Visvesvaraya Technological University

Jnana Sangama, Belagavi – 590018, Karnataka

A Mini Project Report
On

"COVID-19 TESTING MANAGEMENT SYSTEM "

Submitted in partial fulfillment of the requirement for the DBMS
Laboratory with mini project (18CSL58) of V semester

Bachelor of Engineering
In
Computer Science and Engineering

Submitted By

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BRINDAVAN COLLEGE OF ENGINEERING
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DWARAKANAGAR, BAGALUR MAIN ROAD, YELAHANKA, BENGALURU-63,

2021-2022

BRINDAVAN COLLEGE OF ENGINEERING

Department of Computer Science and Engineering

DWARAKANAGAR, BAGALUR MAIN ROAD, YELAHANKA, BENGALURU-63,

CERTIFICATE

This is to certify that V Semester Mini project entitled ***“COVID-19 TESTING MANAGEMENT SYSTEM”*** is a bonafide work carried out by **SANJEEV R (1BO19CS093)** as a partial fulfillment for the award of Bachelor’s Degree in Computer Science and Engineering for DBMS Laboratory with Mini Project [18CSL58] as prescribed by Visvesvaraya Technological University, Belagavi during the year 2021-2022.

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ABSTRACT

The **Coronavirus Disease (COVID-19)** pandemic has impacted the economy, livelihood, and physical and mental well-being of people worldwide. The present study provides an overview of the coronavirus disease 2019 (COVID-19) outbreak which has rapidly extended globally within a short period. COVID-19 is a highly infectious respiratory disease caused by a new coronavirus known as **SARS-CoV-2** (severe acute respiratory syndrome-coronavirus-2). SARS-CoV-2 is different from usual coronaviruses responsible for mild sickness such as common cold among human beings. It is crucial to understand the impact and outcome of this pandemic.
Conducting numerous, rapid, and reliable PCR tests for SARS-CoV-2 is essential for our ability to monitor and control the current COVID-19 pandemic. As a solution to the aforementioned problem, a website implementation is reported here. The title of this web application is **COVID-19 TESTING MANAGEMENT SYSTEM.**

The function of this website can be described as follows- If a person undergoes any Covid-19 symptoms, he/she can undergo the Covid-19 test. There are particularly three Covid tests which are **Antigen**, **RT-PCR**, **CB-NAAT** present in this website. A person can choose any of the above mentioned tests for testing the Coronavirus disease. The test which is chosen by the person is monitored by the website Admin. The admin can add/delete the Phlebotomist and assign him/her to take care of the tests which is undergone by the user. So the user will be able to track his/her test reports by entering mobile number, order_id or user name. Admin and Phlebotomist will update the user every time when the test report is progressed. Finally when admin and phlebotomist update the report is ready, the user will be able to download his/her Coronavirus disease report. Thus this website helps a person to undergo Covid tests which will be helpful to stop the spread of this pandemic world-wide. The website uses **MYSQL** database to store all user details and credentials. This database consists of carefully evaluated, normalized tables interrelated to classify and delegate the information to be stored. The website is developed using front-end tools- **HTML(Hypertext Markup Language), CSS(Cascading Style Sheets), JavaScript and Bootstrap framework. PHP(Hypertext preprocessor)** is a back-end language used to connect the front-end and **MYSQL** database. The home page of the website contains a short description about Covid-19, symptoms and prevention to be taken. This is followed by a Testing section where the user can easily submit his personal details for undergoing the Covid test. In Live Update section a user can view the details such as Covid test done by each States in India (includes pie-chart in which tests are shown percentage wise), State and District wise Covid active, confirmed, decreased cases.

ACKNOWLEDGEMENT

It gives me a great sense of pleasure to present the report of the Mini-Project undertaken during B.E third year. The satisfaction and euphoria that accompany the successful completion of any task would be incomplete without the mention of the people who made it possible and whose constant encouragement and guidance crowned our efforts with success.

I consider myself proud, to be part of **BRINDAVAN COLLEGE OF ENGINEERING** family, the institution which stood by my way in endeavours.

I express my deep and sincere thanks to our Principal **Dr. Rajashekhar Patil** for his support.

I am grateful to **Mrs. Meena Kumari K S,** Professor and Head, Dept. of Computer Science & Engineering who is source of inspiration and of invaluable help in channelizing my efforts in right direction.

I wish to thank our internal guide **Ms. Divyashree H S**, Assistant Professor, Dept of CSE for guiding and correcting various documents with attention and care. She has taken lot of pain to go through the document and make necessary corrections as and when needed.

I would like to thank the faculty members and supporting staff of the Department of CSE, BCE for providing all the support for completing the Project work.

Finally, I am grateful to my **Parents** for their unconditional support and help during my Project work.

SANJEEV R (1BO19CS093)

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION TO SQL

Database is logically structured collection of information. A database consists of tables which is the representation for a particular type of object and the columns of a table represent the properties or attributes of this type. Database Management comprises of creation and maintenance of tables in the said database. A language that facilitates the creation, maintenance and access to the database is Structured Query Language (SQL). There are two types of queries that SQL supports- Data Definition Language and Data Manipulation Language. Data Definition Language consists of the queries or instructions that creates or alters tables. Data Manipulation Language on the other hand, comprises of the queries that is used to modify the data or rows present in tables such as the insert, update and delete commands. In **Covid-19 Testing Management System** web application, SQL is abundantly used to store and manipulate the database stored in the MYSQL backend. This is a relational database, so the usage of SQL is the optimal.

1.2 INTRODUCTION TO FRONT END SOFTWARE

Covid-19 Testing Management System web application uses HTML for creating the structure of the web content, CSS for defining the styles for the web pages. It is used to give styling to the HTML structure, JavaScript for allowing user to interact with webpages. A framework called Bootstrap is used to quicky design and customize the webpage. Advantages of using front-end tools for this website is that because it helps developer to build attractive website layouts with ease. These tools helps to accelerate the web development process by providing drag and drop elements and various built-in features to create a attractive web design layout. Data or information entered in this front-end is stored at the back-end MYSQL database.

1.3 PROJECT REPORT OUTLINE

The structure of this report follows the flow that starts with the Abstract that gives a gist of the entire project and ends with the snapshots of the website developed. The report is divided into sections, the first being, Introduction. This section gives the reader an idea about the motivation behind choosing the said topic along with an overview of **Covid-19 Testing Management System**, this section is divided into three parts, the first one being the introduction to SQL, the second one is the introduction to the front-end software which is in our case is HTML, CSS, JavaScript, Bootstrap and the third section is the report structure.

The second section is the requirement specification where we indicate the hardware and software components utilized for the project implementation.

The third section is the objective of the project where we indicate the motivation behind undertaking this idea. This also encompasses the impact that this project intends to deliver. Implementation is the next section, this consists of very specific technical strategies used in the development of the project like the ER Diagram, mapping of this ER diagram to the schema diagram, thereafter, mapping the schema to relations. This is followed by the creation of the tables and insertion of data into this. Another important aspect is the creation of triggers and stored procedures for execution.
The next section is the frontend design wherein we talk about the UI and how we integrate this with the backend. The section after this deals with the testing aspect and covers all the test cases we developed to ascertain the overall integrity.

The last section is the Results section which has the snapshots of **Covid-19 Testing Management System** application and its features. The report ends with a conclusion and references

CHAPTER 2

REQUIREMENT SPECIFICATION

2.1 SOFTWARE REQUIREMENTS

- ✓ **Operating System:** Windows 7, 10, 11
- ✓ **Database:** MYSQL
- ✓ **Languages:** HTML5, CSS3, JavaScript, Bootstrap5 , PHP
- ✓ **Tools:** VS code(Visual Studio Code), XAMPP, Apache Server

2.2 HARDWARE REQUIREMENTS

- ✓ **Processor**: Any Processor above 500 MHz
- ✓ **RAM:** 4GB or greater
- ✓ **Hard Disk**: 256GB or greater
- ✓ **Compact Disk:** Not required
- ✓ **Input device:** Keyboard, Touchpad, Mouse
- ✓ **Output device:** A monitor

CHAPTER 3

OBJECTIVE OF THE PROJECT

The aim of this project is to create an innovative application for testing Coronavirus disease which has made a economic and social disruption. The motivation behind creating this web application was the need of a platform to showcase how this pandemic can be stopped from further spread.

Testing of all people for SARS-CoV-2, including those who have no symptoms, who show symptoms of infection such as trouble breathing, fever, sore throat or loss of the sense of smell and taste, and who may have been exposed to the virus will help prevent the spread of COVID-19 by identifying people who are in need of care in a timely fashion.

A positive test early in the course of the illness enables individuals to isolate themselves – reducing the chances that they will infect others and allowing them to seek treatment earlier, likely reducing disease severity and the risk of long-term disability, or death. A positive test for SARS-CoV-2 alerts an individual that they have the infection. Not only can they get treated faster, but they can take steps to minimize the spread of the virus.

From the academic perspective, the objective of this project to develop a scalable, reliable and secure website with an efficient storage backend mechanism and a neat frontend. To grasp the concepts of Database Management System, designing a real-time database, maintaining it and manipulating it is essential. With this project, these principles are to be learned and applied.

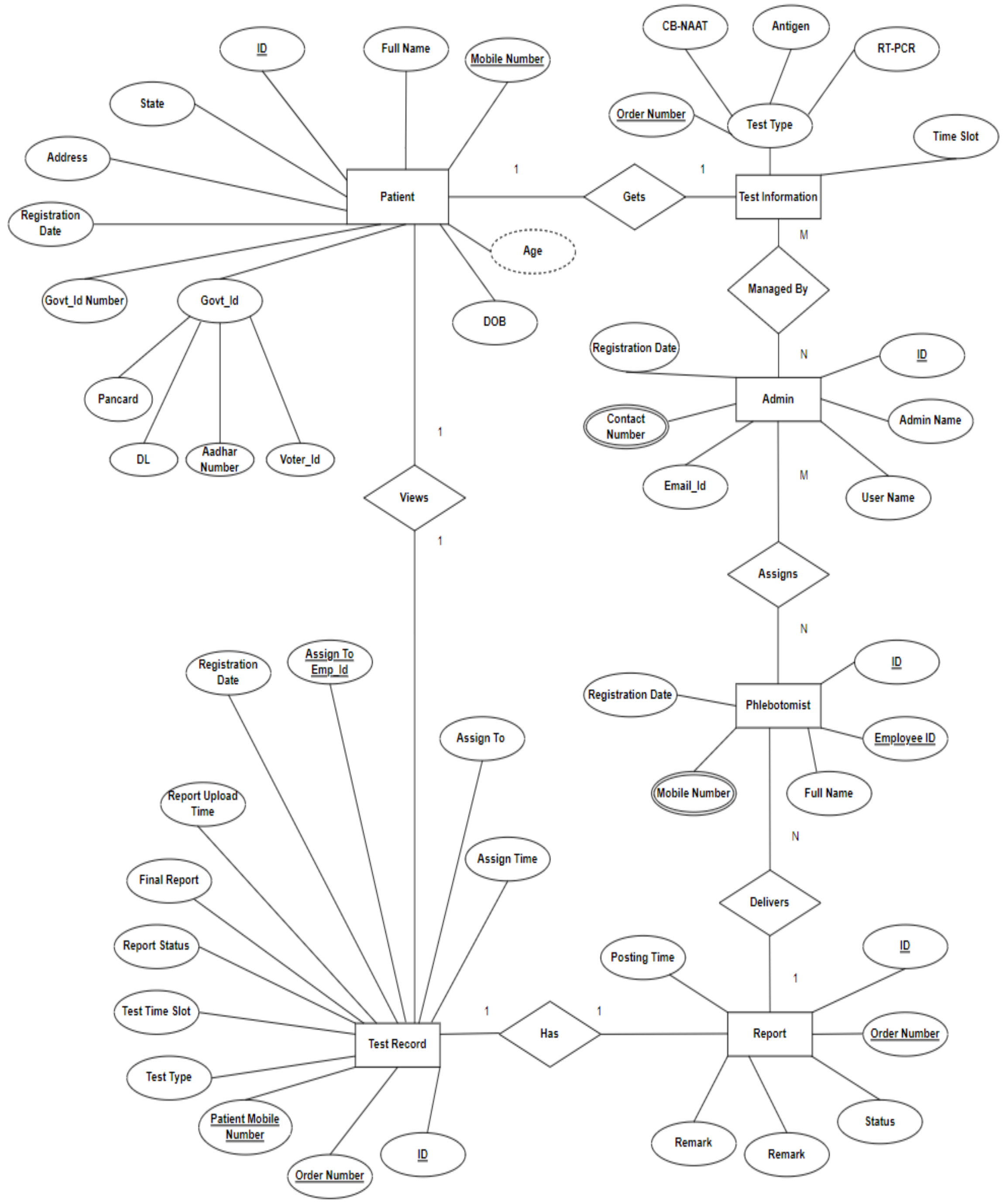
The focus is towards designing an ER diagram that caters to our data needs, mapping this ER diagram into relational schema, creation of tables using this schema and establishment of relationships within these tables. The tables are aimed at achieving the highest Normal Forms, thus being efficient and reduce redundancy.

CHAPTER 4

IMPLEMENTATION

4.1 ER DIAGRAM

Entity relationship diagram can express overall logical structure of a database graphically.

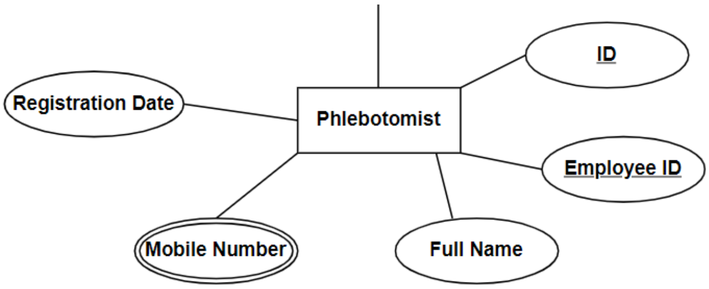


4.2 MAPPING OF ER DIAGRAM TO SCHEMA DIAGRAM

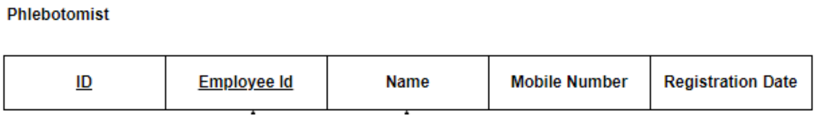
The process of mapping ER diagram to schema can be explained in various steps as follows-

Step 1: Mapping of Regular Entity Types
We first convert entities into corresponding tables. An entity set is mapped to a relation in a straight forward way: Each attribute of the entity set becomes an attribute of the table.

An example is shown below-



This entity in schema is represented as follows-



Phlebotomist

ID	Employee Id	Name	Mobile Number	Registration Date

Step 2: Mapping of Weak Entity Types
Since there are no weak entity types in our ER diagram, this step is not applicable to us.

Step 3: Mapping of Binary 1:1 Relation Types

There are three possibilities the relationship can be:

1. mandatory at both ends
2. mandatory at one end and optional at the other
3. optional at both ends

There are following 1:1 relationship types in our ER diagram. They are-

- Gets
- Has
- Views

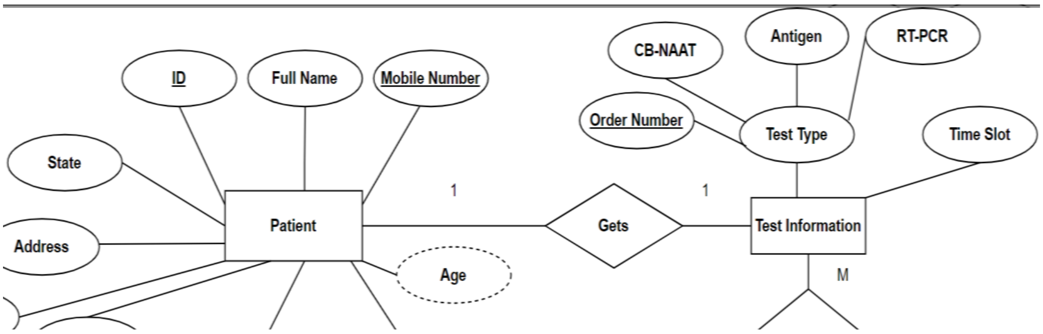
Two entity types: Patient and Test Information, Report and Test Record

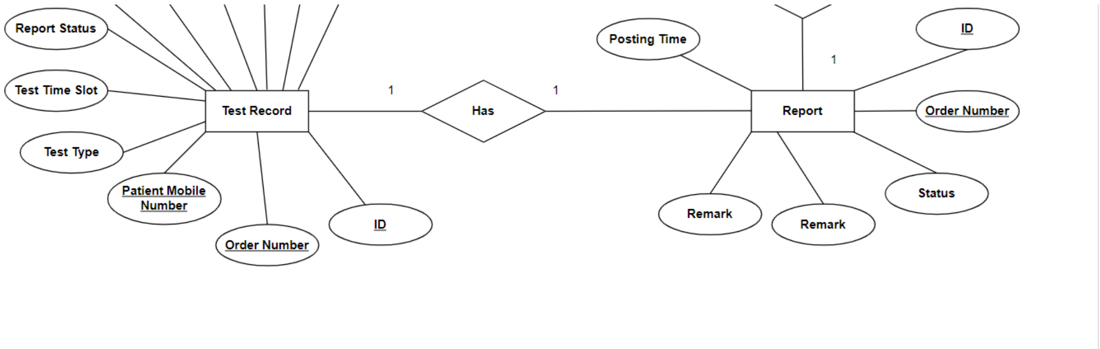
Each Patient must have one Test Information and each Test Information must have one Patient associated with it.

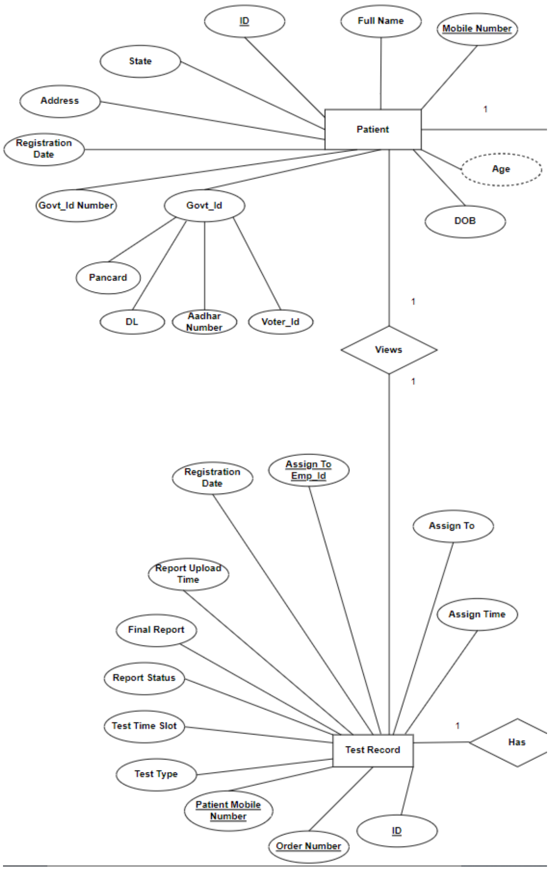
Each Report must have one Test Record and each Test Record must have one Report associated with it.

Each Patient must have one Test Record and each Test Record must have one Patient associated with it.

It is therefore a mandatory relations at both ends.

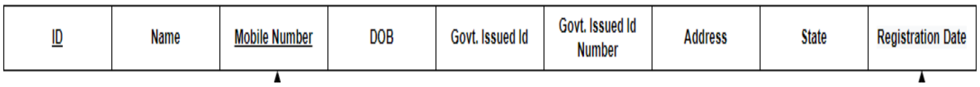






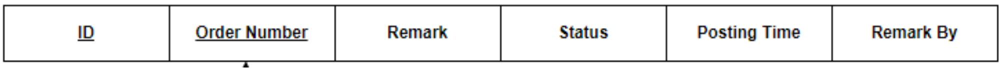
This entity in schema is represented as follows-

Patient

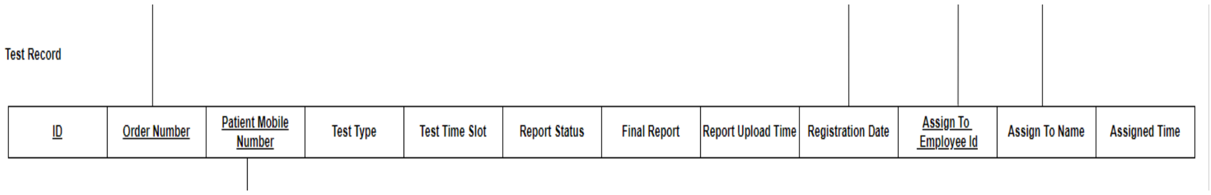


ID	Name	Mobile Number	DOB	Govt. Issued Id	Govt. Issued Id Number	Address	State	Registration Date

Report Tracking



ID	Order Number	Remark	Status	Posting Time	Remark By



Test Record

ID	Order Number	Patient Mobile Number	Test Type	Test Time Slot	Report Status	Final Report	Report Upload Time	Registration Date	Assign To Employee Id	Assign To Name	Assigned Time

Step 4: Mapping of Binary 1:N Relationship Types.

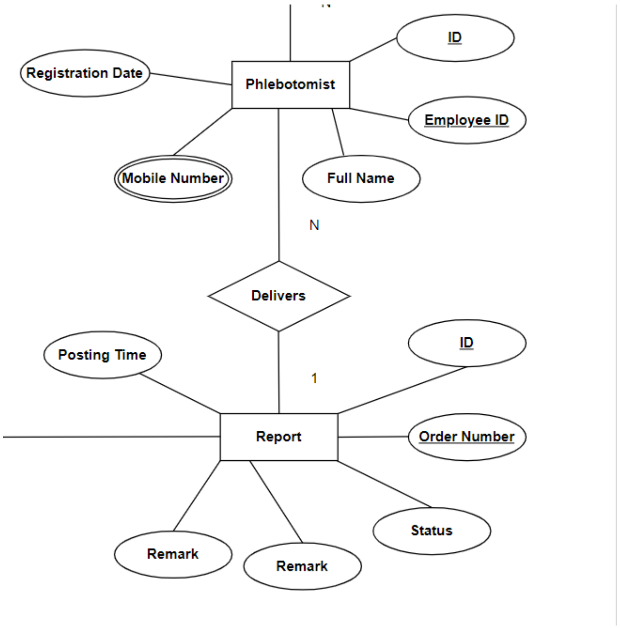
For each of these binary 1:N relationship type R, we identify the relation S that represent the participating entity type at the N-side of the relationship type. Then we include as foreign key in S the primary key of the relation T that represents the other entity type participating in R. Then we include any simple attributes of the 1:N relation type as attributes of S.

There is a following 1:N relationship type in our ER diagram. That is-

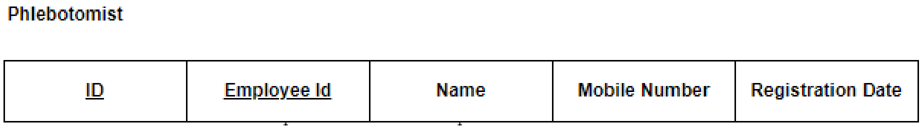
- Delivers

Two entity types: Phlebotomist and Report

There can only be one Report , while there can be many Phlebotomist working on that Report.

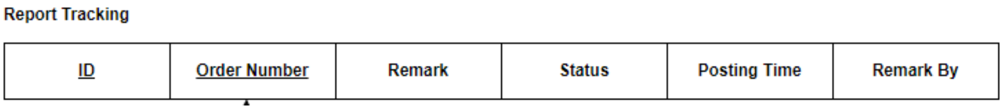


This entity in schema is represented as follows-



Phlebotomist

ID	Employee Id	Name	Mobile Number	Registration Date



Report Tracking

ID	Order Number	Remark	Status	Posting Time	Remark By

Step 5: Mapping of Binary M:N Relationship Types.

To represent a relationship, we must be able to identify each participating entity and give values to the descriptive attributes of the relationship. Thus, the attributes of the relation include:

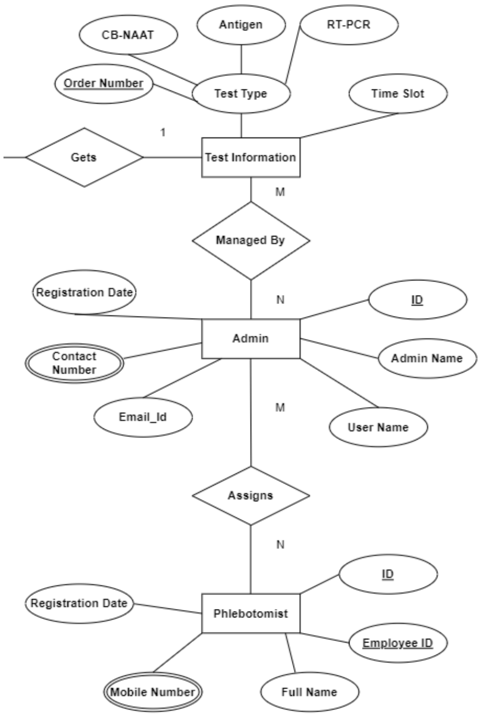
- The primary key attributes of each participating entity set, as foreign key fields.
- The descriptive attributes of the relationship set.

