**ADVANCE JAVA - MINI PROJECT**

**SQL Queries**

Doctor Table Query

CREATE TABLE doctor (

    name VARCHAR(100) NOT NULL,

    password VARCHAR(15),

);

Patients Table Query

CREATE TABLE Patients (

    id INT PRIMARY KEY AUTO\_INCREMENT,

    name VARCHAR(100) NOT NULL,

    email VARCHAR(255) NOT NULL UNIQUE,

    phone VARCHAR(15),

    age INT,

    gender VARCHAR(10),

    diagnosis VARCHAR(255),

    remarks TEXT

);

PatientVitals Table Query

CREATE TABLE PatientVitals (

    id INT AUTO\_INCREMENT PRIMARY KEY,

    name VARCHAR(100) NOT NULL,

    phoneNumber VARCHAR(15),

    bpLow INT,

    bpHigh INT,

    spo2 INT,

    timestamp TIMESTAMP DEFAULT CURRENT\_TIMESTAMP

);

**Java Classes**

Patient Class

**package** minithree;

**public** **class** Patient {

**private** **int** id;

**private** String name;

**private** String email;

**private** String phone;

**private** **int** age;

**private** String gender;

**private** String diagnosis;

**private** String remarks;

**public** Patient() {

}

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

**public** String getPhone() {

**return** phone;

}

**public** **void** setPhone(String phone) {

**this**.phone = phone;

}

**public** **int** getAge() {

**return** age;

}

**public** **void** setAge(**int** age) {

**this**.age = age;

}

**public** String getGender() {

**return** gender;

}

**public** **void** setGender(String gender) {

**this**.gender = gender;

}

**public** String getDiagnosis() {

**return** diagnosis;

}

**public** **void** setDiagnosis(String diagnosis) {

**this**.diagnosis = diagnosis;

}

**public** String getRemarks() {

**return** remarks;

}

**public** **void** setRemarks(String remarks) {

**this**.remarks = remarks;

}

**public** **int** getId() {

**return** id;

}

**public** **void** setId(**int** id) {

**this**.id = id;

}

**public** Patient(**int** id, String name, String email, String phone, **int** age, String gender, String diagnosis,

String remarks) {

**super**();

**this**.id = id;

**this**.name = name;

**this**.email = email;

**this**.phone = phone;

**this**.age = age;

**this**.gender = gender;

**this**.diagnosis = diagnosis;

**this**.remarks = remarks;

}

**public** String getEmail() {

**return** email;

}

**public** **void** setEmail(String email) {

**this**.email = email;

}

}

PatientVitals Class

**package** minithree;

**public** **class** PatientVitals {

**private** **int** id;

**private** String name;

**private** String phoneNumber;

**private** **int** bpLow;

**private** **int** bpHigh;

**private** **int** spo2;

**private** String timestamp;

**public** PatientVitals() {

}

**public** PatientVitals(**int** id, String name, String phoneNumber, **int** bpLow, **int** bpHigh, **int** spo2, String timestamp) {

**this**.id = id;

**this**.name = name;

**this**.phoneNumber = phoneNumber;

**this**.bpLow = bpLow;

**this**.bpHigh = bpHigh;

**this**.spo2 = spo2;

**this**.timestamp = timestamp;

}

**public** **int** getId() {

**return** id;

}

**public** **void** setId(**int** id) {

**this**.id = id;

}

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

**public** String getPhoneNumber() {

**return** phoneNumber;

}

**public** **void** setPhoneNumber(String phoneNumber) {

**this**.phoneNumber = phoneNumber;

}

**public** **int** getBpLow() {

**return** bpLow;

}

**public** **void** setBpLow(**int** bpLow) {

**this**.bpLow = bpLow;

}

**public** **int** getBpHigh() {

**return** bpHigh;

}

**public** **void** setBpHigh(**int** bpHigh) {

**this**.bpHigh = bpHigh;

}

**public** **int** getSpo2() {

**return** spo2;

}

**public** **void** setSpo2(**int** spo2) {

**this**.spo2 = spo2;

}

**public** String getTimestamp() {

**return** timestamp;

}

**public** **void** setTimestamp(String timestamp) {

**this**.timestamp = timestamp;

}

}

PatientRegister Class

**package** minithree;

**import** java.io.IOException;

**import** javax.servlet.ServletException;

**import** javax.servlet.annotation.WebServlet;

**import** javax.servlet.http.HttpServlet;

**import** javax.servlet.http.HttpServletRequest;

**import** javax.servlet.http.HttpServletResponse;

@WebServlet("/PatientRegister")

**public** **class** PatientRegister **extends** HttpServlet {

PatientsDao dao = **new** PatientsDao();

@Override

**protected** **void** doPost(HttpServletRequest req, HttpServletResponse resp) **throws** ServletException, IOException {

String name = req.getParameter("name");

String email = req.getParameter("email");

String phone = req.getParameter("phone");

String age = req.getParameter("age");

String gender = req.getParameter("Gender");

String diagnosis = req.getParameter("disgnosis");

String remarks = req.getParameter("remarks");

System.***out***.println(name + " " + email + "" + phone + "" + age + "" + gender + "" + diagnosis + "" + remarks);

**try** {

**if** (dao.toSavePatient(name, email, phone, age, gender, diagnosis, remarks))

resp.sendRedirect("DoctorHome.jsp");

