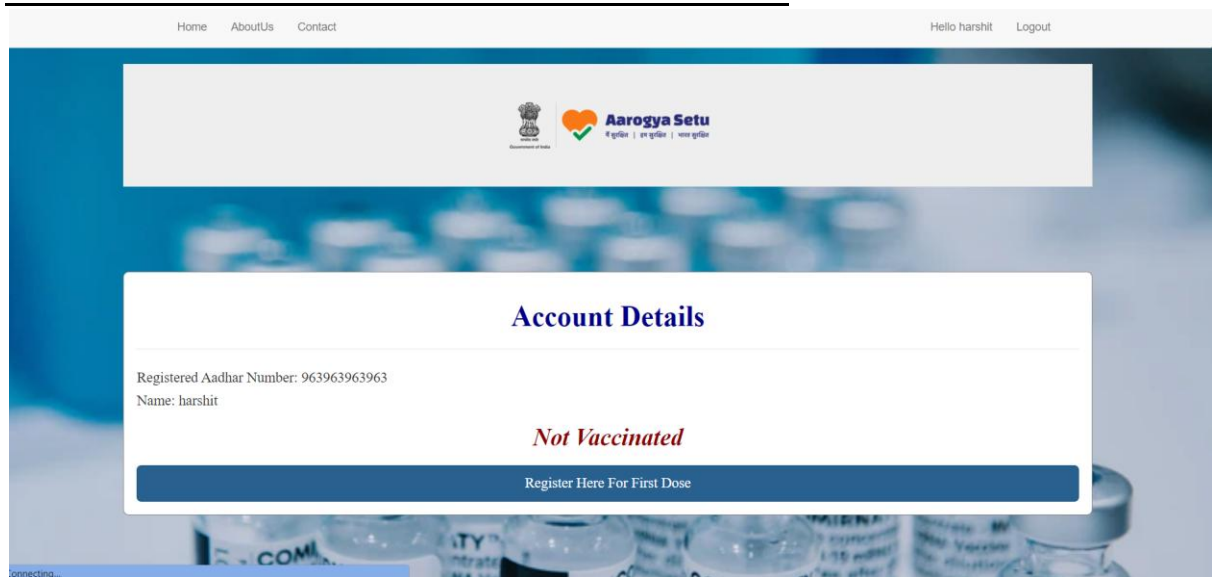
AREA CODE AND DATE SELECTOR:

AFTER REGISTERATION OF FIRST DOSE:

CONFIRMATION PAGE FOR ADMIN:

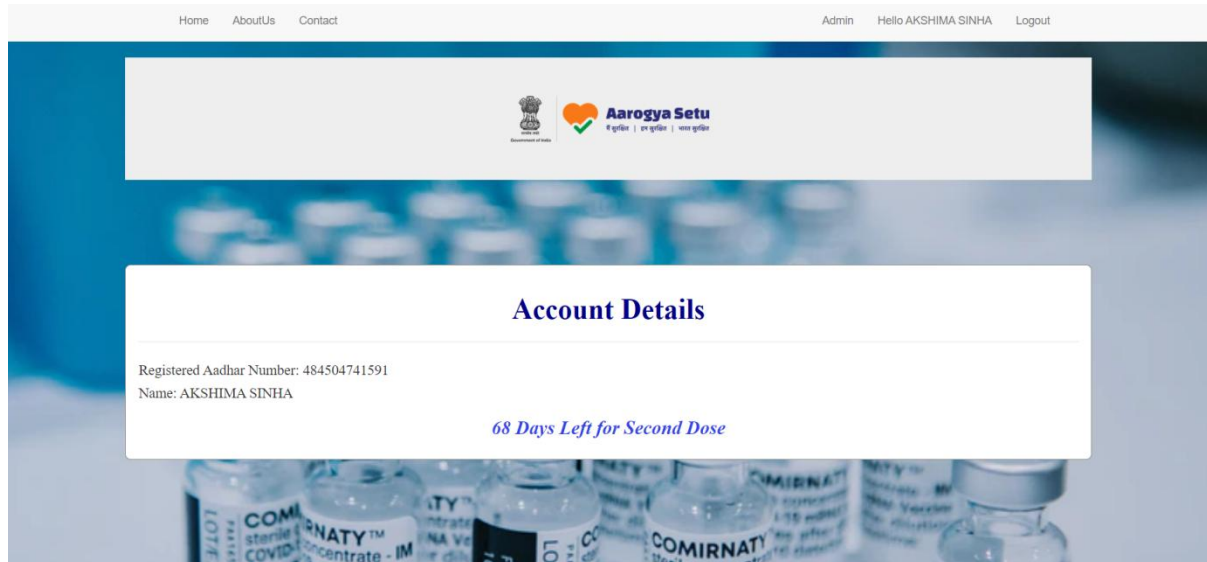# CONFORMING DATA PAGE FOR ADMIN:

AFTER ADMIN CONFIRMS THE FIRST DOSE THAT IS TAKEN BY THE USER:
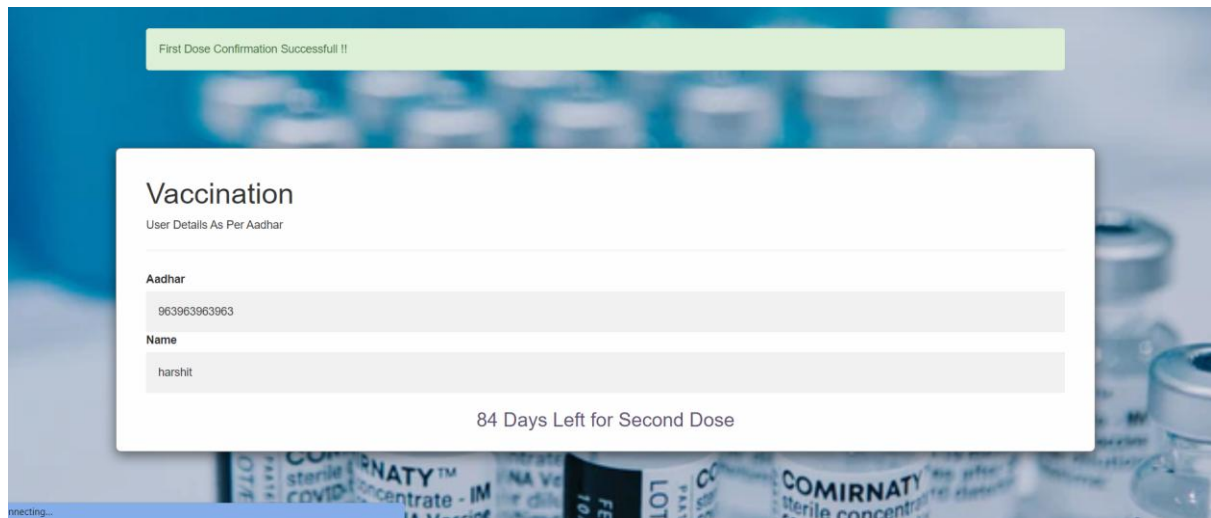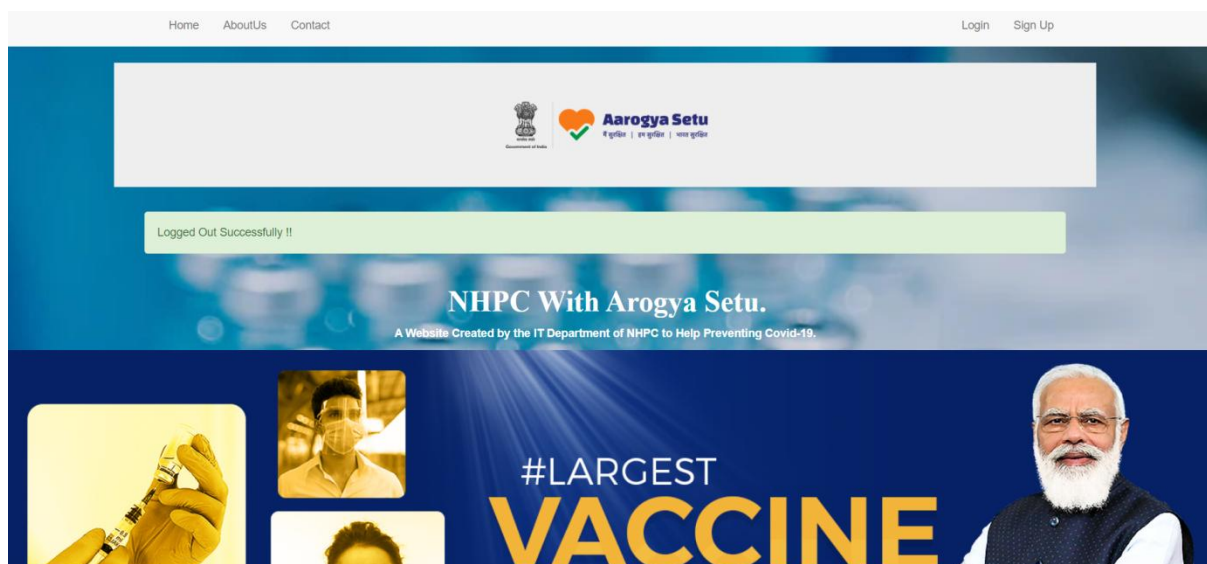

