

Project: FlyAway (An Airline Booking Portal)

Source Code

DAO Class

```
package com.flightbooking.database;
import java.sql.Connection; import
java.sql.DriverManager; import
java.sql.ResultSet; import
java.sql.SQLException; import
java.sql.Statement; import
java.util.ArrayList; import
java.util.HashMap; import
java.util.List; import
com.simplelearn.util.*; public
class ConnectionUtil { public
Connection con=null; public
Statement st=null;
public ConnectionUtil() throws ClassNotFoundException, SQLException{
Class.forName("com.mysql.cj.jdbc.Driver");con=DriverManager.getConnection("jdbc:mysq
l://localhost:3306/fly_away","root","Bhaiyu1598*##");
System.out.println("connection established with database");
st=con.createStatement();
}
public List<String[]> getAvailableFlights(String f, String t, String d) {
List<String[]> flights=new ArrayList<>();
String query="SELECT * FROM flyaway.flights where fromf='"+f+"' and tof='"+t+"' and
datef='"+d+"'";
try {
ResultSet rs=st.executeQuery(query); if(rs.next())
{
String[] flight=new String[3];
flight[0]=rs.getString("name");
flight[1]=rs.getString("timef");
flight[2]=rs.getString("price");
flights.add(flight); return
flights;
}
} catch (SQLException e) {
e.printStackTrace(); }
return null;
} public HashMap<String, String> checkUser(String email, String password)
{
HashMap<String,String> user=null;
String query="select * from user where email='"+email+"' and
password='"+password+"'";
try {
ResultSet rs=st.executeQuery(query);
if(rs.next()) { user=new
HashMap<>();
user.put("name", rs.getString("name"));
user.put("email",rs.getString("email"));
user.put("phno",rs.getString("phno")); user.put("adno",rs.getString("adno"));
}
return user;
} catch (SQLException e) {
e.printStackTrace(); }
return user;
}
```

```

public boolean insertUser(HashMap<String, String> user) { String
query="INSERT INTO user (email, password, name, phno, adno)
values('"+user.get("email")+"','"+user.get("password")+"','"+user.get("name")+"','"+
user.get("phno")+"','"+user.get("adno")+"')"; try { st.execute(query); return true;
} catch (SQLException e) {
e.printStackTrace(); }
return false;
}

public boolean checkAdmin(String email, String password) { try
{
ResultSet rs=st.executeQuery("select * from admin where email='"+email+"' and
password='"+password+"'"); if(rs.next()) return true;
} catch (SQLException e) {
e.printStackTrace(); }
return false;
}

public boolean changeAdminPassword(String email, String password) { try
{
ResultSet rs=st.executeQuery("select * from admin where email='"+email+"'");
if(!rs.next()) { return false;
}
st.execute("update admin set password='"+password+"' where email='"+email+"'");
return true;
} catch (SQLException e) {
e.printStackTrace(); }
return false;
}

public boolean insertFlight(HashMap<String, String> flight) throws SQLException
{
String query1 = "INSERT INTO flights (name, fromf, tof, datef, timef, price)
VALUES" + " ('" +StringUtil.fixSqlFieldValue(flight.get("name")) + "','" + " '" +
StringUtil.fixSqlFieldValue(flight.get("from")) + "','" + " '" +
StringUtil.fixSqlFieldValue(flight.get("to")) + "','" + " '" +
StringUtil.fixSqlFieldValue(flight.get("date")) + "','" + " '" +
StringUtil.fixSqlFieldValue(flight.get("time")) + "','" + " '" +
StringUtil.fixSqlFieldValue(flight.get("price")) + "','" + " '")";

System.out.println(flight.get("date"));
System.out.println(flight.get("time")); try {
//stm.execute();
st.execute(query1); return
true;
} catch (SQLException e) {
System.out.print("error");
e.printStackTrace(); }
return false;
}
}