Here Managed By and Assigns are one such M:N relationship.

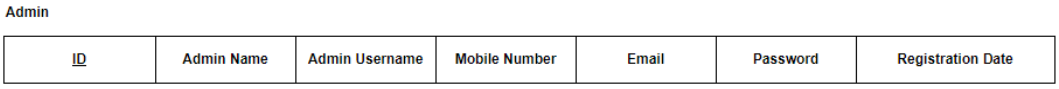
There can be many Test Information which can be manged by many Admins.

Similarly there can be many Admins who can assign many Phlebotomists.

Many Phlebotomist can be assigned by many Admins.

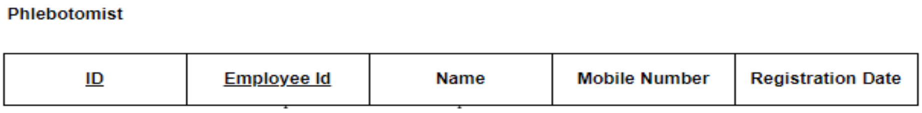


This entity in schema is represented as follows-



Admin

ID	Admin Name	Admin Username	Mobile Number	Email	Password	Registration Date



Phlebotomist

ID	Employee Id	Name	Mobile Number	Registration Date

Step 6: Mapping of Multivalued attributes.

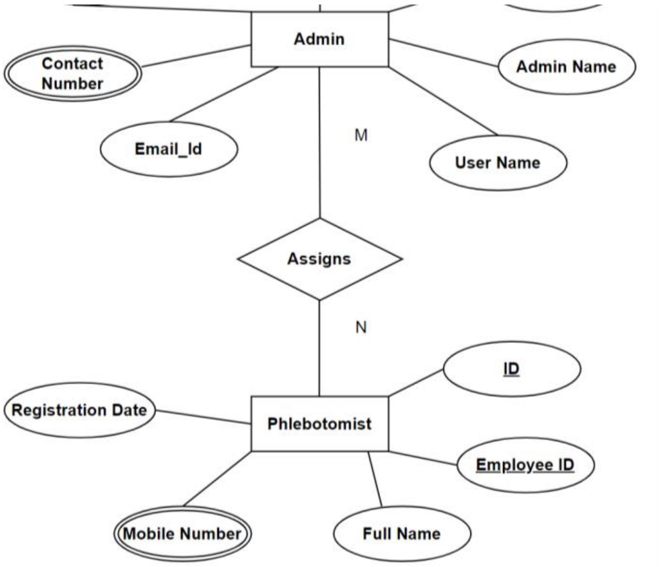
A multivalued attribute of an entity is an attribute that can have more than one value associated with the key of the entity.

In our case we have two multivalued attributes that are-

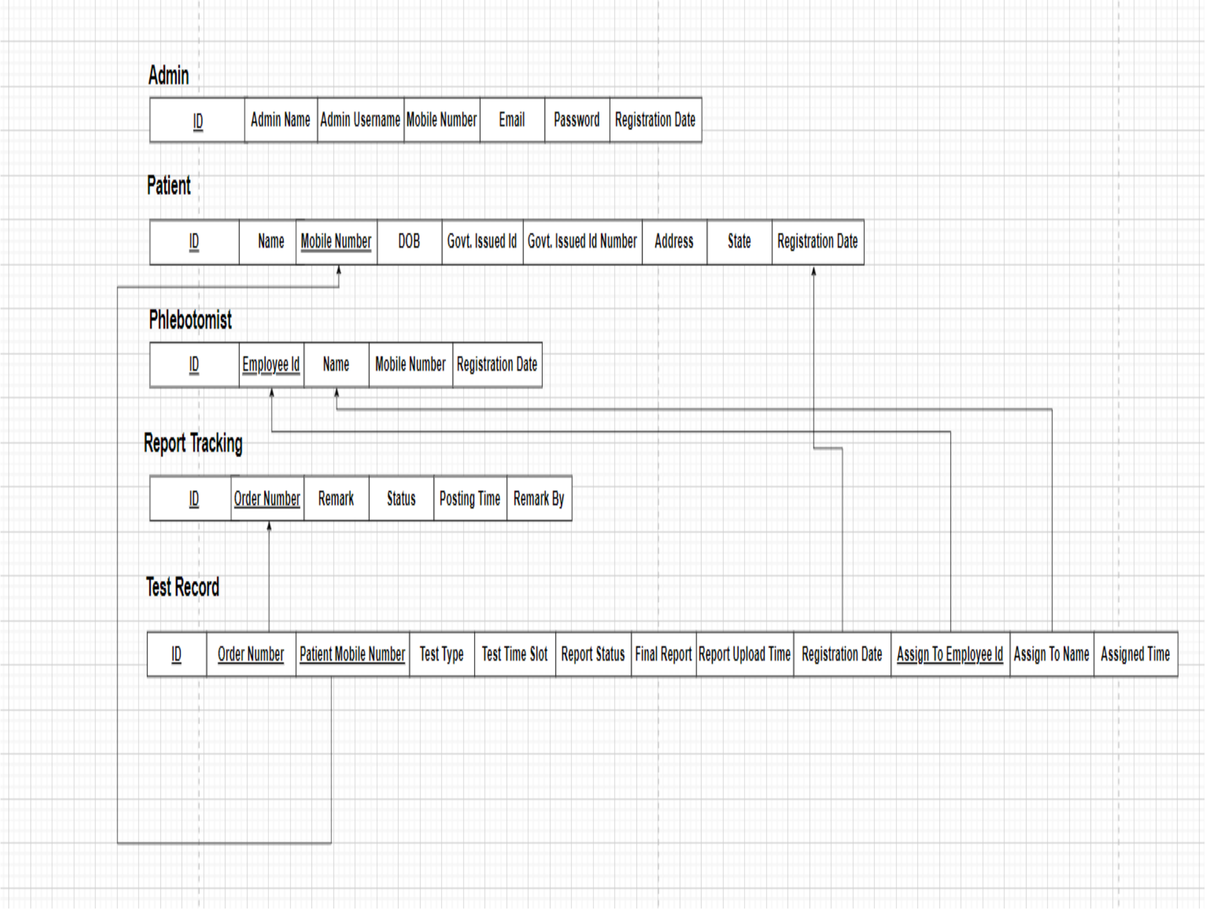
Admin – Contact Number : Admin can have one or more contact number

Similarly

Phlebotomist – Mobile Number: Phlebotomist can have one or more mobile number.


Admin
Contact Number
Admin Name
Email_Id
M
User Name
Assigns
N
ID
Registration Date
Phlebotomist
Employee ID
Mobile Number
Full Name

The final *Schema Diagram* after the mapping procedure:



4.3 CREATION OF TABLES

The SQL queries that create the tables are as follows-

```
Database Name: covidtmsdb
```

```
Table structure for table tbladmin

CREATE TABLE tbladmin (
  ID int(11) NOT NULL,
  AdminName varchar(120) DEFAULT NULL,
  AdminuserName varchar(20) NOT NULL,
  MobileNumber int(10) NOT NULL,
  Email varchar(120) NOT NULL,
  Password varchar(120) DEFAULT NULL,
  AdminRegdate timestamp NULL DEFAULT current_timestamp(),
  Primary key(ID)
  );
  ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

```
Table structure for table tblpatients

CREATE TABLE tblpatients (
  ID int(11) NOT NULL,
  FullName varchar(120) DEFAULT NULL,
  MobileNumber bigint(12) DEFAULT NULL,
  DateOfBirth date DEFAULT NULL,
  GovtIssuedId varchar(150) DEFAULT NULL,
  GovtIssuedIdNo varchar(150) DEFAULT NULL,
  FullAddress varchar(255) DEFAULT NULL,
  State varchar(200) DEFAULT NULL,
  RegistrationDate timestamp NOT NULL DEFAULT
current_timestamp(),
  Primary key(ID),
  Primary key(MobileNumber)
  );
  ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

```
Table structure for table tblphlebotomist
CREATE TABLE tblphlebotomist (
  ID int(11) NOT NULL,
  EmpID varchar(100) DEFAULT NULL,
  FullName varchar(120) DEFAULT NULL,
  MobileNumber bigint(12) DEFAULT NULL,
  RegDate timestamp NULL DEFAULT current_timestamp(),
  Primary key(ID),
  Primary key(EmpID)
  );
  ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

```
Table structure for table tblreporttracking
CREATE TABLE tblreporttracking (
  ID int(11) NOT NULL,
  OrderNumber bigint(40) DEFAULT NULL,
  Remark varchar(255) DEFAULT NULL,
  Status varchar(120) DEFAULT NULL,
  PostingTime timestamp NULL DEFAULT current_timestamp(),
  RemarkBy int(5) DEFAULT NULL,
  Primary key(ID),
  Primary key(OrderNumber)
  );
ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

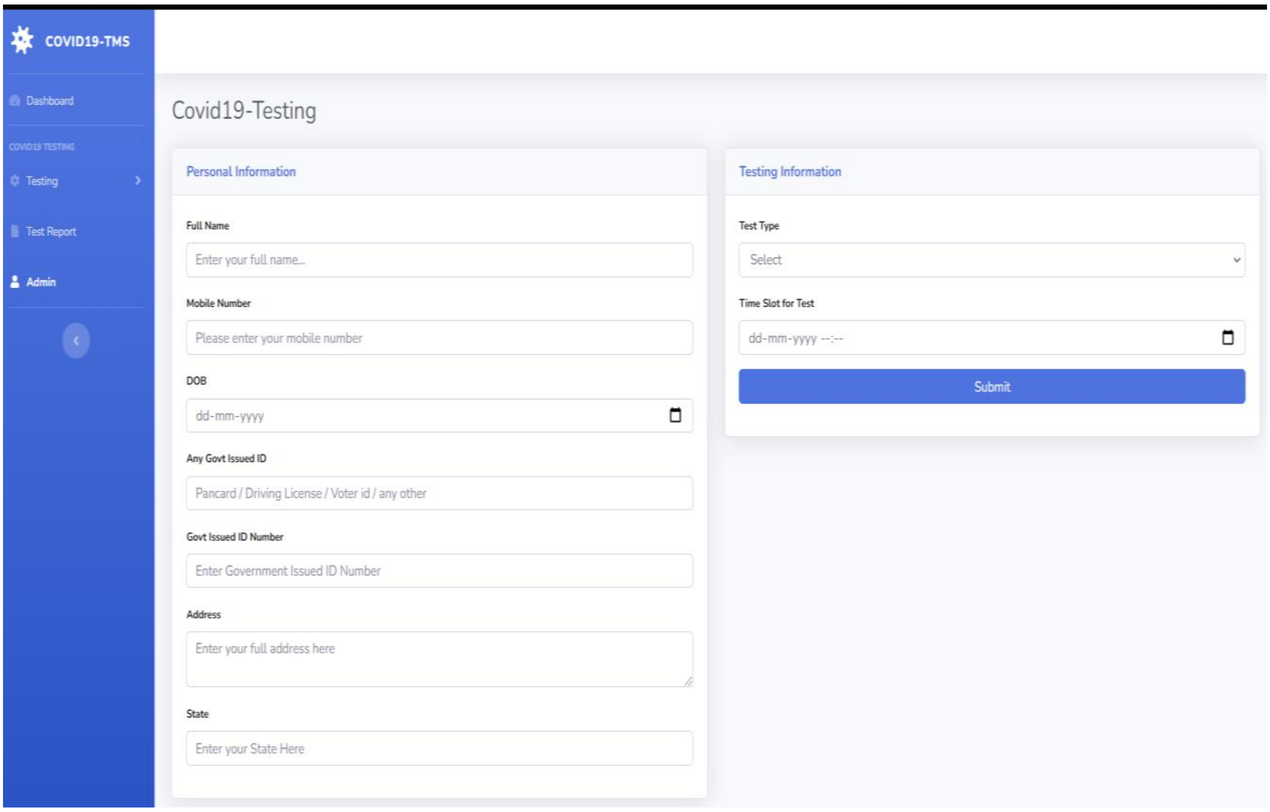
```
Table structure for table tbltestrecord

CREATE TABLE tbltestrecord (
  ID int(11) NOT NULL,
  OrderNumber bigint(14) DEFAULT NULL,
  PatientMobileNumber bigint(14) DEFAULT NULL,
  TestType varchar(100) DEFAULT NULL,
  TestTimeSlot varchar(120) DEFAULT NULL,
  ReportStatus varchar(100) DEFAULT NULL,
  FinalReport varchar(150) DEFAULT NULL,
  ReportUploadTime varchar(200) DEFAULT NULL,
  RegistrationDate timestamp NULL DEFAULT
current_timestamp(),
  AssignedtoEmpID varchar(150) DEFAULT NULL,
  AssigntoName varchar(180) DEFAULT NULL,
  AssignedTime varchar(100) DEFAULT NULL,
Primary key(ID),
Foreign key(OrderNumber) references
tblreporttracking(OrderNumber),
Foreign key(PatientMobileNumber) references
tblpatients(MobileNumber),
(RegistrationDate) references tblpatients(RegistrationDate),
(AssigntoName) references tblphlebotomist(FullName),
Foreign key(AssigntoEmpID) references tblphlebotomist(EmpID)
  );
ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

```
Table structure for table visit
CREATE TABLE visit (
 ID int(11) NOT NULL,
 total_count int(11) NOT NULL,
 Primary key(ID)
 );
ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

4.4 INSERTION OF TUPLES

A single row entry in a table is called a **Tuple** or **Record** or **Row**. A **Tuple** in a table represents a set of related data.

The tuples are inserted into the respective tables that we provide to the user on the front-end page. This form sample is shown below-



Covid19-Testing

Personal Information

Full Name: Enter your full name...

Mobile Number: Please enter your mobile number

DOB: dd-mm-yyyy

Any Govt Issued ID: Pancard / Driving License / Voter id / any other

Govt Issued ID Number: Enter Government Issued ID Number

Address: Enter your full address here

State: Enter your State Here

Testing Information

Test Type: Select

Time Slot for Test: dd-mm-yyyy --:--

4.5 CREATION OF TRIGGERS

A SQL trigger is a database object which fires when an event occurs in a database. A trigger is used for maintaining the integrity of the information on the database.

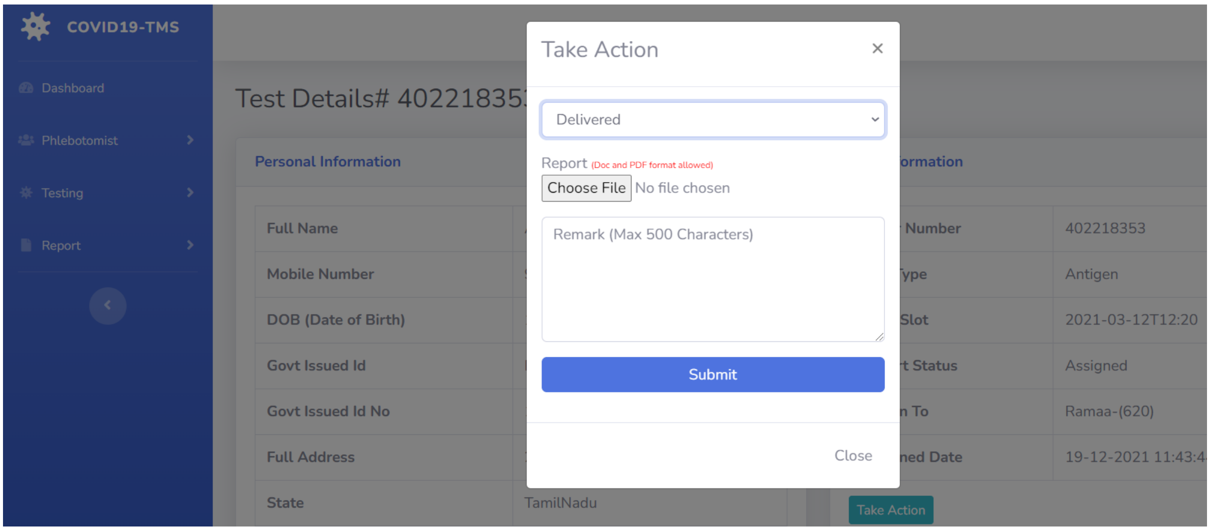
Syntax:

```
CREATE [OR REPLACE ] TRIGGER trigger_name
{BEFORE | AFTER | INSTEAD OF }
{INSERT [OR] | UPDATE [OR] | DELETE}
[OF colonnade]
ON table_name
[REFERENCING OLD AS o NEW AS n]
[FOR EACH ROW]
WHEN (condition)
DECLARE
   Declaration-statements
BEGIN
   Executable-statements
EXCEPTION
   Exception-handling-statements
END;
```

The trigger is written as follows-

```
CREATE TRIGGER TEST REPORT_FORMAT _VIOLATION
BEFORE INSERT OR UPDATE OF PATIENT_TESTREPORT,
ON PATIENT_TESTREPORT
FOR EACH ROW
WHEN (FORMAT!= DOC OR PDF)
INFORM_ADMIN (NEW.TEST REPORT,
FORMAT);
```

While Admin is uploading a Patient test report onto the database, the format of the report must be in DOC or PDF form. Trigger is activated here.
The Admin is informed about the format allowed by the activation of trigger.



Test Details# 40221835

Personal Information

Full Name	
Mobile Number	
DOB (Date of Birth)	
Govt Issued Id	
Govt Issued Id No	
Full Address	
State	TamilNadu

Take Action ×

Delivered

Report (Doc and PDF format allowed)

Choose File No file chosen

Remark (Max 500 Characters)

Submit

Close

ormation

Number	402218353
ype	Antigen
Slot	2021-03-12T12:20
t Status	Assigned
n To	Ramaa-(620)
ned Date	19-12-2021 11:43:4

Take Action

4.6 CREATION OF STORED PROCEDURES

A stored procedure is a prepared SQL code that we can save, so the code can be reused over and over again.

Stored procedure implemented for the test report format violation trigger.

This stored procedure is implemented for the trigger that prevents the addition of a non-nullable field when inserting a foreign key, or if the table is altered to add an additional column to it, when there are tuples already present, then this trigger fires and the stored procedure executes.

Syntax:

```
CREATE PROCEDURE procedure_name
AS
sql_statement
GO;
```

There is a trigger written for warning about the test report format. While uploading the report file onto the database the memory occupied by the test report or the format of the test report should be in PDF or Doc form. This is used for maintaining the integrity of the information on the database.

```
CREATE PROCEDURE INFORM_ADMIN _ABOUT_REPORT_FORMAT (
INT GIVEN_FORMAT)
ex = Exception()
```

```
ex.msg= “DOC and PDF allowed”
//Throw the exception
```

This procedure requests or informs the Admin to choose the test report in a DOC or PDF format and asks Admin to upload a test report of the same format mentioned by throwing an exception containing the message.

CHAPTER 5

FRONT END DESIGN

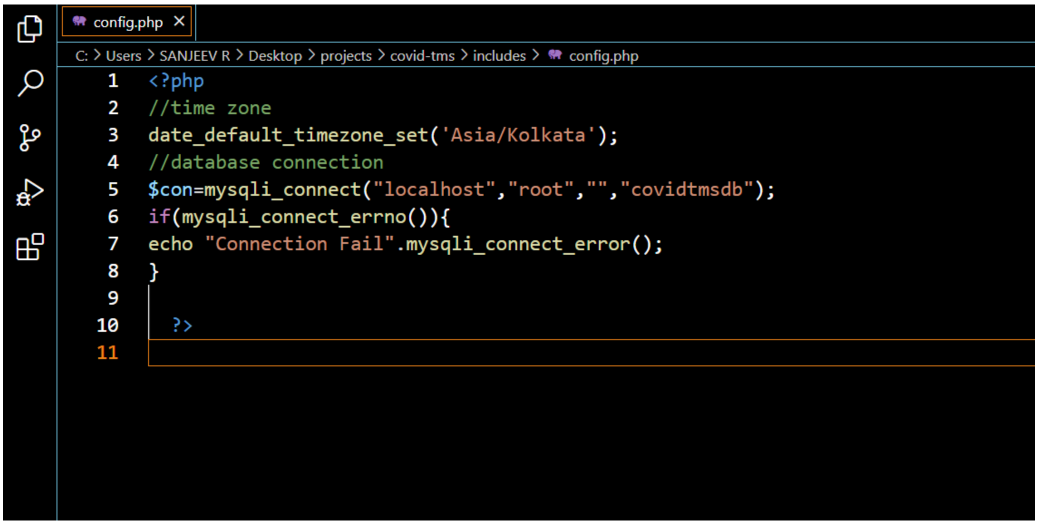
5.1 CONNECTIVITY TO DATABASE

The front-end architecture of **Covid-19 Testing Management System** application is built in HTML, CSS, Bootstrap and JS. The back-end is MYSQL database. PHP(back-end language) is used to connect the front end with the database. PHP is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking etc. PHP supports a large number of major protocols such as POP3, IMAP, and LDAP. PHP4 added support for Java and distributed object architectures (COM and CORBA), making n-tier development a possibility for the first time. PHP files can contain text, HTML, CSS, JavaScript, and PHP code.

