**Phase 2: Become a back end expert – Project FlyAway**

**Developer Details:**

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**Date: 21st January, 2022**

**Program Name: FlyAway**

**GitHub Repository: https://github.com/ShwetaKadgi/FlyAway-/upload/master/Simplilearn\_Flyaway**

**Program Background:**

FlyAway is a airplane ticket-booking portal that lets the user book flights on website

Program Features:

* A search form in the homepage to allow entry of travel details, like the date of travel, source, destination, and the number of persons.
* Based on the travel details entered, it will show the available flights with their ticket prices.
* Once a person selects a flight to book, they will be taken to a register page where they must fill in their personal details. In the next page, they are shown the flight details of the flight that they are booking, and the payment is done via a dummy payment gateway. On completion of the payment, they are shown a confirmation page with the details of the booking.

The admin can check following lists:

1. Places
2. Airlines
3. Flights
4. Registered users

**Tools used for development:**

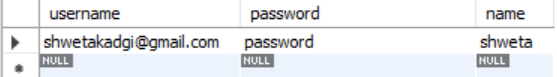
1. Eclipse Enterprise Edition for web developers
2. MySQL Relational Database Management System
3. Apache Tomcat-10 server
4. Servlets in Java
5. Java Server Pages
6. JDBC Java Database Connectivity

Sprint Table:

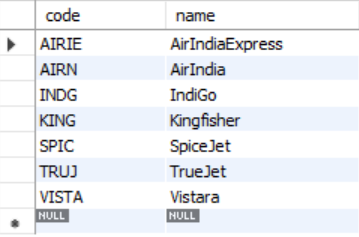
|  |  |  |  |
| --- | --- | --- | --- |
| **Sprint** | **Work Done** | **Time Period** | **Result** |
| 1 | Created Databases in MySQL | 1st January, 2022 to 4th January, 2022 | Done |
| 2 | Designed JSP pages | 5th January 2022 to 7th January, 2022 | Done |
| 3 | Server side coding | 8th January,2022 to 10th January, 2022 | Done |
| 4 | Testing | 11th January, 2022 to 13th January, 2022 | Done |

**Databases:**

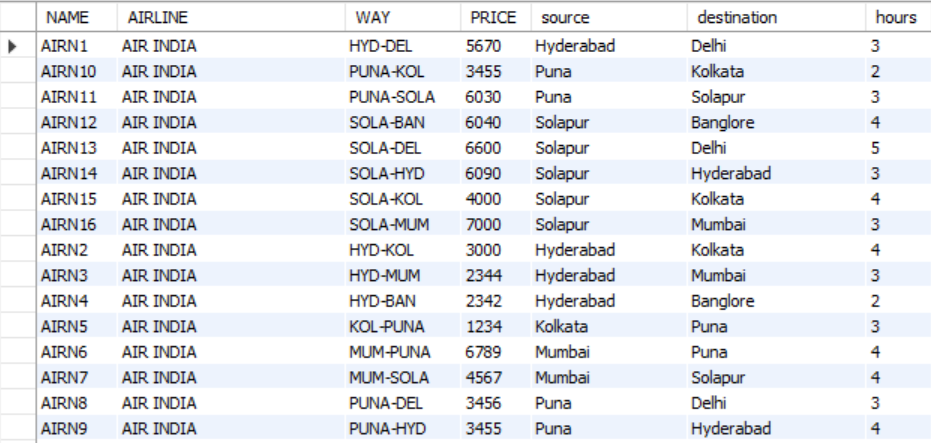
1. **Admin**

****

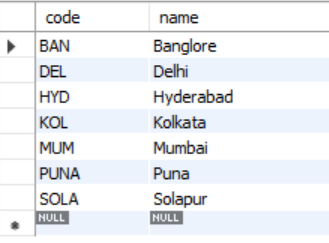
1. **Airlines**

****

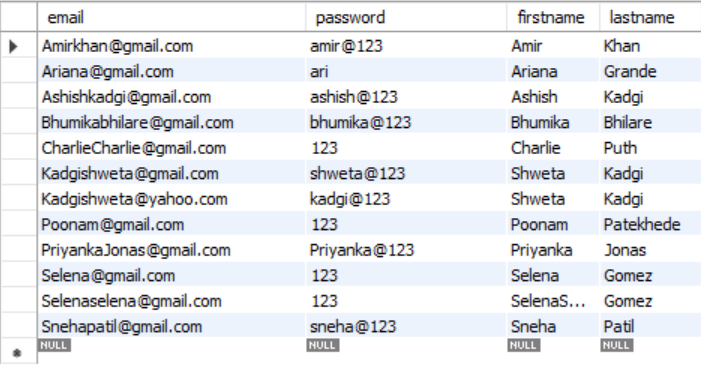
1. **Flights**

****

1. **Places**

****

1. **Users**

****

**Source Code:**

1. **Homepage**

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

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

<%@page import=*"java.sql.DriverManager, java.sql.Connection, java.sql.ResultSet"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<style>

