

DATABASE SYSTEM AND APPLICATIONS



MINI PROJECT Part II

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Subject Code	: CS7594
Content Title	: COVID 19 Patient Management System(part II)

AIM:

To create front end and back end for COVID 19 Patient Management System.

Backend:

Backend was created using MySql .

The screenshot shows the MySQL Workbench interface. At the top, it says "Server: 127.0.0.1" and has tabs for "Databases", "SQL", "Status", "User accounts", and "Export". Below that is a search bar with the placeholder "Run SQL query/queries on server '127.0.0.1':". The main area contains the following SQL code:

```
1 CREATE DATABASE covid19_patient_management;
2 USE covid19_patient_management;
3 CREATE TABLE patient (
4     id INT NOT NULL PRIMARY KEY AUTO_INCREMENT,
5     username VARCHAR(50) NOT NULL UNIQUE,
6     password VARCHAR(255) NOT NULL,
7     admitted_at DATETIME DEFAULT CURRENT_TIMESTAMP,
8     gender varchar(1),
9     phone decimal,
10    phoneCode decimal,
11    email varchar(50),
12    address varchar(255)
13 );
```

At the bottom are buttons for "Clear", "Format", and "Get auto-saved query".

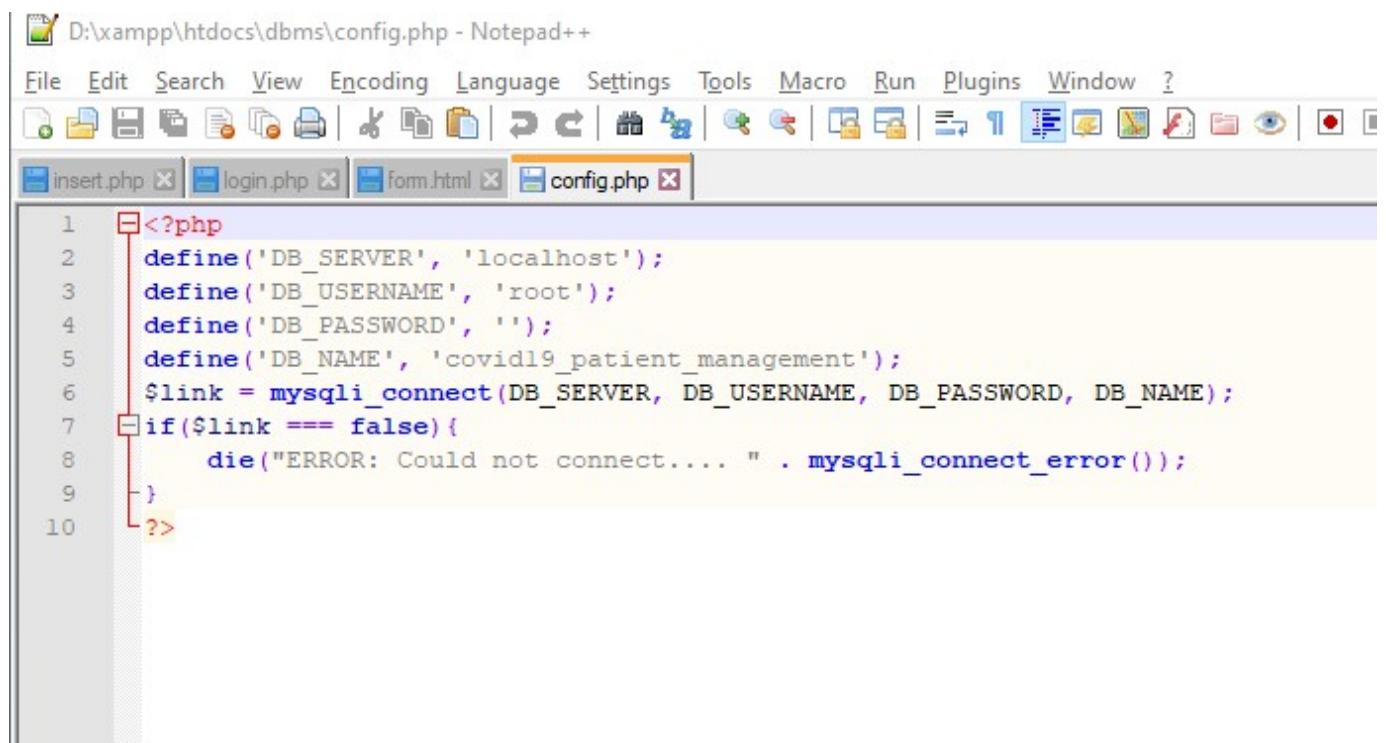
The screenshot shows the phpMyAdmin interface. On the left, there's a sidebar with "Recent" and "Favorites" sections, and a tree view showing databases like "covid19_patient_management", "information_schema", "mysql", "performance_schema", "phpmyadmin", and "test". Under "covid19_patient_management", it shows "New", "patient", "Indexes", and "Information schema". The "patient" table is expanded, showing columns: "id" (PRI, int), "username" (UNI, varchar), "password" (varchar), "phone" (decimal), "phoneCode" (decimal, NULL, nullable), "email" (varchar, NULL, nullable), "gender" (varchar), "admitted_at" (datetime, current..., nullable), and "address" (varchar). The main panel shows the "Structure" tab for the "patient" table. It includes a "Filters" section, a table summary ("1 table(s) Sum"), and a "Create table" section where "Name:" is set to "patient" and "Number of columns:" is set to "4".