Reasons why PHP is chosen at back-end:

- PHP solution can work on various operating systems – Windows, Linux, Mac, Unix
- This programming language provides compatibility with most servers
- PHP is considered to be easy to learn
- PHP works quickly and efficiently on a server-side in most cases
- It supports different types of databases
- PHP is an open-source framework and can be downloaded for free

PHP connection with MYSQL database: (configuration.php)


config.php ×
C: > Users > SANJEEV R > Desktop > projects > covid-tms > includes > config.php

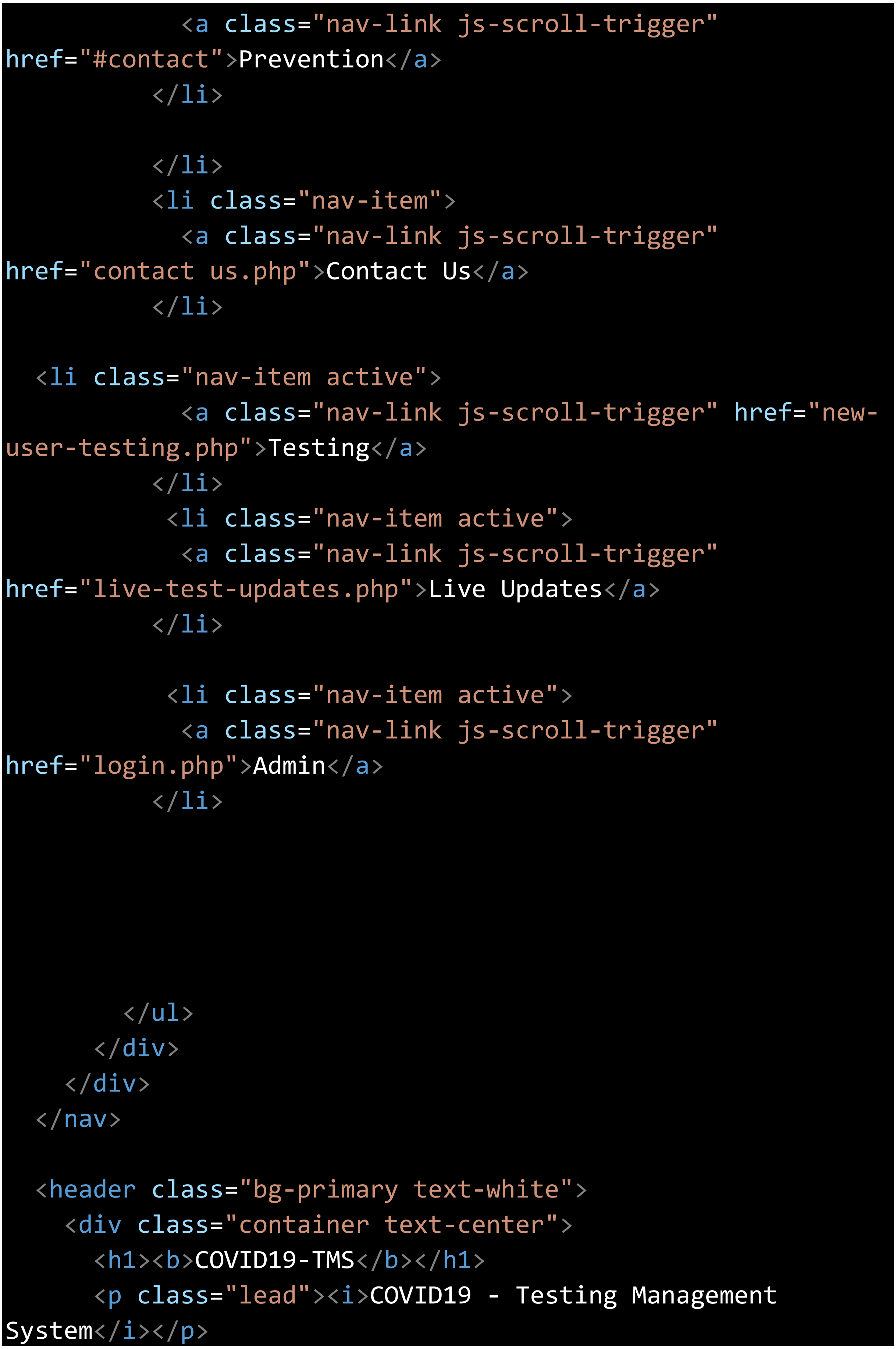
```php
<?php
//time zone
date_default_timezone_set('Asia/Kolkata');
//database connection
$con=mysqli_connect("localhost","root","","covidtmsdb");
if(mysqli_connect_errno()){
echo "Connection Fail".mysqli_connect_error();
}

  ?>

```

5.2 SOURCE CODE

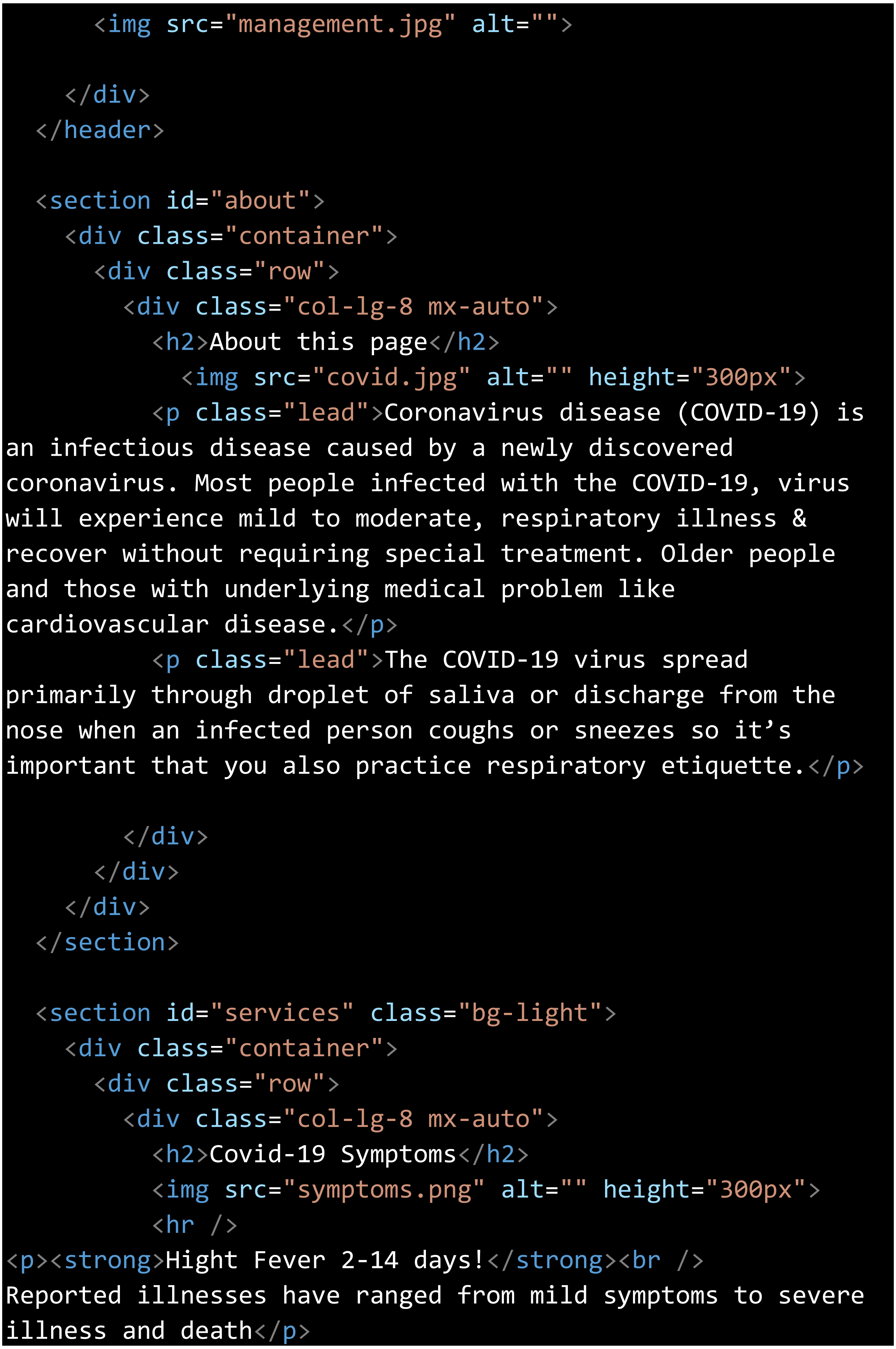
INDEX.PHP

```
<?php include("track.php")?>
<?php include("session.php")?>
<?php include("chat.php")?>
<!DOCTYPE html>
<html lang="en">

<head>

  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1, shrink-to-fit=no">
  <meta name="description" content="">
  <meta name="author" content="">

  <title>Covid-19 Testing Management System</title>

  <!-- Bootstrap core CSS -->
  <link href="vendor/bootstrap/css/bootstrap.min.css"
rel="stylesheet">

  <!-- Custom styles for this template -->
  <link href="css/scrolling-nav.css" rel="stylesheet">

  <style>
     .item{
         list-style-type:none;
         text-align:center;
     }

   .btn{
     border:3px solid blue;
     color:red;

   }
```

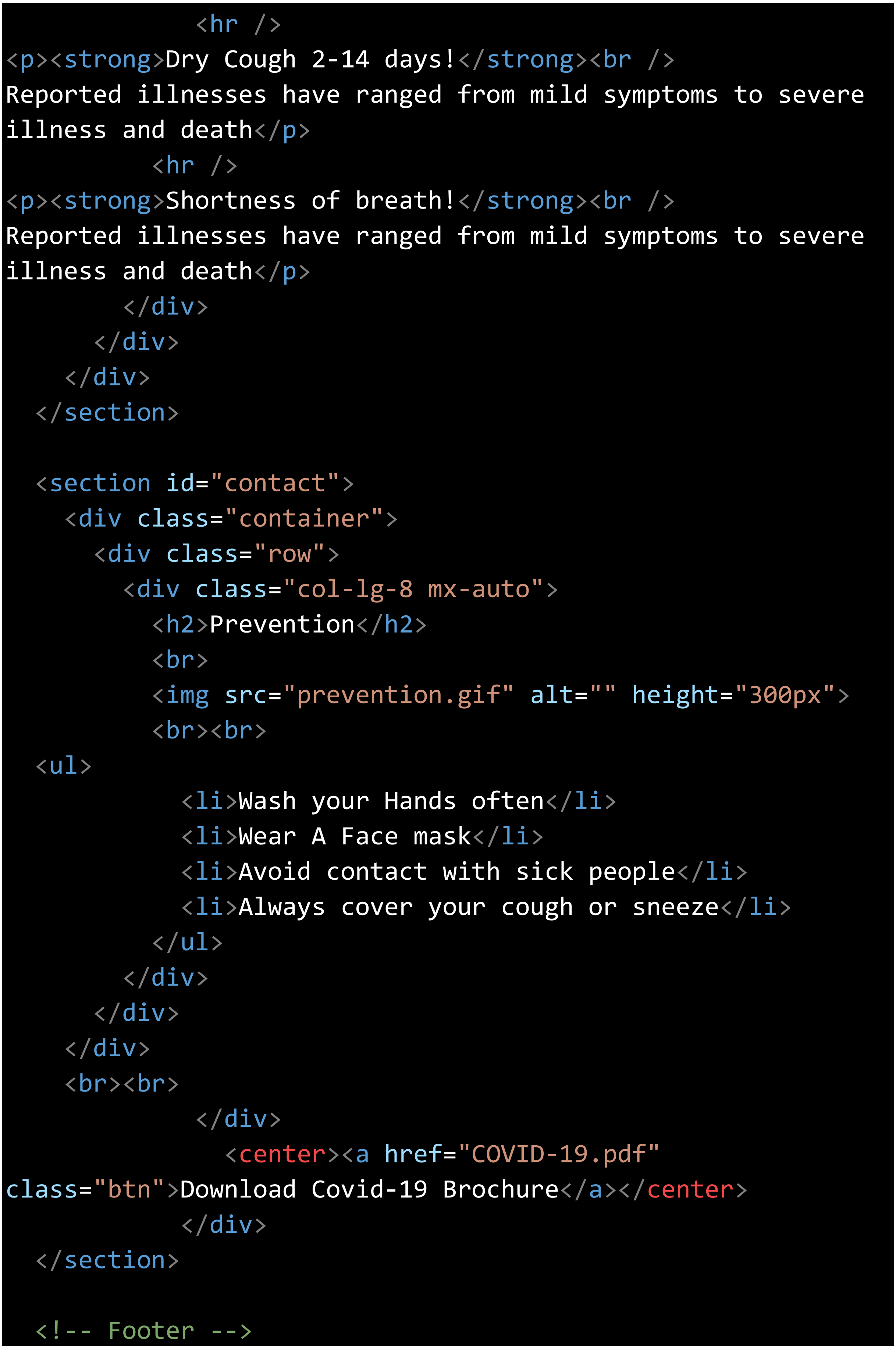
```
 </style>

</head>

<body id="page-top">

  <!-- Navigation -->
  <nav class="navbar navbar-expand-lg navbar-dark bg-dark fixed-top" id="mainNav">
    <div class="container">



      <a class="navbar-brand js-scroll-trigger" href="#page-top">Covid19-TMS</a>


      <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarResponsive" aria-controls="navbarResponsive" aria-expanded="false" aria-label="Toggle navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <div class="collapse navbar-collapse" id="navbarResponsive">
        <ul class="navbar-nav ml-auto">
          <li class="nav-item">
            <a class="nav-link js-scroll-trigger" href="#about">About Coronavirus </a>
          </li>
          <li class="nav-item">
            <a class="nav-link js-scroll-trigger" href="#services">Covid-19 Symptoms</a>

          </li>
          <li class="nav-item">
```



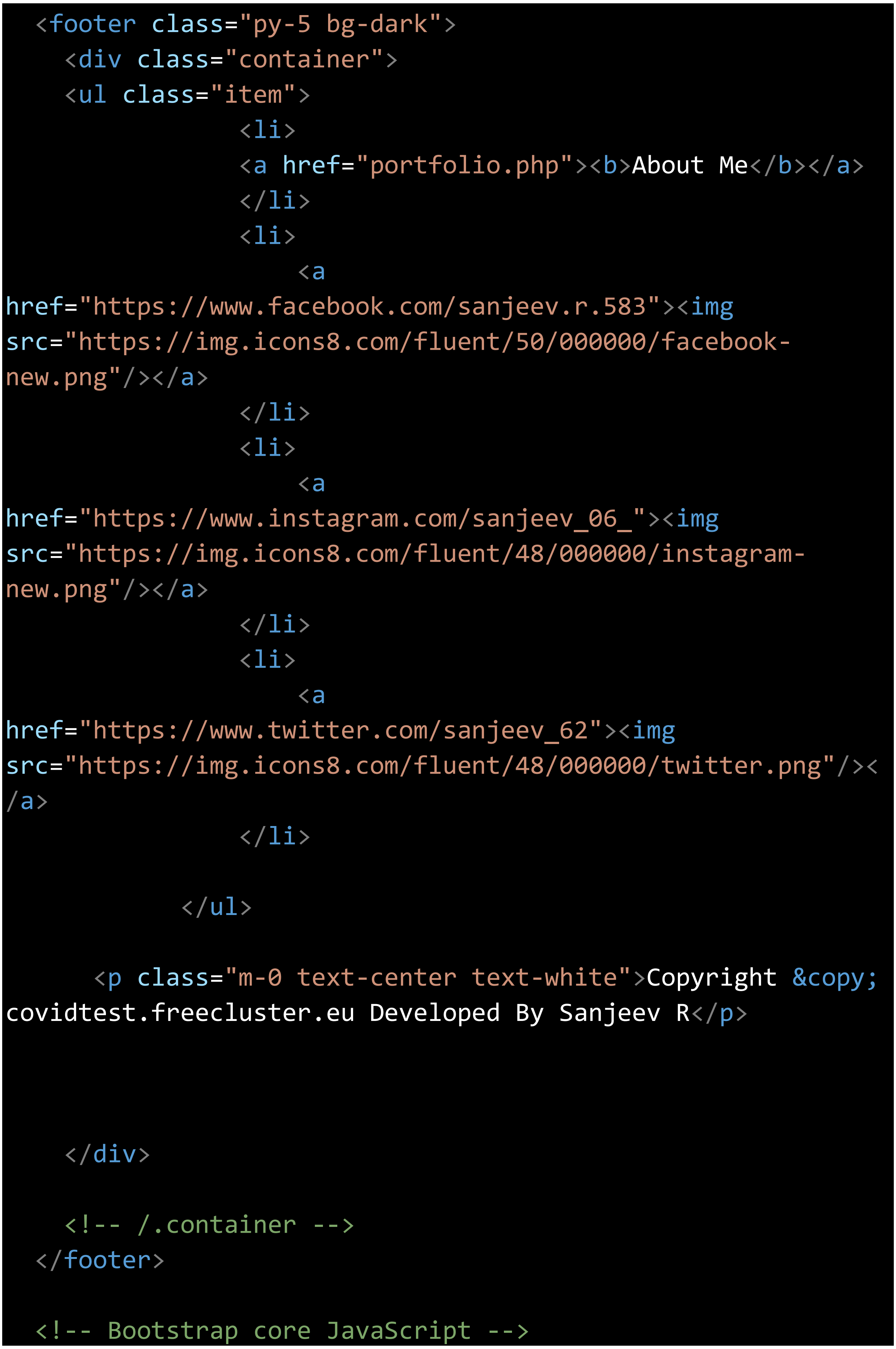
```
            <a class="nav-link js-scroll-trigger"
href="#contact">Prevention</a>
          </li>

          </li>
          <li class="nav-item">
            <a class="nav-link js-scroll-trigger"
href="contact us.php">Contact Us</a>
          </li>

  <li class="nav-item active">
            <a class="nav-link js-scroll-trigger" href="new-
user-testing.php">Testing</a>
          </li>
           <li class="nav-item active">
            <a class="nav-link js-scroll-trigger"
href="live-test-updates.php">Live Updates</a>
          </li>

           <li class="nav-item active">
            <a class="nav-link js-scroll-trigger"
href="login.php">Admin</a>
          </li>





        </ul>
      </div>
    </div>
  </nav>

  <header class="bg-primary text-white">
    <div class="container text-center">
      <h1><b>COVID19-TMS</b></h1>
      <p class="lead"><i>COVID19 - Testing Management
System</i></p>
```



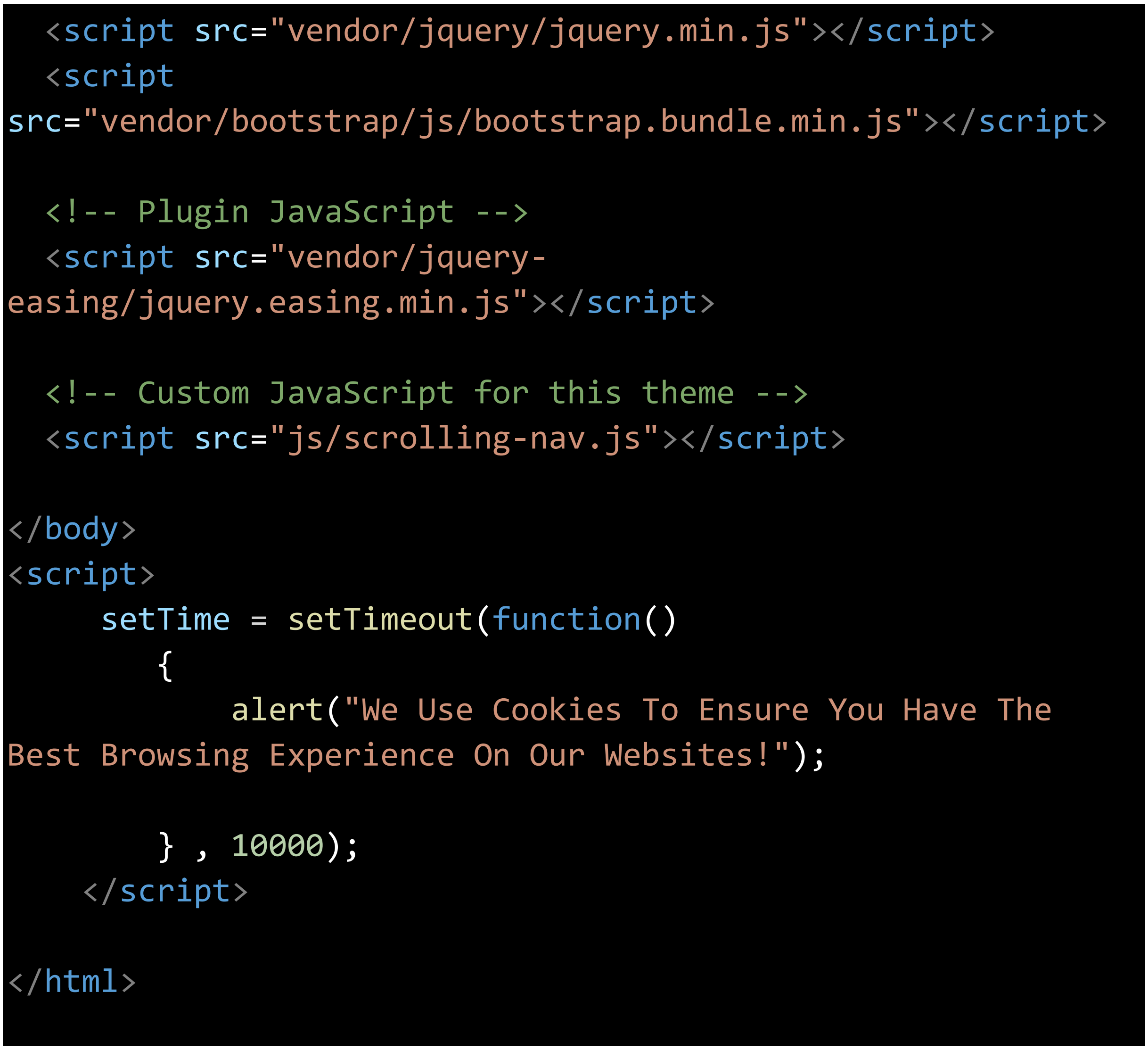
```
      <img src="management.jpg" alt="">

    </div>
  </header>

  <section id="about">
    <div class="container">
      <div class="row">
        <div class="col-lg-8 mx-auto">
          <h2>About this page</h2>
            <img src="covid.jpg" alt="" height="300px">
          <p class="lead">Coronavirus disease (COVID-19) is
an infectious disease caused by a newly discovered
coronavirus. Most people infected with the COVID-19, virus
will experience mild to moderate, respiratory illness &
recover without requiring special treatment. Older people
and those with underlying medical problem like
cardiovascular disease.</p>
          <p class="lead">The COVID-19 virus spread
primarily through droplet of saliva or discharge from the
nose when an infected person coughs or sneezes so it’s
important that you also practice respiratory etiquette.</p>

        </div>
      </div>
    </div>
  </section>

  <section id="services" class="bg-light">
    <div class="container">
      <div class="row">
        <div class="col-lg-8 mx-auto">
          <h2>Covid-19 Symptoms</h2>
          <img src="symptoms.png" alt="" height="300px">
          <hr />
<p><strong>Hight Fever 2-14 days!</strong><br />
Reported illnesses have ranged from mild symptoms to severe
illness and death</p>
```



```
             <hr />
<p><strong>Dry Cough 2-14 days!</strong><br />
Reported illnesses have ranged from mild symptoms to severe
illness and death</p>
          <hr />
<p><strong>Shortness of breath!</strong><br />
Reported illnesses have ranged from mild symptoms to severe
illness and death</p>
        </div>
      </div>
    </div>
  </section>

  <section id="contact">
    <div class="container">
      <div class="row">
        <div class="col-lg-8 mx-auto">
          <h2>Prevention</h2>
          <br>
          <img src="prevention.gif" alt="" height="300px">
          <br><br>
  <ul>
            <li>Wash your Hands often</li>
            <li>Wear A Face mask</li>
            <li>Avoid contact with sick people</li>
            <li>Always cover your cough or sneeze</li>
          </ul>
        </div>
      </div>
    </div>
    <br><br>
             </div>
               <center><a href="COVID-19.pdf"
class="btn">Download Covid-19 Brochure</a></center>
            </div>
  </section>

  <!-- Footer -->
```



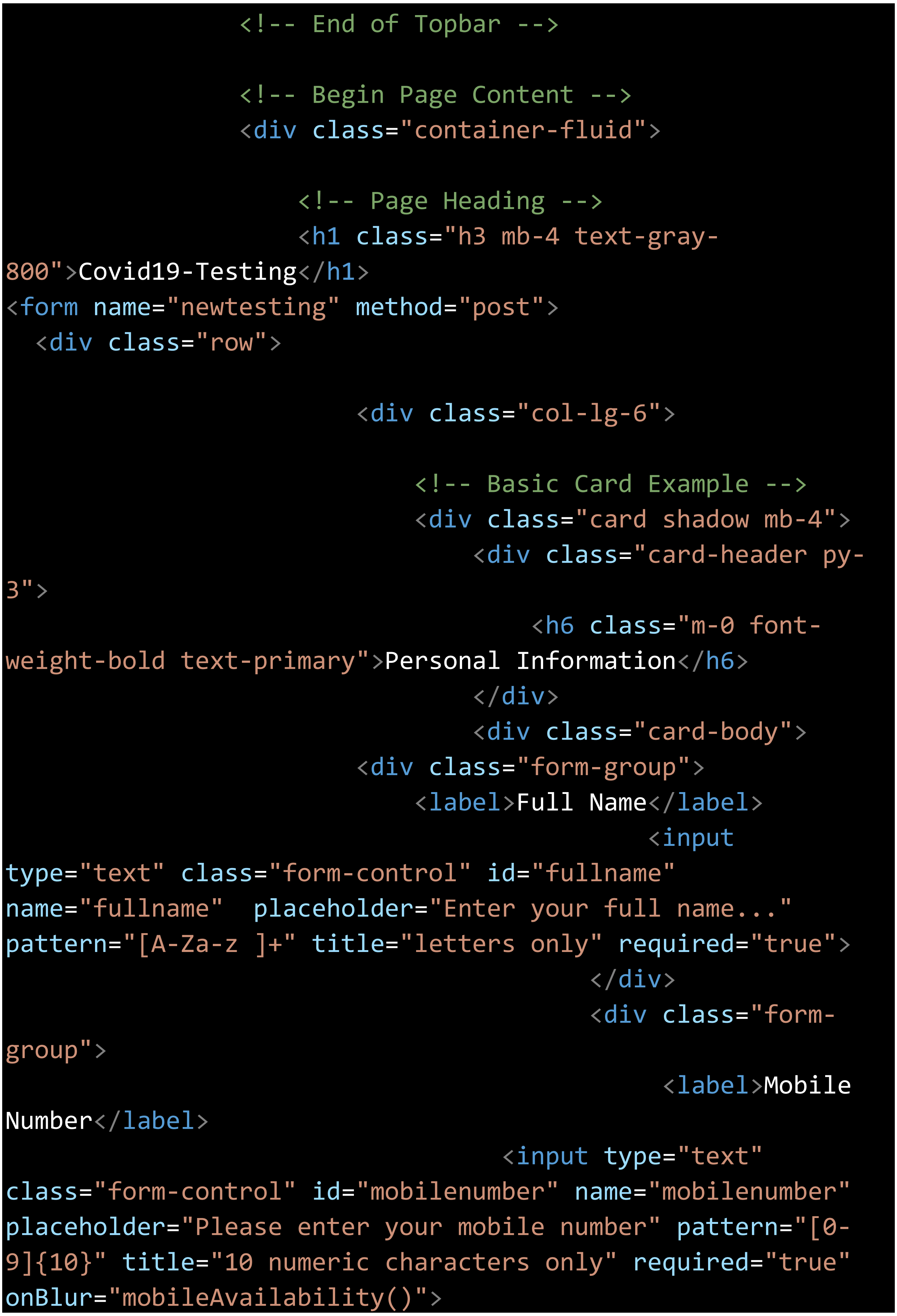
```
  <footer class="py-5 bg-dark">
    <div class="container">
    <ul class="item">
                <li>
                <a href="portfolio.php"><b>About Me</b></a>
                </li>
                <li>
                    <a
href="https://www.facebook.com/sanjeev.r.583"><img
src="https://img.icons8.com/fluent/50/000000/facebook-
new.png"/></a>
                </li>
                <li>
                    <a
href="https://www.instagram.com/sanjeev_06_"><img
src="https://img.icons8.com/fluent/48/000000/instagram-
new.png"/></a>
                </li>
                <li>
                    <a
href="https://www.twitter.com/sanjeev_62"><img
src="https://img.icons8.com/fluent/48/000000/twitter.png"/><
/a>
                </li>

            </ul>

      <p class="m-0 text-center text-white">Copyright &copy;
covidtest.freecluster.eu Developed By Sanjeev R</p>



    </div>

    <!-- /.container -->
  </footer>

  <!-- Bootstrap core JavaScript -->
```



```
  <script src="vendor/jquery/jquery.min.js"></script>
  <script
src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>

  <!-- Plugin JavaScript -->
  <script src="vendor/jquery-
easing/jquery.easing.min.js"></script>

  <!-- Custom JavaScript for this theme -->
  <script src="js/scrolling-nav.js"></script>

</body>
<script>
     setTime = setTimeout(function()
        {
            alert("We Use Cookies To Ensure You Have The
Best Browsing Experience On Our Websites!");

        } , 10000);
    </script>

</html>
```