} **catch** (Exception e) {

e.printStackTrace();

}

}

}

DoctorLogin Class

**package** minithree;

**import** java.io.IOException;

**import** javax.servlet.ServletException;

**import** javax.servlet.annotation.WebServlet;

**import** javax.servlet.http.HttpServlet;

**import** javax.servlet.http.HttpServletRequest;

**import** javax.servlet.http.HttpServletResponse;

@WebServlet("/LoginForm")

**public** **class** DoctorLogin **extends** HttpServlet {

PatientsDao dao=**new** PatientsDao();

@Override

**protected** **void** doPost(HttpServletRequest req, HttpServletResponse resp) **throws** ServletException, IOException {

String name=req.getParameter("name");

String password=req.getParameter("password");

System.***out***.println(name+" "+password);

**try** {

**if**(dao.isValidData(name, password))

resp.sendRedirect("Login2.jsp");

**else**

resp.sendRedirect("LoginForm.jsp");

} **catch** (Exception e) {

e.printStackTrace();

}

}

}

Search Class

package minithree;

import java.io.IOException;

import java.util.List;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/Search")

public class Search extends HttpServlet {

private static final long serialVersionUID = 1L;

private PatientsDao dao = new PatientsDao();

@Override

protected void doPost(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {

String name = req.getParameter("name");

System.out.println(name);

List<Patient> patients = dao.listOfSearchPatients(name); // Retrieve the list of patients

req.setAttribute("patients", patients); // Store the list in request scope

req.getRequestDispatcher("SearchPatient.jsp").forward(req, resp); // Forward to JSP

}

}

VitalsAdd Class

package minithree;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/VitalsAdd")

public class VitalsAdd extends HttpServlet{

PatientsDao dao = new PatientsDao();

@Override

protected void doPost(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {

String name = req.getParameter("name");

int bpLow = Integer.parseInt(req.getParameter("bpLow"));

int bpHigh = Integer.parseInt(req.getParameter("bpHigh"));

int spo2 = Integer.parseInt(req.getParameter("spo2"));

try {

if (dao.toAddPatientVitals(name, bpLow, bpHigh, spo2))

resp.sendRedirect("DoctorHomeVitals.jsp");

} catch (Exception e) {

e.printStackTrace();

}

} }

DeletePatientServlet Class

**package** minithree;

**import** java.io.IOException;

**import** javax.servlet.ServletException;

**import** javax.servlet.annotation.WebServlet;

**import** javax.servlet.http.HttpServlet;

**import** javax.servlet.http.HttpServletRequest;

**import** javax.servlet.http.HttpServletResponse;

@WebServlet("/DeletePatientServlet")

**public** **class** DeletePatientServlet **extends** HttpServlet {

**private** **static** **final** **long** ***serialVersionUID*** = 1L;

**protected** **void** doGet(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, IOException {

String patientId = request.getParameter("id");

**if** (patientId != **null** && !patientId.isEmpty()) {

**try** {

**int** id = Integer.*parseInt*(patientId);

PatientsDao dao = **new** PatientsDao();

**boolean** isDeleted = dao.deletPatient(id);

} **catch** (NumberFormatException e) {

e.printStackTrace();

}

}

response.sendRedirect("DoctorHome.jsp");

}

}

DeletePatientVitals Class

package minithree;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/DeletePatientVitals")

public class DeletePatientVitals extends HttpServlet {

private static final long serialVersionUID = 1L;

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

String patientVitalId = request.getParameter("id");

if (patientVitalId != null && !patientVitalId.isEmpty()) {

try {

int id = Integer.parseInt(patientVitalId);

PatientsDao dao = new PatientsDao();

boolean isDeleted = dao.deletePatientVitals(id);

} catch (NumberFormatException e) {

e.printStackTrace();

}

}

response.sendRedirect("DoctorHomeVitals.jsp");

}

}

PatientsDao Class

package minithree;

import java.security.Timestamp;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.util.ArrayList;

import java.util.List;

public class PatientsDao {

List<Patient> patients = null;

List<PatientVitals> patientVitals = null;

Connection con = null;

PreparedStatement pt = null;

public boolean toSavePatient(String name, String email, String phone, String age, String gender, String diagnosis,

String remarks) {

try {

Class.forName("com.mysql.jdbc.Driver");

con = DriverManager.getConnection("jdbc:mysql://localhost:3306/healthdb", "root", "Password@12");

pt = con.prepareStatement(

"insert into patients(name,email,phone,age,gender,diagnosis,remarks) values (?,?,?,?,?,?,?)");

pt.setString(1, name);

pt.setString(2, email);

pt.setString(3, phone);

pt.setInt(4, Integer.parseInt(age));

pt.setString(5, gender);

pt.setString(6, diagnosis);

pt.setString(7, remarks);

pt.execute();

System.out.println("Row Inserted");

return true;

} catch (SQLException | ClassNotFoundException e) {

e.printStackTrace();

}

return false;

}

public List<Patient> listOfPatients() {

try {

Class.forName("com.mysql.cj.jdbc.Driver");

con = DriverManager.getConnection("jdbc:mysql://localhost:3306/healthdb", "root", "Password@12");

pt = con.prepareStatement("select \* from patients");

