

CODES:

index.Html

```
<!DOCTYPE html>
<html>
<head>
<base href="/HealthLogger/">
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1" />
<title>Health Logger</title>
<style>
* {
    margin: 0;
    box-sizing: border-box;
}

body {
    height: 100vh;
    display: flex;
    flex-direction: column;
    align-items: center;
    justify-content: center;
    /* gap: 12px; */
}

p {
    color: #a0a0a0;
    margin: 4px 0 24px 0;
}

a {
    width: 200px;
    /* height: 50px; */
    border-radius: 12px;
    background: #eee;
    border: 1px solid #eee;
    margin: 8px 0;
    text-decoration: none;
    color: #000;
    padding: 20px 40px;
    text-align: center;
}

a:hover {
    box-shadow: 0 0 4px #a0a0a0;
    border: 1px solid #a0a0a0;
}
</style>
</head>
<body>
```

```
<h1>Health Logger</h1>
<p>Developer : Satyanarayana Bypureddy</p>

<a href="adminLogin.jsp">Doctor Login</a>
</body>
</html>
```

adminHome.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1" />
<title>Health Logger</title>
<style>
* {
    margin: 0;
    box-sizing: border-box;
}
body {
    height: 100vh;
    display: flex;
    flex-direction: column;
    align-items: center;
    justify-content: center;
    /* gap: 12px; */
}
p {
    color: #a0a0a0;
    margin: 4px 0 24px 0;
}
a {
    width: 200px;
    /* height: 50px; */
    border-radius: 12px;
    background: #eee;
    border: 1px solid #eee;
    margin: 8px 0;
    text-decoration: none;
    color: #000;
    padding: 20px 40px;
    text-align: center;
}
a:hover {
    box-shadow: 0 0 4px #a0a0a0;
```

```

        border: 1px solid #a0a0a0;
    }
</style>
</head>
<body>
<h1>Health Logger</h1>
<p>Developer : Satyanarayana Bypureddy</p>

<a href="managePatients.jsp">Manage Patients</a>
<a href="manageVitals.jsp">Manage Vitals</a>
</body>
</html>

```

adminLogin.jsp

```

<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1" />
<title>Health Logger - Doctor Login</title>
<style>
* {
    margin: 0;
    box-sizing: border-box;
}
body {
    height: 100vh;
    display: flex;
    flex-direction: column;
    align-items: center;
    justify-content: center;
    /* gap: 12px; */
}
p {
    color: #a0a0a0;
    margin: 4px 0 24px 0;
}
form {
    display: flex;
    flex-direction: column;
    gap: 24px;
}
.form-group {
    display: flex;
    flex-direction: column;
    gap: 8px;
}

```

```

}
input {
    width: 350px;
    padding: 10px 20px;
    border: 1px solid #eee;
    border-radius: 12px;
}
button {
    width: 350px;
    border-radius: 12px;
    background: #32C732;
    color: #fff;
    font-weight: 700;
    padding: 10px 20px;
    border: none;
    cursor: pointer;
}
button:hover {
    background: #28A228;
}
</style>
</head>
<body>
    <%=String email, password;%>
    <%
        try {
            password = request.getParameter("password") == null ? "" :
request.getParameter("password");
            email = request.getParameter("email") == null ? "" :
request.getParameter("email");
        } catch (NullPointerException e) {
            password = "";
            email = "";
        }
    %>

    <h1>Health Logger</h1>
    <p>Doctor Login</p>

    <form action="AdminLoginController" method="post">
        <div class="form-group">
            <label>Enter Email</label> <input type="email" name="email"
id="email" placeholder="abc@example.com"
value="<%=email%>">
        </div>
        <div class="form-group">
            <label>Enter Password</label> <input type="password"
name="password"
id="password" placeholder="*****"
value="<%=password%>">
        </div>

        <div role="alert">
            <small>${message.message}</small>
        </div>

        <button type="submit">Login</button>

    </form>

```

```
</body>
</html>
```

error.jsp

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8" isErrorPage="true"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<title>Error Page</title>
</head>
<body>

<h1>Something Went Wrong</h1>
<%= exception.getLocalizedMessage() %>
</body>
</html>
```

exportData.jsp

```
<%@page import="java.util.Date"%>
<%@page import="com.opencsv.CSVWriter"%>
<%@page import="java.io.File"%>
<%@page import="java.io.FileWriter"%>
<%@page import="java.text.DateFormat"%>
<%@page import="java.text.SimpleDateFormat"%>
<%@page import="java.util.HashMap"%>
<%@page import="com.tech.models.VitalModel"%>
<%@page import="java.util.Map"%>
<%@page import="com.tech.models.PatientModel"%>
<%@page import="java.util.List"%>
<%@page import="java.util.ArrayList"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="com.tech.dao.DB"%>
<%@page import="com.tech.models.AdminModel"%>
<%@page import="java.io.File"%>
<%@page import="java.io.FileWriter"%>
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
```

```

<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<title>Health Logger</title>
<style>
table {
    width: 100%;
    border-collapse: collapse;
    /* border: 1px solid #a0a0a0; */
}
th, td {
    text-align: left;
    padding: 12px;
    border-bottom: 1px solid #a0a0a0;
}
td a, .add-btn {
    text-decoration: none;
    padding: 4px 16px;
    color: #000;
    background-color: #d9d9d9;
    border-radius: 8px;
    margin: 12px 0;
}
h3 {
    margin: 0;
}
</style>
</head>
<body>
    <div
        style="display: flex; justify-content: space-between; align-items:
center; width: 100%;">
        <h1>Doctor Home Page</h1>
        <a class="add-btn"
href="AdminLoginController?mode=Logout">Logout</a>
    </div>
<%

```

```

        List<Map<String, Object>> vitalsInfo = new ArrayList<Map<String,
Object>>();
        DB db = DB.getDb();
        String sqlQuery = "";
        if (request.getParameter("patientId") == null) {
            /* Exporting All Patient Vitals in csv */
            sqlQuery = "select v.*, p.name, p.phone, p.diagnosis from " +
VitalModel.TABLE_NAME + " as v, "
            + PatientModel.TABLE_NAME + " as p where v.patientId = p.patientId
order by v.addedOn desc;";
        } else {
            /* Exporting Data for Particular Patient */
            sqlQuery = "select v.*, p.name, p.phone, p.diagnosis from " +
VitalModel.TABLE_NAME + " as v, "
            + PatientModel.TABLE_NAME + " as p where v.patientId = p.patientId
and p.patientId="
            + request.getParameter("patientId") + " order by v.addedOn desc;";
        }
        ResultSet result = db.executeQuery(sqlQuery);
        if (result.next()) {