**body** { background-image: *url('Fly.jpg')*;

background-position: *center*;

background-repeat: *no-repeat*;}

</style>

</head>

<title>FlyAway</title>

<body>

<font size=*"12"* face=*"Verdana"*><b>FlyAway- Your ticket to your destination!</b></font><br><br><br>

<form action=*"search.jsp"* method=*"post"*>

<datalist id=*"source"*>

<%

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

String url = "jdbc:mysql://localhost:3306/flyaway?characterEncoding=utf8";

String user = "root";

String pass = "shweta";

String sql = "select name from places order by name";

Connection con = DriverManager.getConnection(url, user, pass);

ResultSet rs = con.createStatement().executeQuery(sql);

**while** (rs.next()) {

String source = rs.getString("name");

%>

<option value=*"*<%=source%>*"* />

<%

}

%>

</datalist>

<br>

<b><font face=*"Verdana"*>Source:</font></b> <input type=*"text"* name=*"source"* list=*"source"* required/>

</br>

</br>

<datalist id=*"destination"*>

<%

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

String url1 = "jdbc:mysql://localhost:3306/flyaway?characterEncoding=utf8";

String user1 = "root";

String pass1 = "shweta";

String sql1 = "select name from places order by name";

Connection con1 = DriverManager.getConnection(url1, user1, pass1);

ResultSet rs1 = con.createStatement().executeQuery(sql1);

**while** (rs1.next()) {

String destination = rs1.getString("name");

%>

<option value=*"*<%=destination%>*"* />

<%

}

rs.close();

con.close();

%>

</datalist>

<p>

<b><font face=*"Verdana"*>Destination:</font></b> <input type=*"text"* name =*"destination"* list=*"destination"* required/>

</p></br>

<b><font face=*"Verdana"*>Travel Date:</font></b>

<input type=*"date"* id=*"traveldate"* name=*"traveldate"* required> </br></br>

<input type=*"submit"* value=*"Show available flights"*></br></br>

</form>

<a href=*"login.jsp"*><h3><font face=*"Verdana"*>Login as an admin</font></h3></a>

<a href=*"NewRegistration.jsp"*><h3><font face=*"Verdana"*>Sign up</font></h3></a>

</body>

</html>

1. **Login page for user**

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

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

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>User Login page</title>

<style>

**body** { background-image: *url('Fly.jpg')*;

background-position: *center*;

background-repeat: *no-repeat*;}

</style>

</head>

<body>

<a href=*"index.jsp"*><h3><font face=*"Verdana"*>Go to Homepage</font></h3></a>

<form action=*"ValidateUser.jsp"* method=*"post"*>

<font size=*"10"* face=*"Verdana"*><b>User Login</b></font><br><br>

<font face=*"Verdana"*><b>Username:</b></font>

<input type=*"text"* name=*"username"*></br></br>

<font face=*"Verdana"*><b>Password:</b></font>

<input type=*"password"* name=*"password"*></br></br>

<input type=*"submit"* value=*"Login"*>

</form>

</body>

</html>

**User validation page**

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

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

<%@page import=*"java.sql.\*"*%>

<html>

<style>

**body** { background-image: *url('Fly.jpg')*;

background-position: *center*;

background-repeat: *no-repeat*;}

</style>

<%

**try** {

String username = request.getParameter("username");

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

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

String url = "jdbc:mysql://localhost:3306/flyaway?characterEncoding=utf8";

String user = "root";

String pass = "shweta";

Connection con = DriverManager.getConnection(url,user,pass);

PreparedStatement st = con

.prepareStatement("select email,password from users where email=? and password=?");

st.setString(1, username);

st.setString(2, password);

ResultSet rs = st.executeQuery();

**if** (rs.next()) {

response.sendRedirect("search.jsp");

} **else** {

out.println("<h1><p style=color:red>Invalid credentials!</P></h1>");

}

} **catch** (Exception e) {

out.println(e);

}

%>

</html>

Search flights

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

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

<%@page import=*"java.sql.\*"*%>

<head>

<title>Available Flights</title>

<style>

**body** { background-image: *url('Fly.jpg')*;

background-position: *center*;

background-repeat: *no-repeat*;}

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

border: *1px solid black*;

border-collapse: *collapse*;

}

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

background-color: *grey*;

}

</style>

</head>

<%

String SOURCE = request.getParameter("source");

String DESTINATION = request.getParameter("destination");

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

String url = "jdbc:mysql://localhost:3306/flyaway?characterEncoding=utf8";

String user = "root";

String pass = "shweta";

String sql = "select \* from flights where source='" + SOURCE + "'and destination='" + DESTINATION + "'";

Connection con = DriverManager.getConnection(url, user, pass);

Statement st = con.createStatement();

ResultSet rs = st.executeQuery(sql);

