**FlyAway (An Airline Booking Portal)**

DESCRIPTION

**Project objective:**

As a Full Stack Developer, design and develop an airline booking portal named as FlyAway. Use the GitHub repository to manage the project artifacts.

**Background of the problem statement:**

FlyAway is a ticket-booking portal that lets people book flights on their website.

**Development Environment**

* Eclipse IDE for Enterprise Java Developers v2019-03 (4.11.0)
* Apache Tomcat Server v9.0
* JRE: OpenJDK Runtime Environment 11.0.2
* MySQL Connector for Java 8.0.16

Adding the jar files for MySQL connection for Java

* Take **mysql-connector-java.jar** and add it to the project’s **WebContent/WEB-INF/lib** folder

**Creating a dynamic web project**

* Open Eclipse
* Go the **File** menu. Choose **New->Dynamic Web Project**
* Enter the project name as **FlyAway.** Click on **Next**
* Enter nothing in the next screen and click on **Next**
* Check the checkbox **Generate web.xml deployment descriptor** and click on **Finish**
* This will create the project files in the Project Explorer

**Creating a AdminLogin class**

* In the Project Explorer, expand **FlyAway->Java Resources**
* Right click on **src** and choose **New->Servlet**
* In **Package,** enter **com.flight** and in **Name** enter **Adminlogin** and click on **Finish**
* Enter the following code:

**package** com.flight;

**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.database.DAO;

@WebServlet("/AdminLogin")

**public** **class** Adminlogin **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** {

DAO dao=**new** DAO();

**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();

}

}

}

**Creating a Flightlist class**

* In the Project Explorer, expand **FlyAway->Java Resources**
* Right click on **src** and choose **New->Servlet**
* In **Package,** enter **com.flight** and in **Name** enter **Flightlist** and click on **Finish**
* Enter the following code:

**package** com.flight;

**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.database.DAO;

@WebServlet("/FlightList")

**public** **class** Flightlist **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** {

DAO dao = **new** DAO();

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");

}

}

**Creating a Forgetpassword class**

* In the Project Explorer, expand **FlyAway->Java Resources**
* Right click on **src** and choose **New->Servlet**
* In **Package,** enter **com.flight** and in **Name** enter **Forgetpassword** and click on **Finish**
* Enter the following code:

**package** com.flight;

**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.database.DAO;

@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** {

DAO dao=**new** DAO();

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");

}

}

**Creating a InsertFlight class**

* In the Project Explorer, expand **FlyAway->Java Resources**
* Right click on **src** and choose **New->Servlet**
* In **Package,** enter **com.flight** and in **Name** enter **InsertFlight** and click on **Finish**
* Enter the following code:

**package** com.flight;

**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.database.DAO;

@WebServlet(“/InsertFlight”)

**public** **class** InsertFlight **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** {

DAO dao=**new** DAO();

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”);

}

}

**Creating a logOut class**

* In the Project Explorer, expand **FlyAway->Java Resources**
* Right click on **src** and choose **New->Servlet**
* In **Package,** enter **com.flight** and in **Name** enter **logOut** and click on **Finish**
* Enter the following code:

**package** com.flight;

**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");

}

}

**Creating a UserLogin class**

* In the Project Explorer, expand **FlyAway->Java Resources**
* Right click on **src** and choose **New->Servlet**
* In **Package,** enter **com.flight** and in **Name** enter **UserLogin** and click on **Finish**
* Enter the following code:

**package** com.flight;

**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.database.DAO;

@WebServlet("/UserLogin")

**public** **class** UserLogin **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** {

DAO dao=**new** DAO();

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();

}

}

}

**Creating a UserRegistration class**

* In the Project Explorer, expand **FlyAway->Java Resources**
* Right click on **src** and choose **New->Servlet**
* In **Package,** enter **com.flight** and in **Name** enter **UserRegistration** and click on **Finish**
* Enter the following code:

**package** com.flight;

**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.database.DAO;

@WebServlet("/UserRegistration")

**public** **class** UserRegistration **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** {

DAO dao=**new** DAO();

**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");

}

}

**Creating a JSP file AdminHome.jsp**

* In the Project Explorer, expand the project **FlyAway**
* Expand **WebContent**. Right click on **WebContent**. Choose **New->JSP File**
* Enter the filename as **AdminHome.jsp** and click on **Finish**
* Enter the following code:

<%@ 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*;">FlyAway</a>

<br><br>

<center>

<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>

</center>

<%

String message=(String)session.getAttribute("message");

if(message!=null){

%>

<p style="color:*silver*;"><%=message %></p>

<%

session.setAttribute("message", null);

}

%>

</body>

</html>

**Creating a JSP file AdminPage.jsp**

* In the Project Explorer, expand the project **FlyAway**
* Expand **WebContent**. Right click on **WebContent**. Choose **New->JSP File**
* Enter the filename as **AdminPage.jsp** and click on **Finish**
* Enter the following code:

<%@ 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*;">FlyAway</a>

<br><br>

<center>

<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>

</center><br>

<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>

**Creating a JSP file BookFlight.jsp**

* In the Project Explorer, expand the project **FlyAway**
* Expand **WebContent**. Right click on **WebContent**. Choose **New->JSP File**
* Enter the filename as **BookFlight.jsp** and click on **Finish**
* Enter the following code:

<%@ 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*;">FlyAway</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>

**Creating a JSP file FlightlList.jsp**

* In the Project Explorer, expand the project **FlyAway**
* Expand **WebContent**. Right click on **WebContent**. Choose **New->JSP File**
* Enter the filename as **FlightList.jsp** and click on **Finish**
* Enter the following code:

<%@ 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*;">FlyAway</a>

<br><br>

<%

@SuppressWarnings("unchecked")

List<String[]> flights=(List<String[]>)session.getAttribute("flights");

if(flights!=null){

%>

<h1>Available Flights</h1>

<center>

<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>

</center>

<center><a href=*BookFlight.jsp*>Book Now</a> </center>

<%

}

%>

<%

}

else{

%>

<h1>There are no available flights</h1>

<%

}

%>

</body>

</html>

Creating a JSP file ForgetPassword.jsp

* In the Project Explorer, expand the project **FlyAway**
* Expand **WebContent**. Right click on **WebContent**. Choose **New->JSP File**
* Enter the filename as **ForgetPassword.jsp** and click on **Finish**
* Enter the following code:

<%@ 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*;">FlyAway</a>

<br><br>

<center>

<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>

</center>

</body>

</html>

**Creating a JSP file HomePage.jsp**

* In the Project Explorer, expand the project **FlyAway**
* Expand **WebContent**. Right click on **WebContent**. Choose **New->JSP File**
* Enter the filename as **HomePage.jsp** and click on **Finish**
* Enter the following code:

<%@ 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*;">FlyAway</a>

<br><br>

<center>

<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>

</center>

</body>

</html>

**Creating a JSP file UserPage.jsp**

* In the Project Explorer, expand the project **FlyAway**
* Expand **WebContent**. Right click on **WebContent**. Choose **New->JSP File**
* Enter the filename as **UserPage.jsp** and click on **Finish**
* Enter the following code:

<%@ 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*;">FlyAway</a>

<br><br>

<center>

<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>

</center>

<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>

**Creating a JSP file UserRegistration.jsp**

* In the Project Explorer, expand the project **FlyAway**
* Expand **WebContent**. Right click on **WebContent**. Choose **New->JSP File**
* Enter the filename as **UserRegistration.jsp** and click on **Finish**
* Enter the following code:

<%@ 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*;">FlyAway</a>

<br><br>

<center>

<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>

</center>

</body>

</html>

**Creating a DAO class**

* In the Project Explorer, expand **FlyAway->Java Resources**
* Right click on **src** and choose **New->class**
* In **Package,** enter **com.database** and in **Name** enter **DAO** and click on **Finish**
* Enter the following code:

**package** com.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;

**public** **class** DAO {

**public** Connection con=**null**;

**public** Statement st=**null**;

**public** DAO() **throws** ClassNotFoundException, SQLException{

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

con=DriverManager.*getConnection*("jdbc:mysql://localhost:3306/flyaway","root","password");

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 {

//PreparedStatement stm=con.prepareStatement("INSERT INTO 'flyaway.flights' ('name', 'from', 'to', 'date', 'time', 'price') values(?,?,?,?,?,?)");

//String sql="INSERT INTO flights ('name','from','to','date','time','price') values('"+flight.get("name")+"','"+flight.get("from")+"','"+flight.get("to")+"','"+flight.get("date")+"','"+flight.get("time")+"','"+flight.get("price")+"');";

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")) + "')";

//String sql="INSERT INTO `flyaway`.`flights` (`name`, `fromf`, `tof`, `datef`, `timef`, `price`) VALUES ('indigo', 'hyd', 'viz', '2021-04-08', '10:00', '2000');";

System.***out***.println(flight.get("date"));

System.***out***.println(flight.get("time"));

//String query1="INSERT into flyaway.flights (name,from,to,date,time,price) values('indigo','hyd','viz','24-02-2022','10:30','2000')";

**try** {

//stm.execute();

st.execute(query1);

**return** **true**;

} **catch** (SQLException e) {

System.***out***.print("error");

e.printStackTrace();

}

**return** **false**;

}

}

Checking for servlet-api.jar

* Before building the project, we need to add **servlet-api.jar** to the project
* To add it to the project, follow the below mentioned steps:
  + In the Project Explorer, right click on **FlyAway** and choose **Properties**
  + Select **Java Build Path** from the options on the left
  + Click on **Libraries** tab on the right
  + Under **ClassPath,** expand the node that says **Apache Tomcat**
  + If there is an existing entry for **servlet-api.jar,** then click on **Cancel** and exit the window
  + If it is not there, then click on **Classpath** entry and click on **Add External JARs** button on the right
  + From the file list, select **servlet-api.jar** file and click on **Ok**
  + Click on **Apply and Close**

Building the project

* From the **Project** menu at the top, click on **Build**
* If any compile errors are shown, fix them as required

Publishing and starting the project

* If you do not see the **Servers** tab near the bottom of the IDE, go to **Window** menu and click on **Show View->Servers**
* Right click the **Server** entry and choose **Add and Remove**
* Click the **Add** button to move **FlyAway** from the **Available** list to the **Configured** list
* Click on **Finish**
* Right click the **Server** entry and click on **Publish**
* Right click the **Server** entry and click on **Start**
* This will start the server

**Running the project**

* To run the project, open a web browser and type: [**http://localhost:8080/**](http://localhost:8080/ServletConcept)**FlyAway/**

**Pushing the code to your GitHub repositories**

* Open your command prompt and navigate to the folder where you have created your files.

**cd <folder path>**

* Initialize your repository using the following command:

**git init**

* Add all the files to your git repository using the following command:

**git add .**

* Commit the changes using the following command:

**git commit . -m “Changes have been committed.”**

* Push the files to the folder you initially created using the following command:

**git push -u origin master**