USER ACCOUNT DETAILS PAGE AFTER THE CONFIRMATION OF FIRST DOSE BY ADMIN:
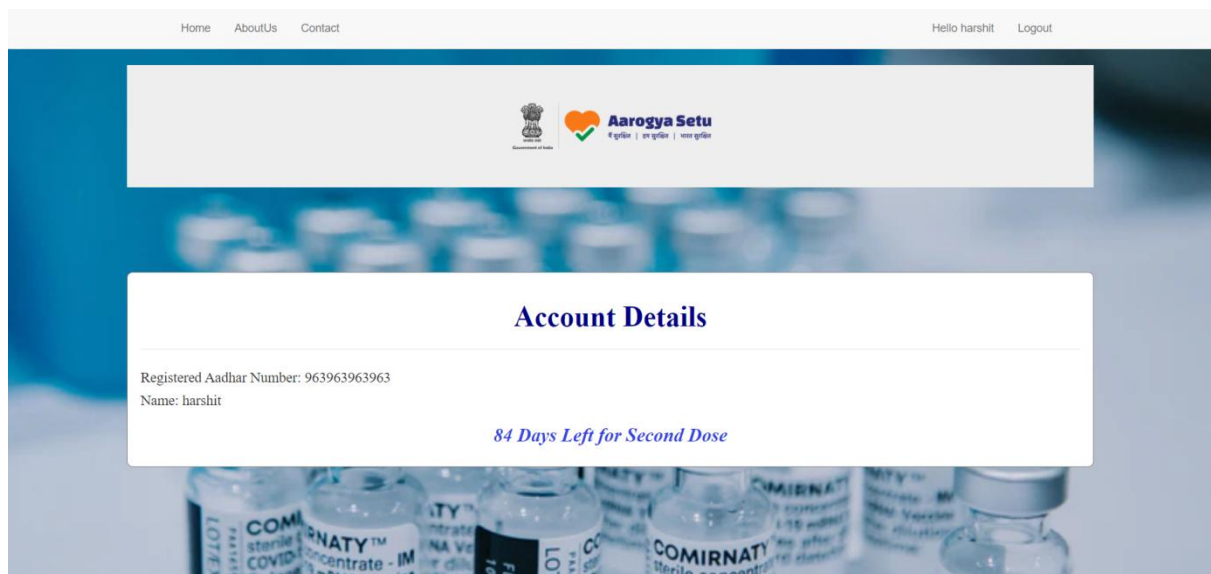
DETAILS OF SOME OTHER ACCOUNT AFTER SOME DAYS OF FORST DOSE VACCINATION (THE COUNTDOWN WILL BE SHOWN FROM DAY 84 TO 0):

AFTER LOGGING OUT OF THE ACCOUNT:

<u>CONCLUSION</u>

In a nutshell, this internship has been an excellent and rewarding experience. I can conclude that there have been a lot I've learnt from my work at NHPC. Needless to say, the technical aspects of the work I've done are not flawless and could be improved provided enough time. As someone with no prior experience with Node.js whatsoever I believe my time spent in research and discovering it was well worth it and contributed to finding an acceptable solution to build a fully functional web service. Two main things that I've learned, the importance of time-management skills and self-motivation.

<u>BIBLIOGRAPHY</u>

- To learn about the software required to use,
  www.wikipidea.org
- For more examples for learning,
  www.tutorialpoint.com
- For learning about the different styles and designs,
  www.w3schools.com