NEW-USER-TESTING.PHP

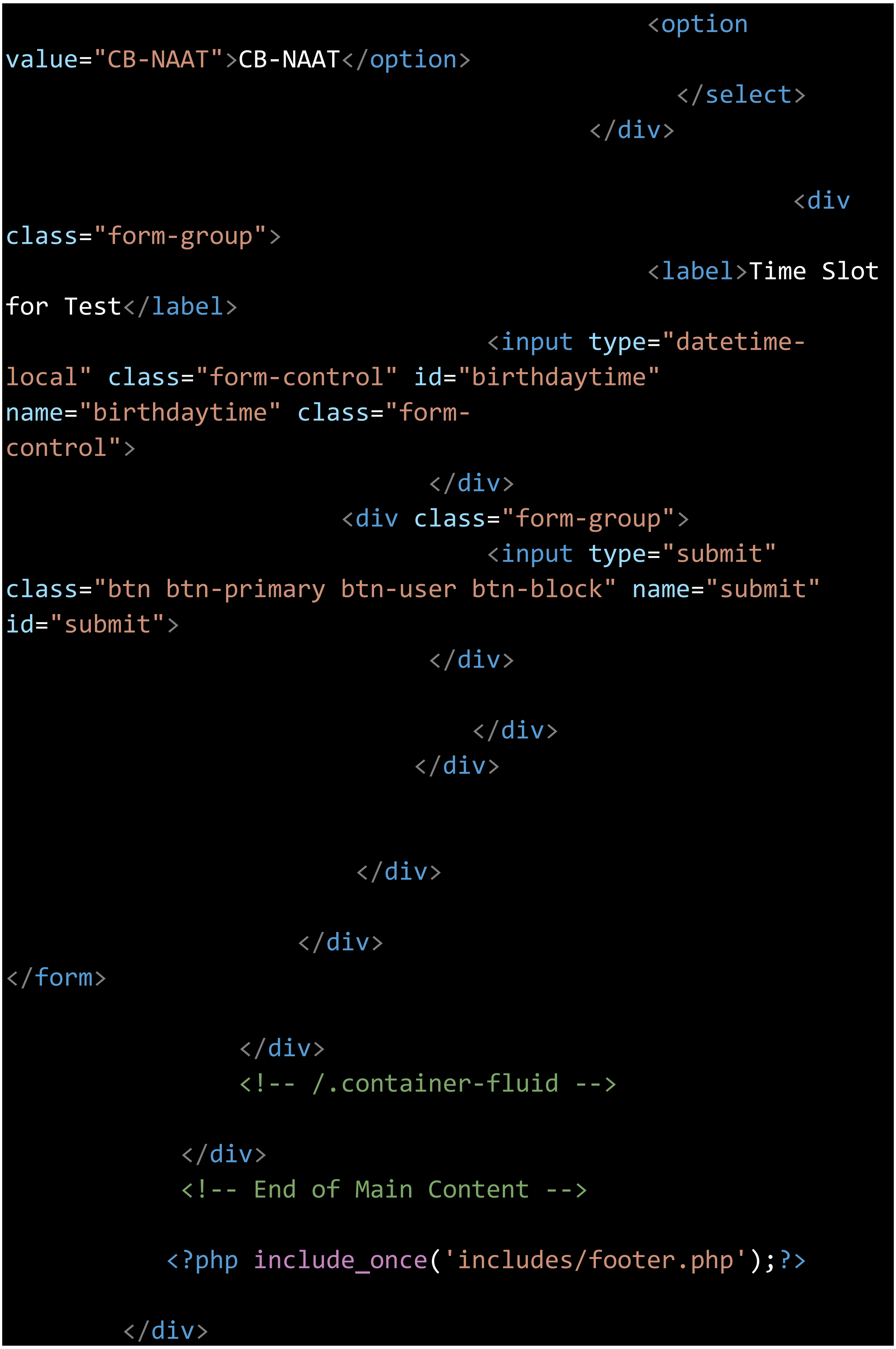
```
<?php
session_start();
error_reporting(0);
//DB conncetion
include_once('includes/config.php');

if(isset($_POST['submit'])){
//getting post values
$fname=$_POST['fullname'];
$mnumber=$_POST['mobilenumber'];
$dob=$_POST['dob'];
$govtid=$_POST['govtissuedid'];
$govtidnumber=$_POST['govtidnumber'];
$address=$_POST['address'];
$state=$_POST['state'];
$testtype=$_POST['testtype'];
$timeslot=$_POST['birthdaytime'];
$orderno= mt_rand(100000000, 999999999);
$query="insert into
tblpatients(FullName,MobileNumber,DateOfBirth,GovtIssuedId,GovtIssuedIdNo,FullAddress,State)
values('$fname','$mnumber','$dob','$govtid','$govtidnumber',
'$address','$state');";
$query.="insert into
tbltestrecord(PatientMobileNumber,TestType,TestTimeSlot,OrderNumber)
values('$mnumber','$testtype','$timeslot','$orderno');";
$result = mysqli_multi_query($con, $query);
if ($result) {
echo '<script>alert("Your test request submitted
successfully. Order number is "+"'.$orderno.'")</script>';
  echo "<script>window.location.href='new-user-testing.php'</script>";
}
else {
    echo "<script>alert('Something went wrong. Please try
again.');</script>";
echo "<script>window.location.href='new-user-
testing.php'</script>";
}
}
?>

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

<head>

    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width,
initial-scale=1, shrink-to-fit=no">
    <meta name="description" content="">
    <meta name="author" content="">

    <title>Covid-19 Testing Management System | New User
Testing</title>

    <!-- Custom fonts for this template-->
    <link href="vendor/fontawesome-free/css/all.min.css"
rel="stylesheet" type="text/css">
    <link
        href="https://fonts.googleapis.com/css?family=Nunito
:200,200i,300,300i,400,400i,600,600i,700,700i,800,800i,900,9
00i"
        rel="stylesheet">

    <!-- Custom styles for this template-->
    <link href="css/sb-admin-2.min.css" rel="stylesheet">
<style type="text/css">
label{
    font-size:16px;
    font-weight:bold;
    color:#000;
}

</style>
  <script>
function mobileAvailability() {
$("#loaderIcon").show();
jQuery.ajax({
url: "check_availability.php",
data:'mobnumber='+$("#mobilenumber").val(),
type: "POST",
success:function(data){
$("#mobile-availability-status").html(data);
$("#loaderIcon").hide();
},
error:function (){}
});
}
</script>

</head>

<body id="page-top">

    <!-- Page Wrapper -->
    <div id="wrapper">

<?php include_once('includes/sidebar.php');?>

        <!-- Content Wrapper -->
        <div id="content-wrapper" class="d-flex flex-
column">

            <!-- Main Content -->
            <div id="content">

                <!-- Topbar -->
          <?php include_once('includes/topbar.php');?>
```



```
                <!-- End of Topbar -->

                <!-- Begin Page Content -->
                <div class="container-fluid">

                    <!-- Page Heading -->
                    <h1 class="h3 mb-4 text-gray-
800">Covid19-Testing</h1>
<form name="newtesting" method="post">
  <div class="row">

                        <div class="col-lg-6">

                            <!-- Basic Card Example -->
                            <div class="card shadow mb-4">
                                <div class="card-header py-
3">
                                    <h6 class="m-0 font-
weight-bold text-primary">Personal Information</h6>
                                </div>
                                <div class="card-body">
                        <div class="form-group">
                            <label>Full Name</label>
                                            <input
type="text" class="form-control" id="fullname"
name="fullname"  placeholder="Enter your full name..."
pattern="[A-Za-z ]+" title="letters only" required="true">
                                        </div>
                                        <div class="form-
group">
                                             <label>Mobile
Number</label>
                                  <input type="text"
class="form-control" id="mobilenumber" name="mobilenumber"
placeholder="Please enter your mobile number" pattern="[0-
9]{10}" title="10 numeric characters only" required="true"
onBlur="mobileAvailability()">
```

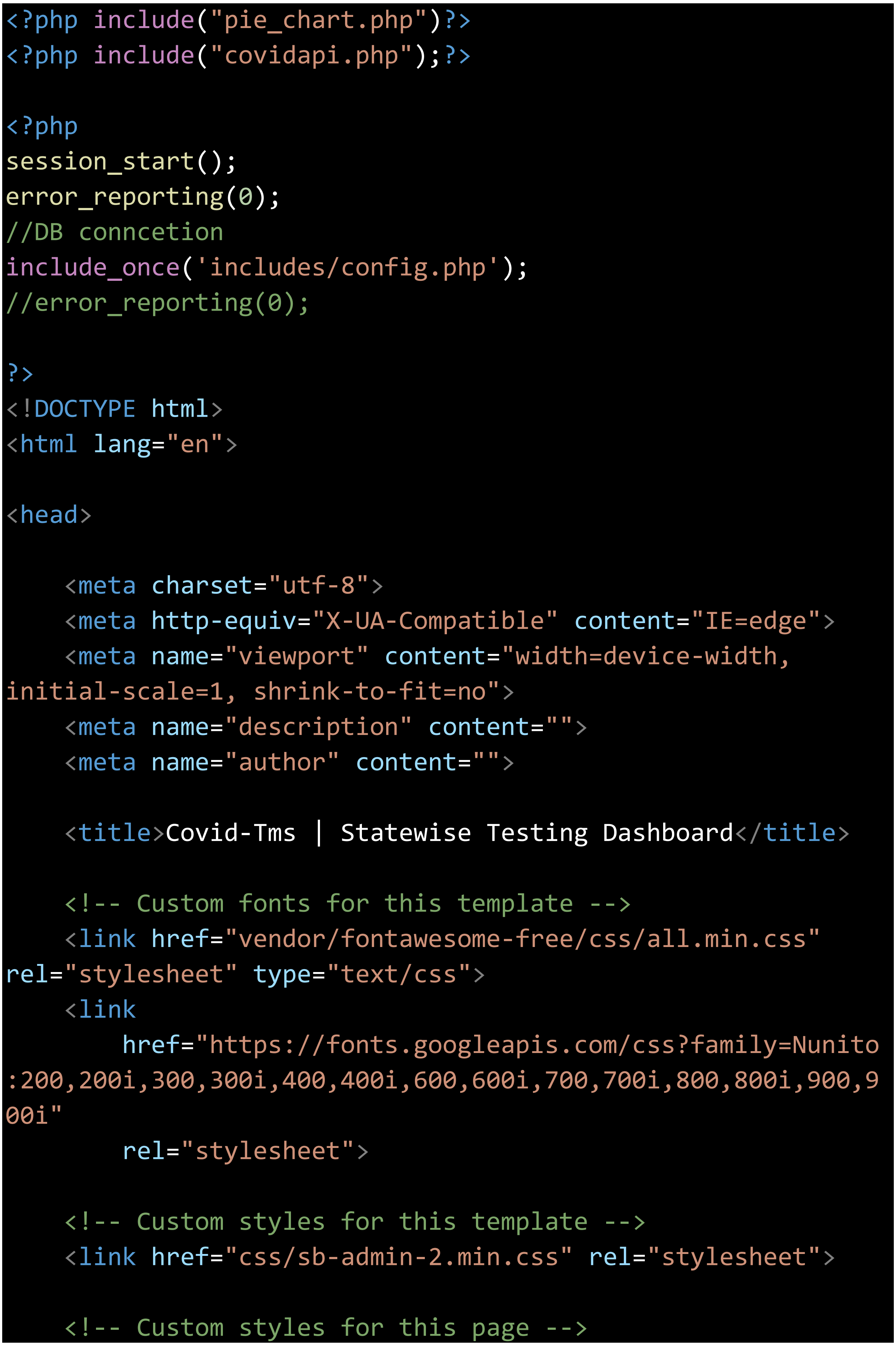
```
                                                <span
id="mobile-availability-status" style="font-
size:12px;"></span>
                                        </div>
                                        <div class="form-
group">
                                             <label>DOB</lab
el>
                                            <input
type="date" class="form-control" id="dob" name="dob"
required="true">
                                        </div>
                                        <div class="form-
group">
                                               <label>Any
Govt Issued ID</label>
                                            <input
type="text" class="form-control" id="govtissuedid"
name="govtissuedid" placeholder="Pancard / Driving License /
Voter id / any other" required="true">
                                        </div>
                                        <div class="form-
group">
                                              <label>Govt
Issued ID Number</label>
                                            <input
type="text" class="form-control" id="govtidnumber"
name="govtidnumber" placeholder="Enter Government Issued ID
Number" required="true">
                                        </div>


                               <div class="form-group">
                                              <label>Address
</label>
                                            <textarea
class="form-control" id="address" name="address"
```

```
required="true" placeholder="Enter your full address
here"></textarea>
                                        </div>
 <div class="form-group">
                                              <label>State</
label>
                                      <input type="text"
class="form-control" id="state" name="state"
placeholder="Enter your State Here" required="true">
                                        </div>

                                </div>
                            </div>

                        </div>

                        <div class="col-lg-6">

                           <div class="card shadow mb-4">
                                <div class="card-header py-
3">
                                    <h6 class="m-0 font-
weight-bold text-primary">Testing Information</h6>
                                </div>
                                <div class="card-body">
                             <div class="form-group">
                                              <label>Test
Type</label>
                                              <select
class="form-control" id="testtype" name="testtype"
required="true">
                                            <option
value="">Select</option>
                                            <option
value="Antigen">Antigen</option>
                                            <option
value="RT-PCR">RT-PCR</option>
```

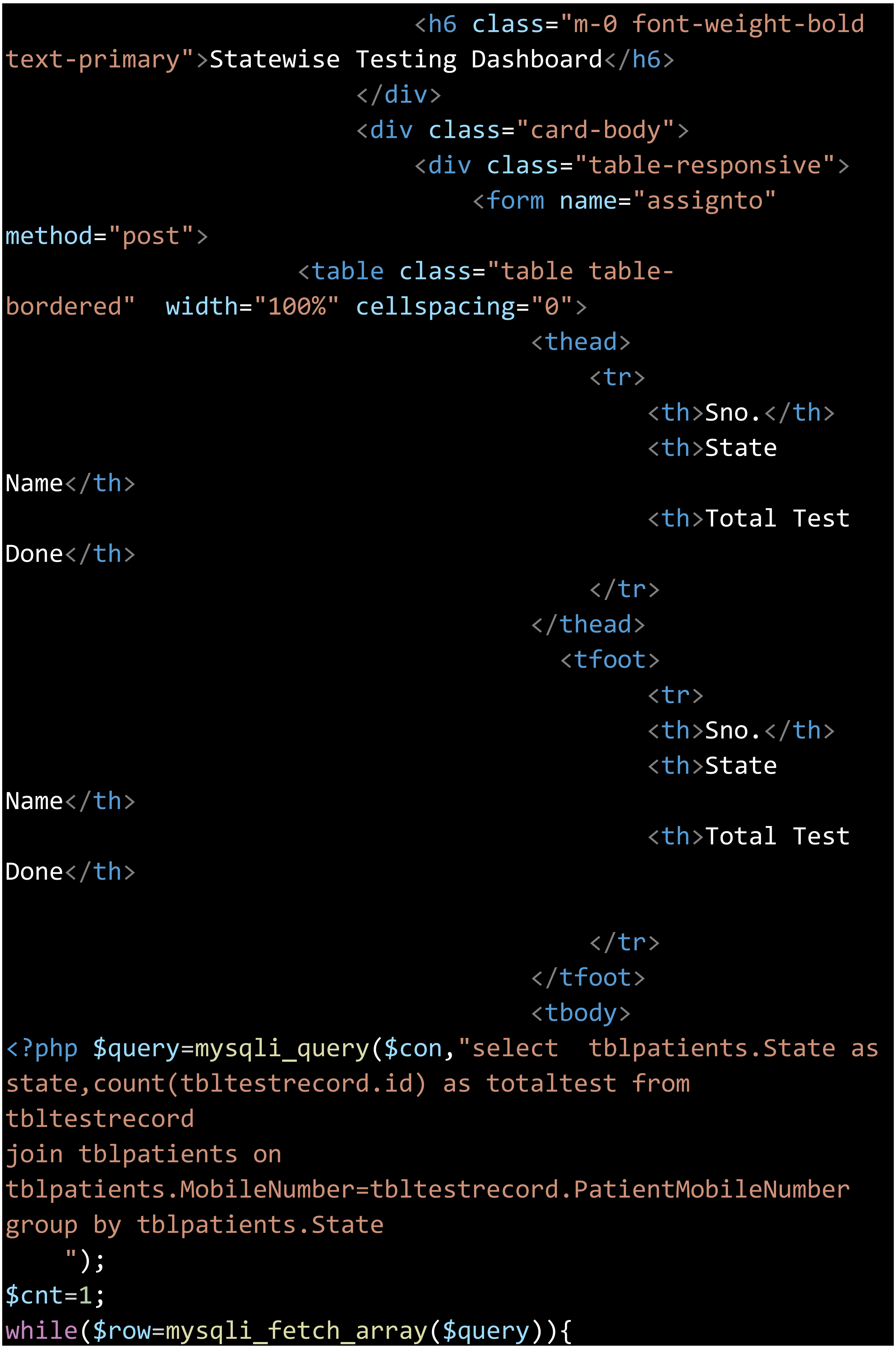


```
                                            <option
value="CB-NAAT">CB-NAAT</option>
                                              </select>
                                        </div>

                                                      <div
class="form-group">
                                            <label>Time Slot
for Test</label>
                                 <input type="datetime-
local" class="form-control" id="birthdaytime"
name="birthdaytime" class="form-
control">
                             </div>
                       <div class="form-group">
                                 <input type="submit"
class="btn btn-primary btn-user btn-block" name="submit"
id="submit">
                             </div>

                                </div>
                            </div>


                        </div>

                    </div>
</form>

                </div>
                <!-- /.container-fluid -->

            </div>
            <!-- End of Main Content -->

           <?php include_once('includes/footer.php');?>

        </div>
        <!-- End of Content Wrapper -->

    </div>
    <!-- End of Page Wrapper -->

    <!-- Scroll to Top Button-->
    <a class="scroll-to-top rounded" href="#page-top">
        <i class="fas fa-angle-up"></i>
    </a>



    <!-- Bootstrap core JavaScript-->
    <script src="vendor/jquery/jquery.min.js"></script>
    <script
src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>

    <!-- Core plugin JavaScript-->
    <script src="vendor/jquery-
easing/jquery.easing.min.js"></script>

    <!-- Custom scripts for all pages-->
    <script src="js/sb-admin-2.min.js"></script>

</body>

</html>
```

LIVE-TEST-UPDATES.PHP

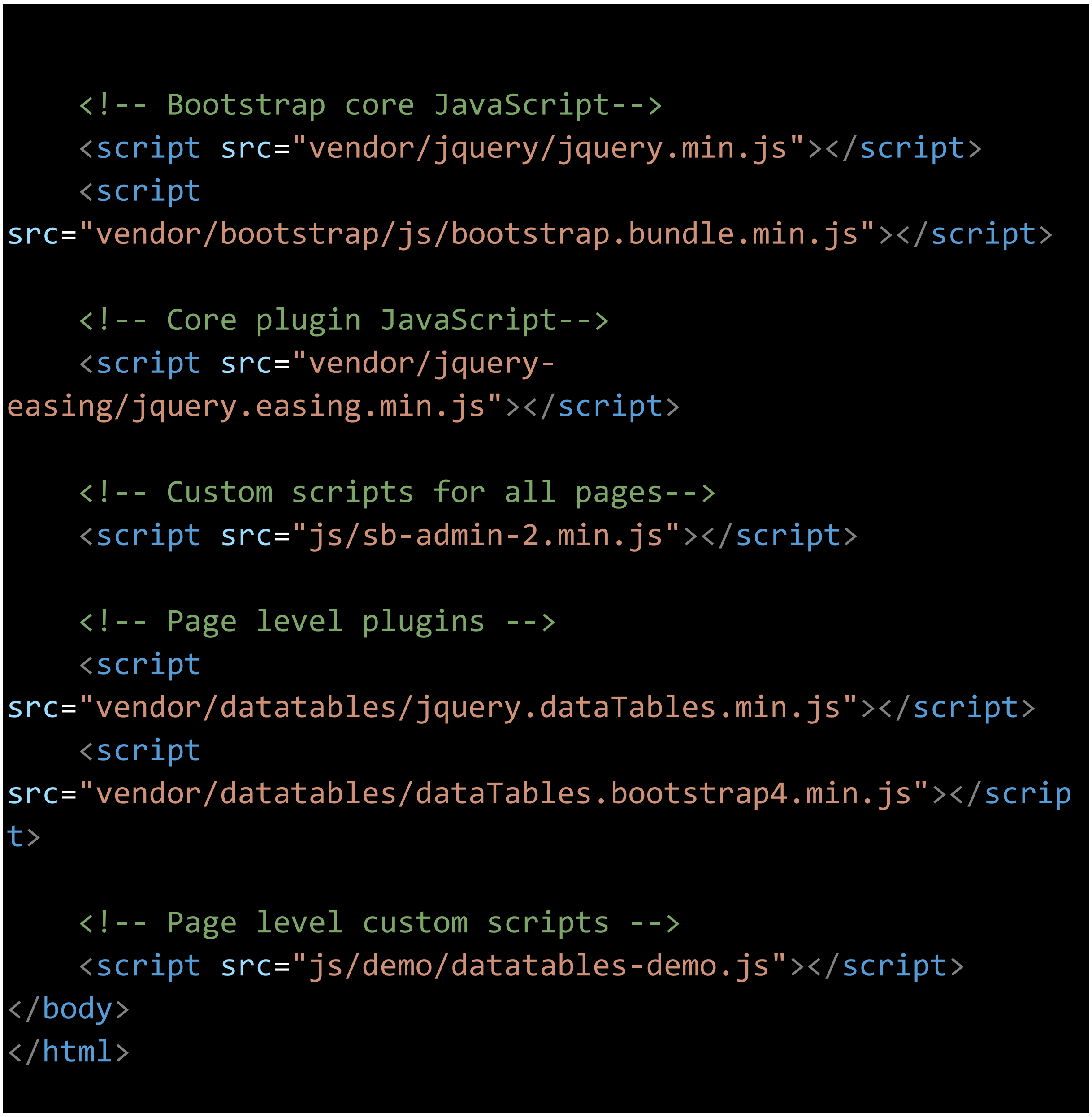


```
<?php include("pie_chart.php")?>
<?php include("covidapi.php");?>

<?php
session_start();
error_reporting(0);
//DB conncetion
include_once('includes/config.php');
//error_reporting(0);

?>
<!DOCTYPE html>
<html lang="en">

<head>

    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width,
initial-scale=1, shrink-to-fit=no">
    <meta name="description" content="">
    <meta name="author" content="">

    <title>Covid-Tms | Statewise Testing Dashboard</title>

    <!-- Custom fonts for this template -->
    <link href="vendor/fontawesome-free/css/all.min.css"
rel="stylesheet" type="text/css">
    <link
        href="https://fonts.googleapis.com/css?family=Nunito
:200,200i,300,300i,400,400i,600,600i,700,700i,800,800i,900,9
00i"
        rel="stylesheet">

    <!-- Custom styles for this template -->
    <link href="css/sb-admin-2.min.css" rel="stylesheet">

    <!-- Custom styles for this page -->
    <link href="vendor/datatables/dataTables.bootstrap4.min.css" rel="stylesheet">

</head>

<body id="page-top">

    <!-- Page Wrapper -->
    <div id="wrapper">

        <!-- Sidebar -->
  <?php include_once('includes/sidebar.php');?>
        <!-- End of Sidebar -->

        <!-- Content Wrapper -->
        <div id="content-wrapper" class="d-flex flex-column">

            <!-- Main Content -->
            <div id="content">

                <!-- Topbar -->
<?php include_once('includes/topbar.php');?>
                <!-- End of Topbar -->

                <!-- Begin Page Content -->
                <div class="container-fluid">

                    <!-- Page Heading -->
                    <h1 class="h3 mb-2 text-gray-800">Statewise Testing Dashboard</h1>


                    <!-- DataTales Example -->
                    <div class="card shadow mb-4">
                        <div class="card-header py-3">
```