%>

<a href=*"index.jsp"*><h3><font face=*"Verdana"*>Go to Homepage</font></h3></a>

<h1><font face=*"Verdana"*>Available Flights :</font></h1>

<table border=*"2"*>

<tr>

<th>Name</th>

<th>Airline</th>

<th>Way</th>

<th>Price</th>

<th>Source</th>

<th>Destination</th>

<th>Hours</th>

</tr>

<%

**while** (rs.next()) {

%>

<tr>

<td><%=rs.getString(1)%></td>

<td><%=rs.getString(2)%></td>

<td><%=rs.getString(3)%></td>

<td><%=rs.getString(4)%></td>

<td><%=rs.getString(5)%></td>

<td><%=rs.getString(6)%></td>

<td><%=rs.getString(7)%></td>

</tr>

<%

}

%>

</table>

</br>

<br>

<br>

<form action=*"customerdetails.jsp"* method=*"post"*>

<b><font face=*"Verdana"*>No of Persons:</font></b>

<input type=*"number"* name=*"no of persons"* required></br></br>

<input type=*"submit"* value=*"Book Ticket"*><br><br>

</form>

<a href=*"UserLogin.jsp"*><h3><font face=*"Verdana"*>Login as a user</font></h3></a>

<a href=*"NewRegistration.jsp"*><h3><font face=*"Verdana"*>Sign up</font></h3></a>

Customer Details

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

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

<%@page import=*"java.sql.DriverManager, java.sql.Connection, java.sql.ResultSet"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title><font face=*"Verdana"*>Insert title here</font></title>

<style>

**body** { background-image: *url('Fly.jpg')*;

background-position: *center*;

background-repeat: *no-repeat*;}

</style>

</head>

<body>

<a href=*"index.jsp"*><h3><font face=*"Verdana"*>Go to Homepage</font></h3></a>

<h1><font face=*"Verdana"*>Select Route:</font></h1>

<form action=*"showdetails.jsp"* method=*"post"*>

<datalist id=*"source"*>

<%

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

String url = "jdbc:mysql://localhost:3306/flyaway?characterEncoding=utf8";

String user = "root";

String pass = "shweta";

String sql = "select name from places order by name";

Connection con = DriverManager.getConnection(url, user, pass);

ResultSet rs = con.createStatement().executeQuery(sql);

**while** (rs.next()) {

String source = rs.getString("name");

%>

<option value=*"*<%=source%>*"* />

<%

}

%>

</datalist>

<p>

<font face=*"Verdana"*>Source:</font> <input type=*"text"* name=*"source"* list=*"source"* required/>

</p>

<datalist id=*"destination"*>

<%

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

String url1 = "jdbc:mysql://localhost:3306/flyaway?characterEncoding=utf8";

String user1 = "root";

String pass1 = "shweta";

String sql1 = "select name from places order by name";

Connection con1 = DriverManager.getConnection(url1, user1, pass1);

ResultSet rs1 = con.createStatement().executeQuery(sql1);

**while** (rs1.next()) {

String destination = rs1.getString("name");

%>

<option value=*"*<%=destination%>*"* />

<%

}

rs.close();

con.close();

%>

</datalist>

<p>

<font face=*"Verdana"*>Destination:</font> <input type=*"text"* name =*"destination"* list=*"destination"* required/>

<h2><font face=*"Verdana"*>Enter your details</font></h2>

<%

**int** count = Integer.parseInt(request.getParameter("no of persons"));

**for** (**int** i = 1; i <= count; i++) {

%>

<font face=*"Verdana"*>Passenger Name</font> <%=i %> : <input type=*"text"* name=*"fullname"* required> </br> </br>

<font face=*"Verdana"*>Aadhar UID</font> <%=i %> : <input type=*"number"* name=*"uid"* required></br> </br>

<font face=*"Verdana"*>Phone Number</font> <%=i %> : <input type=*"number"* name=*"phone"* required> </br> </br>

<font face=*"Verdana"*>Age</font> <%=i %> : <input type=*"number"* name=*"age"* required></br></br>

<hr></br>

<%

}

%>

<input type=*"submit"* value=*"Book Ticket"*></br></br>

</form>

</body>

</html>

Payment Page

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

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

<%@page import=*"java.sql.\*"*%>

<html>

<style>

**body** { background-image: *url('Fly.jpg')*;

background-repeat: *no-repeat*;

background-position: *center*;}

</style>

<body>

<a href=*"index.jsp"*><h3><font face=*"Verdana"*>Go to Homepage</font></h3></a>

<form action=*"PaymentSuccessful.jsp"*>

<h1><font face=*"Verdana"*>Payment Details :</font></h1>

<font face=*"Verdana"*>Debit card Number :</font> <input type=*"number"* required></br>

</br> <font face=*"Verdana"*> Expiry Date :</font> <input type=*"date"* pattern=*"mm-yy"*></br>

