Exercise – 4
Form-Servlet Interaction
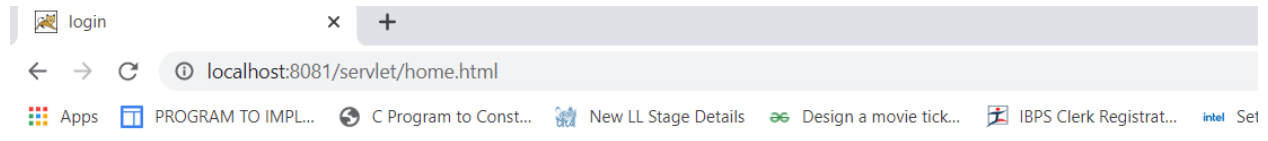
Gayathri M-185001050

Output And Code:
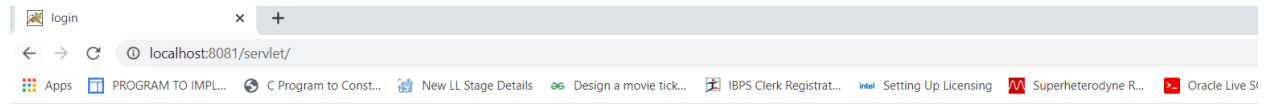
PATIENT MANAGEMENT SYSTEM
ADMIN LOGIN

Username admin
Password ······ Login

HOME

Add Record
Update Record
Delete Record
View Records
Search Record

Enter details to add patient record

ID A1
Name Riya
Age 40
Gender F
Address Mogappair
Marital Status M
Date of visit 01/04/2021
Disease Cold

Submit

Update Record

ID A1 Address Anna Nagar Update

ID	Name	Age	Gender	Address	Marital Status	Date of visit	Disease Name
A1	Riya	40	F	Mogappair	M	2021-01-04	Cold

Delete Record

ID A1 Delete

Record deleted

View

Search Record

ID A1 Search

ID	Name	Age	Gender	Address	Marital Status	Date of visit	Disease Name
A2	John	30	M	Ambattur	Unmarried	2021-05-29	Cough
A3	Archana	20	F	Korattur	M	2021-03-10	Tuberculosis
A4	Anjana	50	F	Adambakkam	M	2021-09-23	Cold
A5	Shashank	35	F	T Nagar	Married	2021-07-16	Body Pain
A6	Riya	29	F	Kalavakkam	M	2021-01-04	Fever

CODE

Web.xml

```xml
<web-app>
<servlet>
<servlet-name>s13</servlet-name>
<servlet-class>TestServletd</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>s13</servlet-name>
<url-pattern>/TestServletd</url-pattern>
</servlet-mapping>
<servlet>
<servlet-name>add</servlet-name>
<servlet-class>Add</servlet-class>
</servlet><servlet-mapping>
<servlet-name>add</servlet-name>
<url-pattern>/Add</url-pattern>
</servlet-mapping>
<servlet>
<servlet-name>view</servlet-name>
<servlet-class>View</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>view</servlet-name>
```

```
<url-pattern>/View</url-pattern>
</servlet-mapping>
<servlet>
<servlet-name>update</servlet-name>
<servlet-class>Update</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>update</servlet-name>
<url-pattern>/Update</url-pattern>
</servlet-mapping>
<servlet>
<servlet-name>search</servlet-name>
<servlet-class>Search</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>search</servlet-name>
<url-pattern>/Search</url-pattern>
</servlet-mapping>
<servlet>
<servlet-name>delete</servlet-name>
<servlet-class>Delete</servlet-class>
</servlet>
<servlet-mapping>
<servlet-name>delete</servlet-name>
<url-pattern>/Delete</url-pattern>
</servlet-mapping>
</web-app>
```

login.html
```
<!DOCTYPE html>
<html>
<head>
<title>login</title>
</head>
<body>
<h1>PATIENT MANAGEMENT SYSTEM<br>ADMIN LOGIN</h2>
<h3>
```

```html
<form align="center" name="myForm" action="TestServletd" method="get">
<label for="uname"><b>Username</b></label>
<input type="text" name="uname" required><br>
<label for="psw"><b>Password</b></label>
<input type="password" name="psw" required>
<input type="submit" value="Login">
</form>
</body>
</html>
```