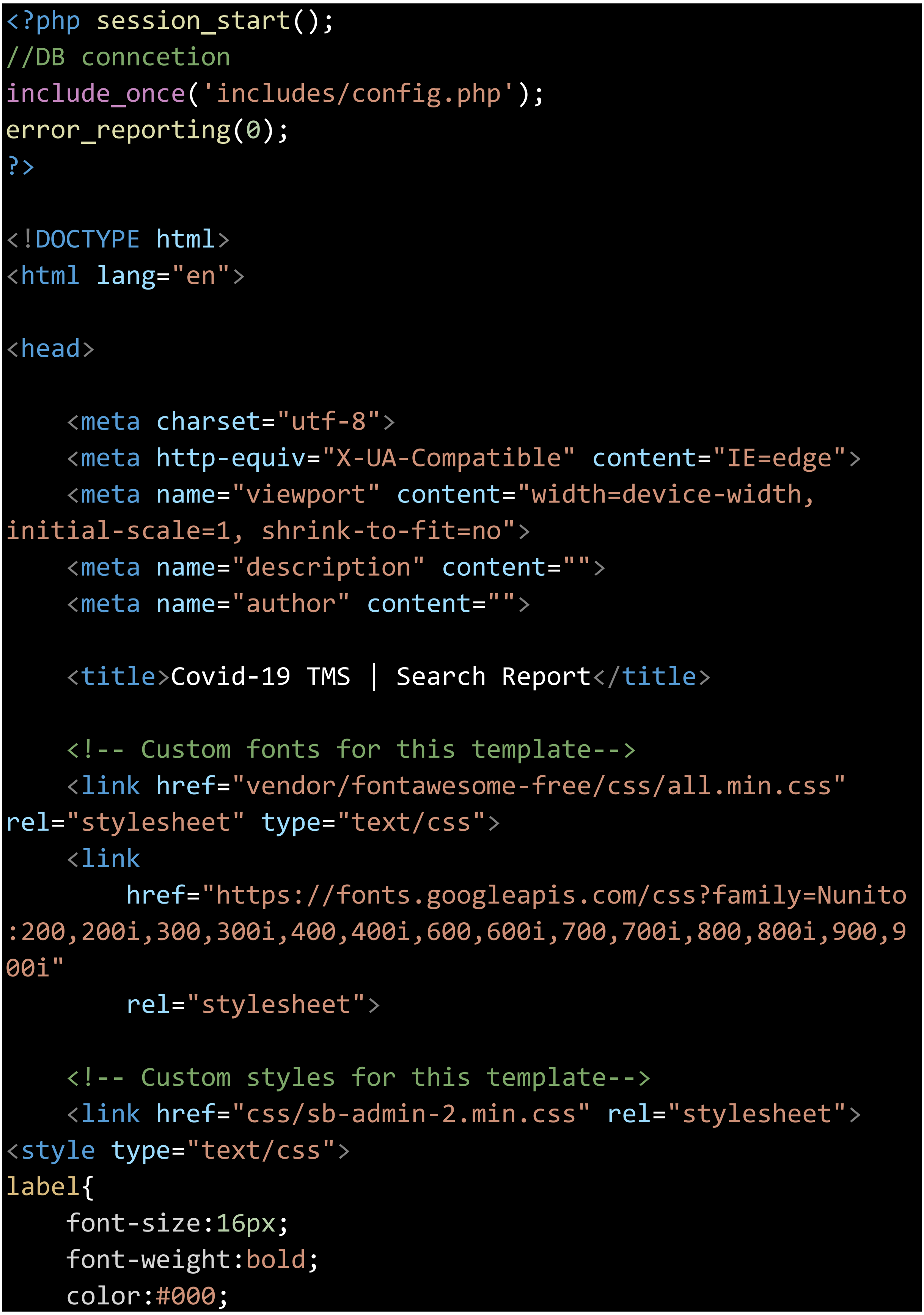
```
                            <h6 class="m-0 font-weight-bold
text-primary">Statewise Testing Dashboard</h6>
                        </div>
                        <div class="card-body">
                            <div class="table-responsive">
                                <form name="assignto"
method="post">
                    <table class="table table-
bordered"  width="100%" cellspacing="0">
                                    <thead>
                                        <tr>
                                            <th>Sno.</th>
                                            <th>State
Name</th>
                                            <th>Total Test
Done</th>
                                        </tr>
                                    </thead>
                                      <tfoot>
                                            <tr>
                                            <th>Sno.</th>
                                            <th>State
Name</th>
                                            <th>Total Test
Done</th>

                                        </tr>
                                    </tfoot>
                                    <tbody>
<?php $query=mysqli_query($con,"select  tblpatients.State as
state,count(tbltestrecord.id) as totaltest from
tbltestrecord
join tblpatients on
tblpatients.MobileNumber=tbltestrecord.PatientMobileNumber
group by tblpatients.State
    ");
$cnt=1;
while($row=mysqli_fetch_array($query)){
```

```
?>

                                        <tr>
                                            <td><?php echo $cnt;?></td>
                                            <td><?php echo $row['state'];?></td>
                                            <td><?php echo $row['totaltest'];?></td>
                                        </tr>
<?php $cnt++;} ?>
                                    </tbody>
                                </table>
                                     </form>
                            </div>
                        </div>
                    </div>

                </div>
                <!-- /.container-fluid -->

            </div>
            <!-- End of Main Content -->


            <!-- Footer -->
    <?php include_once('includes/footer.php');?>
            <!-- End of Footer -->

        </div>
        <!-- End of Content Wrapper -->

    </div>
    <!-- End of Page Wrapper -->

    <!-- Scroll to Top Button-->
  <a class="scroll-to-top rounded" href="#page-top">
        <i class="fas fa-angle-up"></i>
    </a>
```



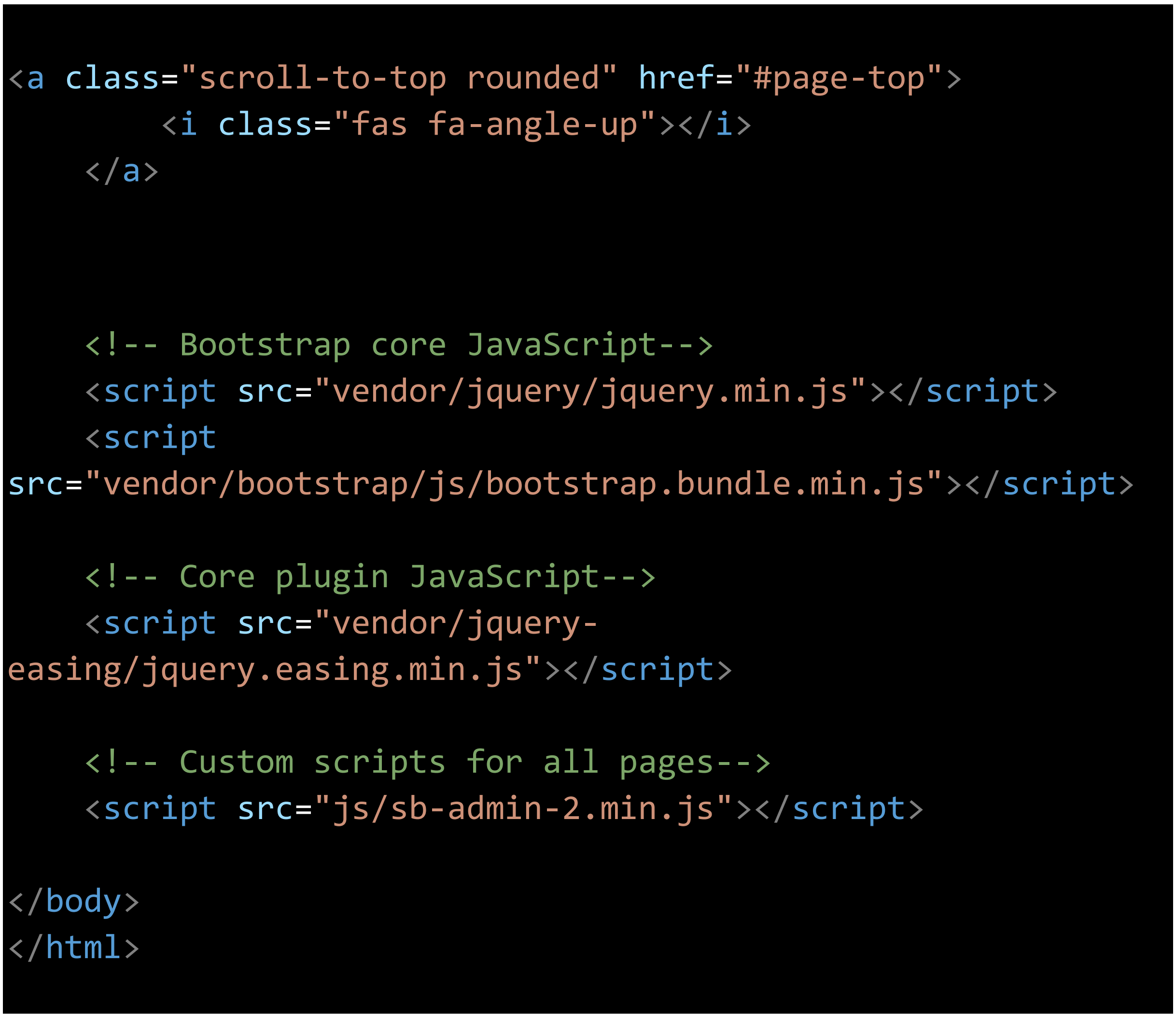
```
    <!-- Bootstrap core JavaScript-->
    <script src="vendor/jquery/jquery.min.js"></script>
    <script
src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>

    <!-- Core plugin JavaScript-->
    <script src="vendor/jquery-
easing/jquery.easing.min.js"></script>

    <!-- Custom scripts for all pages-->
    <script src="js/sb-admin-2.min.js"></script>

    <!-- Page level plugins -->
    <script
src="vendor/datatables/jquery.dataTables.min.js"></script>
    <script
src="vendor/datatables/dataTables.bootstrap4.min.js"></scrip
t>

    <!-- Page level custom scripts -->
    <script src="js/demo/datatables-demo.js"></script>
</body>
</html>
```

PATIENT-SEARCH-REPORT.PHP



```
<?php session_start();
//DB conncetion
include_once('includes/config.php');
error_reporting(0);
?>

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

<head>

    <meta charset="utf-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <meta name="viewport" content="width=device-width,
initial-scale=1, shrink-to-fit=no">
    <meta name="description" content="">
    <meta name="author" content="">

    <title>Covid-19 TMS | Search Report</title>

    <!-- Custom fonts for this template-->
    <link href="vendor/fontawesome-free/css/all.min.css"
rel="stylesheet" type="text/css">
    <link
        href="https://fonts.googleapis.com/css?family=Nunito
:200,200i,300,300i,400,400i,600,600i,700,700i,800,800i,900,9
00i"
        rel="stylesheet">

    <!-- Custom styles for this template-->
    <link href="css/sb-admin-2.min.css" rel="stylesheet">
<style type="text/css">
label{
    font-size:16px;
    font-weight:bold;
    color:#000;
}

</style>
</head>

<body id="page-top">

    <!-- Page Wrapper -->
    <div id="wrapper">

<?php include_once('includes/sidebar.php');?>

        <!-- Content Wrapper -->
        <div id="content-wrapper" class="d-flex flex-
column">

            <!-- Main Content -->
            <div id="content">

                <!-- Topbar -->
          <?php include_once('includes/topbar.php');?>
                <!-- End of Topbar -->

                <!-- Begin Page Content -->
                <div class="container-fluid">

                    <!-- Page Heading -->
                    <h1 class="h3 mb-4 text-gray-800">Search
Report</h1>

<form method="post" action="patient-report.php">
  <div class="row">

                        <div class="col-lg-6">

                            <!-- Basic Card Example -->
                            <div class="card shadow mb-4">
```

```
                                <div class="card-body">
                       <div class="form-group">
                                             <label>Search
By Patient Name or Mobile Number or Order Number</label>
                                            <input
type="text" class="form-control" id="searchdata"
name="searchdata" required="true" placeholder="Enter name or
mobile number or Order Number">
                                        </div>


<div class="form-group">
                                 <input type="submit"
class="btn btn-primary btn-user btn-block" name="search"
value="Search">
                             </div>

                                    </div>
                                </div>
                            </div>
                        </div>
</form>


                </div>
                <!-- /.container-fluid -->

            </div>
            <!-- End of Main Content -->

           <?php include_once('includes/footer.php');?>

        </div>
        <!-- End of Content Wrapper -->

    </div>
    <!-- End of Page Wrapper -->

    <!-- Scroll to Top Button-->
```



```html
<a class="scroll-to-top rounded" href="#page-top">
        <i class="fas fa-angle-up"></i>
    </a>



    <!-- Bootstrap core JavaScript-->
    <script src="vendor/jquery/jquery.min.js"></script>
    <script
src="vendor/bootstrap/js/bootstrap.bundle.min.js"></script>

    <!-- Core plugin JavaScript-->
    <script src="vendor/jquery-
easing/jquery.easing.min.js"></script>

    <!-- Custom scripts for all pages-->
    <script src="js/sb-admin-2.min.js"></script>

</body>
</html>
```

CHAPTER 6

TESTING

6.1 TEST CASES FOR THE PROJECT

The following test cases are developed to ascertain the integrity of the Covid-19 Testing Management System application:

Test Case 1: Ensure the website homepage's display is intact and all the navigations are correct.

Result: Passed. All the navigations lead to the expected pages/section and homepage's display is intact on all devices such as a laptop or a mobile phone.

Test Case 2: Ensure the User/Patient's details form is being accurately filled and submitted with correct validations.

Result: Passed. The User/Patient's details form works as expected and all required field indications are present and functions properly.

Test Case 3: After form submission, ensure User/Patient details is stored in the DB.
Result: Passed. After the User/Patient details form submission, a tuple is created with the correct attributes and the said tuple is stored in the appropriate tables.

Test Case 4: Referential integrity, triggers and stored procedures are implemented.
Result: Passed. If invalid data that violates referential integrity is being inserted, an appropriate error message is shown on the UI which prevents the data being inserted.

Test Case 5: The Live Updates page is rendered properly with a pie-chart.
Result: Passed. State wise Covid tests is visualized using a graphical representation.

Test Case 6: Admin gets an admin panel to manage all the test reports submitted by the user/patient and all admin, phlebotomist details are stored in DB.

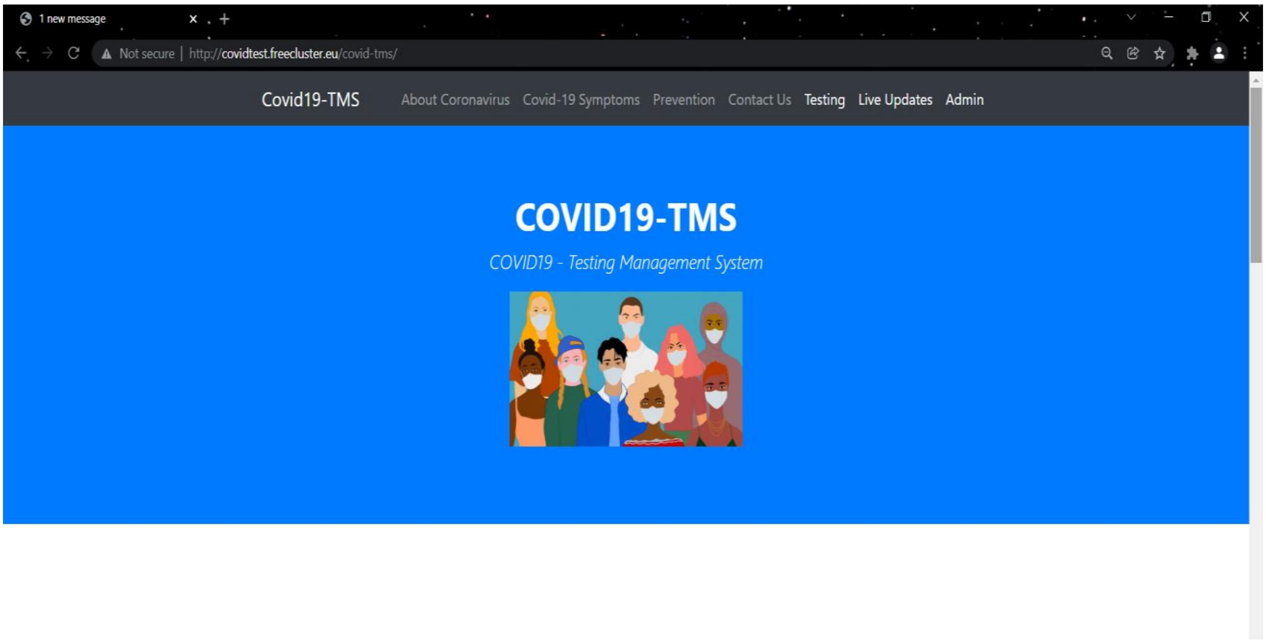
Result: Passed. Admin manages the tests reports and assigns Phlebotomist to take care of the test reports and all the details are stored in DB.

CHAPTER 7

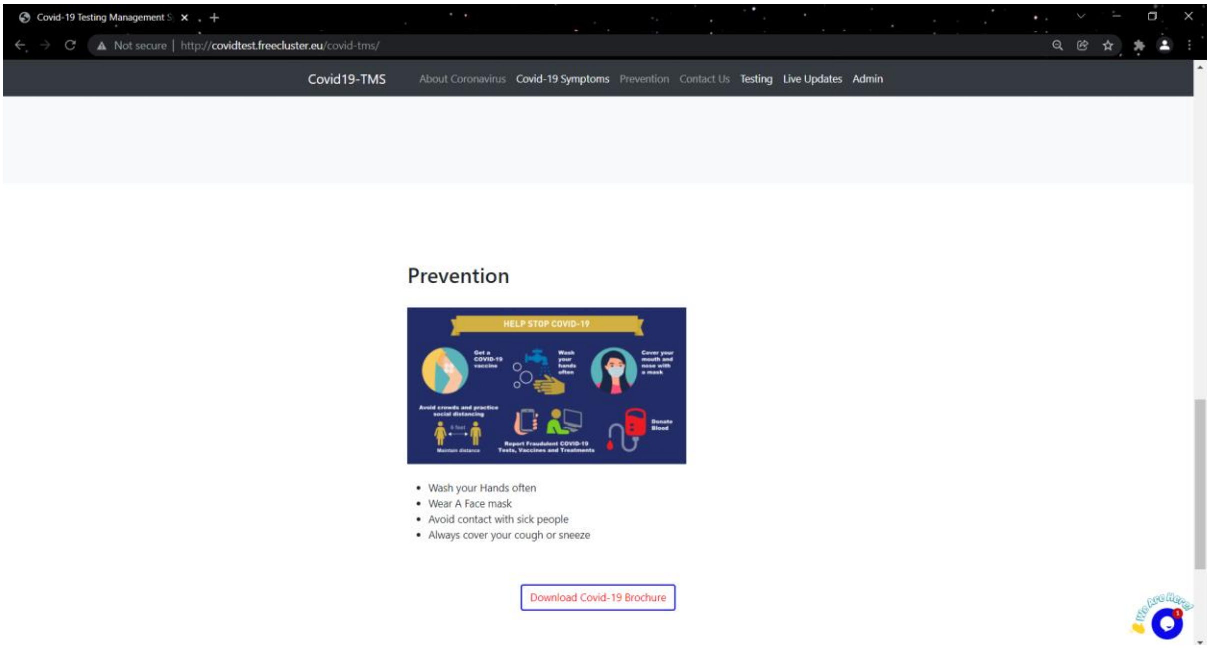
RESULTS

7.1 SNAPSHOTS

Homepage- Landing page



User/Patient can download a brochure which contains protocols and regulations to be followed to stop the further spread of Cononavirus disease.

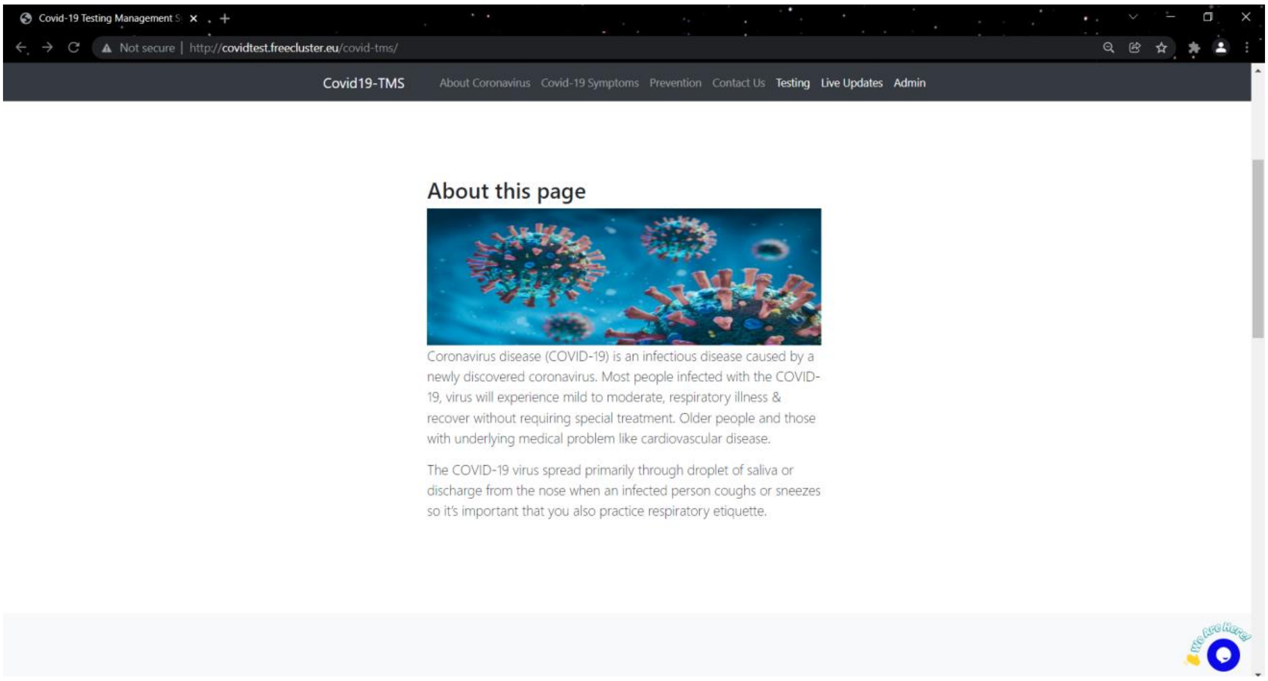

Covid-19 Testing Management S
Not secure | http://covidtest.freecluster.eu/covid-tms/
Covid19-TMS
About Coronavirus
Covid-19 Symptoms
Prevention
Contact Us
Testing
Live Updates
Admin
HELP STOP COVID-19
Get a COVID-19 vaccine
Wash your hands often
Cover your mouth and nose with a mask
Avoid crowds and practice social distancing
6 feet
Maintain distance
Report Fraudulent COVID-19 Tests, Vaccines and Treatments
Donate Blood
Download Covid-19 Brochure

Prevention

- Wash your Hands often
- Wear A Face mask
- Avoid contact with sick people
- Always cover your cough or sneeze

What is Covid-19 Testing Management System?

This is a website used to test for Covid-19. Website basically demonstrates how the user/patient gives for a Covid test and how it is manged by the admin, phlebotomist and how all the information or data is stored at back-end database.