Front End:

Frontend was Created using PHP.

Building the Registration System:-

Step 1: Creating the Config file



D:\xampp\htdocs\dbms\config.php - Notepad++

File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

insert.php login.php form.html config.php

```
1 <?php
2 define('DB_SERVER', 'localhost');
3 define('DB_USERNAME', 'root');
4 define('DB_PASSWORD', '');
5 define('DB_NAME', 'covid19_patient_management');
6 $link = mysqli_connect(DB_SERVER, DB_USERNAME, DB_PASSWORD, DB_NAME);
7 if($link === false){
8     die("ERROR: Could not connect.... " . mysqli_connect_error());
9 }
10 ?>
```

Step 2 : Creating the Registration form

“form.html” file:

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8">
5 <title>DBMS MINI PROJECT</title>
6 <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
7 <style type="text/css">
8 body{ font: 25px Georgia, "Times New Roman", Times; }
9 .wrapper{ width: 1000px; padding: 50px; }
10 body, html {
11 height: 100%;
12 margin: 0;
13 letter-spacing: 2px;
14 line-height: 1.6;
15 font-variant: small-caps;
```

```
16
17 }
18
19 .bg {
20 background-image:
url("https://media.giphy.com/media/xUA7aQWDNhElgR3NUQ/giphy.gif");
21 height: 100%;
22 background-position: center;
23 background-repeat: no-repeat;
24 background-size: cover;
25 }
26 </style>
27 </head>
28 <body>
29 <div class="bg">
30 <div style="color:orange">
31 <div <div align="center">
32 <div class="wrapper">
33 <h1>REGISTER</h1>
34 <p>Please Enter Your Data</p>
35 <title>Register Form</title>
36 </head>
37 <body>
38 <form action="insert.php" method="POST">
39 <table>
40 <tr>
41 <td>User Name : </td>
42 <td><input type="text" name="username" required></td>
43 </tr>
44 <tr>
45 <td>Password : </td>
46 <td><input type="password" name="password" required></td>
47 </tr>
48 <tr>
49 <td>Gender : </td>
50 <td>
51 <input type="radio" name="gender" value="m" required>Male
52 <input type="radio" name="gender" value="f" required>Female
53 </td>
54 </tr>
55 <tr>
56 <td>Address : </td>
57 <td><input type="add" name="address" required></td>
58 </tr>
59 <tr>
60 <td>Email : </td>
61 <td><input type="email" name="email" required></td>
62 </tr>
63 <tr>
64 <td>Phone no : </td>
65 <td>
66 <select name="phoneCode" required>
```

```

67 <option selected hidden value="">Select Code</option>
68 <option value="+91">91</option>
69 </select>
70 <input type="phone" name="phone" required>
71 </td>
72 </tr>
73 <tr>
74 <td><input type="submit" class="btn btn-primary" value="Submit"></td>
75 </tr>
76 <tr>
77 <td>Already have an account? <a href="login.php">Login here</a></td>
78 </tr>
79 </table>
80 </form>
81 </body>
82 </html>
```

“insert.php” file:

```

1 <?php
2 $username = $_POST['username'];
3 $password = $_POST['password'];
4 $password = password_hash($password, PASSWORD_DEFAULT);
5 $gender = $_POST['gender'];
6 $address= $_POST['address'];
7 $email = $_POST['email'];
8 $phoneCode = $_POST['phoneCode'];
9 $phone = $_POST['phone'];
10 if (!empty($username) || !empty($password) || !empty($gender) ||!empty($address) ||
!empty($email) || !empty($phoneCode) || !empty($phone)) {
11 $host = "localhost";
12 $dbUsername = "root";
13 $dbPassword = "";
14 $dbname = "covid19_patient_management";
15 //create connection
16 $conn = new mysqli($host, $dbUsername, $dbPassword, $dbname);
17 if (mysqli_connect_error()) {
18 die('Connect Error('. mysqli_connect_errno().')'. mysqli_connect_error());
19 } else {
20 $SELECT = "SELECT email From patient Where email = ? Limit 1";
21 $INSERT = "INSERT Into patient (username, password, gender, address, email,
phoneCode, phone) values(?, ?, ?, ?, ?, ?, ?)";
22 //Prepare statement
23 $stmt = $conn->prepare($SELECT);
24 $stmt->bind_param("s", $email);
25 $stmt->execute();
26 $stmt->bind_result($email);
27 $stmt->store_result();
28 $stmt->store_result();
29 $stmt->fetch();
30 $rnum = $stmt->num_rows;
31 if ($rnum==0) {
```

```

32 $stmt->close();
33 $stmt = $conn->prepare($INSERT);
34 $stmt->bind_param("ssssii", $username, $password, $gender, $address, $email, $phoneCode, $phone);
35 $stmt->execute();
36 echo "New record inserted sucessfully";
37 header("location: login.php");
38 } else {
39 echo "Someone already patient using this email";
40 }
41 $stmt->close();
42 $conn->close();
43 }
44 } else {
45 echo "All field are required";
46 die();
47 }
48 ?>

```

OUTPUT:

REGISTER

PLEASE ENTER YOUR DATA

USER NAME :	<input type="text"/>
PASSWORD :	<input type="text"/>
GENDER :	<input checked="" type="radio"/> MALE <input type="radio"/> FEMALE
ADDRESS :	<input type="text"/>
EMAIL :	<input type="text"/>
PHONE NO. :	<input type="text"/>
SUBMIT	
ALREADY HAVE AN ACCOUNT? LOGIN HERE	

REGISTER

PLEASE ENTER YOUR DATA

USER NAME :	SANTHOSH
PASSWORD :	*****
GENDER :	<input checked="" type="radio"/> MALE <input type="radio"/> FEMALE
ADDRESS :	XYZ
EMAIL :	SANTHOSH@GMAIL.COM
PHONE NO. :	91 1234567890
SUBMIT	
ALREADY HAVE AN ACCOUNT? LOGIN HERE	

phpMyAdmin

Server: 127.0.0.1 » Database: covid19_patient_management » Table: patient

Showing rows 0 - 0 (1 total). Query took 0.0016 seconds.															
SELECT * FROM `patient` Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]															
<input type="checkbox"/> Show all Number of rows: 25 Filter rows: Search this table															
+ Options <input type="checkbox"/>															
id username password admitted_at address gender phone email phoneCode															
10 santhosh \$2y\$10\$O.gVMhqI 2020-10-31 20:35:47 xyz m 1234567890 santhosh@gmail.com 91															
<input type="checkbox"/> Check all With selected: <input type="checkbox"/>															
<input type="checkbox"/> Show all Number of rows: 25 Filter rows: Search this table															
Query results operations <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>															
Print Copy to clipboard Export Display chart Create view															
<input type="checkbox"/> Bookmark this SQL query															

Note: password_hash() function is used hence the users with same password can have a unique password hashes

Building the Login System

Step 1 : Creating login.php

"login.php" file:

```

1 <?php
2 session_start();
3
4 if(isset($_SESSION["loggedin"]) && $_SESSION["loggedin"] === true){
5 header("location: welcome.php");
6 exit;
7 }
  
```

```
8 // Include config file
9 require_once "config.php";
10 // Define variables and initialize with empty values
11 $username = $password = "";
12 $username_err = $password_err = "";
13 // Processing form data when form is submitted
14 if($_SERVER["REQUEST_METHOD"] == "POST"){
15 // Check if username is empty
16 if(empty(trim($_POST["username"]))){
17 $username_err = "Please enter username.";
18 } else{
19 $username = trim($_POST["username"]);
20 }
21 // Check if password is empty
22 if(empty(trim($_POST["password"]))){
23 $password_err = "Please enter your password.";
24 } else{
25 $password = trim($_POST["password"]);
26 }
27 // Validate credentials
28 if(empty($username_err) && empty($password_err)){
29 // Prepare a select statement
30 $sql = "SELECT id, username, password FROM patient WHERE username = ?";
31 if($stmt = mysqli_prepare($link, $sql)){
32 // Bind variables to the prepared statement as parameters
33 mysqli_stmt_bind_param($stmt, "s", $param_username);
34 $param_username = $username;
35 if(mysqli_stmt_execute($stmt)){
36 // Store result
37 mysqli_stmt_store_result($stmt);
38
39 // Check if username exists, if yes then verify password
40 if(mysqli_stmt_num_rows($stmt) == 1){
41 mysqli_stmt_bind_result($stmt, $id, $username, $hashed_password);
42 if(mysqli_stmt_fetch($stmt)){
43 if(password_verify($password, $hashed_password)){
44 // Password is correct, so start a new session
45 session_start();
46 // Store data in session variables
47 $_SESSION["loggedin"] = true;
48 $_SESSION["id"] = $id;
49 $_SESSION["username"] = $username;
50 // Redirect user to welcome page
51 header("location: welcome.php");
52 } else{
53 // Display an error message if password is not valid
54 $password_err = "The password you entered was not valid.";
55 }
56 }
57 } else{
58 // Display an error message if username doesn't exist
59 $username_err = "No account found with that username.";
60 }
61 } else{
62 echo "Oops! Something went wrong. Please try again later.";
63 }
64
65 // Close statement
```

```
66 mysqli_stmt_close($stmt);
67 }
68 }
69
70 // Close connection
71 mysqli_close($link);
72 }
73 ?>
74
75 <!DOCTYPE html>
76 <html lang="en">
77 <head>
78 <meta charset="UTF-8">
79 <title>DBMS MINI PROJECT</title>
80 <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
81 <style type="text/css">
82 body{ font: 25px Georgia, "Times New Roman", Times; }
83 .wrapper{ width: 380px; padding: 20px; }
84 body, html {
85 height: 100%;
86 margin: 0;
87 letter-spacing: 2px;
88 line-height: 1.6;
89 font-variant: small-caps;
90 }
91
92 .bg {
93 background-image:url("https://media.giphy.com/media/3og0IV7MOCfnm85iRa/giphy.gif");
94 height: 100%;
95 background-position: center;
96 background-repeat: no-repeat;
97 background-size: cover;
98 }
99 </style>
100 </head>
101 <body>
102 <div class="bg">
103 <div style="color:#42f554">
104 <div <div align="center">
105 <div class="wrapper">
106 <h2>Login</h2>
107 <p>Please fill in your data to login.</p>
108 <form action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]); ?>" method="post">
109 <div class="form-group <?php echo (!empty($username_err)) ? 'has-error' : ''; ?>">
110 <label>Username</label>
111 <input type="text" name="username" class="form-control" value="<?php echo $username; ?>">
112 <span class="help-block"><?php echo $username_err; ?></span>
113 </div>
114 <div class="form-group <?php echo (!empty($password_err)) ? 'has-error' : ''; ?>">
115 <label>Password</label>
116 <input type="password" name="password" class="form-control">
117 <span class="help-block"><?php echo $password_err; ?></span>
```

```

118 </div>
119 <div class="form-group">
120 <input type="submit" class="btn btn-primary" value="Login">
121 </div>
122 <p>Don't have an account? <a href="form.html">Sign up now</a>.</p>
123 </form>
124 </div>
125 </body>
126 </html>

```

Step 2 : creating the Welcome page

“welcome.php” file:



```

1 <?php
2 session_start();
3
4 if(!isset($_SESSION["loggedin"]) || $_SESSION["loggedin"] !== true){
5     header("location: login.php");
6     exit;
7 }
8 ?>
9
10 <!DOCTYPE html>
11 <html lang="en">
12 <head>
13     <meta charset="UTF-8">
14     <title>Welcome</title>
15     <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css">
16     <style type="text/css">
17         body{ font: 18px Georgia, "Times New Roman", Times; text-align: center; }
18     </style>
19 </head>
20 <body>
21     <div class="page-header">
22         <h1>Hi, <b><?php echo htmlspecialchars($_SESSION["username"]); ?></b>. Welcome to our site.</h1>
23     </div>
24     <p>
25         <a href="logout.php" class="btn btn-danger">Sign Out of Your Account</a>
26     </p>
27 </body>
28 </html>

```

Step 3 : Creating the Logout Script

“logout.php” File:

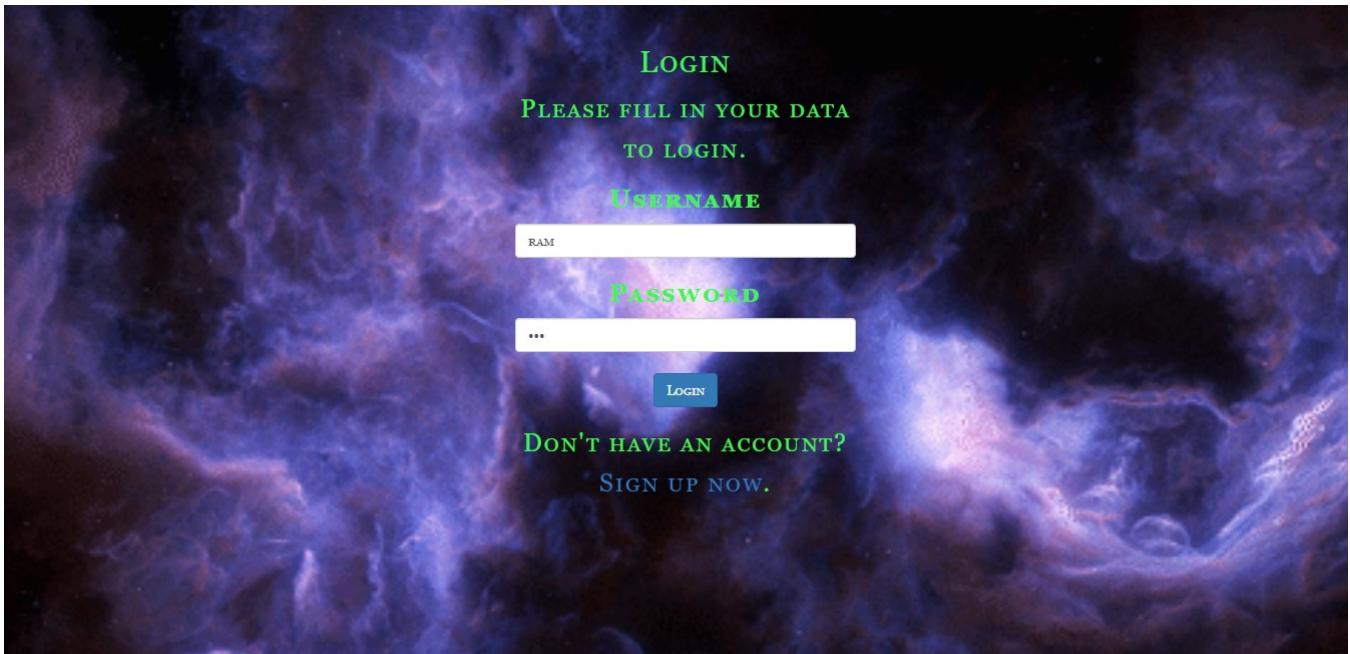
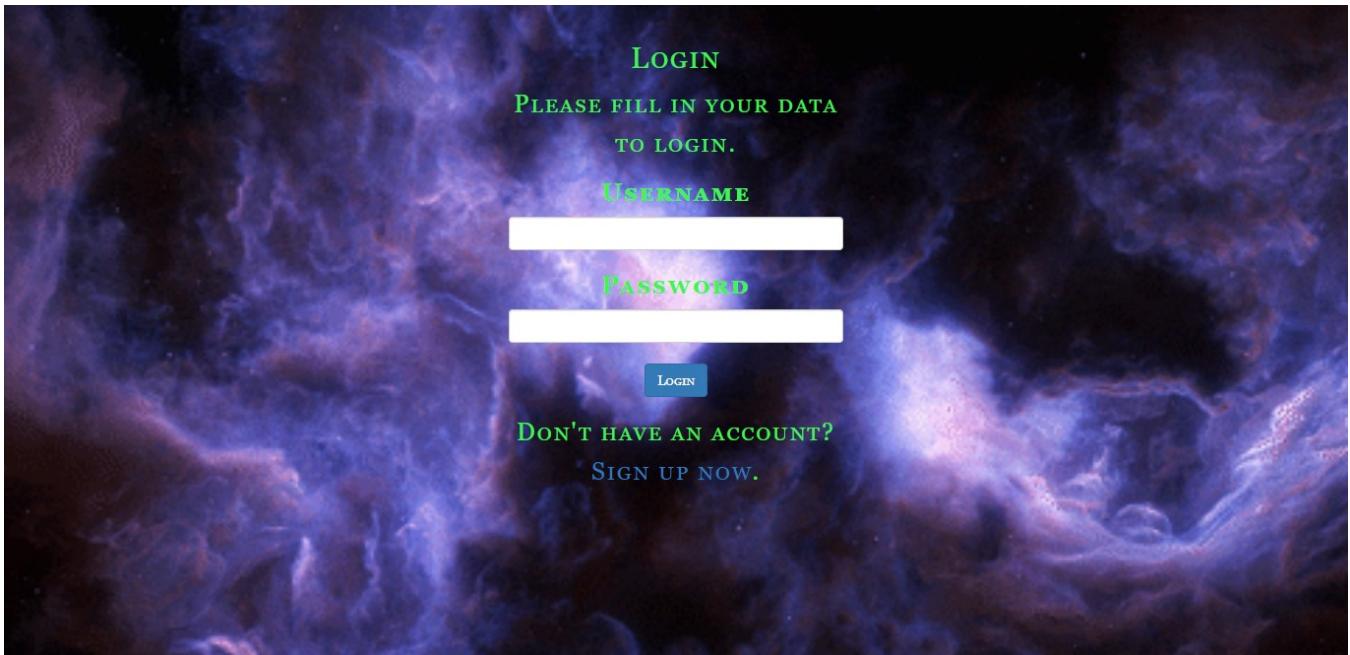