</br> <font face=*"Verdana"*>CVV :</font> <input type=*"number"* required></br>

</br> <input type=*"submit"* value=*"Pay"* ></br>

</br>

</form>

</body>

</html>

Admin Login Page

<%@ 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>

<style>

**body** { background-image: *url('Fly.jpg')*;

background-position: *center*;

background-repeat: *no-repeat*;}

</style>

</head>

<body>

<a href=*"index.jsp"*><h3><font face=*"Verdana"*>Go to Homepage</font></h3></a>

<form action=*"placeslist.jsp"* method=*"post"*>

<h2>

<input type=*"submit"* value=*"Places List"*>

</h2>

</form>

<form action=*"airlineslist.jsp"* method=*"post"*>

<h2>

<input type=*"submit"* value=*"Airlines List"*>

</h2>

</form>

<form action=*"flightslist.jsp"* method=*"post"*>

<h2>

<input type=*"submit"* value=*"Flights List"*>

</h2>

</form>

<form action=*"ShowUsers.jsp"* method=*"post"*>

<h2>

<input type=*"submit"* value=*"Show registered users"*>

</h2>

</form>

<form action=*"passdata.jsp"* method=*"post"*>

<h2>

<input type=*"submit"* value=*"Change Password"*>

</h2>

</form>

</body>

</html>

**Places List**

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

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

<%@page import=*"java.sql.\*"*%>

<html>

<style>

**body** { background-image: *url('Fly.jpg')*;

background-position: *center*;

background-repeat: *no-repeat*;}

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

border: *1px solid black*;

border-collapse: *collapse*;

}

</style>

<body>

<a href=*"index.jsp"*><h3><font face=*"Verdana"*>Go to Homepage</font></h3></a>

<%

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

String url = "jdbc:mysql://localhost:3306/flyaway?characterEncoding=utf8";

String user = "root";

String pass = "shweta";

String sql = "select \* from places order by name";

Connection con = DriverManager.getConnection(url, user, pass);

Statement st = con.createStatement();

ResultSet rs = st.executeQuery(sql);

%>

<h1><font face=*"Verdana"*>Places List</font></h1>

<table border=*"1"*>

<tr>

<th><font face=*"Verdana"*>Code</font></th>

<th><font face=*"Verdana"*>Name</font></th>

</tr>

<%

**while** (rs.next()) {

%>

<tr>

<td>

<%=

rs.getString(1)

%>

</td>

<td>

<%=

rs.getString(2)

%>

</td>

</tr>

<%

}

%>

</table>

</body>

</html>

**Airlines List:**

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

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

<%@page import=*"java.sql.\*"*%>

<html>

<Style>

**body** { background-image: *url('Fly.jpg')*;

background-position: *center*;

background-repeat: *no-repeat*;}

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

border: *1px solid black*;

border-collapse: *collapse*;

}

</Style>

<body>

<a href=*"index.jsp"*><h3><font face=*"Verdana"*>Go to Homepage</font></h3></a>

<%

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

String url = "jdbc:mysql://localhost:3306/flyaway?characterEncoding=utf8";

String user = "root";

String pass = "shweta";

String sql = "select \* from airlines order by name";

Connection con = DriverManager.getConnection(url, user, pass);

Statement st = con.createStatement();

ResultSet rs = st.executeQuery(sql);

%>

<h1><font face=*"Verdana"*>AirLines List :</font></h1>

<table border=*"1"*>

<tr>

<th><font face=*"Verdana"*>Code</font></th>

<th><font face=*"Verdana"*>Name</font></th>

</tr>

<%

**while** (rs.next()) {

%>

<tr>

<td>

<%=

rs.getString(1)

%>

</td>

<td>

<%=

rs.getString(2)

%>

</td>

</tr>

<%

}

%>

</table>

</body>

</html>

**Flight List:**

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

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

<%@page import=*"java.sql.\*"*%>

<html>

<style>

**body** { background-image: *url('Fly.jpg')*;

background-position: *center*;

background-repeat: *no-repeat*;}

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

border: *1px solid black*;

border-collapse: *collapse*;

}

</style>

<body>

<a href=*"index.jsp"*><h3><font face=*"Verdana"*>Go to Homepage</font></h3></a>

<%

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

String url = "jdbc:mysql://localhost:3306/flyaway?characterEncoding=utf8";

String user = "root";

String pass = "shweta";

String sql = "select \* from flights order by name";

Connection con = DriverManager.getConnection(url, user, pass);

Statement st = con.createStatement();

ResultSet rs = st.executeQuery(sql);

%>

<h1><font face=*"Verdana"*>Flights List</font></h1>

<table border=*"1"*>

<tr>

<th><font face=*"Verdana"*>Name</font></th>

<th><font face=*"Verdana"*>Airline</font></th>

<th><font face=*"Verdana"*>Way</font></th>

<th><font face=*"Verdana"*>Price</font></th>

<th><font face=*"Vendara"*>Hours</font></th>

</tr>

<%

**while** (rs.next()) {

%>

<tr>

<td>

<%=

rs.getString(1)

%>

</td>

<td>

<%=

rs.getString(2)

%>

</td>

<td>

<%=

rs.getString(3)

%>

</td>

<td>

<%=

rs.getString(4)

%>

</td>

<td>

<%=

rs.getString(7)

%>

</td>

</tr>

<%

}

%>

</table>

</body>

</html>

**Registered Users List:**

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

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

<%@page import=*"java.sql.\*"*%>

<!DOCTYPE html>

<html>

<head>

<meta charset=*"ISO-8859-1"*>

<title>Insert title here</title>

<style>

**body** { background-image: *url('Fly.jpg')*;

background-position: *center*;

background-repeat: *no-repeat*;}

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

border: *1px solid black*;

border-collapse: *collapse*;