ResultSet set = pt.executeQuery();

patients = new ArrayList();

while (set.next()) {

Patient patient = new Patient();

patient.setId(set.getInt(1));

patient.setName(set.getString(2));

patient.setEmail(set.getString(3));

patient.setPhone(set.getString(4));

patient.setAge(set.getInt(5));

patient.setGender(set.getString(6));

patient.setDiagnosis(set.getString(7));

patient.setRemarks(set.getString(8));

patients.add(patient);

}

System.out.println(patients);

return patients;

} catch (SQLException | ClassNotFoundException e) {

e.printStackTrace();

}

return null;

}

public List<Patient> searchedPatients() {

System.out.println(patients);

return patients;

}

public List<Patient> listOfSearchPatients(String search) {

try {

Class.forName("com.mysql.jdbc.Driver");

con = DriverManager.getConnection("jdbc:mysql://localhost:3306/healthdb", "root", "Password@12");

pt = con.prepareStatement("SELECT \* FROM patients WHERE name LIKE ?");

pt.setString(1, "%" + search + "%");

ResultSet set = pt.executeQuery();

patients = new ArrayList();

while (set.next()) {

Patient patient = new Patient();

patient.setId(set.getInt(1));

patient.setName(set.getString(2));

patient.setEmail(set.getString(3));

patient.setPhone(set.getString(4));

patient.setAge(set.getInt(5));

patient.setGender(set.getString(6));

patient.setDiagnosis(set.getString(7));

patient.setRemarks(set.getString(8));

patients.add(patient);

}

return patients;

} catch (SQLException | ClassNotFoundException e) {

e.printStackTrace();

}

return null;

}

public boolean toAddPatientVitals(String name, int bpLow, int bpHigh, int spo2) {

try {

String phone = findPatient(name);

System.out.println(phone);

Class.forName("com.mysql.jdbc.Driver");

con = DriverManager.getConnection("jdbc:mysql://localhost:3306/healthdb", "root", "Password@12");

String sql = "INSERT INTO patientvitals (name,phoneNumber, bpLow, bpHigh, spo2) VALUES (?, ?, ?, ?, ?)";

pt = con.prepareStatement(sql);

pt.setString(1, name);

pt.setString(2, phone);

pt.setInt(3, bpLow);

pt.setInt(4, bpHigh);

pt.setInt(5, spo2);

pt.execute();

return true;

} catch (SQLException | ClassNotFoundException e) {

e.printStackTrace();

}

return false;

}

private String findPatient(String name) {

try {

Class.forName("com.mysql.jdbc.Driver");

con = DriverManager.getConnection("jdbc:mysql://localhost:3306/healthdb", "root", "Password@12");

pt = con.prepareStatement("SELECT phone FROM patients WHERE name = ?");

pt.setString(1, name);

ResultSet set = pt.executeQuery();

if (set.next()) {

return set.getString("phone"); // Use column name or index

} else {

return null;

}

} catch (SQLException | ClassNotFoundException e) {

e.printStackTrace();

}

return null;

}

public List<PatientVitals> filterVitalPatients() {

try {

Class.forName("com.mysql.jdbc.Driver");

con = DriverManager.getConnection("jdbc:mysql://localhost:3306/healthdb", "root", "Password@12");

pt = con.prepareStatement(

"SELECT \*FROM patientvitals WHERE bpLow NOT BETWEEN 70 AND 90 OR bpHigh NOT BETWEEN 120 AND 150 OR spo2 NOT BETWEEN 95 AND 100");

ResultSet set = pt.executeQuery();

patientVitals = new ArrayList();

while (set.next()) {

PatientVitals patientV = new PatientVitals();

patientV.setId(set.getInt(1));

patientV.setName(set.getString(2));

patientV.setPhoneNumber(set.getString(3));

patientV.setBpLow(set.getInt(4));

patientV.setBpHigh(set.getInt(5));

patientV.setSpo2(set.getInt(6));

patientV.setTimestamp(set.getString(7));

patientVitals.add(patientV);

}

return patientVitals;

} catch (SQLException | ClassNotFoundException e) {

e.printStackTrace();

}

return null;

}

public List<PatientVitals> patientVitals() {

try {

Class.forName("com.mysql.jdbc.Driver");

con = DriverManager.getConnection("jdbc:mysql://localhost:3306/healthdb", "root", "Password@12");

pt = con.prepareStatement("select \* from patientvitals");

ResultSet set = pt.executeQuery();

patientVitals = new ArrayList();

while (set.next()) {

PatientVitals patientV = new PatientVitals();

patientV.setId(set.getInt(1));

patientV.setName(set.getString(2));

patientV.setPhoneNumber(set.getString(3));

patientV.setBpLow(set.getInt(4));

patientV.setBpHigh(set.getInt(5));

patientV.setSpo2(set.getInt(6));

patientV.setTimestamp(set.getString(7));

patientVitals.add(patientV);

}

return patientVitals;

} catch (SQLException | ClassNotFoundException e) {

e.printStackTrace();

}

return null;

}

public boolean isValidData(String name, String password) {

try {

Class.forName("com.mysql.jdbc.Driver");

con = DriverManager.getConnection("jdbc:mysql://localhost:3306/healthdb", "root", "Password@12");

pt = con.prepareStatement("SELECT \* FROM doctor WHERE name=? and password=?");

pt.setString(1, name);

pt.setString(2, password);

ResultSet set = pt.executeQuery();

if (set.next()) {

System.out.println("Doctor Login Successfully");

return true;