```

SERVLETS



FilghtInsert.java

```

package com.flightbooking.servlets;
import javax.servlet.annotation.WebServlet;
import javax.servlet.http.HttpServlet;
import java.io.IOException; import
java.sql.SQLException; import
java.util.HashMap;
import javax.servlet.ServletException; import
javax.servlet.http.HttpServletRequest; import
javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
import
com.flightbooking.database.ConnectionUtil;

@WebServlet("/InsertFlight")
public class FlightInsert extends HttpServlet {
    private static final long serialVersionUID = 1L;
    protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {

        String name=request.getParameter("name");
        String from=request.getParameter("from");
        String to=request.getParameter("to");
        String departure=request.getParameter("departure");
        String time=request.getParameter("time");
        String price=request.getParameter("price");

        HashMap<String,String> flight=new HashMap<>();
        flight.put("name", name); flight.put("from",
from); flight.put("to", to);
        flight.put("date", departure);
        flight.put("time", time); flight.put("price",
price);

try {

        ConnectionUtil dao=new ConnectionUtil(); HttpSession
session=request.getSession();
        if(dao.insertFlight(flight)) {

            session.setAttribute("message", "Flight Added
Successfully");
        } else
        {
            session.setAttribute("message", "Invalid Details"); }

    } catch (ClassNotFoundException | SQLException e) {
        // TODO Auto-generated catch block
        System.out.print("error"); e.printStackTrace();
    }
    response.sendRedirect("AdminHome.jsp");

}
}

```



```

package com.flightbooking.servlets;
import
javax.servlet.annotation.WebServlet; import
java.io.IOException; import
java.sql.SQLException;
import javax.servlet.ServletException; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest; import
javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;
import
com.flightbooking.database.ConnectionUtil;
@WebServlet("/ForgotPassword")
public class ForgotPassword extends HttpServlet {
    private static final long serialVersionUID = 1L;
    protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException

{

        String email=request.getParameter("email");
        String password=request.getParameter("password");

        try {
            ConnectionUtil dao=new ConnectionUtil();           HttpSession
session=request.getSession();
            if(dao.changeAdminPassword(email,password)) {
                session.setAttribute("message", "Password Changed
Successfully");
            }
            else
            {
                session.setAttribute("message", "Invalid Details");
            }
        } catch (ClassNotFoundException | SQLException e) {
            // TODO Auto-generated catch block
            e.printStackTrace();
        }
        response.sendRedirect("AdminPage.jsp");
    }
}

```



ListOfFlights.java

```

package com.flightbooking.servlets;

import java.io.IOException; import
java.sql.SQLException; 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;    import
javax.servlet.http.HttpSession;           import
com.flightbooking.database.ConnectionUtil;

@WebServlet("/FlightList")
public class ListOfFlights extends HttpServlet {
    private static final long serialVersionUID = 1L;
    protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {

        String from=request.getParameter("from");
        String to=request.getParameter("to");
        String departure=request.getParameter("departure");

        try {
            ConnectionUtil dao = new ConnectionUtil();
            List<String[]> flights=dao.getAvailableFlights(from, to, departure);
            HttpSession session=request.getSession();
            session.setAttribute("flights", flights);

        } catch (ClassNotFoundException | SQLException e) {
            // TODO Auto-generated catch block
            e.printStackTrace();
        }
        response.sendRedirect("FlightList.jsp");
    }
}

```



LoginOfAdmin.java

```

package com.flightbooking.servlets;
import java.io.IOException;      import
java.sql.SQLException;          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.flightbooking.database.ConnectionUtil;

@WebServlet("/AdminLogin")
public class LoginOfAdmin extends HttpServlet {
    private static final long serialVersionUID = 1L;
    protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {

```

```

        String email=request.getParameter("email");
        String password=request.getParameter("password");

        try {
            ConnectionUtil dao=new ConnectionUtil();
            if(dao.checkAdmin(email,password)) {
                response.sendRedirect("AdminHome.jsp");
            } else {
                HttpSession session=request.getSession();
                session.setAttribute("message", "Invalid Details");
                response.sendRedirect("AdminPage.jsp");
            }

        } catch (ClassNotFoundException | SQLException e) {
            // TODO Auto-generated catch block
            e.printStackTrace();
        }

    }

}

```



LoginOfUser.java

```

package com.flightbooking.servlets;
import javax.servlet.annotation.WebServlet;
import java.io.IOException; import
java.sql.SQLException; import
java.util.HashMap; import
javax.servlet.ServletException; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest; import
javax.servlet.http.HttpServletResponse; import
javax.servlet.http.HttpSession;
import
com.flightbooking.database.ConnectionUtil;
@WebServlet("/UserLogin")
public class LoginOfUser extends HttpServlet { private
    static final long serialVersionUID = 1L;
protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
    String email=request.getParameter("email");
    String password=request.getParameter("password");

    try {
        ConnectionUtil dao=new ConnectionUtil();
        HashMap<String,String> user=dao.checkUser(email,password);
        HttpSession session=request.getSession();
        if(user!=null) {
            session.setAttribute("user", user);
            response.sendRedirect("HomePage.jsp");
        } else {
            session.setAttribute("message", "Invalid Details");
        }
    }
}