}

</style>

</head>

<body>

<a href=*"index.jsp"*><h3><font face=*"Verdana"*>Go to Homepage</font></h3></a>

<%

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

String url = "jdbc:mysql://localhost:3306/flyaway?characterEncoding=utf8";

String user = "root";

String pass = "shweta";

String sql = "select \* from users";

Connection con = DriverManager.getConnection(url, user, pass);

Statement st = con.createStatement();

ResultSet rs = st.executeQuery(sql);

%>

<h1><font face=*"Verdana"*>List of the registered users:</font> </h1>

<table border=*"1"*>

<tr>

<th><font face=*"Verdana"*>Email</font></th>

<th><font face=*"Verdana"*>Firstname</font></th>

<th><font face=*"Verdana"*>Lastname</font></th>

</tr>

<%

**while** (rs.next()) {

%>

<tr>

<td>

<%=

rs.getString(1)

%>

</td>

<td>

<%=

rs.getString(3)

%>

</td>

<td>

<%=

rs.getString(4)

%>

</td>

</tr>

<%

}

%>

</table>

</body>

</html>

**Admin Change Password:**

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

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

<%@page import=*"java.sql.\*"*%>

<%

String PASS = request.getParameter("new password");

String oldpass = request.getParameter("existing password");

String OLDPASS = "";

String confirmPassword = request.getParameter("confirm password");

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

String url = "jdbc:mysql://localhost:3306/flyaway?characterEncoding=utf8";

String user = "root";

String pass = "shweta";

String sql1 = "select password from admin where password='" + oldpass + "'";

String sql2 = "update admin set password='" + confirmPassword + "' where username='shwetakadgi@gmail.com'";

Connection con = DriverManager.getConnection(url, user, pass);

Statement st = con.createStatement();

ResultSet rs = st.executeQuery(sql1);

**if** (rs.next()) {

OLDPASS = rs.getString("password");

}

**if** (PASS.equals(confirmPassword)) {

**if** (oldpass.equals(OLDPASS)) {

st = con.createStatement();

**int** i = st.executeUpdate(sql2);

out.println("Password updated");

%>

<html>

<body>

<br>

<br>

<br>

<a href=*"login.jsp"*><strong><font face=*"Verdana"*>Login as an admin</font></strong></a>

</body>

</html>

<%

RequestDispatcher rd = request.getRequestDispatcher("/passdata.jsp");

rd.include(request, response);

} **else** {

out.println("Old password doesn't match");

RequestDispatcher rd = request.getRequestDispatcher("/passdata.jsp");

rd.include(request, response);

}

} **else** {

out.println("Passwords dont match");

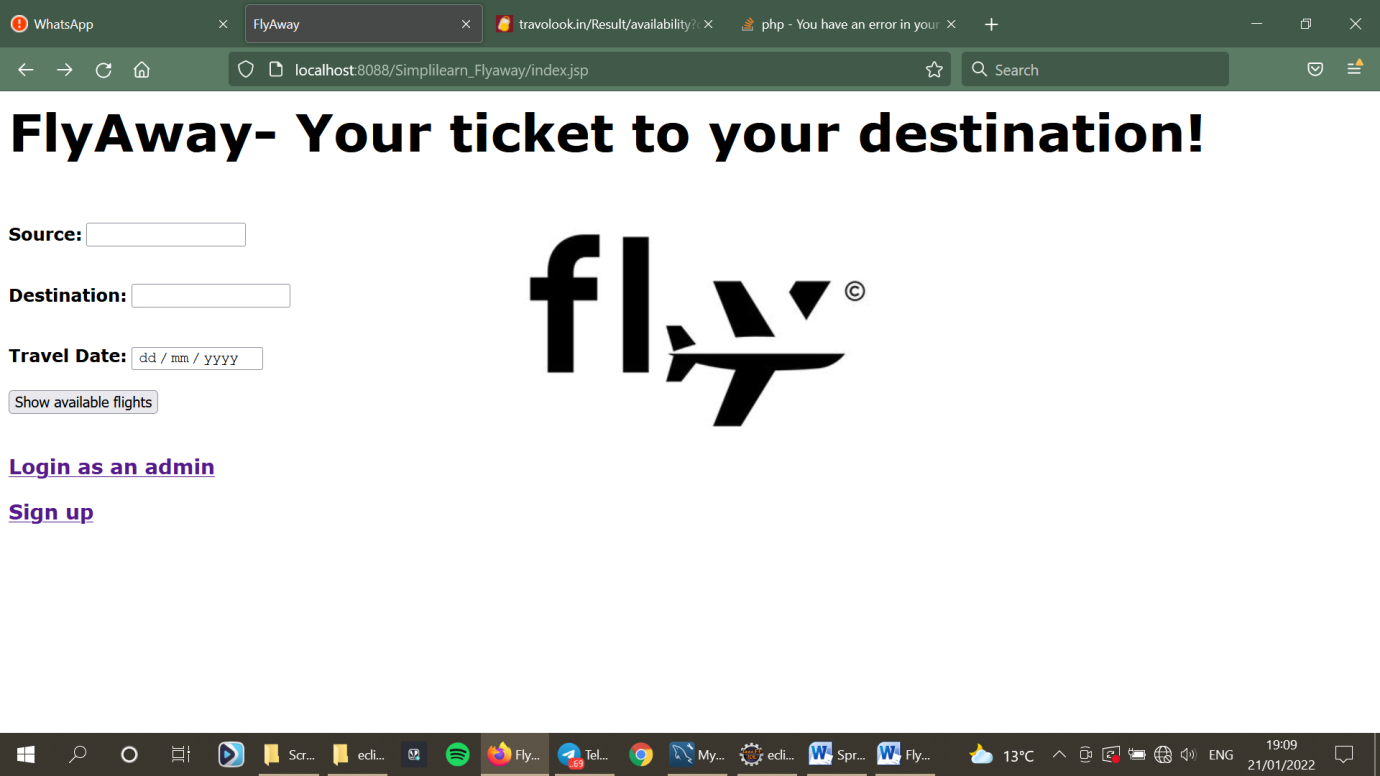
RequestDispatcher rd = request.getRequestDispatcher("/passdata.jsp");