} else {

return false;

}

} catch (SQLException | ClassNotFoundException e) {

e.printStackTrace();

}

return false;

}

boolean deletPatient(int id) {

try {

Class.forName("com.mysql.jdbc.Driver");

con = DriverManager.getConnection("jdbc:mysql://localhost:3306/healthdb", "root", "Password@12");

pt = con.prepareStatement("DELETE FROM Patients WHERE id = ?");

pt.setInt(1, id);

pt.executeUpdate();

System.out.println("Deleted");

return true;

} catch (SQLException | ClassNotFoundException e) {

e.printStackTrace();

}

return false;

}

boolean deletePatientVitals(int id) {

try {

Class.forName("com.mysql.jdbc.Driver");

con = DriverManager.getConnection("jdbc:mysql://localhost:3306/healthdb", "root", "Password@12");

pt = con.prepareStatement("DELETE FROM patientvitals WHERE id = ?");

pt.setInt(1, id);

pt.executeUpdate();

System.out.println("Deleted");

return true;

} catch (SQLException | ClassNotFoundException e) {

e.printStackTrace();

}

return false;

}

}

**JSP Files**

Login.jsp

<html>

<head>

<title>Home Page</title>

<style>

\*{

margin: *0*;

padding: *0*;

box-sizing: *border-box*;

}

*#health*{

height: *100vh*;

width: *100%*;

display: *flex*;

align-items: *center*;

justify-content: *center*;

}

*.logger*{

height: *200px*;

width: *350px*;

border: *3px solid red*;

border-radius: *10px*;

}

**h1**{

margin: *15px 0*;

font-weight: *100px*;

font-family: *Cambria, Cochin, Georgia, Times, 'Times New Roman', serif*;

}

**h4**{

color: *rgb(93, 93, 93)*;

margin-bottom: *60px*;

font-family: *Cambria, Cochin, Georgia, Times, 'Times New Roman', serif*;

}

**a**{

font-family: *Cambria, Cochin, Georgia, Times, 'Times New Roman', serif*;

background-color: *rgb(218, 218, 218)*;

padding: *15px 20px*;

text-decoration: *none*;

color: *rgb(0, 0, 0)*;

font-weight: *bolder*;

border-radius: *10px*;

}

**a***:hover*{

background-color: *rgb(24, 24, 24)*;

color: *rgb(255, 255, 255)*;

}

</style>

</head>

<body>

<div id=*"health"*>

<div class=*"logger"*>

<center>

<h1>Health Logger</h1>

<h4>Developed by Sreekanth Reddy</h4>

<a href=*"LoginForm.jsp"*>DOCTOR LOGIN</a>

</center>

</div>

</div>

</body>

</html>

LoginForm.jsp

<!DOCTYPE html>

<html lang=*"en"*>

<head>

<meta charset=*"UTF-8"*>

<meta name=*"viewport"* content=*"width=device-width, initial-scale=1.0"*>

<title>Login</title>

<style>

\*{

margin: *0*;

padding: *0*;

box-sizing: *border-box*;

}

*#out*{

height: *100vh*;

width: *100%*;

background-color: *rgba(49, 50, 50, 0.183)*;

}

**h1**{

font-family: *Cambria, Cochin, Georgia, Times, 'Times New Roman', serif*;

color: *rgb(90, 4, 17)*;

font-size: *40px*;

padding-top: *58px*;

}

*#login*{

height: *300px*;

width: *500px*;

margin:*50px auto*;

background-color: *#04424244*;

}

**h2**{

font-family: *Cambria, Cochin, Georgia, Times, 'Times New Roman', serif*;

color: *blue*;

font-size: *28px*;

padding-top: *15px*;

padding-bottom: *15px*;

}

**form** {

max-width: *300px*;

margin: *auto*;

}

*.form-group* {

margin-bottom: *15px*;

}

**label** {

display: *block*;

margin-bottom: *5px*;

font-weight: *bold*;

font-family: *Cambria, Cochin, Georgia, Times, 'Times New Roman', serif*;

}

**input**{

border: *none*;

border-radius: *4px*;

}

**input**[type="text"]**,** **input**[type="password"] {

width: *100%*;

padding: *8px*;

box-sizing: *border-box*;

}

**input**[type="submit"] {

margin-top: *10px*;

padding: *8px 50px*;

background-color: *#346dc2*;

color: *white*;

border: *none*;

border-radius: *4px*;

cursor: *pointer*;

font-family: *Cambria, Cochin, Georgia, Times, 'Times New Roman', serif*;

font-size:*large*;

}

**input**[type="submit"]*:hover* {

background-color: *#d80000*;

}

</style>

</head>

<body>

<div id=*"out"*>

<center>

<h1>PLEASE ENTER LOGIN DETAILS</h1>

</center>

<div id=*"login"*>

<center>

<h2>LOGIN PAGE</h2>

</center>

<form action=*"LoginForm"* method=*"post"*>

<div class=*"form-group"*>

<label for=*"username"*>Username:</label>

<input type=*"text"* id=*"username"* name=*"name"* required />

</div>

<div class=*"form-group"*>

<label for=*"password"*>Password:</label>

<input type=*"password"* id=*"password"* name=*"password"* required />

</div>

<center>

<input type=*"submit"* value=*"LOGIN"* />

</center>

</form>

</div>

</div>

</body>

</html>

Login2.jsp

<!DOCTYPE html>

<html lang=*"en"*>

<head>

<title>Document</title>

<style>

\*{

margin: *0*;

padding: *0*;

box-sizing: *border-box*;