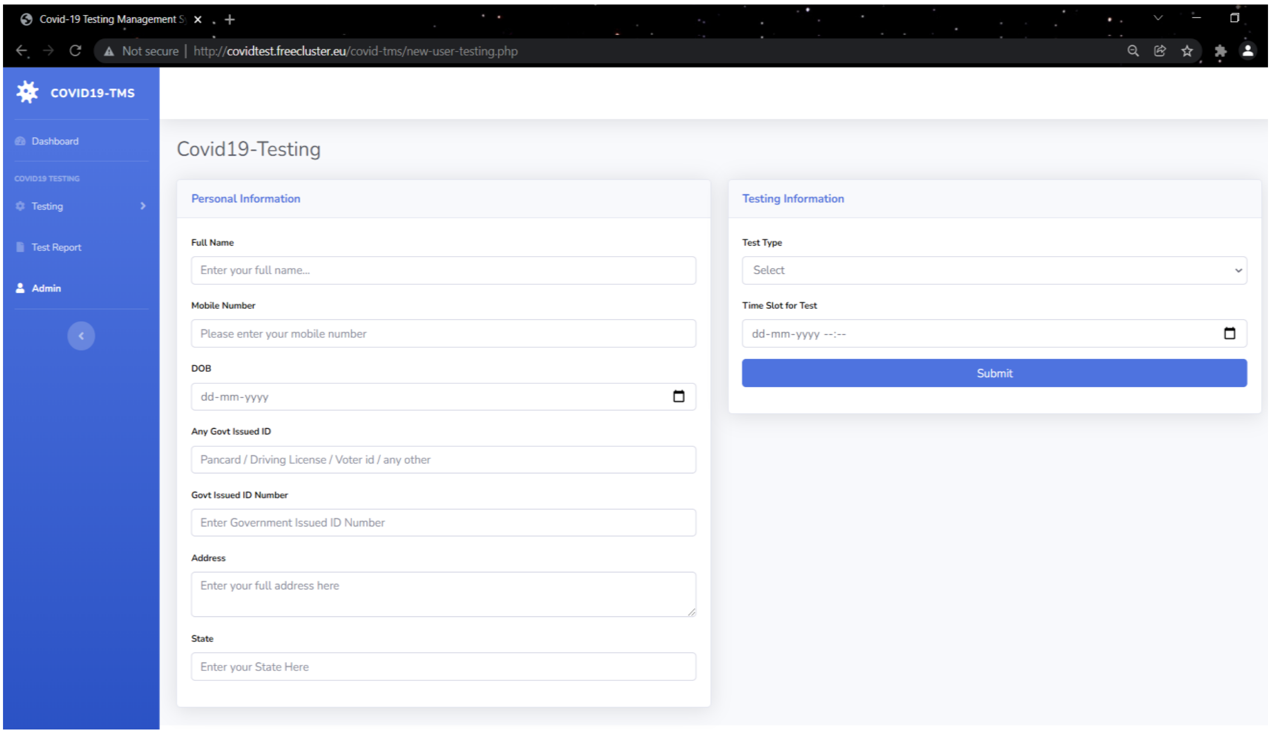


About this page

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Most people infected with the COVID-19, virus will experience mild to moderate, respiratory illness & recover without requiring special treatment. Older people and those with underlying medical problem like cardiovascular disease.

The COVID-19 virus spread primarily through droplet of saliva or discharge from the nose when an infected person coughs or sneezes so it's important that you also practice respiratory etiquette.

Testing Section for user/patient:


Covid-19 Testing Management S
Not secure | http://covidtest.freecluster.eu/covid-tms/new-user-testing.php
COVID19-TMS
Dashboard
COVID19 TESTING
Testing
Test Report
Admin
Submit

Covid19-Testing

Personal Information

Full Name: Enter your full name...

Mobile Number: Please enter your mobile number

DOB: dd-mm-yyyy

Any Govt Issued ID: Pancard / Driving License / Voter id / any other

Govt Issued ID Number: Enter Government Issued ID Number

Address: Enter your full address here

State: Enter your State Here

Testing Information

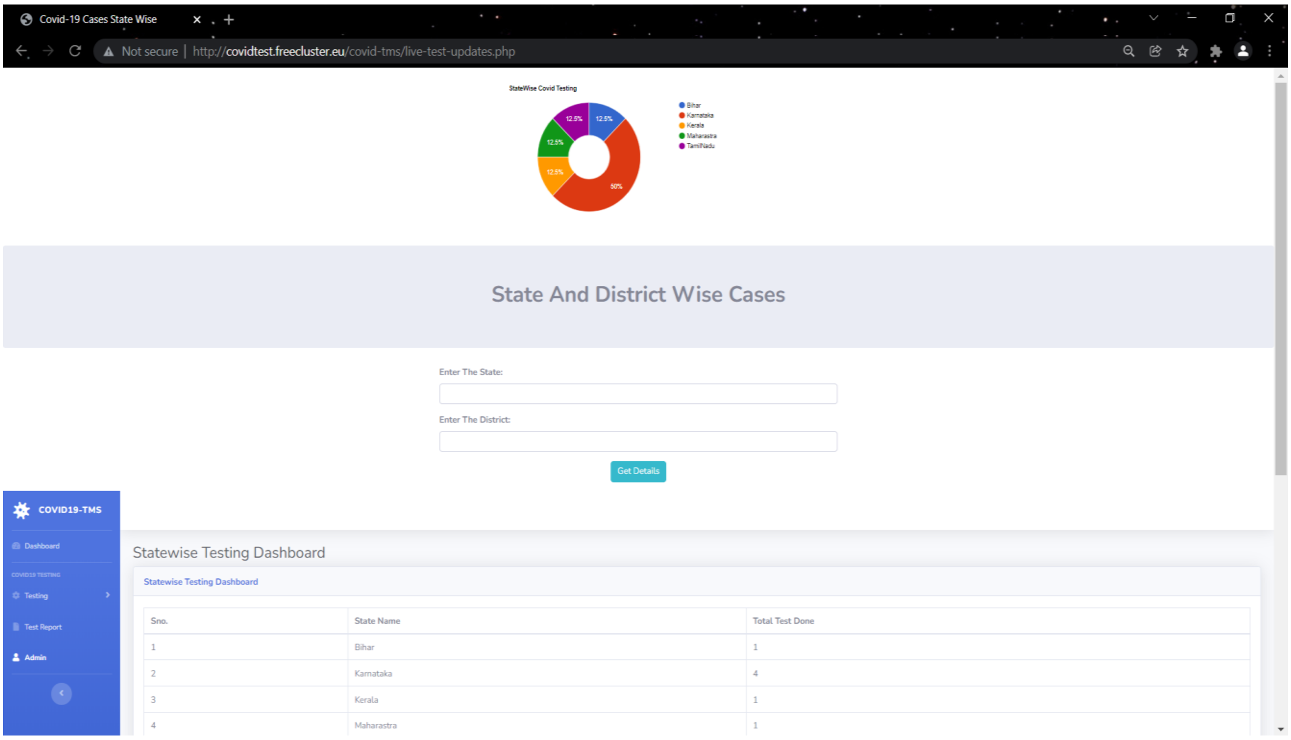
Test Type: Select

Time Slot for Test: dd-mm-yyyy --:--

Live Update Section

This section shows the State wise testing done with a graphical representation that is pie-chart.

This also shows State and District Wise Cases. This is done using an **API (APPLICATION PROGRAMMING INTERFACE)** which fetches the data from https://data.covid19india.org/state_district_wise.json



State And District Wise Cases

Enter The State:

Enter The District:

Get Details

Statewise Testing Dashboard

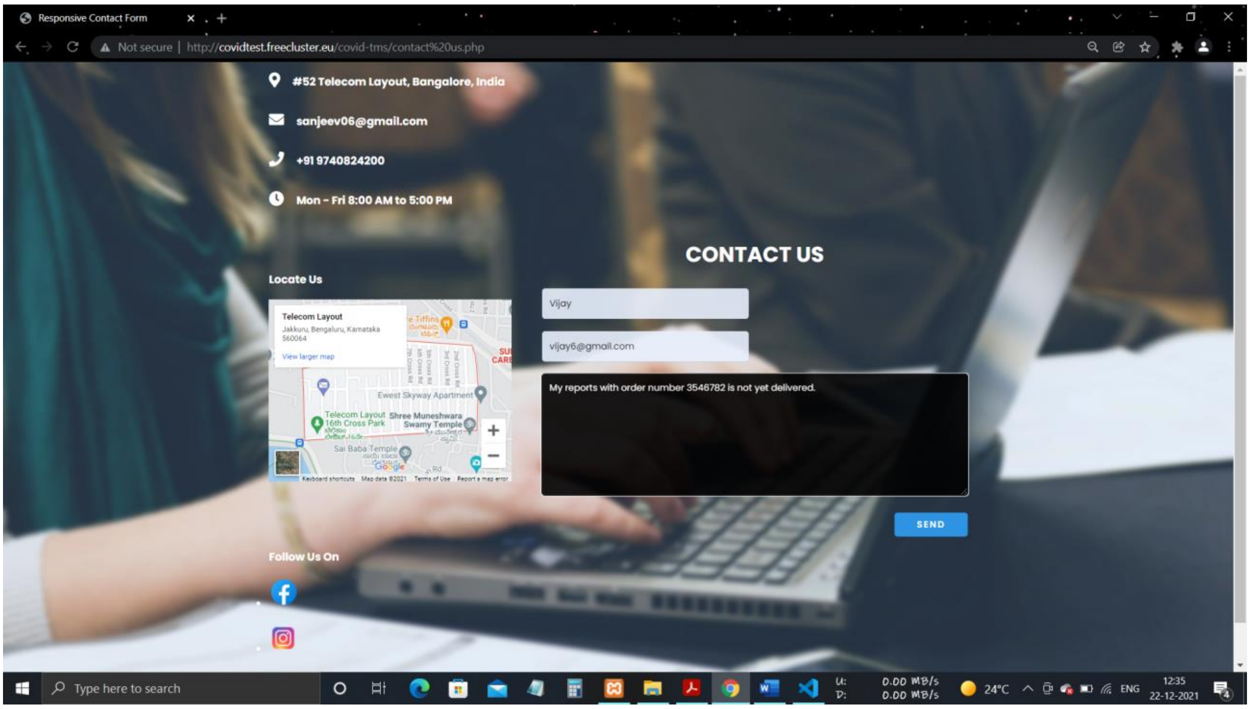
Statewise Testing Dashboard

Sno.	State Name	Total Test Done
1	Bihar	1
2	Karnataka	4
3	Kerala	1
4	Maharastra	1

Contact Us Section

This section is helpful for the user/patient when he/she has some issues or queries with covid testing. The user or patient may contact the admin and tell their issues or queries.

When the user inputs his/her name, email, and the message and clicks on send button, the message is sent to admin mail id using **SMTP (Simple Mail Transfer Protocol)** which is an internet standard communication protocol for electronic mail transmission.


Responsive Contact Form
Not secure | http://covidtest.freecluster.eu/covid-tms/contact%20us.php
Type here to search
24°C ENG
12:35
22-12-2021

#52 Telecom Layout, Bangalore, India

sanjeev06@gmail.com

+91 9740824200

Mon - Fri 8:00 AM to 5:00 PM

Locate Us

Telecom Layout
Jakkuru, Bengaluru, Karnataka
560064
View larger map

Follow Us On

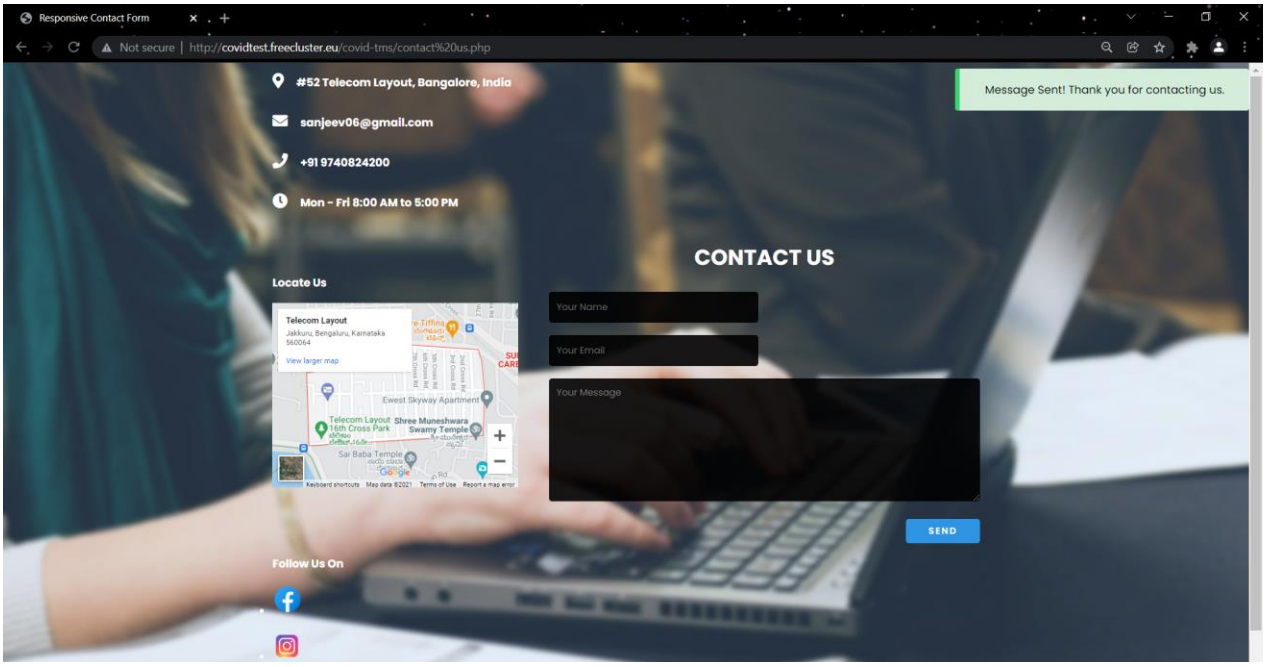
CONTACT US

Vijay

vijay6@gmail.com

My reports with order number 3546782 is not yet delivered.

SEND


Responsive Contact Form
Not secure | http://covidtest.freecluster.eu/covid-tms/contact%20us.php

Message Sent! Thank you for contacting us.

#52 Telecom Layout, Bangalore, India

sanjeev06@gmail.com

+91 9740824200

Mon - Fri 8:00 AM to 5:00 PM

Locate Us

Telecom Layout
Jakkuru, Bengaluru, Karnataka
560064
View larger map

Follow Us On

CONTACT US

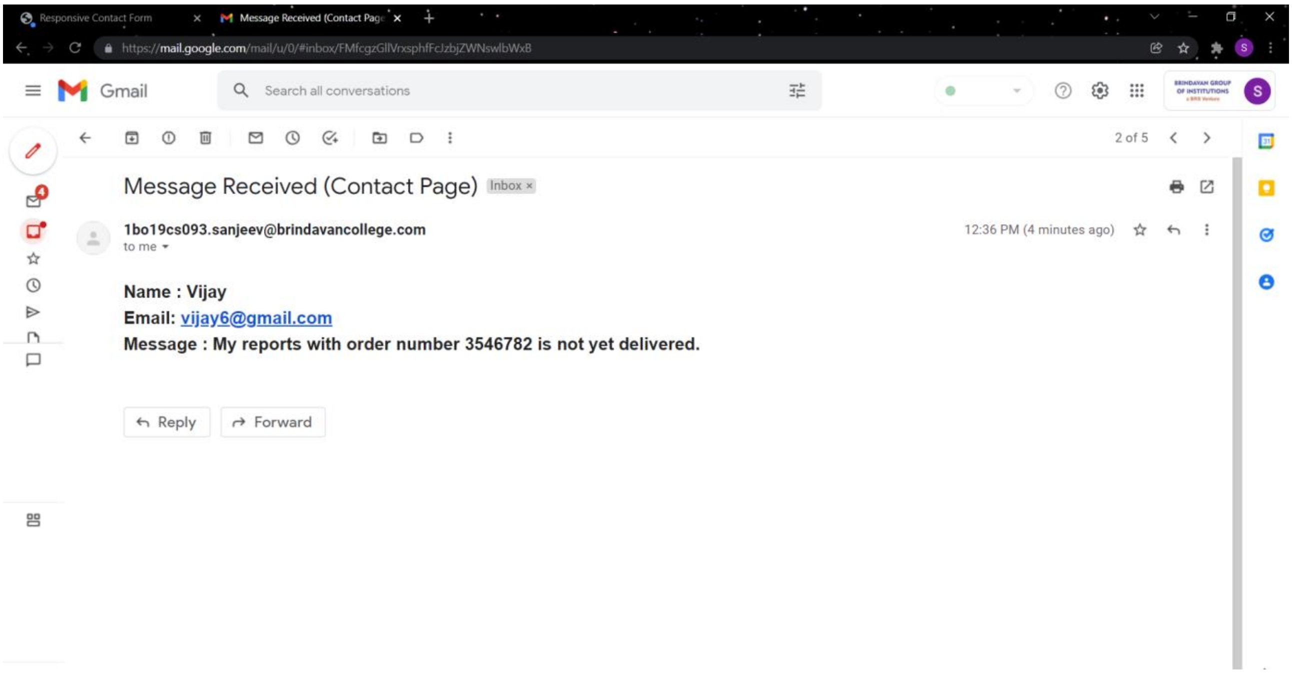
Your Name

Your Email

Your Message

SEND

Admin gets the message from the user/patient to his mail id.


Responsive Contact Form
Message Received (Contact Page
https://mail.google.com/mail/u/0/#inbox/FMfcgzGlIVrxsphfFcJzbjZWNswlbWxB
Gmail
Search all conversations
2 of 5

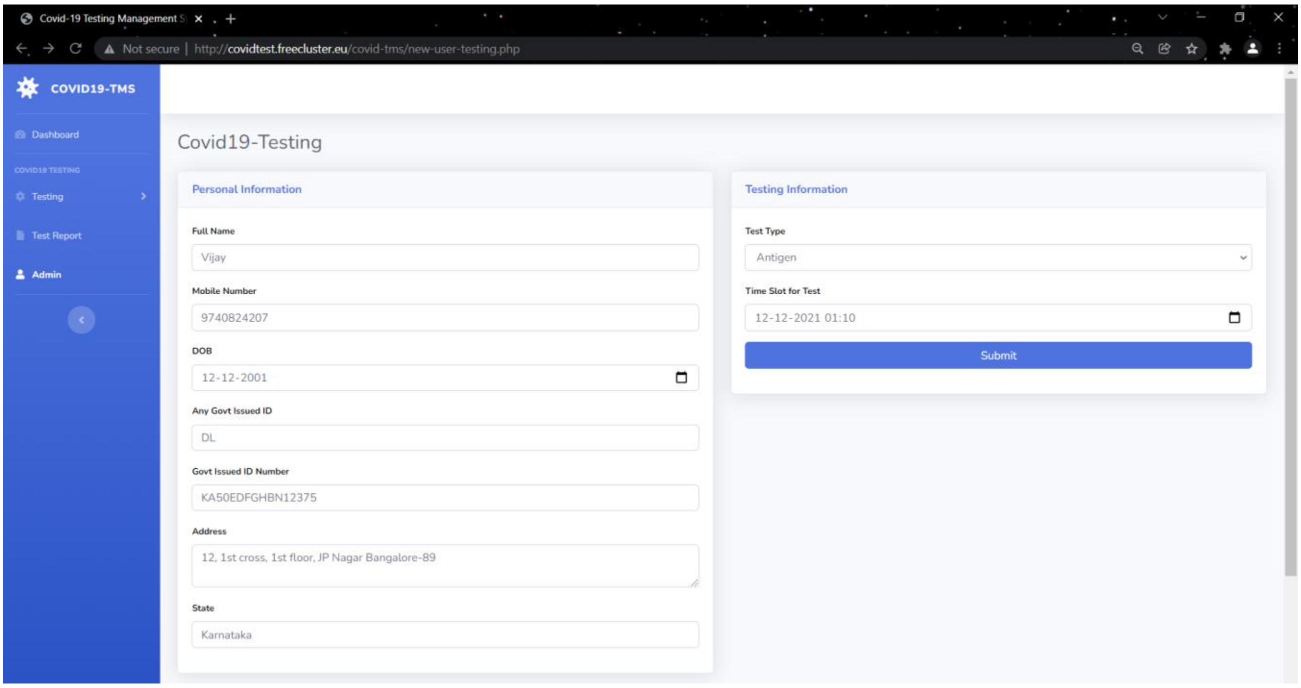
Message Received (Contact Page) Inbox

1bo19cs093.sanjeev@brindavancollege.com
to me

12:36 PM (4 minutes ago)

Name : Vijay
Email: vijay6@gmail.com
Message : My reports with order number 3546782 is not yet delivered.

After Submitting the Covid Test by the Patient


Covid-19 Testing Management S
Not secure | http://covidtest.freecluster.eu/covid-tms/new-user-testing.php
COVID19-TMS
Dashboard
COVID19 TESTING
Testing
Test Report
Admin

Covid19-Testing

Personal Information

Full Name: Vijay

Mobile Number: 9740824207

DOB: 12-12-2001

Any Govt Issued ID: DL

Govt Issued ID Number: KA50EDFGHBN12375

Address: 12, 1st cross, 1st floor, JP Nagar Bangalore-89

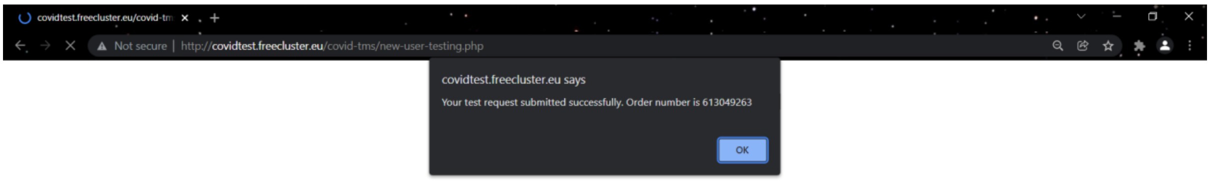
State: Karnataka

Testing Information

Test Type: Antigen

Time Slot for Test: 12-12-2021 01:10

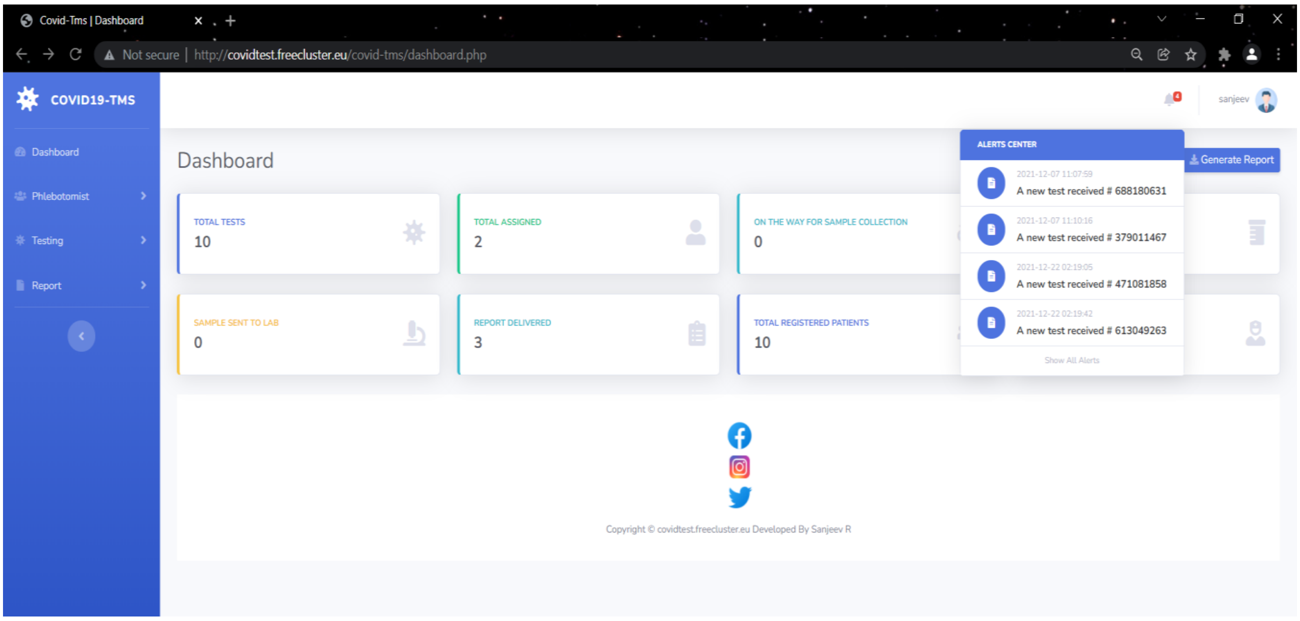
Order Number is generated to the user/patient after he/she submits the above details.


covidtest.freecluster.eu/covid-tm
Not secure | http://covidtest.freecluster.eu/covid-tms/new-user-testing.php

covidtest.freecluster.eu says

Your test request submitted successfully. Order number is 613049263

Admin now gets a notification(alerts center) in admin panel about the covid test booked the patient.