```

```

        DateFormat format = DateFormat.getDateTimeInstance(DateFormat.SHORT,
DateFormat.SHORT);
        Date date = new Date();

        String tempDir = System.getProperty("java.io.tmpdir");
        String filename = tempDir + "/myfile.csv";
        File file = new File(filename);
        CSVWriter writer = new CSVWriter(new FileWriter(file));
        writer.writeNext(new String[] { "Sr. No", "Name", "Phone", "BP Low",
"BP High", "SP02", "RecordedOn" });
        int idx = 0;
        while(result.next()) {
            writer.writeNext(new String[]{
                String.valueOf(++idx),
                result.getString("name"),
                result.getString("phone"),
                String.valueOf(result.getInt("bpLow")),
                String.valueOf(result.getInt("bpHigh")),
                String.valueOf(result.getInt("spo2")),
                format.format(result.getTimestamp("addedOn"))
            });
        }
        writer.flush();
        writer.close();
        out.println("<b>You are Successfully Created Csv file.</b></br>");
        out.println("<b>Downloaded at " + filename + "</b>");

    } else {
        out.println("<b>Unable to created csv/xlsx file.</b>");
    }
%>

</body>
</html>

```

managePatients.jsp

```

<%@page import="com.tech.models.PatientModel"%>
<%@page import="java.util.List"%>
<%@page import="java.util.ArrayList"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="com.tech.dao.DB"%>
<%@page import="com.tech.models.AdminModel"%>
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">

```

```

<title>Health Logger</title>
<style>
table {
    width: 100%;
    border-collapse: collapse;
    /* border: 1px solid #a0a0a0; */
}
th, td {
    text-align: left;
    padding: 12px;
    border-bottom: 1px solid #a0a0a0;
}
td a, .add-btn {
    text-decoration: none;
    padding: 4px 16px;
    color: #000;
    background-color: #d9d9d9;
    border-radius: 8px;
    margin: 12px 0;
}
h3 {
    margin: 0;
}
</style>
</head>
<body>
    <%
        List<PatientModel> patients = new ArrayList<PatientModel>();
        DB db = DB.getDb();
        ResultSet result = db.executeQuery(PatientModel.getAllPatientQuery());
        while (result.next()) {
            patients.add(PatientModel.getPatientModel(result));
        }
    %>
    <div
        style="display: flex; justify-content: space-between; align-items:
center; width: 100%;">
        <h1>Doctor Home Page</h1>
        <a class="add-btn"
href="AdminLoginController?mode=Logout">Logout</a>
    </div>

    <div style="display: flex; align-items: center; width: 100%; margin: 8px 0;
gap: 12px;">
        <h3>
            Patients [ <%=patients.size()%> ]
        </h3>

        <a class="add-btn" href="searchPatient.jsp">Search Patient</a>
        <a class="add-btn" href="patientForm.jsp?mode=add">Add
Patient</a>
        <a class="add-btn" href="manageVitals.jsp">Manage Vitals</a>

    </div>
    <div style="overflow-x: auto;">
        <table>
            <thead>
                <tr>
                    <th>Sr. No</th>

```



```

        <th>Name - Age</th>
        <th>Email</th>
        <th>Phone</th>
        <th>Diagnosis</th>
        <th>Remark</th>
        <th>gender</th>
        <th>Action</th>
    </tr>
</thead>
<tbody>
    <%
    for (int idx = 0; idx < patients.size(); idx++) {
        PatientModel patient = patients.get(idx);
    %>
    <tr>
        <td><%=idx + 1%></td>
        <td><%=patient.name%> - <%=patient.age%></td>
        <td><%=patient.email%></td>
        <td><%=patient.phone%></td>
        <td><%=patient.diagnosis%></td>
        <td><%=patient.remarks%></td>
        <td><%=patient.gender%></td>
        <td>
            <a
href="manageVitals.jsp?patientId=<%=patient.patientId%>">Manage Vitals</a>
            <a
href="patientForm.jsp?mode=update&patientId=<%=patient.patientId%>">Update</a>
            <a
href="<%=request.getContextPath()%>/PatientController?mode=delete&patientId=<%=patient.patientId%>">Delete</a>
        </td>
    </tr>
    <%
    }
    %>
</tbody>
</table>
</div>
</body>
</html>

```

manageVitals.jsp

```

<%@page import="com.google.gson.Gson"%>
<%@page import="java.text.DateFormat"%>
<%@page import="java.text.SimpleDateFormat"%>
<%@page import="java.util.HashMap"%>
<%@page import="com.tech.models.VitalModel"%>
<%@page import="java.util.Map"%>
<%@page import="com.tech.models.PatientModel"%>
<%@page import="java.util.List"%>
<%@page import="java.util.ArrayList"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="com.tech.dao.DB"%>

```

```

<%@page import="com.tech.models.AdminModel"%>
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<title>Health Logger</title>
<style>
table {
    width: 100%;
    border-collapse: collapse;
    /* border: 1px solid #a0a0a0; */
}
th, td {
    text-align: left;
    padding: 12px;
    border-bottom: 1px solid #a0a0a0;
}
td a, .add-btn {
    text-decoration: none;
    padding: 4px 16px;
    color: #000;
    background-color: #d9d9d9;
    border-radius: 8px;
    margin: 12px 0;
}
h3 {
    margin: 0;
}
</style>
</head>
<body>
    <%!
        Map<String, Object> getMapObject(String xValue, int yValue) {
            Map<String, Object> map = new HashMap<String, Object>();
            map.put("label", xValue);
            map.put("y", yValue);
            return map;
        }
    %>

    <%

        Gson gsonObj = new Gson();
        List<Map<String, Object>> vitalsInfo = new ArrayList<Map<String,
Object>>();
        DB db = DB.getDb();
        boolean isPatientVitals = false;
        String sqlQuery = "";
        if (request.getParameter("patientId") == null) {
            /* Exporting All Patient Vitals in csv */
            isPatientVitals = false;
            sqlQuery = "select v.*, p.name, p.phone, p.diagnosis from " +
VitalModel.TABLE_NAME + " as v, "
+ PatientModel.TABLE_NAME + " as p where v.patientId = p.patientId
order by v.addedOn desc;";
        } else {