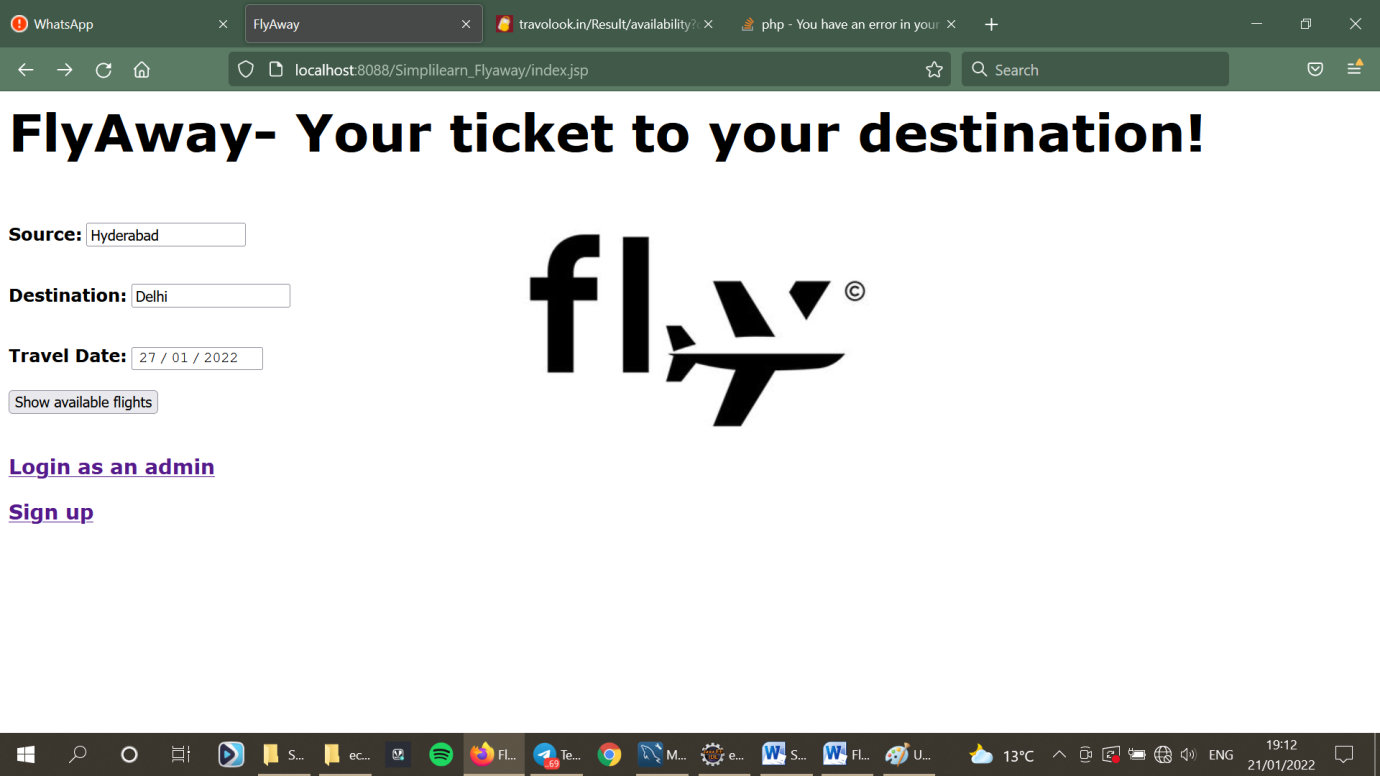
rd.include(request, response);