Dashboard

TOTAL TESTS
10

TOTAL ASSIGNED
2

ON THE WAY FOR SAMPLE COLLECTION
0

SAMPLE SENT TO LAB
0

REPORT DELIVERED
3

TOTAL REGISTERED PATIENTS
10

ALERTS CENTER

2021-12-07 11:07:59
A new test received # 688180631

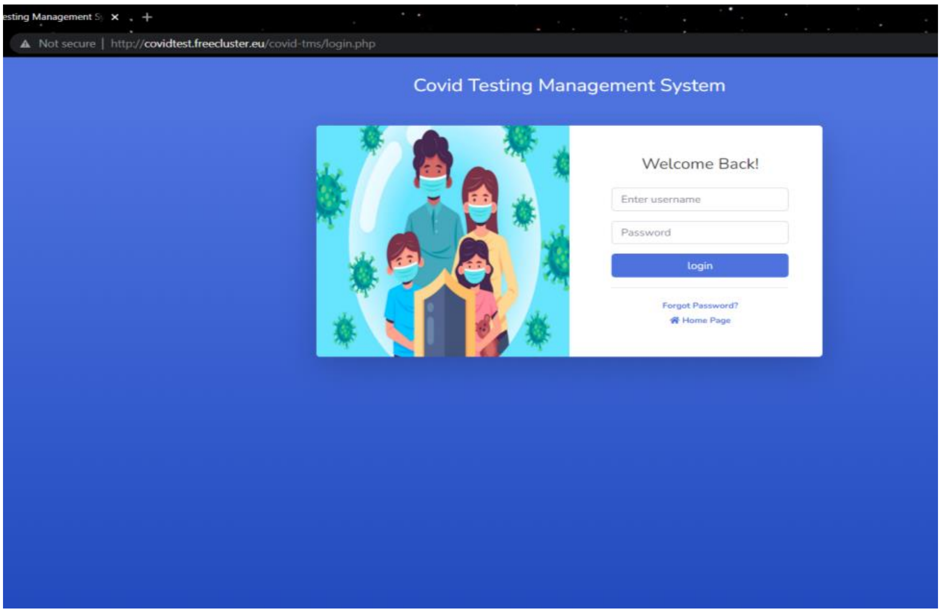
2021-12-07 11:10:16
A new test received # 379011467

2021-12-22 02:19:05
A new test received # 471081858

2021-12-22 02:19:42
A new test received # 613049263

Copyright © covidtest.freecluster.eu Developed By Sanjeev R

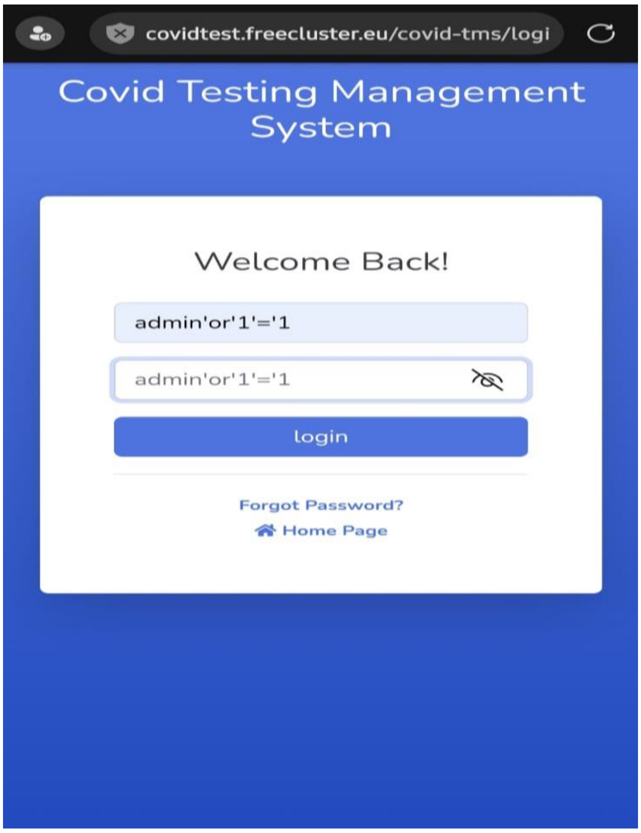
Admin Login Panel


esting Management S
Not secure | http://covidtest.freecluster.eu/covid-tms/login.php
Covid Testing Management System
Welcome Back!
Enter username
Password
login
Forgot Password?
Home Page

Admin panel is secured from **SQL INJECTION** that uses malicious SQL code for back-end database manipulation to access information that was not intended to be displayed.

Using this malicious SQL **('or'1='1)** code the hacker can easily access the admin panel even without the actual username and password.

admin'or'1'=1 means that admin username is closed and one more condition is added that is 1=1, as we all know 1=1 this will remain true and by adding **or** operator, admin username does not matter whether it has to be true or not. If **'1='1** this is true the SQL query gets executed and admin panel opens.



covidtest.freecluster.eu/covid-tms/logi

Covid Testing Management System

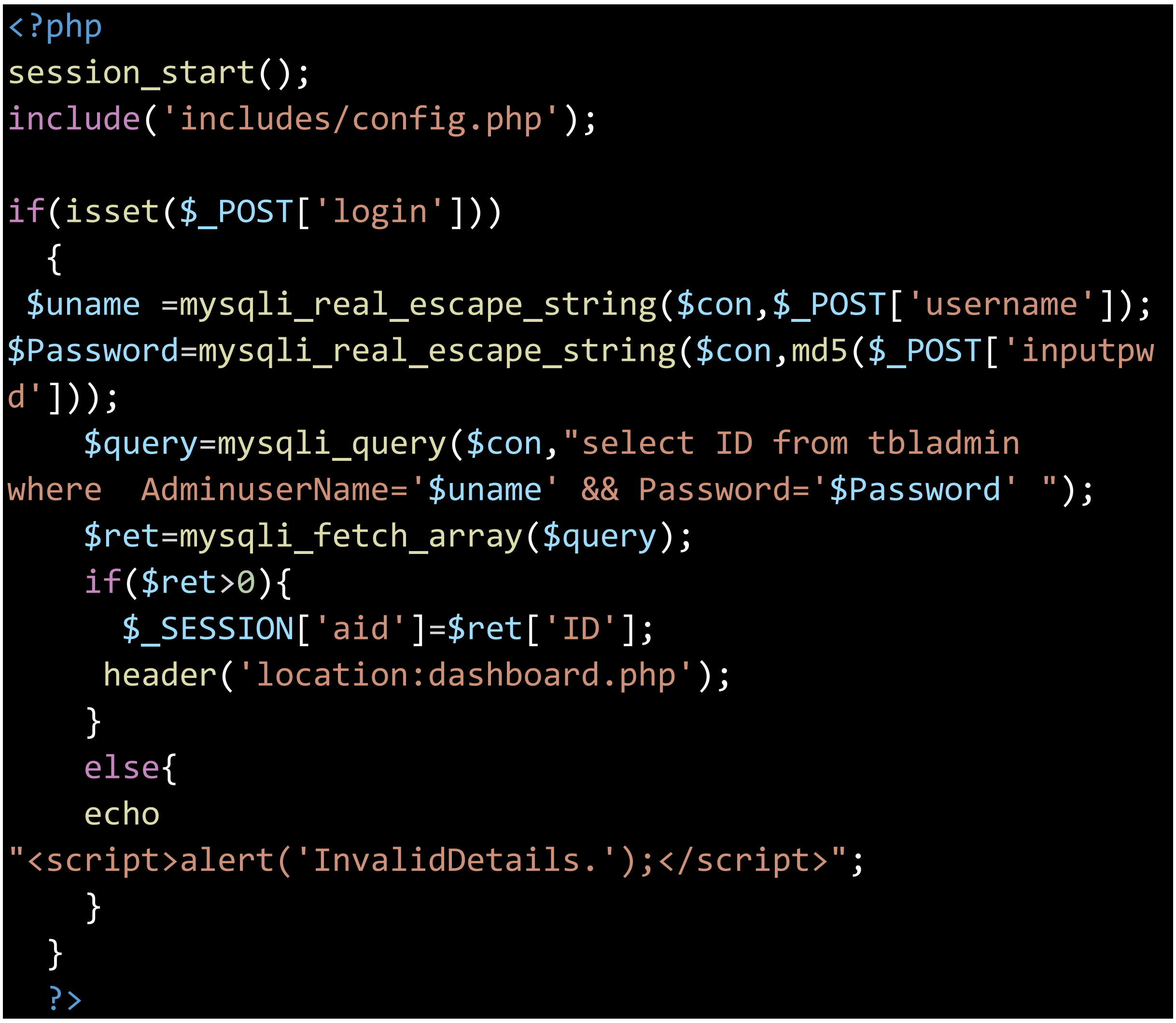
Welcome Back!

admin'or'1'='1

admin'or'1'='1

So for securing the database, we use-

`mysqli_real_escape_string`



```php
<?php
session_start();
include('includes/config.php');

if(isset($_POST['login']))
  {
 $uname =mysqli_real_escape_string($con,$_POST['username']);
$Password=mysqli_real_escape_string($con,md5($_POST['inputpw
d']));
    $query=mysqli_query($con,"select ID from tbladmin
where  AdminuserName='$uname' && Password='$Password' ");
    $ret=mysqli_fetch_array($query);
    if($ret>0){
      $_SESSION['aid']=$ret['ID'];
     header('location:dashboard.php');
    }
    else{
    echo
"<script>alert('InvalidDetails.');</script>";
    }
  }
  ?>
```

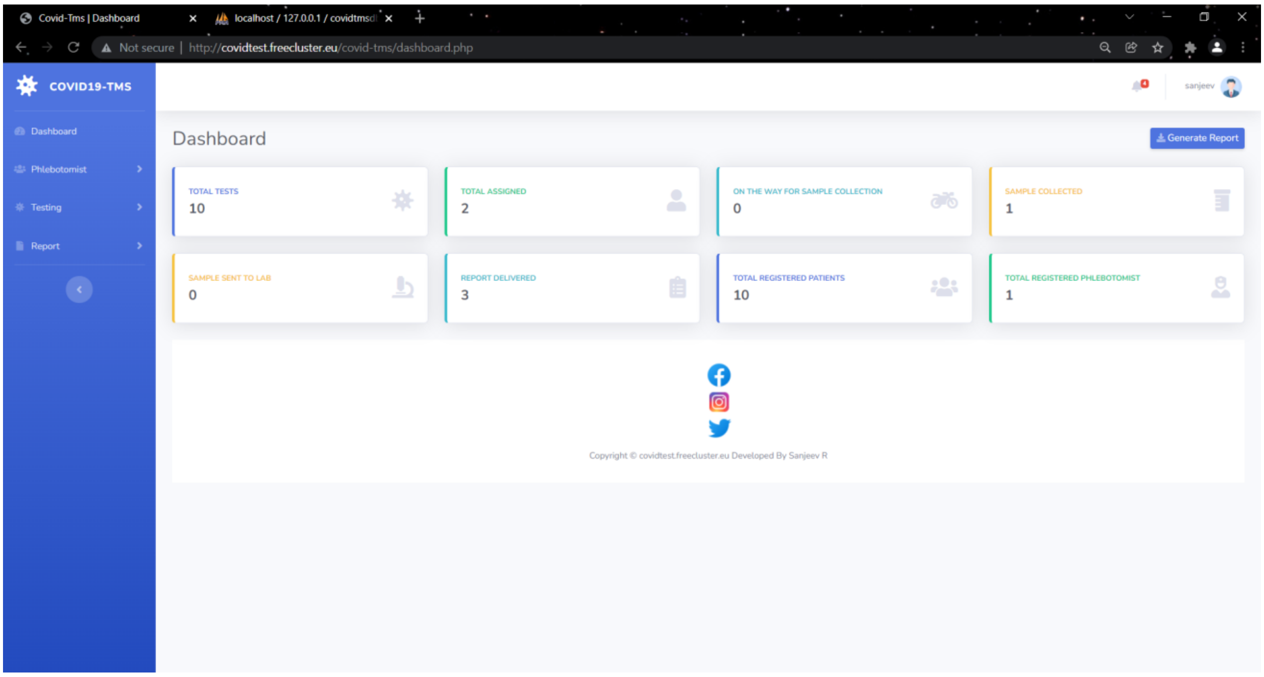
PHP provides *mysql_real_escape_string()* to escape special characters in a string before sending a query to MySQL. This function was adopted by many to escape single quotes in strings and by the same occasion prevent SQL injection attacks. However, it can create serious security flaws when it is not used correctly.

Admin’s password is also encrypted using **md5() function** which uses **RSA Data security, MD5 MESSAGE-DIGEST ALGORITHM.** This provides message of arbitrary length and produces a 128-bit “message digest” of the input.

Admin’s password is: **123**

At the database password is encrypted as: **202cb962ac59075b964b07152d234b70**

Admin Dashboard:


Covid-Tms | Dashboard
localhost / 127.0.0.1 / covidtmsdl
Not secure | http://covidtest.freecluster.eu/covid-tms/dashboard.php
COVID19-TMS
Dashboard
Phlebotomist
Testing
Report
sanjeev
Generate Report

Dashboard

TOTAL TESTS 10

TOTAL ASSIGNED 2

ON THE WAY FOR SAMPLE COLLECTION 0

SAMPLE COLLECTED 1

SAMPLE SENT TO LAB 0

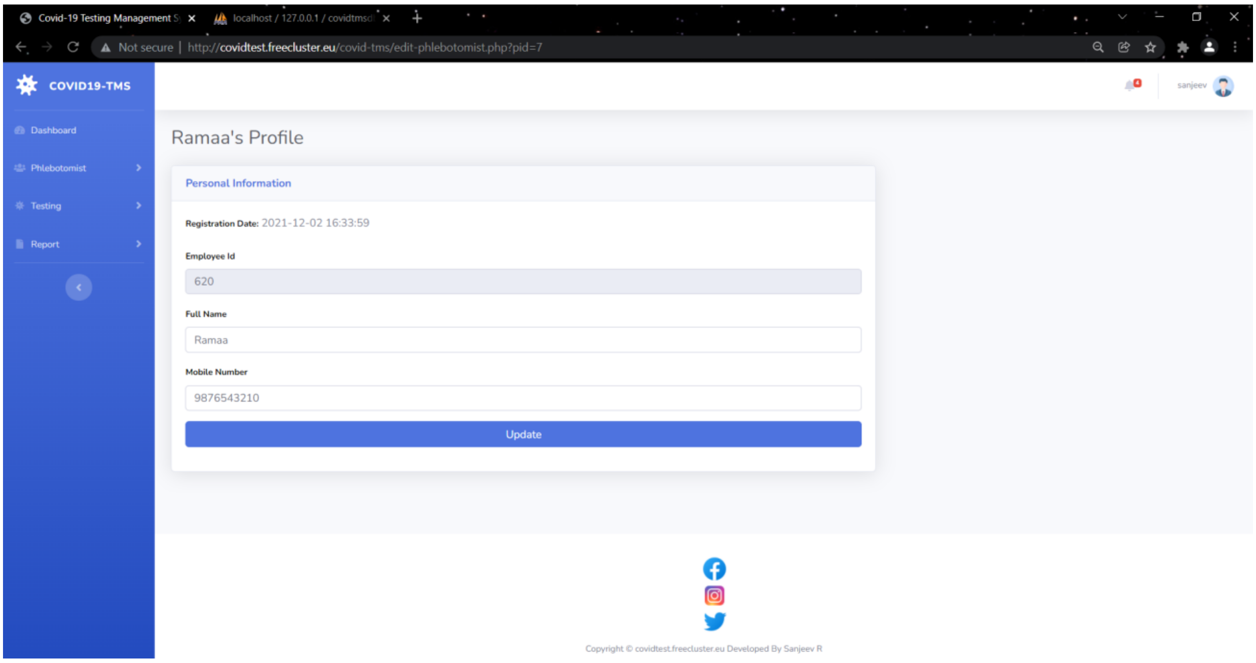
REPORT DELIVERED 3

TOTAL REGISTERED PATIENTS 10

TOTAL REGISTERED PHLEBOTOMIST 1

Copyright © covidtest.freecluster.eu Developed By Sanjeev R

Phlebotomist Panel:


Covid-19 Testing Management S
localhost / 127.0.0.1 / covidtmsdl
Not secure | http://covidtest.freecluster.eu/covid-tms/edit-phlebotomist.php?pid=7
COVID19-TMS
Dashboard
Phlebotomist
Testing
Report
sanjeev
Update

Ramaa's Profile

Personal Information

Registration Date: 2021-12-02 16:33:59

Employee Id: 620

Full Name: Ramaa

Mobile Number: 9876543210

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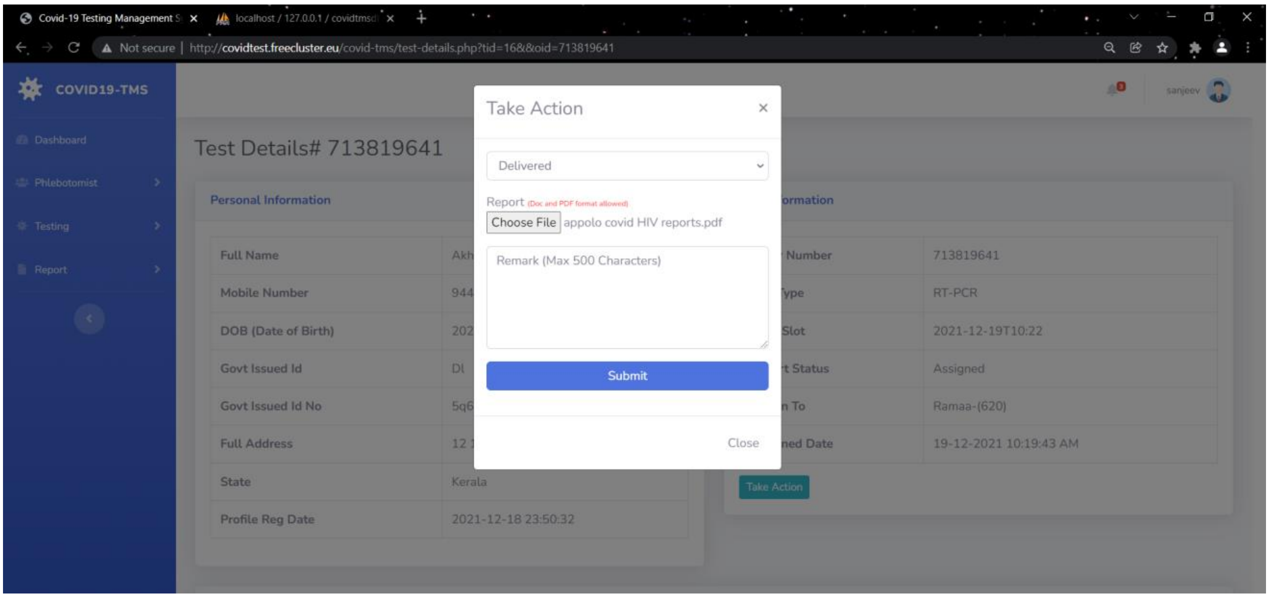
Report Generated:

Admin uploads the test report after updating the status as delivered which is even reflected in user interface. Patient can download the report as soon as admin uploads the report in his panel.



Not secure | http://covidtest.freecluster.eu/covid-tms/test-details.php?tid=16&&oid=713819641

COVID19-TMS

Test Details# 713819641

Take Action

Delivered

Report (Doc and PDF format allowed)

Choose File appolo covid HIV reports.pdf

Remark (Max 500 Characters)

Submit

Close

Personal Information

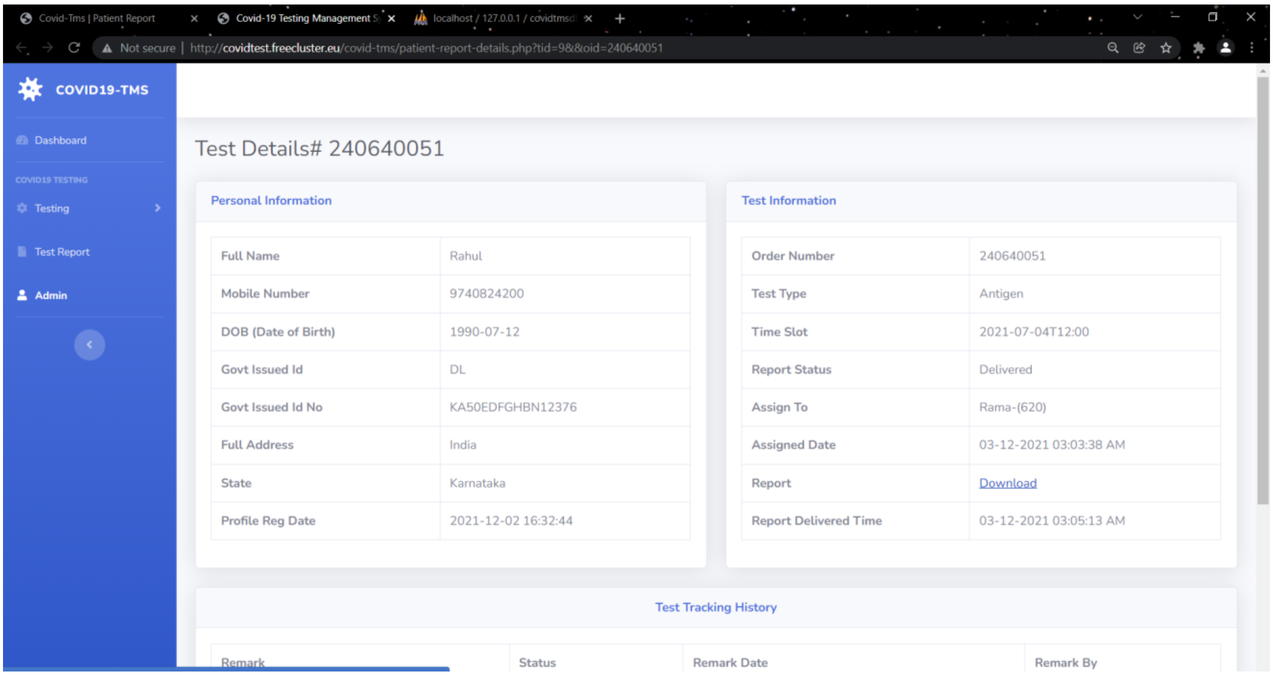
Full Name	Akh
Mobile Number	944
DOB (Date of Birth)	202
Govt Issued Id	Dl
Govt Issued Id No	5q6
Full Address	12 1
State	Kerala
Profile Reg Date	2021-12-18 23:50:32

ormation

Number	713819641
ype	RT-PCR
Slot	2021-12-19T10:22
t Status	Assigned
n To	Ramaa-(620)
ned Date	19-12-2021 10:19:43 AM

Covid-19 Testing Management S
localhost / 127.0.0.1 / covidtmsd
Dashboard
Phlebotomist
Testing
Report
sanjeev
Take Action

At User Interface Report can be downloaded by the Patient:



Not secure | http://covidtest.freecluster.eu/covid-tms/patient-report-details.php?tid=9&&oid=240640051

COVID19-TMS

Test Details# 240640051

Personal Information

Full Name	Rahul
Mobile Number	9740824200
DOB (Date of Birth)	1990-07-12
Govt Issued Id	DL
Govt Issued Id No	KA50EDFGHBN12376
Full Address	India
State	Karnataka
Profile Reg Date	2021-12-02 16:32:44

Test Information

Order Number	240640051
Test Type	Antigen
Time Slot	2021-07-04T12:00
Report Status	Delivered
Assign To	Rama-(620)
Assigned Date	03-12-2021 03:03:38 AM
Report	Download
Report Delivered Time	03-12-2021 03:05:13 AM

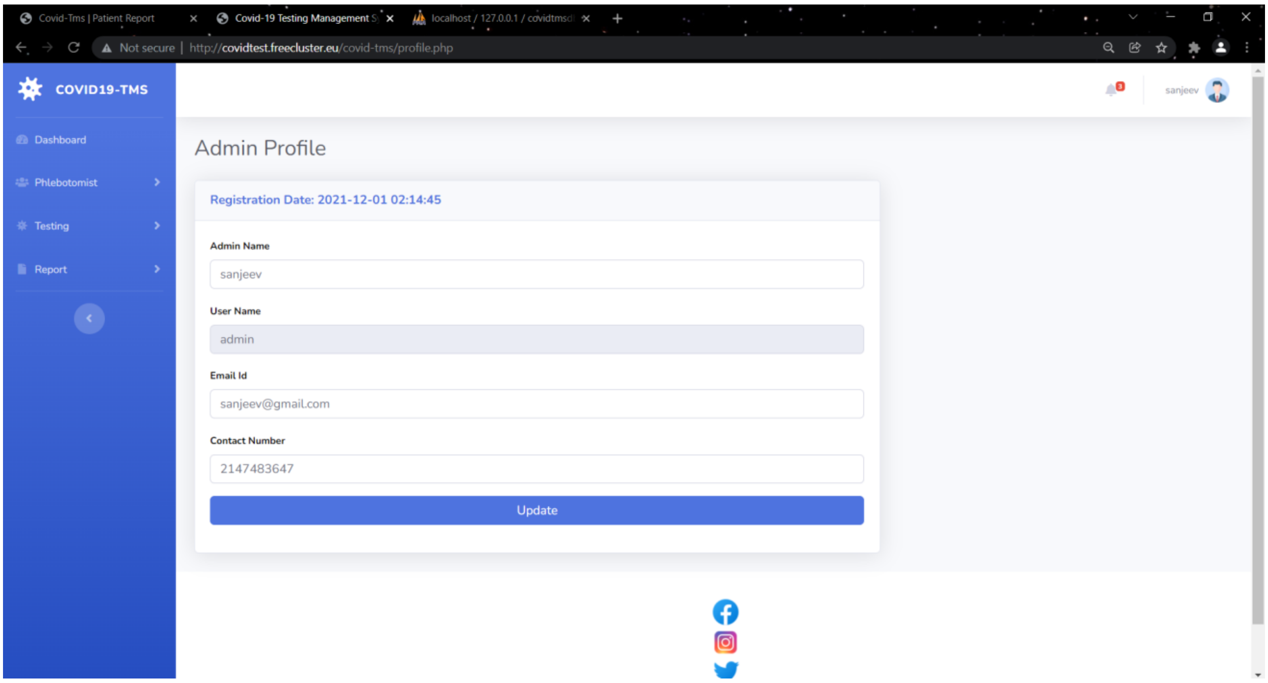
Test Tracking History

Remark	Status	Remark Date	Remark By

Covid-Tms | Patient Report
Covid-19 Testing Management S
localhost / 127.0.0.1 / covidtmsd
Dashboard
COVID19 TESTING
Testing
Test Report
Admin