```

```

        /* Exporting Data for Particular Patient */
        isPatientVitals = true;
        sqlQuery = "select v.*, p.name, p.phone, p.diagnosis from " +
VitalModel.TABLE_NAME + " as v, "
        + PatientModel.TABLE_NAME + " as p where v.patientId = p.patientId
and p.patientId="
        + request.getParameter("patientId") + ";";
    }
    ResultSet result = db.executeQuery(sqlQuery);
    List<Map<String, Object>> bpLowList = new ArrayList<Map<String, Object>>();
    List<Map<String, Object>> bpHighList = new ArrayList<Map<String,
Object>>();
    List<Map<String, Object>> spo2List = new ArrayList<Map<String, Object>>();
    int index = 0;
    while (result.next()) {
        DateFormat format = DateFormat.getDateInstance(DateFormat.SHORT,
DateFormat.SHORT);
        Map<String, Object> vitalMap = new HashMap<String, Object>();
        vitalMap.put("vitalId", result.getInt("vitalId"));
        vitalMap.put("patientId", result.getInt("patientId"));
        vitalMap.put("bpLow", result.getInt("bpLow"));
        vitalMap.put("bpHigh", result.getInt("bpHigh"));
        vitalMap.put("spo2", result.getInt("spo2"));
        vitalMap.put("name", result.getString("name"));
        vitalMap.put("phone", result.getString("phone"));
        vitalMap.put("addedOn",
format.format(result.getTimestamp("addedOn")));

        bpLowList.add(getMapObject(format.format(result.getTimestamp("addedOn")),
result.getInt("bpLow")));

        bpHighList.add(getMapObject(format.format(result.getTimestamp("addedOn")),
result.getInt("bpHigh")));

        spo2List.add(getMapObject(format.format(result.getTimestamp("addedOn")),
result.getInt("spo2")));
        index += 1;
        vitalsInfo.add(vitalMap);
    }
    %>
<div
    style="display: flex; justify-content: space-between; align-items:
center; width: 100%;">
    <h1>Doctor Home Page</h1>
    <a class="add-btn"
href="AdminLoginController?mode=Logout">Logout</a>
</div>
<div
    style="display: flex; justify-content: space-between; align-items:
center; width: 100%; margin: 8px 0;">
    <h3>Vitals</h3>
    <div
        style="display: flex; justify-content: end; align-items:
center; gap: 12px;">
        <a class="add-btn" href="managePatients.jsp">Manage
Patients</a>
        <a class="add-btn" href="exportData.jsp">Export</a>
    </div>
    </div>

```

```

        <a class="add-btn"
href="vitalForm.jsp?mode=add&isPatientVital=<%=isPatientVitals%>">Record New
Vital</a>

        <a class="add-btn" href="vitalAlerts.jsp">Vital
Alerts</a>
    </div>
</div>

    <%if (isPatientVitals) {%>
    <div id="chartContainer" style="height: 370px; width: 100%; margin: 4px
0;"></div>
    <%}%>
    <div style="overflow-x: auto;">
        <table>
            <thead>
                <tr>
                    <th>Sr. No</th>
                    <th>Name</th>
                    <th>Phone</th>
                    <th>BP Low</th>
                    <th>BP High</th>
                    <th>SP02</th>
                    <th>Recorded On</th>
                    <th>Action</th>
                </tr>
            </thead>
            <tbody>
                <%
for (int idx = 0; idx < vitalsInfo.size(); idx++) {
    Map<String, Object> vital = vitalsInfo.get(idx);
%>
                <tr>
                    <td><%=idx + 1%></td>
                    <td><%=vital.get("name")%></td>
                    <td><%=vital.get("phone")%></td>
                    <td><%=vital.get("bpLow")%></td>
                    <td><%=vital.get("bpHigh")%></td>
                    <td><%=vital.get("spo2")%></td>
                    <td><%=vital.get("addedOn")%></td>
                    <td><a
href="<%=request.getContextPath()%>/VitalController?mode=delete&vitalId=<%=
vital.get("vitalId")%>">Delete</a>
                    </td>
                </tr>
                <%
}
%>
            </tbody>
        </table>
    </div>
    <script src="https://canvasjs.com/assets/script/canvasjs.min.js"></script>
    <script type="text/javascript">

    <%if (isPatientVitals) {%>
        window.onload = function() {
            var chart = new CanvasJS.Chart("chartContainer", {
                animationEnabled: true,
                zoomEnabled: true,

```

```

        theme: "light2",
        title: {
            text: "Patient's Vitals"
        },
        axisX: {
            title: "Recorded On",
            valueFormatString: "dd/MM/yyyy hh:mm:ss a"
        },
        axisY: {
            logarithmic: true, //change it to false
            title: "Vitals",
            titleFontColor: "#6D78AD",
            lineColor: "#6D78AD",
            gridThickness: 0,
            lineThickness: 1,
        },
        tooltip: {
            shared: true
        },
        legend: {
            verticalAlign: "top",
            dockInsidePlotArea: true
        },
        data: [{
            type: "line",
            showInLegend: true,
            name: "BP Low",
            legendText: "{name}",
            dataPoints:
<%out.print(gsonObj.toJson(bpLowList));%>
        },
        {
            type: "line",
            showInLegend: true,
            name: "BP High",
            legendText: "{name}",
            dataPoints:
<%out.print(gsonObj.toJson(bpHighList));%>
        },
        {
            type: "line",
            showInLegend: true,
            name: "SPO2",
            legendText: "{name}",
            dataPoints:
<%out.print(gsonObj.toJson(spo2List));%>
        }
    ]
});
chart.render();
    }
<%}%>

</script>
</body>
</html>

```

patientForm.jsp

```
<%@page import="com.tech.models.PatientModel"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="com.tech.dao.DB"%>
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1" />
<title>Health Logger</title>

<style>
* {
    margin: 0;
    box-sizing: border-box;
}
body {
    height: 100vh;
    display: flex;
    flex-direction: column;
    align-items: center;
    justify-content: center;
    /* gap: 12px; */
}
p {
    color: #a0a0a0;
    margin: 4px 0 24px 0;
}
form {
    display: flex;
    flex-direction: column;
    gap: 24px;
}
.form-group {
    display: flex;
    flex-direction: column;
    align-items: start;
    gap: 8px;
}
input:not([type="radio"]), textarea {
    width: 350px;
    padding: 10px;
    border: 1px solid #b9b9b9;
    border-radius: 8px;
}
input[type="radio"] {
    width: max-content;
}
button {
    width: 350px;
```

```

        border-radius: 12px;
        background: #32C732;
        color: #fff;
        font-weight: 700;
        padding: 10px 20px;
        border: none;
        cursor: pointer;
    }
    button:hover {
        background: #28A228;
    }
</style>
</head>
<body>

    <%!
        DB db = DB.getDb();
        PatientModel model = new PatientModel(0, "", "", "", 0, "", "", "",
0, null);
        String mode;

    %>
    <%
        mode = request.getParameter("mode");
        if(mode.equals("update")) {
            String patientId = request.getParameter("patientId");
            ResultSet result =
db.executeQuery(PatientModel.getPatientByIdQuery(patientId));
            if(result.next()) {
                model = PatientModel.getPatientModel(result);
            }
        }
    %>

    <br>
    <br>

    <h1>Health Logger</h1>
    <p>Add/Update Patient Information</p>

    <form action="PatientController" method="post">
        <input type="text" name="mode" value="<%= mode %>" hidden="">
        <input type="text" name="patientId" value="<%= model.patientId %>"
hidden="">
        <div class="form-group">
            <label> Name</label>
            <input type="text" name="name" id="name" placeholder="John
Peterson" value="<%=model.name %>">
        </div>
        <div class="form-group">
            <label>Email</label>
            <input type="email" name="email" id="email"
placeholder="abc@example.com" value="<%=model.email %>">
        </div>
        <div class="form-group">
            <label>Phone</label>
            <input type="text" name="phone" id="phone" placeholder="+91
*****" value="<%=model.phone %>">
        </div>
        <div class="form-group">