}

*#health*{

height: *100vh*;

width: *100%*;

display: *flex*;

align-items: *center*;

justify-content: *center*;

}

*.logger*{

height: *300px*;

width: *350px*;

border: *3px solid red*;

border-radius: *10px*;

}

**h1**{

margin: *15px 0*;

font-weight: *100px*;

font-family: *Cambria, Cochin, Georgia, Times, 'Times New Roman', serif*;

}

**h4**{

color: *rgb(93, 93, 93)*;

margin-bottom: *60px*;

font-family: *Cambria, Cochin, Georgia, Times, 'Times New Roman', serif*;

}

**a**{

font-family: *Cambria, Cochin, Georgia, Times, 'Times New Roman', serif*;

background-color: *rgb(218, 218, 218)*;

padding: *15px 20px*;

text-decoration: *none*;

color: *rgb(0, 0, 0)*;

font-weight: *bolder*;

border-radius: *10px*;

height: *50px*;

width: *200px*;

display: *flex*;

margin: *20px 5px*;

display: *flex*;

align-items: *center*;

justify-content: *center*;

}

**a***:hover*{

font-family: *Cambria, Cochin, Georgia, Times, 'Times New Roman', serif*;

background-color: *rgb(24, 24, 24)*;

padding: *15px 20px*;

text-decoration: *none*;

color: *rgb(255, 255, 255)*;

font-weight: *bolder*;

border-radius: *10px*;

}

</style>

</head>

<body>

<div id=*"health"*>

<div class=*"logger"*>

<center>

<h1>Health Logger</h1>

<h4>Developed by Sreekanth Reddy</h4>

<a href=*"DoctorHome.jsp"*>MANAGE PATIENTS</a>

<a href=*"DoctorHomeVitals.jsp"*>MANAGE VITALS</a>

</center>

</div>

</div>

</body>

</html>

DoctorHome.jsp

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<%@page import=*"minithree.PatientsDao"*%>

<%@page import=*"minithree.\*"*%>

<%@page import=*"java.util.List"*%>

<%

PatientsDao dao = **new** PatientsDao();

List<Patient> pt = dao.listOfPatients();

%>

<!DOCTYPE html>

<html>

<head>

<title>Display Users</title>

<link rel=*"stylesheet"* href=*"table.css"*>

<style>

**tr**>*.actionmain* {

width: *190px*;

}

**tr**>*.action* {

display: *flex*;

}

**tr**>*.action*>**a** {

margin: *0 5px*;

padding: *5px 7px*;

border-radius: *5px*;

}

</style>

</head>

<body>

<div class=*"firstnav"*>

<h2>DOCTOR HOME PAGE</h2>

<a href=*"Login.jsp"*>LOGOUT</a>

</div>

<div class=*"secondnav"*>

<div class=*"buttons"*>

<h3>

Patients[<%=pt.size()%>]

</h3>

<a href=*"SearchPatient.jsp"*>Search Patients</a> <a

href=*"PatientRegistration.jsp"*>Add Patients</a> <a

href=*"DoctorHomeVitals.jsp"*>Manage Vitals</a>

</div>

</div>

<table>

<thead>

<tr>

<th>Sr N0</th>

<th>Name-Age</th>

<th>Email</th>

<th>Phone</th>

<th>Diagnosis</th>

<th>Remarks</th>

<th>Gender</th>

<th class=*"actionmain"*>Action</th>

</tr>

</thead>

<tbody>

<%

**for** (Patient p : pt) {

%>

<tr>

<td><%=p.getId()%></td>

<td><%=p.getName() + " - " + p.getAge()%></td>

<td><%=p.getEmail()%></td>

<td><%=p.getPhone()%></td>

<td><%=p.getDiagnosis()%></td>

<td><%=p.getRemarks()%></td>

<td><%=p.getGender()%></td>

<td class=*"action"*> <a href=*"DoctorHomeVitals.jsp"* style="background-color: *green*; color: *white*">Manage Vitals</a>

<a href=*""* style="background-color: *blue*; color: *white*">Update</a>

<a href=*"DeletePatientServlet?id=*<%=p.getId()%>*"* style="background-color: *red*; color: *white*" >Delete</a> </td>

</tr>

<%

}

%>

</tbody>

</table>

</body>

</html>

PatientRegistration.jsp

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<html>

<head>

<title>Registration</title>

<link rel=*"stylesheet"* href=*"form.css"*>

<style>

*#GenderMale***,***#GenderFemale*

{

height: *15px*;

width: *12px*;