Admin Profile:

Admin can update his/her name, email-id, contact number


Covid-Tms | Patient Report
Covid-19 Testing Management S
localhost / 127.0.0.1 / covidtmsd
Not secure | http://covidtest.freecluster.eu/covid-tms/profile.php
COVID19-TMS
Dashboard
Phlebotomist
Testing
Report
sanjeev

Admin Profile

Registration Date: 2021-12-01 02:14:45

Admin Name

sanjeev

User Name

admin

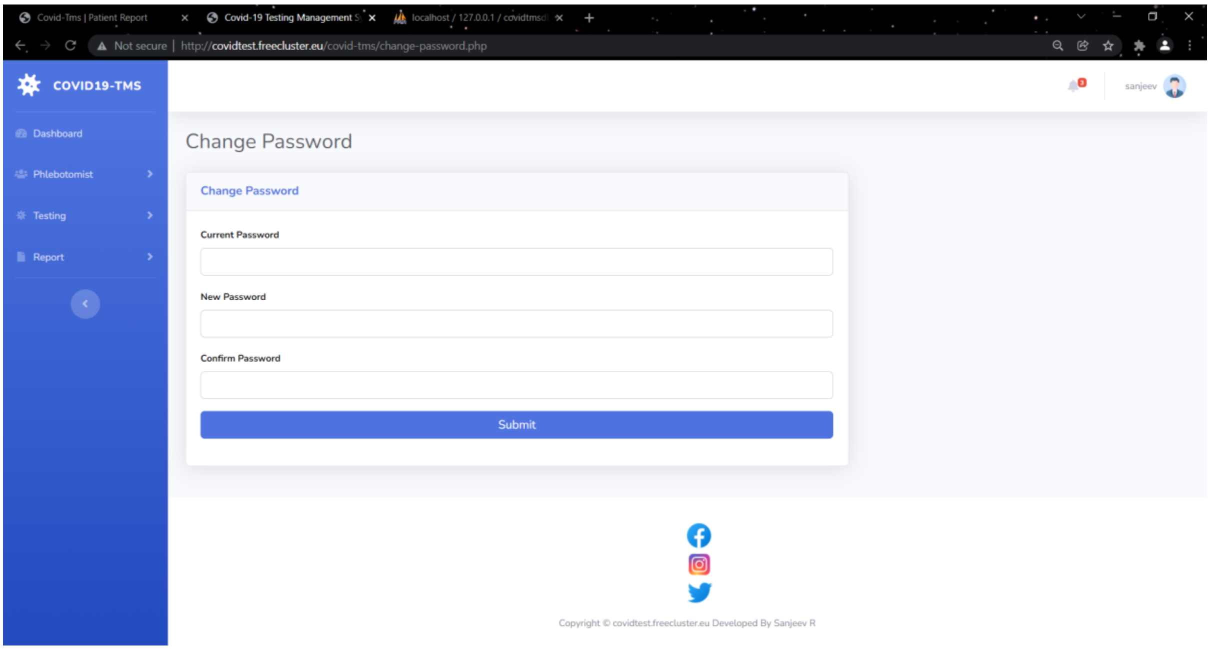
Email Id

sanjeev@gmail.com

Contact Number

2147483647

Admin Change Password:


Covid-Tms | Patient Report
Covid-19 Testing Management S
localhost / 127.0.0.1 / covidtmsd
Not secure | http://covidtest.freecluster.eu/covid-tms/change-password.php
COVID19-TMS
Dashboard
Phlebotomist
Testing
Report
sanjeev

Change Password

Change Password

Current Password

New Password

Confirm Password

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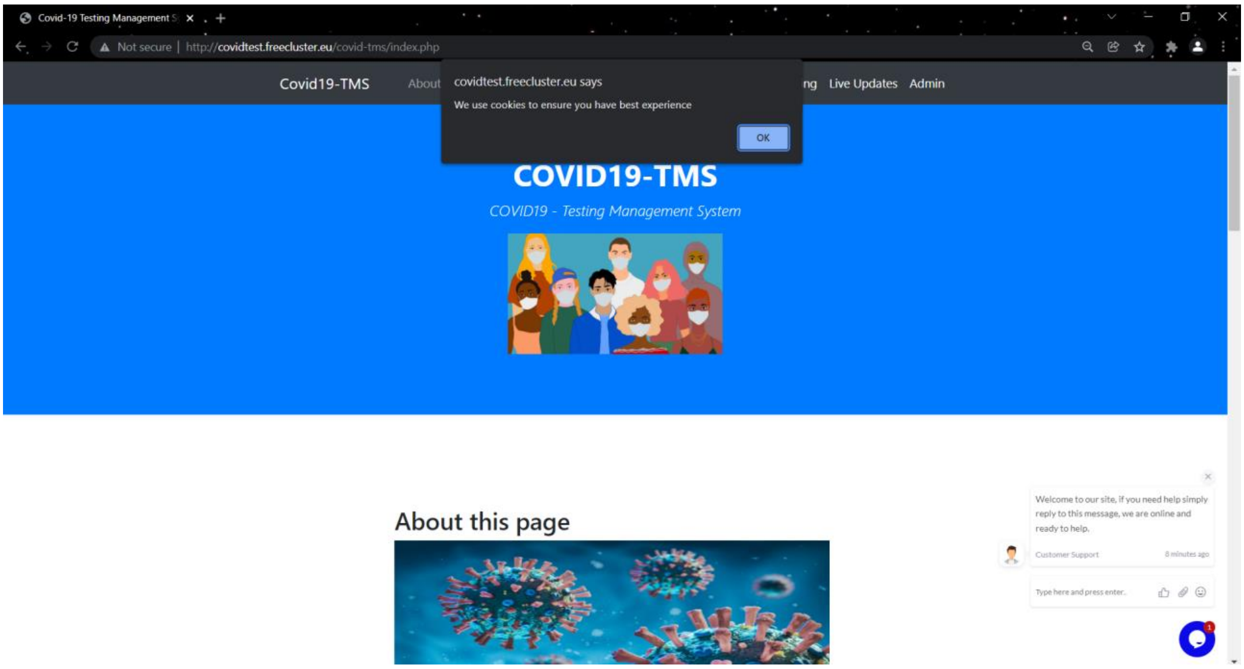
About Cookies:

This website is implemented with basic demonstration of how cookies works.

Cookies are files that hold information about you, your web browser and your behaviour on the internet. They are tiny files stored on your PC or device, which can be used by websites or web apps to tailor your online experience.

In our website, when a new user visits the website there a number generated at back-end database which is a unique id. Each time the website gets refreshed, unique id number is generated at back-end database.



covidtest.freecluster.eu says

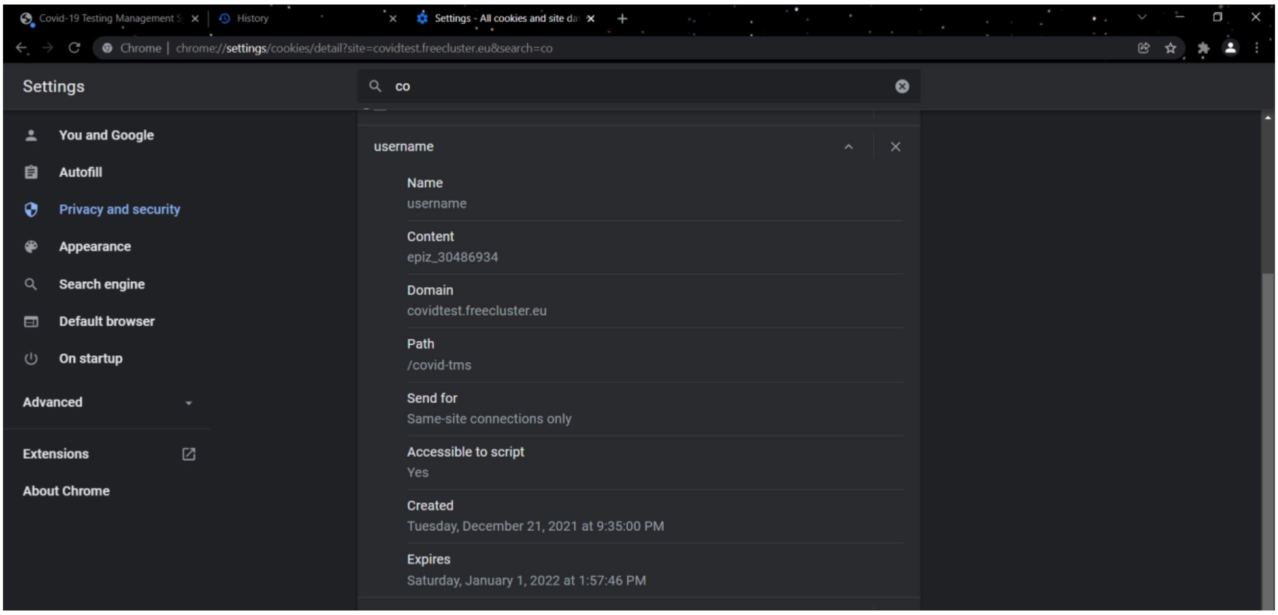
We use cookies to ensure you have best experience

Welcome to our site, if you need help simply reply to this message, we are online and ready to help.

Customer Support 8 minutes ago

Covid-19 Testing Management S
Not secure | http://covidtest.freecluster.eu/covid-tms/index.php
Covid19-TMS
About
ng
Live Updates
Admin
OK
COVID19-TMS
COVID19 - Testing Management System
About this page
Type here and press enter.
1

There is also **Session cookies** applied to this website. The session cookies is set for 10 days. If the user does not visit the website for 10 days the session cookies gets destroyed automatically. It contains fields such as name, content, Domain name, path, created and expires.



Covid-19 Testing Management S
History
Settings - All cookies and site da
Chrome | chrome://settings/cookies/detail?site=covidtest.freecluster.eu&search=co
Settings
co
You and Google
Autofill
Privacy and security
Appearance
Search engine
Default browser
On startup
Advanced
Extensions
About Chrome

username

Name
username

Content
epiz_30486934

Domain
covidtest.freecluster.eu

Path
/covid-tms

Send for
Same-site connections only

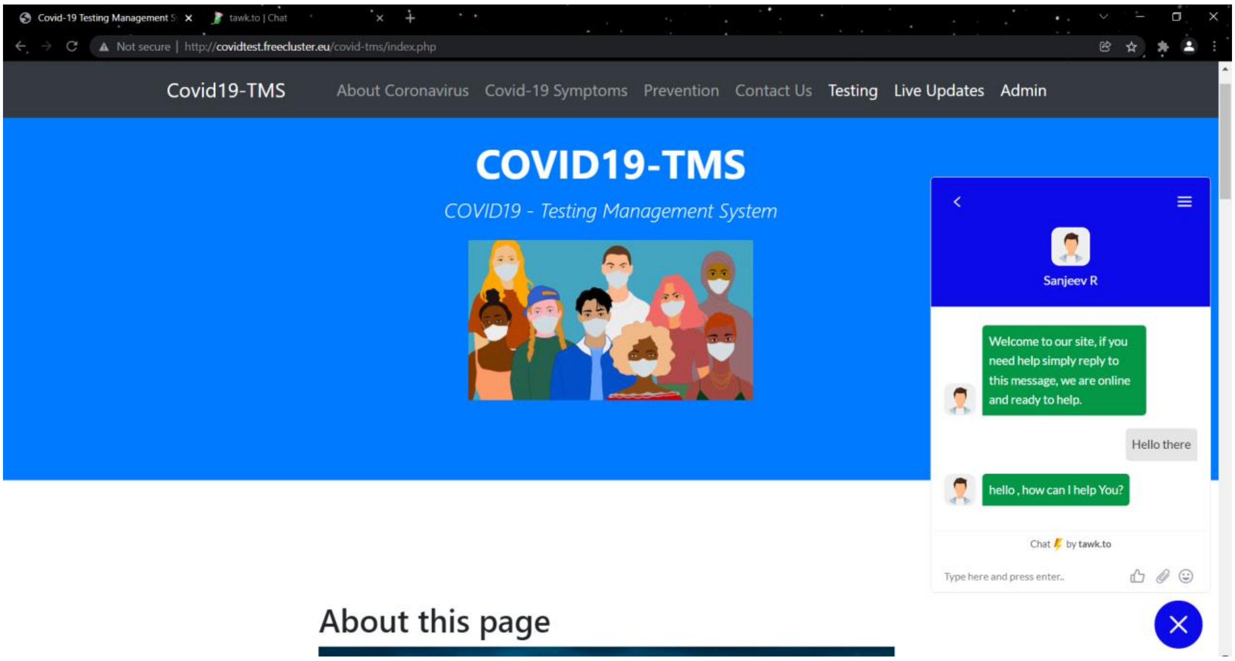
Accessible to script
Yes

Created
Tuesday, December 21, 2021 at 9:35:00 PM

Expires
Saturday, January 1, 2022 at 1:57:46 PM

Chat With Us:

There is a chat with option in this website using which a user can chat live with the admin for any issues or queries. This is done with help of website called https://www.tawk.to/ where JavaScript code is implemented according to our requirements.

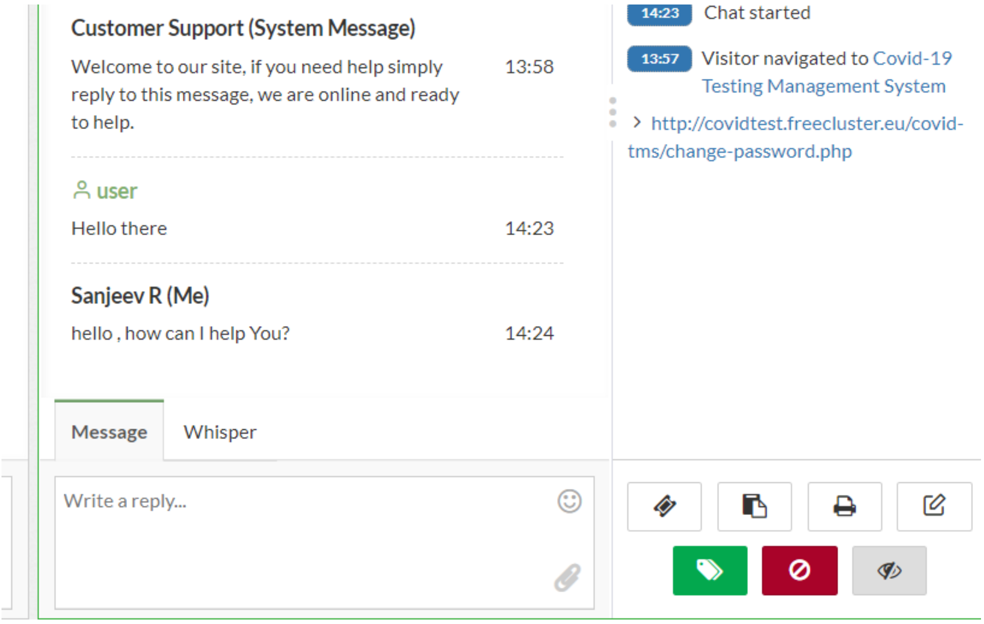

Covid-19 Testing Management S
tawk.to | Chat
Not secure | http://covidtest.freecluster.eu/covid-tms/index.php
Covid19-TMS
About Coronavirus
Covid-19 Symptoms
Prevention
Contact Us
Testing
Live Updates
Admin
COVID19-TMS
COVID19 - Testing Management System
Sanjeev R
Chat by tawk.to
Type here and press enter..
About this page

Welcome to our site, if you need help simply reply to this message, we are online and ready to help.

Hello there

hello , how can I help You?

Admin can reply back using his admin panel in Tawk.To webite which is reflected in user interface.



Customer Support (System Message)

Welcome to our site, if you need help simply reply to this message, we are online and ready to help. 13:58

user

Hello there 14:23

Sanjeev R (Me)

hello , how can I help You? 14:24

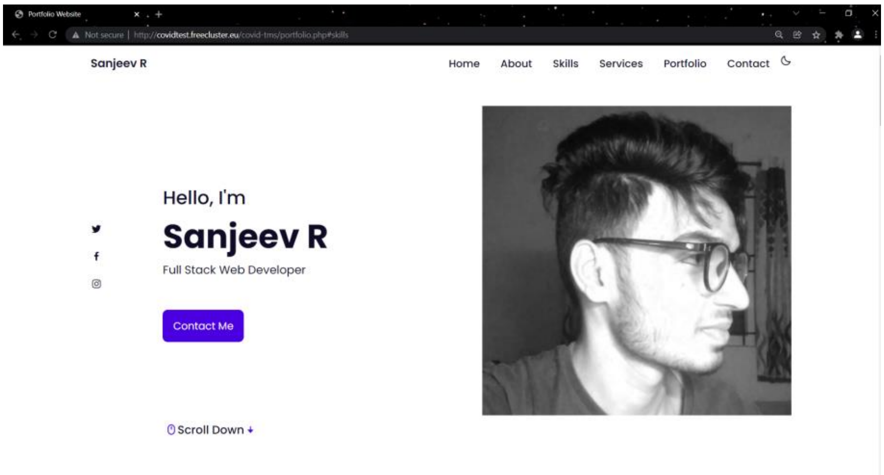
14:23 Chat started

13:57 Visitor navigated to Covid-19 Testing Management System

› http://covidtest.freecluster.eu/covid-tms/change-password.php

About Me Section:

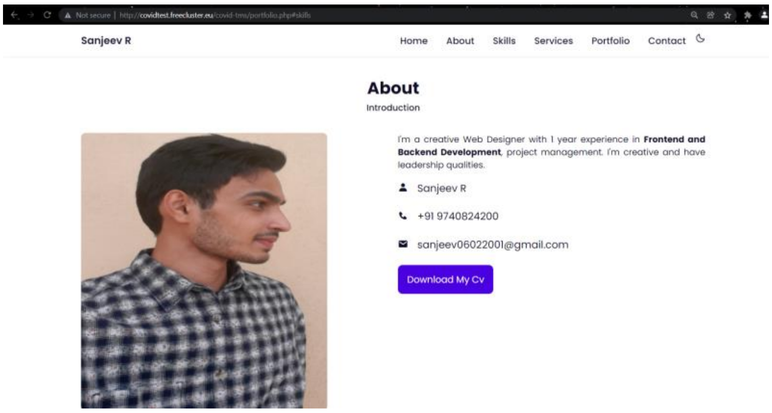
This section is a portfolio which includes my personal details, my skills, recent works, etc.



Hello, I'm

Sanjeev R

Full Stack Web Developer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About

Introduction

I'm a creative Web Designer with 1 year experience in **Frontend and Backend Development**, project management. I'm creative and have leadership qualities.

Sanjeev R

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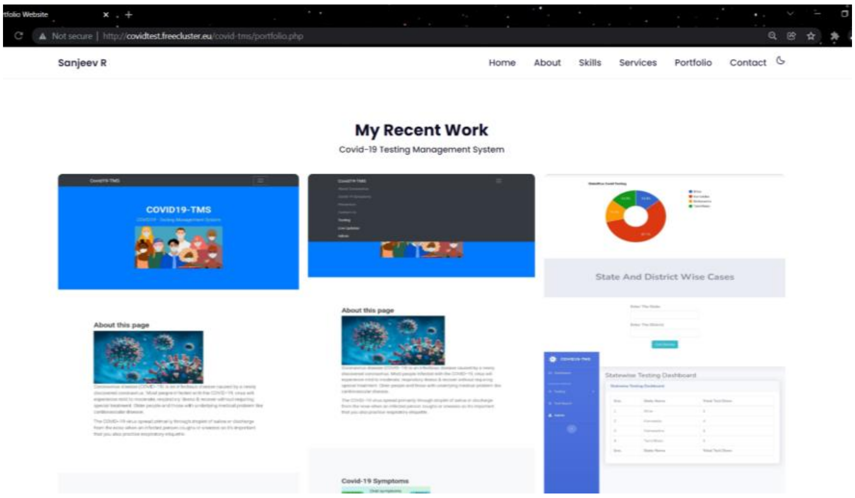
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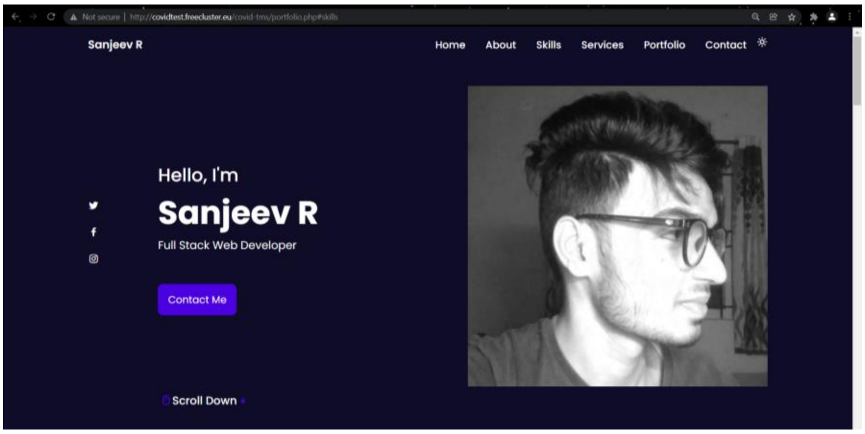
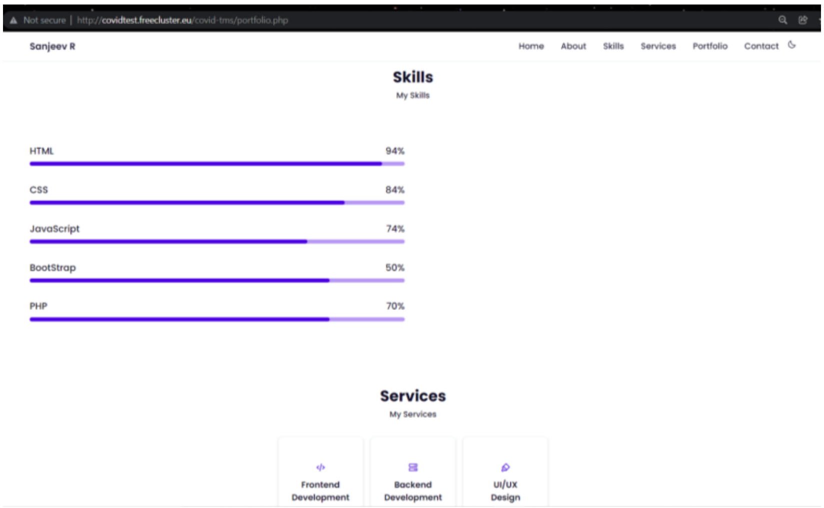
State And District Wise Cases
Statewise Testing Dashboard
Covid-19 Symptoms

My Recent Work

Covid-19 Testing Management System

This portfolio uses light and dark theme which is implemented using JavaScript.





Hosting The Website:

The project was basically done in local host called Apache server. Later the website is hosted on the platform https://infinityfree.net/ which supports free dynamic web hosting for PHP and MYSQL.

URL link for the website hosted is http://covidtest.freecluster.eu/covid-tms/.

This is not secure website and it does not have SSL certificate. This is just done for demonstration and testing purposes only.

CHAPTER 8

CONCLUSION

Owing to the difficult times that the pandemic has posed upon India, people are facing many challenges in their day to day lives. The Coronavirus disease continues to spread across the world following a trajectory that is difficult to predict. The COVID-19 pandemic has led to a dramatic loss of human life worldwide and presents an unprecedented challenge to public health, food systems and the world of work. The economic and social disruption caused by the pandemic is devastating: tens of millions of people are at risk of falling into extreme poverty.

Scientists from the NIH and across the country are working around the clock to establish programs that will ensure access to and acceptance of rapid and reliable testing around the country. Testing can help people determine if they are infected with SARS-CoV-2 – regardless of whether they have symptoms – and whether they are at risk of spreading the infection to others. Taking measures to prevent the spread of infection will be the most effective strategy for getting us safely back to work and school.

This is what this project aimed at achieving.

This project aims to create awareness to people about the pandemic and helps a person to get tested for Corona virus and minimize its spread. Testing is very important to help reduce the spread of Covid-19. As mentioned this project has three basic tests for Coronavirus – Antigen, RT-PCR, CB-NAAT by which people can undergo these and help the country to stop the further spread of the disease. Further people must also follow the Covid protocols to get back the country to its normal state.

So this was a small effort from our side to create awareness about the pandemic by implementing it into the project.

CHAPTER 9

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