```

```

        <label>Age</label>
        <input type="number" name="age" id="age" placeholder="eg: 22"
value="<%=model.age %>">
    </div>
    <div class="form-group">
        <label>Diagnosis</label>
        <input type="text" name="diagnosis" id="diagnosis"
placeholder="eg: Blood Pressure" value="<%=model.diagnosis %>">
    </div>
    <div class="form-group">
        <label>Remark</label>
        <textarea rows="5" name="remarks"
id="remarks"><%=model.remarks %></textarea>
    </div>

    <div class="form-group">
        <span>Gender</span>
        <div style="display: flex; gap: 12px;">
            <input type="radio" name="gender" id="male"
value="male">
                <label for="male">Male</label>
        </div>
        <div style="display: flex; gap: 12px;">
            <input type="radio" name="gender" id="female"
value="female">
                <label for="female">Female</label>
        </div>
    </div>

    <div role="alert">
        <small>${message}</small>
    </div>
    <button type="submit">Submit</button>

</form>

</body>
</html>

```

searchPatient.jsp

```

<%@page import="com.tech.models.PatientModel"%>
<%@page import="java.util.List"%>
<%@page import="java.util.ArrayList"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="com.tech.dao.DB"%>
<%@page import="com.tech.models.AdminModel"%>
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">

```



```

<meta http-equiv="X-UA-Compatible" content="IE=edge">
<title>Health Logger</title>
<style>
table {
    width: 100%;
    border-collapse: collapse;
    /* border: 1px solid #a0a0a0; */
}
th, td {
    text-align: left;
    padding: 12px;
    border-bottom: 1px solid #a0a0a0;
}
td a, .add-btn {
    text-decoration: none;
    padding: 4px 16px;
    color: #000;
    background-color: #d9d9d9;
    border-radius: 8px;
    margin: 12px 0;
}
h3 {
    margin: 0;
}
form {
    display: flex;
    flex-direction: column;
    gap: 24px;
}
.form-group {
    display: flex;
    flex-direction: column;
    gap: 8px;
}
input {
    width: 350px;
    padding: 10px 20px;
    border: 1px solid #eee;
    border-radius: 12px;
}
button {
    width: 350px;
    border-radius: 12px;
    background: #32C732;
    color: #fff;
    font-weight: 700;
    padding: 10px 20px;
    border: none;
    cursor: pointer;
}
button:hover {
    background: #28A228;
}
</style>
</head>
<body>

    <div

```

```

        style="display: flex; justify-content: space-between; align-items:
center; width: 100%;">
        <h1>Doctor Home Page</h1>
        <a class="add-btn"
href="AdminLoginController?mode=Logout">Logout</a>
    </div>

    <div
        style="display: flex; align-items: center; width: 100%;
margin: 8px 0; gap: 12px;">
        <a class="add-btn" href="managePatients.jsp">Home</a>
        <a class="add-btn" href="patientForm.jsp?mode=add">Add
Patient</a>
    </div>

    <div>
        <form action='searchPatient.jsp' method="post">
            <div class="form-group">
                <label>Search Patient</label>
                <input type="text" name="search" id="search"
placeholder="Search By Name..">
                <input type="submit" value="Search">
            </div>
        </form>
        <br>
    </div>

    <%

String searchText = request.getParameter("search");
if(searchText == null){
    return;
}

List<PatientModel> patients = new ArrayList<PatientModel>();
DB db = DB.getDb();

ResultSet result = db.executeQuery("select * from patients where name like
'" + searchText + "%'");
while (result.next()) {
    patients.add(PatientModel.getPatientModel(result));
}
%>
    <div
        style="display: flex; justify-content: space-between; align-items:
center; width: 100%; margin: 8px 0;">
        <h3>
            Patient (<%=patients.size()%>)
        </h3>
    </div>

    <div style="overflow-x: auto;">
        <table>
            <thead>
                <tr>
                    <th>Sr. No</th>
                    <th>Name - Age</th>
                    <th>Email</th>
                    <th>Phone</th>

```

```

        <th>Diagnosis</th>
        <th>Remark</th>
        <th>gender</th>
        <th>Action</th>
    </tr>
</thead>
<tbody>
    <%
    for (int idx = 0; idx < patients.size(); idx++) {
        PatientModel patient = patients.get(idx);
    %>
    <tr>
        <td><%=idx + 1%></td>
        <td><%=patient.name%> - <%=patient.age%></td>
        <td><%=patient.email%></td>
        <td><%=patient.phone%></td>
        <td><%=patient.diagnosis%></td>
        <td><%=patient.remarks%></td>
        <td><%=patient.gender%></td>
        <td>
            <a
href="manageVitals.jsp?patientId=<%=patient.patientId%>">Manage Vitals</a>
            <a
href="patientForm.jsp?mode=update&patientId=<%=patient.patientId%>">Update</a>
            <a
href="<%=request.getContextPath()%>/PatientController?mode=delete&patientId=<%=patient.patientId%>">Delete</a>
        </td>
    </tr>
    <%
    }
    %>
</tbody>
</table>
</div>
</body>
</html>

```

vitalAlerts.jsp

```

<%@page import="com.google.gson.Gson"%>
<%@page import="java.text.DateFormat"%>
<%@page import="java.text.SimpleDateFormat"%>
<%@page import="java.util.HashMap"%>
<%@page import="com.tech.models.VitalModel"%>
<%@page import="java.util.Map"%>
<%@page import="com.tech.models.PatientModel"%>
<%@page import="java.util.List"%>
<%@page import="java.util.ArrayList"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="com.tech.dao.DB"%>

```

```

<%@page import="com.tech.models.AdminModel"%>
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<title>Health Logger</title>
<style>
table {
    width: 100%;
    border-collapse: collapse;
    /* border: 1px solid #a0a0a0; */
}
th, td {
    text-align: left;
    padding: 12px;
    border-bottom: 1px solid #a0a0a0;
}
td a, .add-btn {
    text-decoration: none;
    padding: 4px 16px;
    color: #000;
    background-color: #d9d9d9;
    border-radius: 8px;
    margin: 12px 0;
}
h3 {
    margin: 0;
}
</style>
</head>
<body>
    <%!
        Map<String, Object> getMapObject(String xValue, int yValue) {
            Map<String, Object> map = new HashMap<String, Object>();
            map.put("label", xValue);
            map.put("y", yValue);
            return map;
        }
    %>

    <%

        Gson gsonObj = new Gson();
        List<Map<String, Object>> vitalsInfo = new ArrayList<Map<String,
Object>>();
        DB db = DB.getDb();
        boolean isPatientVitals = false;
        String sqlQuery = "";
        if (request.getParameter("patientId") == null) {
            /* Exporting All Patient Vitals in csv */
            isPatientVitals = false;
            sqlQuery = "select v.*, p.name, p.phone, p.diagnosis from " +
VitalModel.TABLE_NAME + " as v, "
+ PatientModel.TABLE_NAME + " as p where v.patientId = p.patientId
order by v.addedOn desc;";
        } else {