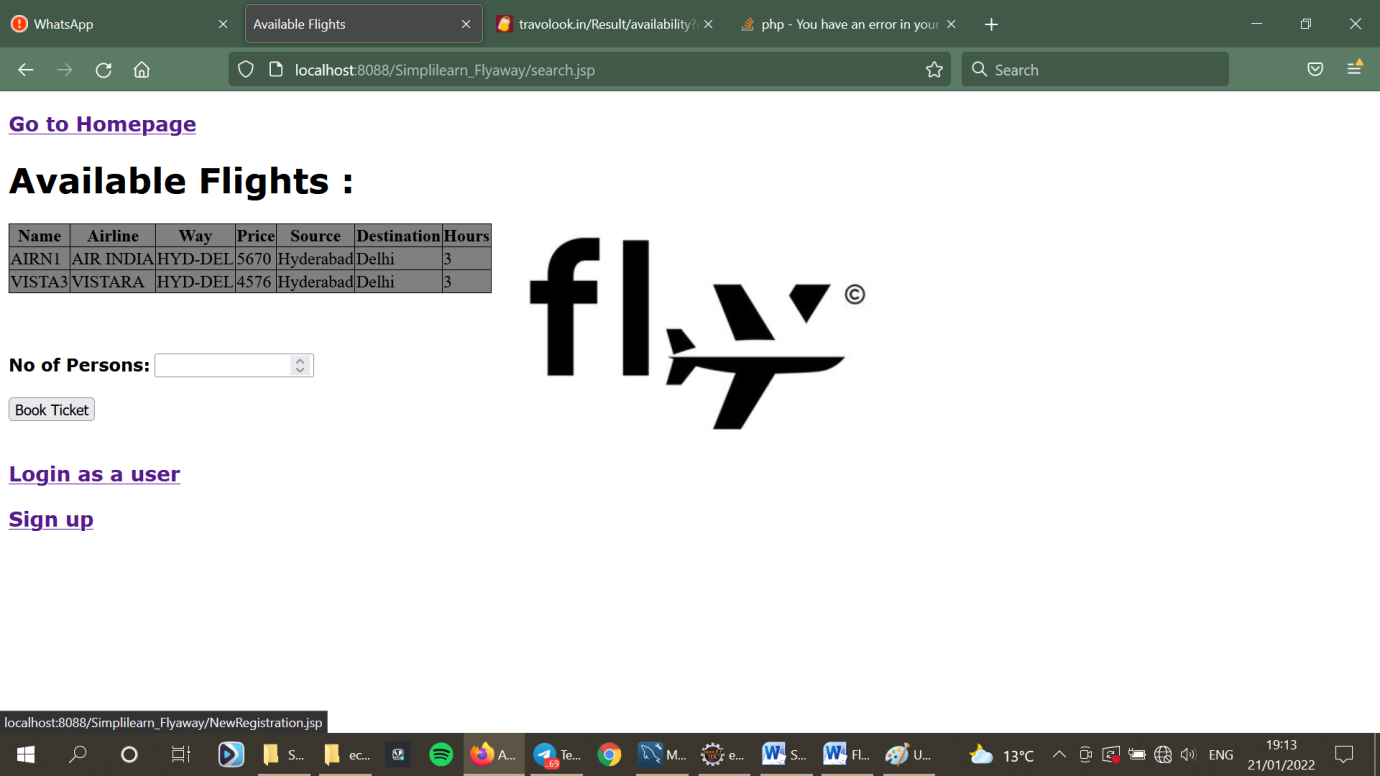
}

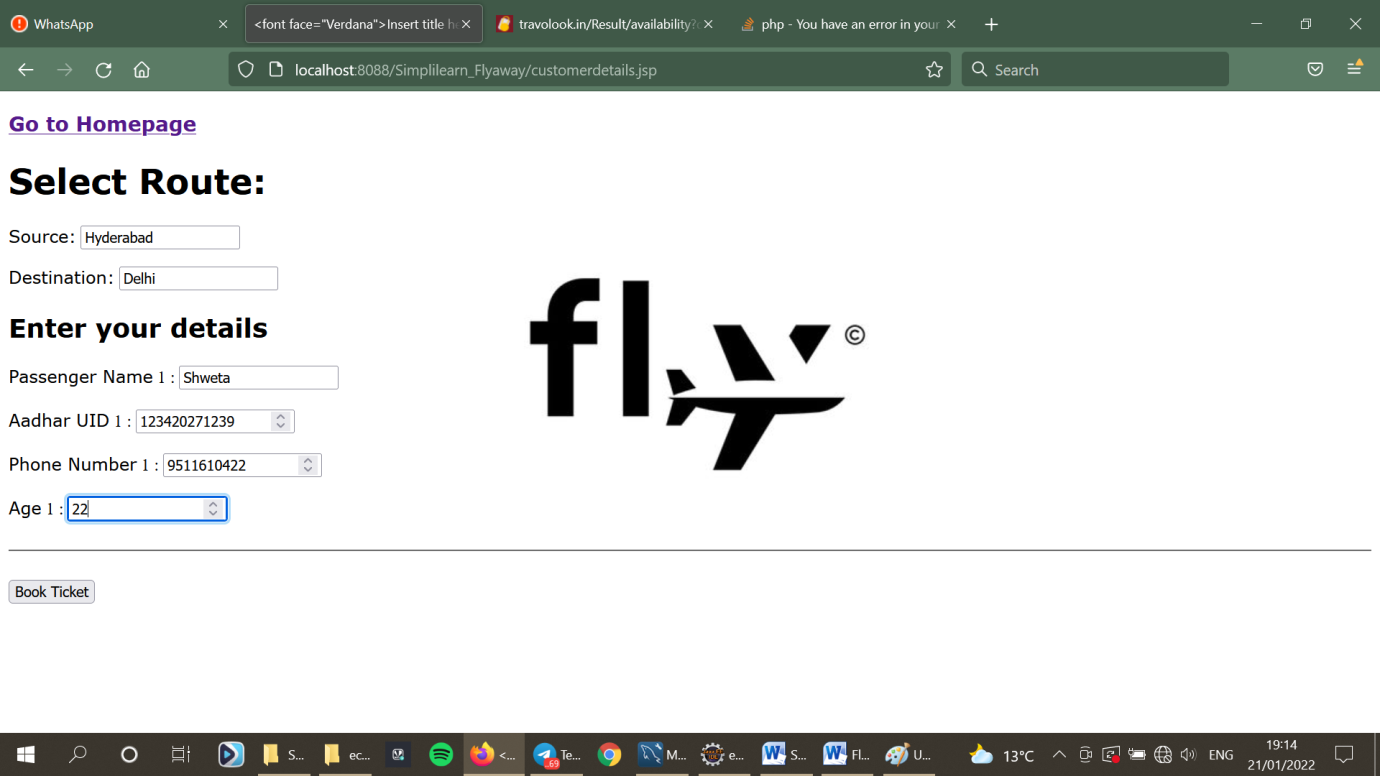