```

```

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

    } catch (ClassNotFoundException | SQLException e) {
        // TODO Auto-generated catch block
        e.printStackTrace();
    }

}
}

```



Logout.java

```

package com.flightbooking.servlets;
import javax.servlet.annotation.WebServlet;
import java.io.IOException; import
javax.servlet.ServletException; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest; import
javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

@WebServlet("/Logout")
public class Logout extends HttpServlet { private
    static final long serialVersionUID = 1L;
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
        throws ServletException, IOException {

        HttpSession session=request.getSession();
        session.setAttribute("user", null);
        response.sendRedirect("HomePage.jsp"); }
}

```



RegistrationOfUser.java

```

package com.flightbooking.servlets;
import javax.servlet.annotation.WebServlet;
import java.io.IOException; import
java.sql.SQLException; import java.util.HashMap;
import javax.servlet.ServletException; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest; import
javax.servlet.http.HttpServletResponse; import
javax.servlet.http.HttpSession; import
com.flightbooking.database.ConnectionUtil;

@WebServlet("/UserRegistration")
public class RegistrationOfUser extends HttpServlet {
    private static final long serialVersionUID = 1L;
    protected void doPost(HttpServletRequest request, HttpServletResponse
        response) throws ServletException, IOException {

```



```

String email=request.getParameter("email");
String password=request.getParameter("password");
String name=request.getParameter("name");
String phno=request.getParameter("phno");
String adno=request.getParameter("adno");

HashMap<String,String> user=new HashMap<>();
user.put("email", email);
user.put("password", password);
user.put("name", name); user.put("phno",
phno); user.put("adno", adno);

    try {
        ConnectionUtil dao=new ConnectionUtil();        boolean
result=dao.insertUser(user);        HttpSession
session=request.getSession();        if(result) {
            session.setAttribute("message", "User Added
Successfully");

        }        else
        {
            session.setAttribute("message","Invalid Details");
        }

    } catch (ClassNotFoundException | SQLException e) {
        // TODO Auto-generated catch block
        e.printStackTrace();
    }
    response.sendRedirect("UserPage.jsp");
}
}

```



StringUtil.java

```

package com.simplelearn.util;
public class StringUtil { public static String
fixSqlFieldValue(String value) { if (value == null) {
return null;
}
int length = value.length();
StringBuffer fixedValue = new StringBuffer((int)(length*1.1));
for(int i = 0 ; i < length ; i++) { char c = value.charAt(i);
if ( c == '\'' ) { fixedValue.append("''");
} else { fixedValue.append(c);
}
}
return fixedValue.toString();
}

public static String encodeHtmlTag(String tag)
{ if (tag==null) return null;
int length = tag.length();
StringBuffer encodedTag = new StringBuffer(2 *
length); for(int i = 0 ; i < length;i++) { char c =
tag.charAt(i); if(c=='<') encodedTag.append("<");
else if(c=='>') encodedTag.append(">");
else if(c=='&') encodedTag.append("&");
else if(c=='\"') encodedTag.append(""");

```

```

        else if(c==' ')
            encodedTag.append("&nbsp;"); else
                encodedTag.append(c);
    }

    return encodedTag.toString();
}
}

```

JSP



AdminHome.jsp

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html> <head>
<meta charset="ISO-8859-1">
<title>Admin Home</title>
</head>
<body >
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none ;font-size:35px;font-
weight:bold;">Flight Booking</a>
<br><br>
<h1>Insert New Flight Details</h1>