```

```

        /* Exporting Data for Particular Patient */
        isPatientVitals = true;
        sqlQuery = "select v.*, p.name, p.phone, p.diagnosis from " +
VitalModel.TABLE_NAME + " as v, "
        + PatientModel.TABLE_NAME + " as p where v.patientId = p.patientId
and p.patientId="
        + request.getParameter("patientId") + ";";
    }
    ResultSet result = db.executeQuery(sqlQuery);
    List<Map<String, Object>> bpLowList = new ArrayList<Map<String, Object>>();
    List<Map<String, Object>> bpHighList = new ArrayList<Map<String,
Object>>();
    List<Map<String, Object>> spo2List = new ArrayList<Map<String, Object>>();
    int index = 0;
    while (result.next()) {
        if( !(result.getInt("bpLow") < 50 || result.getInt("bpHigh") > 160
|| result.getInt("spo2") < 90)) {
            continue;
        }

        DateFormat format = DateFormat.getDateInstance(DateFormat.SHORT,
DateFormat.SHORT);
        Map<String, Object> vitalMap = new HashMap<String, Object>();
        vitalMap.put("vitalId", result.getInt("vitalId"));
        vitalMap.put("patientId", result.getInt("patientId"));
        vitalMap.put("bpLow", result.getInt("bpLow"));
        vitalMap.put("bpHigh", result.getInt("bpHigh"));
        vitalMap.put("spo2", result.getInt("spo2"));
        vitalMap.put("name", result.getString("name"));
        vitalMap.put("phone", result.getString("phone"));
        vitalMap.put("addedOn",
format.format(result.getTimestamp("addedOn")));

        bpLowList.add(getMapObject(format.format(result.getTimestamp("addedOn")),
result.getInt("bpLow")));

        bpHighList.add(getMapObject(format.format(result.getTimestamp("addedOn")),
result.getInt("bpHigh")));

        spo2List.add(getMapObject(format.format(result.getTimestamp("addedOn")),
result.getInt("spo2")));
        index += 1;
        vitalsInfo.add(vitalMap);
    }
    %>
    <div
        style="display: flex; justify-content: space-between; align-items:
center; width: 100%;">
        <h1 style="color: red">Vital Alerts</h1>
        <br>
        <a class="add-btn"
href="AdminLoginController?mode=Logout">Logout</a>
    </div>
    <div
        style="display: flex; justify-content: space-between; align-items:
center; width: 100%; margin: 8px 0;">
        <h3>Vitals</h3>
        <div>

```

```

        style="display: flex; justify-content: end; align-items:
center; gap: 12px;">
        <a class="add-btn" href="managePatients.jsp">Manage
Patients</a>
        <a class="add-btn" href="exportData.jsp">Export</a>
        <a class="add-btn"
href="vitalForm.jsp?mode=add&isPatientVital=<%=isPatientVitals%>">Record New
Vital</a>
    </div>
</div>

<%if (isPatientVitals) {%>
<div id="chartContainer" style="height: 370px; width: 100%; margin: 4px
0;"></div>
<%}%>
<div style="overflow-x: auto;">
    <table>
        <thead>
            <tr>
                <th>Sr. No</th>
                <th>Name</th>
                <th>Phone</th>
                <th>BP Low</th>
                <th>BP High</th>
                <th>SP02</th>
                <th>Recorded On</th>
                <th>Action</th>
            </tr>
        </thead>
        <tbody>
            <%
for (int idx = 0; idx < vitalsInfo.size(); idx++) {
    Map<String, Object> vital = vitalsInfo.get(idx);
%>
            <tr>
                <td><%=idx + 1%></td>
                <td><%=vital.get("name")%></td>
                <td><%=vital.get("phone")%></td>
                <%
                    int threshold = (int)vital.get("bpLow");
                    if(threshold < 50){
%>
                <td style="color:
red;"><b><%=vital.get("bpLow")%></b></td>
                <%
                    }else{
%>
                <td><%=vital.get("bpLow")%></td>
                <%
                    }
%>
                <%
                    threshold = (int)vital.get("bpHigh");
                    if(threshold > 160){
%>
                <td style="color:
red;"><b><%=vital.get("bpHigh")%></b></td>
                <%
                    }
%>
            </tr>
        </tbody>
    </table>
</div>
</div>

```

```

        }else{
%>
        <td><%=vital.get("bpHigh")%></td>
%>
        }
%>

%>
        threshold = (int)vital.get("spo2");
        if(threshold < 90){
%>
        <td style="color:
red;"><b><%=vital.get("spo2")%></b></td>
%>
        }else{
%>
        <td><%=vital.get("spo2")%></td>
%>
        }

        <td><%=vital.get("addedOn")%></td>
        <td><a

        href="<%=request.getContextPath()%>/VitalController?mode=delete&vitalId=<%=
vital.get("vitalId")%>">Delete</a>
        </td>
    </tr>
    <%
    }
    %>
</tbody>
</table>
</div>
<script src="https://canvasjs.com/assets/script/canvasjs.min.js"></script>
<script type="text/javascript">

<%if (isPatientVitals) {%>
    window.onload = function() {
        var chart = new CanvasJS.Chart("chartContainer", {
            animationEnabled: true,
            zoomEnabled: true,
            theme: "light2",
            title: {
                text: "Patient's Vitals"
            },
            axisX: {
                title: "Recorded On",
                valueFormatString: "dd/MM/yyyy hh:mm:ss a"
            },
            axisY: {
                logarithmic: true, //change it to false
                title: "Vitals",
                titleFontColor: "#6D78AD",
                lineColor: "#6D78AD",
                gridThickness: 0,
                lineThickness: 1,

```

```

    },
    tooltip: {
        shared: true
    },
    legend: {
        verticalAlign: "top",
        dockInsidePlotArea: true
    },
    data: [{
        type: "line",
        showInLegend: true,
        name: "BP Low",
        legendText: "{name}",
        dataPoints:
<%out.print(gsonObj.toJson(bpLowList));%>
    },
    {
        type: "line",
        showInLegend: true,
        name: "BP High",
        legendText: "{name}",
        dataPoints:
<%out.print(gsonObj.toJson(bpHighList));%>
    },
    {
        type: "line",
        showInLegend: true,
        name: "SP02",
        legendText: "{name}",
        dataPoints:
<%out.print(gsonObj.toJson(spo2List));%>
    }
    ]
    });
    chart.render();
}
<%}%>

</script>
</body>
</html>