}

</style>

<body>

<div id=*"patientinformation"*>

<center>

<h1 >Health Logger</h1>

<h4 >Add/Update Patient Information</h4>

</center>

<form action=*"PatientRegister"* method=*"post"*>

<div class=*"PatientInfo"*>

<label for=*"Name"*>Name</label>

<br>

<input type=*"text"* id=*"Name"* name=*"name"* required>

</div>

<div class=*"PatientInfo"*>

<label for=*"Email"*>Email</label>

<br>

<input type=*"text"* id=*"Email"* name=*"email"* required>

</div>

<div class=*"PatientInfo"*>

<label for=*"Phone"*>Phone</label>

<br>

<input type=*"text"* id=*"Phone"* name=*"phone"* required>

</div>

<div class=*"PatientInfo"*>

<label for=*"Age"*>Age</label>

<br>

<input type=*"text"* id=*"Age"* name=*"age"* required>

</div>

<div class=*"PatientInfo"*>

<label for=*"Diagnosis"*>Diagnosis</label>

<br>

<input type=*"text"* id=*"Diagnosis"* name=*"disgnosis"* required>

</div>

<div class=*"PatientInfo"*>

<label for=*"Remarks"*>Remarks</label>

<br>

<textarea id=*"Remarks"* name=*"remarks"*></textarea>

</div>

<br>

<br>

<br>

<div class=*"PatientInfo"*>

<label for=*"GenderMale"*>Gender</label>

<br>

<input type=*"radio"* name=*"Gender"* value=*"Male"* id=*"GenderMale"*> Male

<br>

<input type=*"radio"* name=*"Gender"* value=*"Female"* id=*"GenderFemale"*> Female

</div>

<center><button class=*"button"*>SUBMIT</button></center>

</div>

</form>

</body>

</html>

SearchPatient.jsp

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<%@ page import=*"java.util.List"* %>

<%@ page import=*"minithree.Patient"* %>

<%@ page import=*"minithree.PatientsDao"* %>

<!DOCTYPE html>

<html>

<head>

<title>Display Users</title>

<link rel=*"stylesheet"* href=*"table.css"*>

<style>

**tr**>*.actionmain* {

width: *190px*;

}

**tr**>*.action* {

display: *flex*;

}

**tr**>*.action*>**a** {

margin: *0 5px*;

padding: *5px 7px*;

border-radius: *5px*;

}

*.buttons* {

margin-left: *27px*;

height: *100px*;

width: *380px*;

}

*.buttons*>**a** {

height: *30px*;

width: *200px*;

color: *rgb(0, 0, 0)*;

margin-right: *20px*;

}

*#label* {

font-family: *Cambria, Cochin, Georgia, Times, 'Times New Roman', serif*;

font-weight: *bolder*;

height: *35px*;

width: *150px*;

margin-top: *15px*;

}

*#search* {

font-family: *Cambria, Cochin, Georgia, Times, 'Times New Roman', serif*;

height: *30px*;

width: *300px*;

border-radius: *5px*;

}

</style>

</head>

<body>

<div class=*"firstnav"*>

<h2>DOCTOR HOME PAGE</h2>

<a href=*"Login.jsp"*>LOGOUT</a>

</div>

<div class=*"secondnav"*>

<div class=*"buttons"*>

<a href=*"DoctorHome.jsp"*>Home</a> <a href=*"PatientRegistration.jsp"*>Add

Patients</a>

</div>

</div>

<div class=*"buttons"*>

<form action=*"Search"* method=*"post"*>

<input type=*"text"* name=*"name"* id=*"search"*> <input

type=*"submit"* value=*"SEARCH"* id=*"label"*>

</form>

</div>

<table>

<thead>

<tr>

<th>Sr N0</th>

<th>Name-Age</th>

<th>Email</th>

<th>Phone</th>

<th>Diagnosis</th>

<th>Remarks</th>

<th>Gender</th>

<th class=*"actionmain"*>Action</th>

</tr>

</thead>

<tbody>

<%

List<Patient> pt = (List<Patient>) request.getAttribute("patients");

**if** (pt != **null** && !pt.isEmpty()) {

**for** (Patient p : pt) {

%>

<tr>

<td><%=p.getId()%></td>

<td><%=p.getName() + " - " + p.getAge()%></td>

<td><%=p.getEmail()%></td>

<td><%=p.getPhone()%></td>

<td><%=p.getDiagnosis()%></td>

<td><%=p.getRemarks()%></td>

<td><%=p.getGender()%></td>

<td class=*"action"*><a href=*"DoctorHomeVitals.jsp"*

style="background-color: *green*; color: *white*">Manage Vitals</a> <a

href=*""* style="background-color: *blue*; color: *white*">Update</a>

<a href=*""* style="background-color: *red*; color: *white*">Delete</a>

</td>

</tr>

<%

}

}

%>

</tbody>

</table>

</body>

</html>

DoctorHomeVitals.jsp

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<%@ page import=*"java.util.List"*%>

<%@ page import=*"minithree.PatientVitals"*%>

<%@ page import=*"minithree.PatientsDao"*%>

<%@ taglib uri=*"http://java.sun.com/jsp/jstl/core"* prefix=*"c"*%>

<%

PatientsDao dao = **new** PatientsDao();

List<PatientVitals> vitalsList = dao.patientVitals();

%>

<!DOCTYPE html>

<html>

<head>

<title>Display Vitals</title>

<link rel=*"stylesheet"* href=*"table.css"*>

<style>

**tr**>*.action*>**a** {

height: *20px*;

padding: *3px 0px*;

border-radius: *10px*;

}

</style>

<script type=*"text/javascript"* src=*"https://www.gstatic.com/charts/loader.js"*></script>

<script type=*"text/javascript"*>

google.charts.load('current', {'packages':['corechart']});

google.charts.setOnLoadCallback(drawChart);