```

1 <?php
2 session_start();
3 $_SESSION = array();
4 session_destroy();
5 header("location: login.php");
6 exit;
7 ?>

```

OUTPUT:



Hi, **ram**. Welcome to our site.

[Sign Out of Your Account](#)

The screenshot shows the phpMyAdmin interface for the 'covid19_patient_management' database. The left sidebar shows the database structure with a 'patient' table selected. The main area displays the 'patient' table with two rows of data. The table structure includes columns for id, username, password, admitted_at, address, gender, phone, and en.

	id	username	password	admitted_at	address	gender	phone	en
10	santhosh	\$2y\$10\$O.gVMhqHadU1qVO.y7zte6c0Ar.2J1FPuxBgJhl... g...	2020-10-31 20:35:47	xyz	m	1234567890	sa	
12	ram	\$2y\$10\$ltBkKRht9tZTsEuYs6zg uxEpXT/SHANhS9cMFqYoKu... r...	2020-10-31 21:05:57	ram	m	1234242342	ra	

Conclusion:

- ❖ Hence, the covid19_patient_management_system can completely be implemented using Mysql (backend) and PHP (Frontend). In this section I have implemented the patient table of covid19_patient_management_system successfully.
- ❖ All the files that are used for implementing patient table were attached as “dbms.zip” file and uploaded in the teams.