<div style="border:3px solid black;width:25%;border-radius:20px;padding:20px"
align="center">
<form action=InsertFlight method=post>
    <label for=name>Name :-</label> <input type="text" name=name id=name
/><br><br>
    <label for=from>From :-</label> <input type="text" name=from id=from
/><br><br>
    <label for=to>To :-</label> <input type="text" name=to id=to /><br><br>
    <label for=departure>Departure :-</label> <input type="date" name=departure
id=departure /><br><br>
    <label for=time>Time :-</label> <input type="time" name=time id=time
/><br><br>
    <label for=price>Price :-</label> <input type="text" name=price id=price
/><br><br>
    <input type=submit value=submit /> <input type=reset />
</form>
</div>
<%
    String message=(String)session.getAttribute("message");
    if(message!=null){
%>
<p style="color:silver;"><%=message %></p>
<% session.setAttribute("message", null); }
%>
</body>

```

</html>



AdminPage.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html> <head>
<meta charset="ISO-8859-1">
<title>Admin Page</title>
</head>
<body >
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none ;font-size:35px;font-
weight:bold;">Flight Booking</a>
<br><br>
<h2>Admin Login</h2>
<div style="border:3px solid black;width:25%;border-radius:20px;padding:20px"
align="center">
<form action=AdminLogin method=post>
    <label for=email>Email :-</label> <input type="email" name=email id=email
/><br><br>
    <label for=pass>Password :-</label> <input type="password" name=password
id=pass /><br><br>
    <input type=submit value=submit /> <input type=reset />
</form> </div>
<a href=ForgotPassword.jsp style="font-size:25;color:red;">Forgot Password</a>

<%
    String message=(String)session.getAttribute("message");
    if(message!=null){
%>
<p style="color:silver;"><%=message %></p>
<% session.setAttribute("message", null); }
%>
</body>

</html>
```



BookFlight.jsp

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<%@ page import="java.util.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>FlyAway</title>
</head>
<body >
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none ;font-size:35px;font-
weight:bold;">Flight Booking</a>
<br><br>

<%
    @SuppressWarnings("unchecked")
    HashMap<String,String>
    user=(HashMap<String,String>)session.getAttribute("user")
    ; if(user==null){ response.sendRedirect("UserPage.jsp");
    }
%>
<p align="center" style="color:green;font-size:40px;font-weight:bold">Flight
Booked Successfully</p>
</body>
</html>

```



FlightList.jsp

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<%@ page import="java.util.*" %>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Flight List</title>
</head>
<body > <br>
<a href=HomePage.jsp style="color:black;text-decoration:none;font-size:35px;font-
weight:bold;">Flight Booking</a>
<br><br>
<%
    @SuppressWarnings("unchecked")
    List<String[]> flights=(List<String[]>)session.getAttribute("flights");
    if(flights!=null){
%>

<h1>Available Flights</h1>

<table border="1">

```

```

<tr>
    <th>Name</th>
    <th>Time</th>
    <th>Price</th>
</tr>

    for(String[] flight:flights){
<%
%>

<tr>
<td><%=flight[0]%></td>
<td><%=flight[1]%></td>
<td><%=flight[2]%></td>
</tr>
</table>
<a href=BookFlight.jsp>Book Now</a>
<%
    }
%>

<% } else{
%>
<h1>There are no available flights</h1>
<%
    }
%>
</body>
</html>

```



ForgotPassword.jsp

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html> <head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body >
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none ;font-size:35px;font-
weight:bold;">Flight Booking</a>
<br><br>
<div style="border:3px solid black;width:25%;border-radius:20px;padding:20px"
align="center">
<form action=ForgotPassword method=post>
    <label for=email>Email :-</label> <input type="email" name=email id=email
/><br><br>
    <label for=pass>New Password :-</label> <input type="password" name=password
id=pass /><br><br>

```

```

        <input type=submit value=submit /> <input type=reset />
    </form>
</div>
</body>

</html>

```



HomePage.jsp

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<%@ page import="java.util.*" %>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Flight Booking</title>
</head>
<body >
<h1>FlyAway</h1>

<div align="right">
<a href="AdminPage.jsp">Admin Login</a>
</div>

<%
    @SuppressWarnings("unchecked")
    HashMap<String,String>
    user=(HashMap<String,String>)session.getAttribute("user"); if(user!=null){
%>
<p>Welcome <%=user.get("name") %></p>
<a href="Logout">Logout</a>
<%
    }else{
%>
<a href=UserPage.jsp>User Login</a>
<%
    }
%> <br><br>
<div style="border:5px solid black;width:25%;border-radius:20px;padding:20px"
align="center">
<form action=FlightList method=post>
    <label for=from>From :-</label> <input type=text name=from id=from/><br><br>
    <label for=to>To :-</label> <input type=text name=to id=to/><br><br>
    <label for=departure>Departure :-</label> <input type=date name=departure
id=departure/><br><br>
    <label for=travellers>Travellers :-</label> <input type=number
name=travellers id=travellers/><br><br>
    <input type=submit value=Search /> <input type=reset />
</form>
</div>
</body>

</html>