```

vitalForm.jsp

```

<%@page import="java.util.List"%>
<%@page import="java.util.ArrayList"%>
<%@page import="com.tech.models.PatientModel"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="com.tech.dao.DB"%>
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>
<!DOCTYPE html>

```



```

<html>
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1" />
<title>Health Logger</title>
<style>
* {
    margin: 0;
    box-sizing: border-box;
}
body {
    height: 100vh;
    display: flex;
    flex-direction: column;
    align-items: center;
    justify-content: center;
    /* gap: 12px; */
}
p {
    color: #a0a0a0;
    margin: 4px 0 24px 0;
}
form {
    display: flex;
    flex-direction: column;
    gap: 24px;
}
.form-group {
    display: flex;
    flex-direction: column;
    align-items: start;
    gap: 8px;
}
input:not([type="radio"]), textarea, select {
    width: 350px;
    padding: 10px;
    border: 1px solid #b9b9b9;
    border-radius: 8px;
}
input[type="radio"] {
    width: max-content;
}
button {
    width: 350px;
    border-radius: 12px;
    background: #32C732;
    color: #fff;
    font-weight: 700;
    padding: 10px 20px;
    border: none;
    cursor: pointer;
}
button:hover {
    background: #28A228;
}
</style>
</head>
<body>

```

```

<%!
String mode;

%>
<%
mode = request.getParameter("mode");
String patientVital = request.getParameter("isPatientVital");
DB db = DB.getDb();
List<PatientModel> patients = new ArrayList<PatientModel>();

ResultSet result =
db.executeQuery(PatientModel.getAllPatientQuery());
while(result.next()) {
    patients.add(PatientModel.getPatientModel(result));
}

%>

<h1>Health Logger</h1>
<p>Add Patient's Vital Information</p>

<form action="VitalController" method="post">
    <input type="text" name="mode" value="<%= mode %>" hidden="">
    <input type="text" name="isPatientVitals" value="<%= patientVital
%>" hidden="">
    <div class="form-group">
        <label> Select Patient</label>
        <select name="patientId" id="patientId">
            <% for(PatientModel patient: patients){ %>
                <option value="<%=patient.patientId %>"><%=
patient.name %></option>
            <%}%>
        </select>
    </div>
    <div class="form-group">
        <label>BP Low</label>
        <input type="number" name="bpLow" id="bpLow">
    </div>
    <div class="form-group">
        <label>BP High</label>
        <input type="number" name="bpHigh" id="bpHigh">
    </div>
    <div class="form-group">
        <label>SP02</label>
        <input type="number" name="spo2" id="spo2" >
    </div>

    <div role="alert">
        <small>${message}</small>
    </div>
    <button type="submit">Submit</button>

</form>

</body>
</html>

```

AdminModel.java

package com.tech.models;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.util.Date;

public class AdminModel {

_____ public final String TABLE_NAME = "admins";

_____ public int adminId;

_____ public String name;

_____ public String email;

_____ public String password;

_____ public Date registeredOn;

_____ public AdminModel() {

_____ // TODO Auto-generated constructor stub

_____ }

```
_____ public AdminModel(int adminId, String name, String email, String  
password, Date registeredOn) {
```

```
_____     this.adminId = adminId;
```

```
_____     this.name = name;
```

```
_____     this.email = email;
```

```
_____     this.password = password;
```

```
_____     this.registeredOn = registeredOn;
```

```
_____ }
```

```
_____ public AdminModel getAdminModel(ResultSet resultSet) throws  
SQLException {
```

```
_____     AdminModel admin = new AdminModel();
```

```
_____     admin.adminId = resultSet.getInt("adminId");
```

```
_____     admin.name = resultSet.getString("name");
```

```
_____     admin.email = resultSet.getString("email");
```

```
_____     admin.password = resultSet.getString("password");
```

```
_____     admin.registeredOn = resultSet.getDate("registeredOn");
```

```
_____     return admin;
```

```
_____ }
```

```
_____ @Override
```

```
_____ public String toString() {
```

```
_____     return "AdminModel [adminId=" + adminId + ", name=" + name  
+ ", email=" + email + ", password=" + password
```

```
_____     + ", registeredOn=" + registeredOn + "];
```

```
_____ }
```

```
_____  
_____public String toAdminLoginSql() {  
_____return "select * from "+ TABLE_NAME +" where email='"+ email  
+"' and password='"+ password + "';";  
_____}  
_____  
_____}
```

PatientModel.java

```
package com.tech.models;
```

```
import java.sql.ResultSet;
```

```
import java.sql.SQLException;
```

```
import java.util.Date;
```

```
public class PatientModel {
```

```
_____public static final String TABLE_NAME = "patients";
```

```
_____public int patientId;
```

```
_____public String name;
```

```
_____public String email;
```

```
_____public String phone;
```

```
_____ public int age;
_____ public String diagnosis;
_____ public String remarks;
_____ public String gender;
_____ public int createdByAdminId;
_____ public Date registeredOn;

_____ public PatientModel() {
_____     // TODO Auto-generated constructor stub
_____ }

_____ public PatientModel(int patientId, String name, String email, String
phone, int age, String diagnosis,
_____     String remarks, String gender, int createdByAdminId, Date
registeredOn) {
_____     this.patientId = patientId;
_____     this.name = name;
_____     this.email = email;
_____     this.phone = phone;
_____     this.age = age;
_____     this.diagnosis = diagnosis;
_____     this.remarks = remarks;
_____     this.gender = gender;
_____     this.createdByAdminId = createdByAdminId;
_____     this.registeredOn = registeredOn;
_____ }
```

```
public static PatientModel getPatientModel(ResultSet result) throws  
SQLException {
```

```
    PatientModel model = new PatientModel();  
    model.patientId = result.getInt("patientId");  
    model.name = result.getString("name");  
    model.email = result.getString("email");  
    model.phone = result.getString("phone");  
    model.age = result.getInt("age");  
    model.diagnosis = result.getString("diagnosis");  
    model.remarks = result.getString("remarks");  
    model.gender = result.getString("gender");  
    model.createdByAdminId = result.getInt("createdByAdminId");  
    model.registeredOn = result.getDate("registeredOn");  
    return model;  
}
```

```
@Override
```

```
public String toString() {  
    return "PatientModel [TABLE_NAME=" + TABLE_NAME + ",  
patientId=" + patientId + ", name=" + name + ", email="  
    + email + ", phone=" + phone + ", age=" + age + ",  
diagnosis=" + diagnosis + ", remarks=" + remarks  
    + ", gender=" + gender + ", createdByAdminId=" +  
createdByAdminId + ", registeredOn=" + registeredOn  
    + "];  
}
```

```
public String getPatientInsertQuery() {  
    return "insert into " + TABLE_NAME  
        + " (name, email, phone, age, diagnosis, remarks,  
gender, createdByAdminId) values ('" + name + "', '"  
        + email + "', '" + phone + "', " + age + ", '" + diagnosis  
+ "', '" + remarks + "', '" + gender + "', "  
        + createdByAdminId + "));";  
}
```

```
public String getUpdateQuery() {  
    return "update " + TABLE_NAME + " set name='" + name + "',  
email='" + email + "', phone='" + phone  
        + "', diagnosis='" + diagnosis + "', remarks='" +  
remarks + "', gender='" + gender + "', age=" + age  
        + " where patientId=" + patientId + ";;";  
}
```

```
public static String getDeleteQuery(int patientId) {  
    return "delete from " + TABLE_NAME + " where patientId= "  
patientId + ";;";  
}
```

```
public static String getAllPatientQuery() {  
    return "select * from " + TABLE_NAME + ";;";  
}
```

```
public static String getPatientByIdQuery(String patientId) {  
    return "select * from " + TABLE_NAME + ";;";  
}
```



```
_____}
```

```
}
```