TestServletd.java

```java
import java.io.*;
import jakarta.servlet.*;
import jakarta.servlet.http.*;
import java.sql.*;
import java.util.*;
public class TestServletd extends HttpServlet
{
public void doGet(HttpServletRequest req,HttpServletResponse res)throws
IOException,ServletException
{
res.setContentType("text/html");
PrintWriter out=res.getWriter();
String n=req.getParameter("uname");
String username=req.getParameter("psw");
Connection conn=null;
try{
String url="jdbc:mysql://localhost:3306/sample";
String user="root";String password="Test1234@";
Class.forName("com.mysql.cj.jdbc.Driver");
conn=DriverManager.getConnection(url,user,password);
String msg="select * from admin where name='"+n+"' and
pw='"+username+"'";
PreparedStatement st=conn.prepareStatement(msg);
ResultSet ress = st.executeQuery();
if(ress.next())
{
ress.close();
```

```java
res.sendRedirect("home.html");
}
else
{
out.print("invalid credentials");
}
out.close();
ress.close();
st.close();
}
catch(SQLException se)
{
se.printStackTrace();
}
catch(Exception e)
{
e.printStackTrace();
}
finally{
try{
if(conn!=null)
{
conn.close();
out.close();
}}
catch(SQLException se)
{
se.printStackTrace();
}}
}}
```

home.html

```html
<!DOCTYPE html>
<html>
<head>
<title>login</title>
</head>
<body>
```

```html
<h1>HOME</h2>
<h3>
<a href="add.html">Add Record</a><br>
<a href="update.html">Update Record</a><br>
<a href="delete.html">Delete Record</a><br>
<a href='View'>View Records</a><br>
<a href="search.html">Search Record</a><br>
</body>
</html>
```

add.html

```html
<!DOCTYPE html>
<html>
<head>
<title>add</title>
</head>
<body>
<h2>Enter details to add patient record</h2>
<h3>
<form align="center" name="myForm" action="Add" method="get">
<label for="id"><b>ID</b></label>
<input type="text" name="id" required><br>
<label for="n"><b>Name</b></label>
<input type="text" name="n" required><br>
<label for="a"><b>Age</b></label>
<input type="text" name="a" required><br>
<label for="g"><b>Gender</b></label>
<input type="text" name="g" required><br>
<label for="addr"><b>Address</b></label><input type="text" name="addr" required><br>
<label for="ms"><b>Marital Status</b></label>
<input type="text" name="ms" required><br>
<label for="d"><b>Date of visit</b></label>
<input type="date" name="d" required><br>
<label for="dis"><b>Disease</b></label>
<input type="text" name="dis" required><br>
<input type="submit" value="Submit">
</form>
```

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

Add.java

```java
import java.io.*;
import jakarta.servlet.*;
import jakarta.servlet.http.*;
import java.sql.*;
import java.util.*;
public class Add extends HttpServlet
{
public void doGet(HttpServletRequest req,HttpServletResponse res)throws
IOException,ServletException
{
res.setContentType("text/html");
PrintWriter out=res.getWriter();
String n=req.getParameter("uname");
String username=req.getParameter("psw");
Connection conn=null;
try{
String url="jdbc:mysql://localhost:3306/sample";
String user="root";
String password="Test1234@";
Class.forName("com.mysql.cj.jdbc.Driver");
conn=DriverManager.getConnection(url,user,password);
String msg="insert into Patient_Details values(?,?,?,?,?,?,?,?)";
PreparedStatement st=conn.prepareStatement(msg);
st.setString(1,req.getParameter("id"));
st.setString(2,req.getParameter("n"));
st.setString(3,req.getParameter("a"));
st.setString(4,req.getParameter("g"));
st.setString(5,req.getParameter("addr"));
st.setString(6,req.getParameter("ms"));
st.setString(7,req.getParameter("d"));st.setString(8,req.getParameter("dis"));
int i = st.executeUpdate();
if(i==1)
{
out.print("Record added!");
```

```java
out.print("<form name=\"myForm\" action=\"View\"
method=\"get\"><input type=\"submit\" value=\"View\">");
}
out.close();
st.close();
}
catch(SQLException se)
{
se.printStackTrace();
}
catch(Exception e)
{
e.printStackTrace();
}
finally{
try{
if(conn!=null)
{
conn.close();
out.close();
}}
catch(SQLException se)
{
se.printStackTrace();
}
}
}
}
```

update.html
```html
<!DOCTYPE html>
<html>
<head>
<title>update</title>
</head><body>
<h1>Update Record</h2>
<h3>
<form align="center" name="myForm" action="Update" method="get">
```

```html
<label for="id"><b>ID</b></label>
<input type="text" name="id" required>
<label for="a"><b>Address</b></label>
<input type="text" name="a" required>
<input type="submit" value="Update">
</form>
</body>
</html>
```