```



UserPage.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body >
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none ;font-size:35px;font-
weight:bold;">Flight Booking</a>
<br><br>
<h2>User Login</h2>
<div style="border:2px solid black;width:25%;border-radius:20px;padding:20px"
align="center">
<form action=UserLogin method=post >
    <table >
        <tr>
            <td><label for=email>Email</label><br></td>
            <td><input type="email" name=email id=email /></td>
        </tr>
        <tr>
            <td><label for=pass>Password</label><br></td>
            <td><input type="password" name=password id=pass /></td>
        </tr>

        <tr>
            <td><input type=submit value=submit /></td>
            <td><input type=reset /></td>
        </tr>
    </table>

</form>
</div>
<br><br>
<i>New User-Create account</i>
<h4><a href=UserRegistration.jsp style="font-size:25;color:red;">Create
Account</a></h4>

<%
    String message=(String)session.getAttribute("message");
    if(message!=null){
%>
<p style="color:silver;"><%=message %></p>
<% session.setAttribute("message", null); }
%>
```

</body>

</html>



UserRegistration.jsp

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html> <head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body >
<br>
<a href=HomePage.jsp style="color:black;text-decoration:none ;font-size:35px;font-
weight:bold;">Flight Booking</a>
<br><br>
<div style="border:3px solid black;width:25%;border-radius:20px;padding:20px"
align="center">
<form action=UserRegistration method=post>
    <label for=email>Email :-</label> <input type="email" name=email id=email
/><br><br>
    <label for=pass>Password :-</label> <input type="password" name=password
id=pass /><br><br>
    <label for=name>Name :-</label> <input type="text" name=name id=name
/><br><br>
    <label for=phno>Phone No. :-</label> <input type="text" name=phno id=phno
/><br><br>
    <label for=adno>Aadhaar No. :-</label> <input type="text" name=adno id=adno
/><br><br>
    <input type=submit value=submit /> <input type=reset />
</form>
</div>
</body>
```

</html>



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" version="4.0">
```



```

<display-name>Flight Booking</display-name>
<welcome-file-list>
  <welcome-file>UserRegistration.jsp</welcome-file>
  <welcome-file>AdminHome.jsp</welcome-file>
  <welcome-file>AdminPage.jsp</welcome-file>
  <welcome-file>FlightList.jsp</welcome-file>
  <welcome-file>BookFlight.jsp</welcome-file>
  <welcome-file>ForgotPassword.jsp</welcome-file>
  <welcome-file>HomePage.jsp</welcome-file>
  <welcome-file>UserPage.jsp</welcome-file>
</welcome-file-list> </web-app>

```



pom.xml

```

<project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <groupId>org.simplilearn.workshop</groupId>
  <artifactId>FlyAway</artifactId>
  <version>1.0-SNAPSHOT</version>
  <packaging>war</packaging>
  <name>FlyAway</name>
  <description>FlyAway is a ticket-booking portal that lets people book flights on
their website.</description>
  <properties>
    <maven.compiler.source>1.8</maven.compiler.source>
    <maven.compiler.target>1.8</maven.compiler.target> </properties>

  <build>
    <plugins>
      <plugin>
        <groupId>org.apache.maven.plugins</groupId>
        <artifactId>maven-war-plugin</artifactId>
        <version>2.6</version>
        <configuration>
          <failOnMissingWebXml>>false</failOnMissingWebXml>
        </configuration>
      </plugin>
    </plugins>
  </build>

  <dependencies>
    <dependency>
      <groupId>javax.servlet.jsp</groupId>
      <artifactId>javax.servlet.jsp-api</artifactId>
      <version>2.3.3</version>
      <scope>provided</scope>
    </dependency>
    <dependency>
      <groupId>javax.servlet</groupId>
      <artifactId>javax.servlet-api</artifactId>
      <version>4.0.1</version>
      <scope>provided</scope>
    </dependency>
    <dependency>
      <groupId>mysql</groupId>
      <artifactId>mysql-connector-java</artifactId>
      <version>8.0.23</version>
    </dependency>
  </dependencies>

```

```
</dependencies> </project>
```