VitalModel.java

```
package com.tech.models;

import java.util.Date;

public class VitalModel {

    public static final String TABLE_NAME = "vitals";

    public int vitalId;
    public int patientId;
    public int bpLow;
    public int bpHigh;
    public int spo2;
    public Date addedOn;

    public VitalModel() {
        // TODO Auto-generated constructor stub
    }

    public VitalModel(int vitalId, int patientId, int bpLow, int bpHigh, int
spo2, Date addedOn) {
        super();
        this.vitalId = vitalId;
        this.patientId = patientId;
        this.bpLow = bpLow;
        this.bpHigh = bpHigh;
        this.spo2 = spo2;
        this.addedOn = addedOn;
    }

    @Override
    public String toString() {
        return "VitalModel [vitalId=" + vitalId + ", patientId=" + patientId
+ ", bpLow=" + bpLow + ", bpHigh=" + bpHigh
        + ", spo2=" + spo2 + ", addedOn=" + addedOn + "]";
    }

    public String getInsertQuery() {
```

```

        return String.format("insert into %s (bpLow, bpHigh, spo2,
patientId) values (%d, %d, %d, %d)", TABLE_NAME, bpLow, bpHigh, spo2, patientId);
    }

    // Getting All Latest Recorded Vital
    public static String getAllVitals() {
        return "select * from " + TABLE_NAME + "order by addedOn desc;";
    }
}

```

DB.java

package com.tech.dao;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.Statement;

public class DB {

public final String DATABASE_NAME = "health logger db";

Connection connection;

Statement statement;

private static DB db = new DB();

```
_____ public DB() {  
_____ // TODO Auto-generated constructor stub  
_____ try {  
_____ Class.forName("com.mysql.cj.jdbc.Driver");  
_____ System.out.println("[DB] Driver Loaded");  
  
_____ String url = "jdbc:mysql://localhost/" + DATABASE_NAME;  
_____ String user = "root";  
_____ String password = "Satti@2001";  
  
_____ connection = DriverManager.getConnection(url, user,  
_____ password);  
_____ System.out.println("[DB] Connection Created");  
  
_____ statement = connection.createStatement();  
_____ System.out.println("[DB] Statement Created");  
  
_____ } catch (Exception e) {  
_____ System.out.println("Something Went Wrong: " + e);  
_____ }  
_____ }  
  
_____ public static DB getDb() {  
_____ return db;  
_____ }  
  
_____ public Connection getConnection() {
```

```
_____return connection;
_____}
```

```
_____public int executeUpdate(String sql) {
```

```
_____try {
_____    int result = 0;
_____    // executeUpdate -> for : insert update and delete
instructions
_____    result = statement.executeUpdate(sql);
_____    System.out.println("[DB] SQL Statement Executed");
_____    return result;
_____} catch (Exception e) {
_____    System.out.println("Something Went Wrong: " + e);
_____    return 0;
_____}
_____}
```

```
_____public ResultSet executeQuery(String sql) {
```

```
//_____    ResultSet set = null; // data structure which will have data of
table i.e. all the rows
```

```
_____try {
_____    // executeUpdate -> for : query
_____    System.out.println(sql);
_____    System.out.println("[DB] SQL Statement Executed ");
_____    return statement.executeQuery(sql);
```

```
        } catch (Exception e) {  
            System.out.println("Something Went Wrong: " + e);  
            return null;  
        }  
  
    }  
  
}
```

```
    public void closeConnection() {  
        try {  
            connection.close();  
            System.out.println("[DB] Connection Closed");  
        } catch (Exception e) {  
            System.out.println("Something Went Wrong: " + e);  
        }  
    }  
  
}
```

AdminLoginController.java

package com.tech.controller;

import java.io.IOException;

import java.sql.ResultSet;

import java.util.HashMap;

import java.util.Map;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

import com.tech.dao.DB;

import com.tech.models.AdminModel;

/**

* Servlet implementation class AdminLoginController

*/

@WebServlet({ "/AdminLoginController", "/admin-login-controller" })

public class AdminLoginController extends HttpServlet {

 private static final long serialVersionUID = 1L;

 public AdminLoginController() {

 // TODO Auto-generated constructor stub

 }

 @Override

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

```
        if(req.getParameter("mode").equals("logout")) {  
            req.getSession().removeAttribute("admin");  
            resp.sendRedirect("index.html");  
            return;  
        }  
    }  
}  
  
@Override  
protected void doPost(HttpServletRequest req, HttpServletResponse  
resp) throws ServletException, IOException {  
    try {  
        DB db = DB.getDb();  
        AdminModel admin = new AdminModel();  
        admin.email = req.getParameter("email");  
        admin.password = req.getParameter("password");  
  
        ResultSet result =  
db.executeQuery(admin.toAdminLoginSql());  
        if(result.next()) {  
            System.out.println("Login Successful");  
            HttpSession session = req.getSession();  
            session.setAttribute("admin",  
admin.getAdminModel(result));  
  
            resp.sendRedirect("adminHome.jsp");  
        } else {
```

```

        Map<String, String> message = new
        HashMap<String, String>();

        message.put("status", "error");

        message.put("message", "User Not Found
        Corresponding To this email id or invalid credentials");

        req.setAttribute("message", message);

        req.getRequestDispatcher("/adminLogin.jsp").include(req, resp);
    }

    } catch (Exception ex) {
        System.err.println(ex);
    }
}

}
}