Update.java

```java
import java.io.*;
import jakarta.servlet.*;
import jakarta.servlet.http.*;
import java.sql.*;
import java.util.*;
public class Update extends HttpServlet
{
public void doGet(HttpServletRequest req,HttpServletResponse res)throws
IOException,ServletException
{
res.setContentType("text/html");
PrintWriter out=res.getWriter();
Connection conn=null;
try{
String url="jdbc:mysql://localhost:3306/sample";
String user="root";
String password="Test1234@";
Class.forName("com.mysql.cj.jdbc.Driver");
conn=DriverManager.getConnection(url,user,password);
String msg="update Patient_Details set address=? where id=?";
PreparedStatement st=conn.prepareStatement(msg);
st.setString(1,req.getParameter("a"));
st.setString(2,req.getParameter("id"));int i = st.executeUpdate();
if(i==1)
{
out.print("Record Updated!");
out.print("<form name=\"myForm\" action=\"View\"
method=\"get\"><input type=\"submit\" value=\"View\">");
```

```java
}
out.close();
st.close();
}
catch(SQLException se)
{
se.printStackTrace();
}
catch(Exception e)
{
e.printStackTrace();
}
finally{
try{
if(conn!=null)
{
conn.close();
out.close();
}}
catch(SQLException se)
{
se.printStackTrace();
}
}
}
}
```

search.html

```html
<!DOCTYPE html>
<html>
<head>
<title>Search</title>
</head><body>
<h1>Search Record</h2>
<h3>
<form align="center" name="myForm" action="Search" method="get">
<label for="id"><b>ID</b></label>
<input type="text" name="id" required>
```

```html
<input type="submit" value="Search">
</form>
</body>
</html>
```

Search.java

```java
import java.io.*;
import jakarta.servlet.*;
import jakarta.servlet.http.*;
import java.sql.*;
import java.util.*;
public class Search extends HttpServlet
{
public void doGet(HttpServletRequest req,HttpServletResponse res)throws
IOException,ServletException
{
res.setContentType("text/html");
PrintWriter out=res.getWriter();
Connection conn=null;
try{
String url="jdbc:mysql://localhost:3306/sample";
String user="root";
String password="Test1234@";
Class.forName("com.mysql.cj.jdbc.Driver");
conn=DriverManager.getConnection(url,user,password);
String msg="select * from Patient_Details where id=?";
PreparedStatement ss=conn.prepareStatement(msg);
ss.setString(1,req.getParameter("id"));
ResultSet ress=ss.executeQuery();
out.println("<html><body>");
out.println("<table
border=1>");out.println("<tr><th>ID</th><th>Name</th><th>Age</th><th>Gende
r</th><th>Address</th><th>Marital Status</th><th>Date of
visit</th><th>Disease Name</th><tr>");
String s1,s2,s3,s4,s5,s6,s7,s8;
int flag=0;
while(ress.next())
{
```

```java
flag=1;
s1=ress.getString(1);
s2=ress.getString(2);
s3=ress.getString(3);
s4=ress.getString(4);
s5=ress.getString(5);
s6=ress.getString(6);
s7=ress.getString(7);
s8=ress.getString(8);
out.print("<tr><td>" + s1 + "</td><td>" + s2 + "</td><td>" + s3 +
"</td><td>" + s4 + "</td><td>" + s5 + "</td><td>" + s6 + "</td><td>" + s7 +
"</td><td>" + s8 + "</td></tr>");
}
out.println("</table>");
out.println("</body></html>");
if(flag==0)
out.print("Record not found!");
ss.close();
ress.close();
out.print("<form name=\"myForm\" action=\"home.html\"
method=\"get\"><input type=\"submit\" value=\"Home\">");
out.close();
}
catch(SQLException se)
{
se.printStackTrace();
}
catch(Exception e)
{
e.printStackTrace();
}
finally{
try{
if(conn!=null)
{
conn.close();out.close();
}}
```

```
catch(SQLException se)
{
se.printStackTrace();
}
}
}
}
```