**function** drawChart() {

**var** dataArray = [['Timestamp', 'BP Low', 'BP High', 'SPO2']];

<%

// Use a for loop to populate the data array in JSP

**for** (PatientVitals p : vitalsList) {

%>

dataArray.push(['<%= p.getTimestamp() %>', <%= p.getBpLow() %>, <%= p.getBpHigh() %>, <%= p.getSpo2() %>]);

<% } %>

**var** data = google.visualization.arrayToDataTable(dataArray);

**var** options = {

title: 'Patient Vitals Over Time',

hAxis: {title: 'Recorded On', titleTextStyle: {color: '#333'}},

vAxis: {title: 'Values', minValue: 0},

curveType: 'function',

legend: { position: 'bottom' },

isStacked: **true** // Stacked Area Chart

};

**var** chart = **new** google.visualization.AreaChart(document.getElementById('chart\_div'));

chart.draw(data, options);

}

</script>

</head>

<body>

<div class=*"firstnav"*>

<h2>DOCTOR HOME PAGE</h2>

<a href=*"Login.jsp"*>LOGOUT</a>

</div>

<div class=*"secondnav"*>

<h3>Vitals</h3>

<div class=*"buttons"*>

<a href=*"DoctorHome.jsp"*>Manage Patients</a>

<a href=*""*>Export</a>

<a href=*"VitalsAdd.jsp"*>Record New Vital</a>

<a href=*"VitalsAlert.jsp"*>Vital Alerts</a>

</div>

</div>

<!-- Area Chart Div -->

<div id=*"chart\_div"* style="width: *100%*; height: *500px*;"></div>

<!-- Table of Vitals -->

<table>

<thead>

<tr>

<th>Sr No</th>

<th>Name</th>

<th>Phone</th>

<th>BP Low</th>

<th>BP High</th>

<th>SPO2</th>

<th>Recorded On</th>

<th>Action</th>

</tr>

</thead>

<tbody>

<% **for** (PatientVitals p : vitalsList) { %>

<tr>

<td><%= p.getId() %></td>

<td><%= p.getName() %></td>

<td><%= p.getPhoneNumber() %></td>

<td><%= p.getBpLow() %></td>

<td><%= p.getBpHigh() %></td>

<td><%= p.getSpo2() %></td>

<td><%= p.getTimestamp() %></td>

<td class=*"action"*>

<a href=*"DeletePatientVitals?id=*<%= p.getId() %>*"* style="background-color: *red*; color: *white*">Delete</a>

</td>

</tr>

<% } %>

</tbody>

</table>

</body>

</html>

VitalsAdd.jsp

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<html>

<head>

<title>Registration</title>

<link rel=*"stylesheet"* href=*"form.css"*>

<style>

**form**{

height:*400px*;

}

</style>

<body>

<div id=*"patientinformation"*>

<center>

<h1 >Health Logger</h1>

<h4 >Add Patient Vital Information</h4>

</center>

<form action=*"VitalsAdd"* method=*"post"* style=" height:*400px*">

<div class=*"PatientInfo"*>

<label for=*"Name"*>Select Patient</label>

<br>

<input type=*"text"* id=*"Name"* name=*"name"* required>

</div>

<div class=*"PatientInfo"*>

<label for=*"bpLow"*>BP Low</label>

<br>

<input type=*"number"* id=*"bpLow"* name=*"bpLow"* required>

</div>

<div class=*"PatientInfo"*>

<label for=*"bpHigh"*>BP High</label>

<br>

<input type=*"text"* id=*"bpHigh"* name=*"bpHigh"* required>

</div>

<div class=*"PatientInfo"*>

<label for=*"spo2"*>SPO2</label>

<br>

<input type=*"text"* id=*"spo2"* name=*"spo2"* required>

</div>

<center><button class=*"button"*>SUBMIT</button></center>

</div>

</form>

</body>

</html>

VitalsAlert.jsp

<%@ page language=*"java"* contentType=*"text/html; charset=ISO-8859-1"*

pageEncoding=*"ISO-8859-1"*%>

<%@ page import=*"java.util.List"*%>

<%@ page import=*"minithree.PatientVitals"*%>

<%@ page import=*"minithree.PatientsDao"*%>

<%@ taglib uri=*"http://java.sun.com/jsp/jstl/core"* prefix=*"c"*%>

<%

PatientsDao dao = **new** PatientsDao();

List<PatientVitals> vitalsList = dao.filterVitalPatients();

%>

<!DOCTYPE html>

<html>

<head>

<title>Display Vitals</title>

<link rel=*"stylesheet"* href=*"table.css"*>

<style>

**tr**>*.action*>**a** {

height: *20px*;

padding: *3px 0px*;

border-radius: *10px*;

}

*.red-text* {

color: *red*;