```

PatientController.java

```

package com.tech.controller;

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;  
import javax.servlet.http.HttpSession;
```

```
import com.tech.dao.DB;  
import com.tech.models.AdminModel;  
import com.tech.models.PatientModel;
```

```
@WebServlet("/PatientController")
```

```
public class PatientController extends HttpServlet {  
    private static final long serialVersionUID = 1L;  
    DB db = DB.getDb();
```

```
    public PatientController() {  
        super();  
        // TODO Auto-generated constructor stub  
    }
```

```
    protected void doGet(HttpServletRequest request,  
        HttpServletResponse response) throws ServletException, IOException {  
        if(request.getParameter("mode").equals("delete")) {  
            doDelete(request, response);  
            return;  
        }
```

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

```
if(request.getParameter("mode").equals("update")) {
```

```
doPut(request, response);
```

```

    return;

```

```
HttpSession sess = request.getSession();
```

```
AdminModel admin = (AdminModel) sess.getAttribute("admin");
```

```
PatientModel model = new PatientModel();
```

```
model.name = request.getParameter("name");
```

```
model.email = request.getParameter("email");
```

```
model.phone = request.getParameter("phone");
```

```
model.age = Integer.parseInt(request.getParameter("age"));
```

```
model.diagnosis = request.getParameter("diagnosis");
```

```
model.remarks = request.getParameter("remarks");
```

```
model.gender = request.getParameter("gender");
```

```
model.createdByAdminId = admin.adminId;
```

```
int result = db.executeUpdate(model.getPatientInsertQuery());
```

```
if(result > 0) {
```

```
response.sendRedirect("managePatients.jsp");
```

```

    } else {

```

```
        request.setAttribute("message", "Something went wrong!!  
Please Try Again");
```

```
        request.getRequestDispatcher("/patientForm.jsp?mode=add").forward  
(request, response);
```

```
    }
```

```
}
```

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

```
    PatientModel model = new PatientModel();
```

```
    model.patientId =  
Integer.parseInt(request.getParameter("patientId"));
```

```
    model.name = request.getParameter("name");
```

```
    model.email = request.getParameter("email");
```

```
    model.phone = request.getParameter("phone");
```

```
    model.age = Integer.parseInt(request.getParameter("age"));
```

```
    model.diagnosis = request.getParameter("diagnosis");
```

```
    model.gender = request.getParameter("gender");
```

```
    model.remarks = request.getParameter("remarks");
```

```
    int result = db.executeUpdate(model.getUpdateQuery());
```

```
    if(result > 0) {
```

```
        response.sendRedirect("managePatients.jsp");
```

```
    } else {
```

```
        request.setAttribute("message", "Something went wrong!!  
Please Try Again");
```

```

        response.getWriter().print("Something went wrong");
        response.getWriter().close();

    }

    request.getRequestDispatcher("/patientForm.jsp?mode=update").forward(request, response);
}

}

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

    int patientId =
    Integer.parseInt(request.getParameter("patientId"));

    db.executeUpdate(PatientModel.getDeleteQuery(patientId));

    response.sendRedirect("managePatients.jsp");
}

}

```

VitalController.java

```

package com.tech.controller;

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;
```

```
import com.tech.dao.DB;  
import com.tech.models.VitalModel;
```

```
/**  
 * Servlet implementation class VitalController  
 */  
@WebServlet("/VitalController")  
public class VitalController extends HttpServlet {  
    private static final long serialVersionUID = 1L;
```

```
    DB db = DB.getDb();  
    /**  
     * @see HttpServlet#HttpServlet()  
     */  
    public VitalController() {  
        super();  
        // TODO Auto-generated constructor stub  
    }
```

```
        protected void doGet(HttpServletRequest request, HttpServletResponse  
response) throws ServletException, IOException {  
            if(request.getParameter("mode").equals("delete")) {  
                doDelete(request, response);  
            return;
```

```
_____  
_____  
_____}
```

```
_____protected void doPost(HttpServletRequest request, HttpServletResponse  
response) throws ServletException, IOException {
```

```
_____if(request.getParameter("patientId") == null) {
```

```
_____request.setAttribute("message", "Please Select Patient");
```

```
_____request.getRequestDispatcher("vitalForm.jsp").include(request, response);
```

```
_____return;
```

```
_____}
```

```
_____VitalModel vital = new VitalModel();
```

```
_____vital.bpLow = request.getParameter("bpLow") == null ? 0 :  
Integer.parseInt(request.getParameter("bpLow"));
```

```
_____vital.bpHigh = request.getParameter("bpHigh") == null ? 0 :  
Integer.parseInt(request.getParameter("bpHigh"));
```

```
_____vital.spo2 = request.getParameter("spo2") == null ? 0 :  
Integer.parseInt(request.getParameter("spo2"));
```

```
_____vital.patientId = request.getParameter("patientId") == null ? 0 :  
Integer.parseInt(request.getParameter("patientId"));
```

```
_____int result = db.executeUpdate(vital.getInsertQuery());
```

```
_____if(result > 0) {
```

```
_____String redirect =  
request.getParameter("isPatientVitals").equals("true") ?  
"manageVitals.jsp?patientId=" + vital.patientId : "manageVitals.jsp";
```

```
_____response.sendRedirect(redirect);
```

```
_____} else {
```

```
_____request.setAttribute("message", "Something went wrong!!  
Please Try Again");
```

```

request.getRequestDispatcher("vitalForm.jsp").include(request, response);
    }
}

protected void doDelete(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
    int vitalId = Integer.parseInt(request.getParameter("vitalId"));

    db.executeUpdate("delete from "+VitalModel.TABLE_NAME + " where
vitalId="+vitalId+";");

    response.sendRedirect("manageVitals.jsp");
}

}

```

Web.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<web-app xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://xmlns.jcp.org/xml/ns/javaee"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee
http://xmlns.jcp.org/xml/ns/javaee/web-app_4_0.xsd" id="WebApp_ID" version="4.0">
    <display-name>Health Logger</display-name>
    <welcome-file-list>
        <welcome-file>index.html</welcome-file>
        <welcome-file>index.jsp</welcome-file>
        <welcome-file>index.htm</welcome-file>
        <welcome-file>default.html</welcome-file>
        <welcome-file>default.jsp</welcome-file>
        <welcome-file>default.htm</welcome-file>
    </welcome-file-list>

    <servlet>
        <servlet-name>AdminLoginController</servlet-name>
        <servlet-class>com.tech.controller.AdminLoginController</servlet-class>
    </servlet>

```

```
<servlet>
  <servlet-name>PatientController</servlet-name>
  <servlet-class>com.tech.controller.PatientController</servlet-class>
</servlet>
<servlet>
  <servlet-name>VitalController</servlet-name>
  <servlet-class>com.tech.controller.VitalController</servlet-class>
</servlet>

<error-page>
  <exception-type>java.lang.Exception</exception-type>
  <location>/error.jsp</location>
</error-page>
<error-page>
  <exception-type>java.sql.SQLException</exception-type>
  <location>/error.jsp</location>
</error-page>
</web-app>
```