delete.html
```html
<!DOCTYPE html>
<html>
<head>
<title>Delete</title>
</head>
<body>
<h1>Delete Record</h2>
<h3>
<form align="center" name="myForm" action="Delete" method="get">
<label for="id"><b>ID</b></label>
<input type="text" name="id" required>
<input type="submit" value="Delete">
</form>
</body>
</html>
```
Delete.java
```java
import java.io.*;
import jakarta.servlet.*;
import jakarta.servlet.http.*;
import java.sql.*;
import java.util.*;
public class Delete extends HttpServlet
{
public void doGet(HttpServletRequest req,HttpServletResponse res)throws
IOException,ServletException
{res.setContentType("text/html");
PrintWriter out=res.getWriter();
Connection conn=null;
```

```java
try{
String url="jdbc:mysql://localhost:3306/sample";
String user="root";
String password="Test1234@";
Class.forName("com.mysql.cj.jdbc.Driver");
conn=DriverManager.getConnection(url,user,password);
String msg="delete from Patient_Details where id=?";
PreparedStatement ss=conn.prepareStatement(msg);
ss.setString(1,req.getParameter("id"));
int i=ss.executeUpdate();
if(i==1)
{
out.print("Record Deleted!");
out.print("<form name=\"myForm\" action=\"View\"
method=\"get\"><input type=\"submit\" value=\"View\">");
}
else
{
out.print("Failed!");
out.print("<form name=\"myForm\" action=\"home.html\"
method=\"get\"><input type=\"submit\" value=\"Home\">");
}
ss.close();
out.close();
}
catch(SQLException se)
{
se.printStackTrace();
}
catch(Exception e)
{
e.printStackTrace();
}
finally{
try{
if(conn!=null)
{
```

```java
conn.close();
out.close();}}
catch(SQLException se)
{
se.printStackTrace();
}
}
}}
```

View.java

```java
import java.io.*;
import jakarta.servlet.*;
import jakarta.servlet.http.*;
import java.sql.*;
import java.util.*;
public class View extends HttpServlet
{
public void doGet(HttpServletRequest req,HttpServletResponse res)throws
IOException,ServletException
{
res.setContentType("text/html");
PrintWriter out=res.getWriter();
Connection conn=null;
try{
String url="jdbc:mysql://localhost:3306/sample";
String user="root";
String password="Test1234@";
Class.forName("com.mysql.cj.jdbc.Driver");
conn=DriverManager.getConnection(url,user,password);
String msg="select * from Patient_Details";
PreparedStatement ss=conn.prepareStatement(msg);
ResultSet ress=ss.executeQuery();
out.println("<html><body>");
out.println("<table border=1>");
out.println("<tr><th>ID</th><th>Name</th><th>Age</th><th>Gender</th><th>Ad
dre
ss</th><th>Marital Status</th><th>Date of visit</th><th>Disease
Name</th><tr>");
```

```java
String s1,s2,s3,s4,s5,s6,s7,s8;
while(ress.next())
{
s1=ress.getString(1);s2=ress.getString(2);
s3=ress.getString(3);
s4=ress.getString(4);
s5=ress.getString(5);
s6=ress.getString(6);
s7=ress.getString(7);
s8=ress.getString(8);
out.print("<tr><td>" + s1 + "</td><td>" + s2 + "</td><td>" + s3 +
"</td><td>" + s4 + "</td><td>" + s5 + "</td><td>" + s6 + "</td><td>" + s7 +
"</td><td>" + s8 + "</td></tr>");
}
out.println("</table>");
out.println("</body></html>");
ss.close();
ress.close();
out.print("<form name=\"myForm\" action=\"home.html\"
method=\"get\"><input type=\"submit\" value=\"Home\">");
out.close();
}
catch(SQLException se)
{
se.printStackTrace();
}
catch(Exception e)
{
e.printStackTrace();
}
finally{
try{
if(conn!=null)
{
conn.close();
out.close();
}}
```

```java
catch(SQLException se)
{
se.printStackTrace();
}
}
}
}
```