}

</style>

</head>

<body>

<div class=*"firstnav"*>

<h2>DOCTOR HOME PAGE</h2>

<a href=*"Login.jsp"*>LOGOUT</a>

</div>

<div class=*"secondnav"*>

<h3>Vitals</h3>

<div class=*"buttons"*>

<a href=*"DoctorHome.jsp"*>Manage Patients</a> <a href=*""*>Export</a>

<a href=*"VitalsAdd.jsp"*>Record New Vital</a>

</div>

</div>

<table>

<thead>

<tr>

<th>Sr No</th>

<th>Name</th>

<th>Phone</th>

<th>BP Low</th>

<th>BP High</th>

<th>SPO2</th>

<th>Recorded On</th>

<th>Action</th>

</tr>

</thead>

<tbody>

<%

**int** srNo = 1;

**for** (PatientVitals p : vitalsList) {

**boolean** isBpLowOutOfRange = p.getBpLow() < 70 || p.getBpLow() > 90;

**boolean** isBpHighOutOfRange = p.getBpHigh() < 120 || p.getBpHigh() > 150;

**boolean** isSpo2OutOfRange = p.getSpo2() < 95 || p.getSpo2() > 100;

%>

<tr>

<td><%= srNo++ %></td>

<td><%= p.getName() %></td>

<td><%= p.getPhoneNumber() %></td>

<td class=*"*<%= isBpLowOutOfRange ? "red-text" : "" %>*"*><%= p.getBpLow() %></td>

<td class=*"*<%= isBpHighOutOfRange ? "red-text" : "" %>*"*><%= p.getBpHigh() %></td>

<td class=*"*<%= isSpo2OutOfRange ? "red-text" : "" %>*"*><%= p.getSpo2() %></td>

<td><%= p.getTimestamp() %></td>

<td class=*"action"*>

<a href=*"DeletePatientVitals?id=*<%=p.getId()%>*"* style="background-color: *red*; color: *white*">Delete</a>

</td>

</tr>

<%

}

%>

</tbody>

</table>

</body>

</html>

form.css

@charset *"ISO-8859-1"*;

*#patientinformation*

{

border: *3px* *solid* *rgb(53,* *53,* *53)*;

height: *100%*;

width: *400px*;

margin: *50px* *auto*;

}

*.PatientInfo*{

height: *70px*;

width: *300px*;

margin-bottom: *10px*;

margin-left: *30px*;

}

**label**{

font-family: *Cambria,* *Cochin,* *Georgia,* *Times,* *'Times New Roman',* *serif*;

}

**input**

{

height: *25px*;

width: *300px*;

}

**textarea**{

height: *75px*;

width: *300px*;

}

*.button* {

color: *rgb(0,* *0,* *0)*;

padding: *16px* *32px*;

text-align: *center*;

text-decoration: *none*;

display: *inline-block*;

font-size: *16px*;

font-weight: *bolder*;

margin: *10px* *0px*;

cursor: *pointer*;

margin-left: *30px*;

border:*2px* *solid* *rgb(2,* *2,* *2)*;

border-radius: *13px*;

}

*.button:hover*{

background-color: *rgb(0,* *0,* *0)*;

color: *white*;

}

**h1,h4**{

font-family: *Cambria,* *Cochin,* *Georgia,* *Times,* *'Times New Roman',* *serif*;

color: *brown*;

}

table.css

@charset *"ISO-8859-1"*;

**table** {

width: *95.5%*;

border-collapse: *collapse*;

margin: *50px* *0*;

font-size: *18px*;

text-align: *left*;

margin: *0* *auto*;

}

**th,** **td** {

padding: *12px*;

width: *auto*;

height: *auto*;

border-bottom: *1px* *solid* *#ddd*;

font-family: *Cambria,* *Cochin,* *Georgia,* *Times,* *'Times New Roman',* *serif*;

}

**th** {

background-color: *#f2f2f2*;

}

*.buttons* {

height: *70px*;

width: *50%*;

display: *flex*;

align-items: *center*;

justify-content: *space-evenly*;

}

**h2,** **h3** {

font-family: *Cambria,* *Cochin,* *Georgia,* *Times,* *'Times New Roman',* *serif*;

margin-left: *30px*;

color: *red*;

}

*.firstnav*>**a** {

font-family: *Cambria,* *Cochin,* *Georgia,* *Times,* *'Times New Roman',* *serif*;

background-color: *rgb(218,* *218,* *218)*;

padding: *5px* *10px*;

text-decoration: *none*;

color: *rgb(0,* *0,* *0)*;

font-weight: *bolder*;

border-radius: *10px*;

margin-right: *25px*;

display: *flex*;

align-items: *center*;

justify-content: *center*;

}

*.buttons*>**a** {

font-family: *Cambria,* *Cochin,* *Georgia,* *Times,* *'Times New Roman',* *serif*;

background-color: *rgb(218,* *218,* *218)*;

padding: *5px* *10px*;

text-decoration: *none*;

color: *rgb(0,* *0,* *0)*;

font-weight: *bolder*;

border-radius: *10px*;

margin-right: *10px*;

display: *flex*;

align-items: *center*;

justify-content: *center*;

}

**tr**>*.action*>**a** {

font-family: *Cambria,* *Cochin,* *Georgia,* *Times,* *'Times New Roman',* *serif*;

background-color: *rgb(218,* *218,* *218)*;

text-decoration: *none*;

font-weight: *bolder*;

display: *flex*;

align-items: *center*;

justify-content: *center*;

}

*.firstnav***,** *.secondnav* {

height: *70px*;

width: *100%*;

display: *flex*;

align-items: *center*;

justify-content: *space-between*;

}

Web.xml

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<web-app xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns=*"http://java.sun.com/xml/ns/javaee"* xsi:schemaLocation=*"http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-app\_3\_0.xsd"* version=*"3.0"*>

<display-name>ABCD</display-name>

<welcome-file-list>

<welcome-file>Login.jsp</welcome-file>

</welcome-file-list>

</web-app>