%>

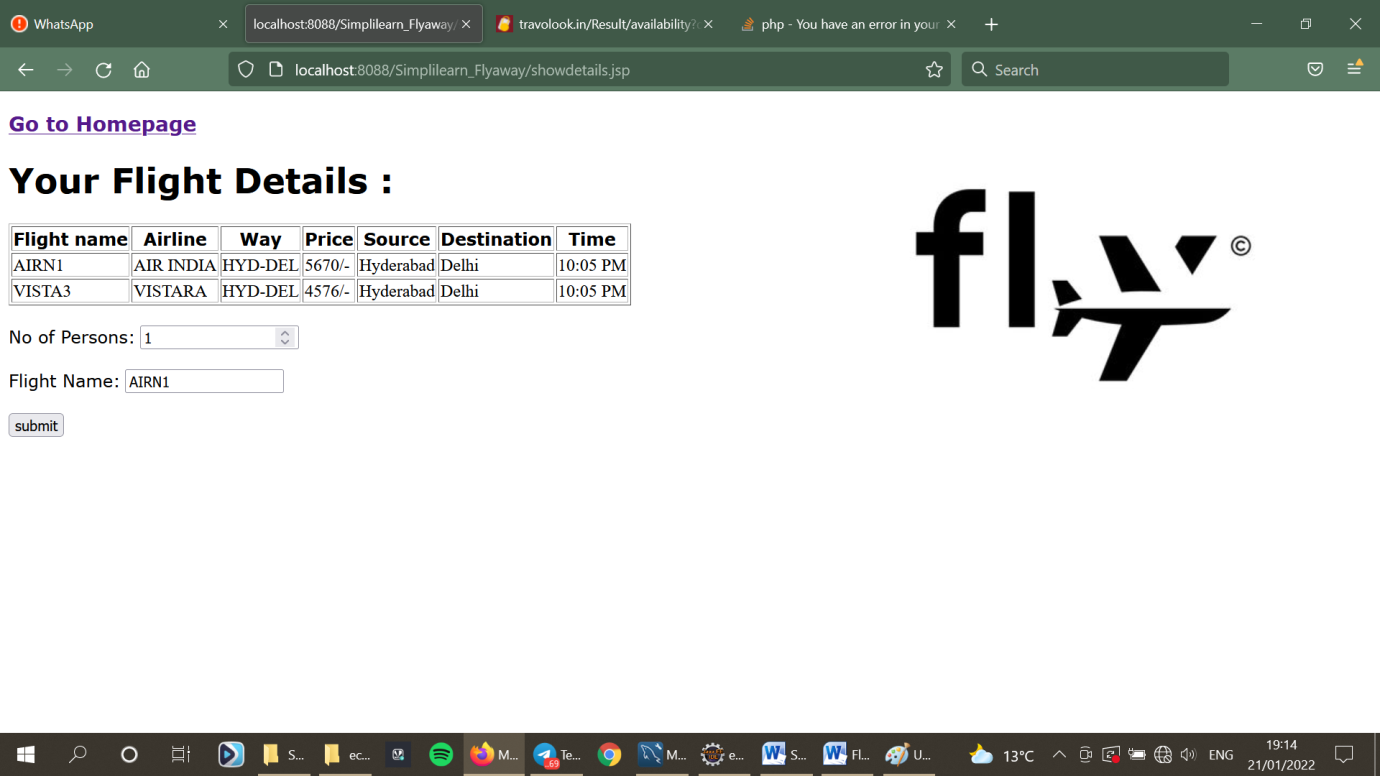
**Screenshots:**

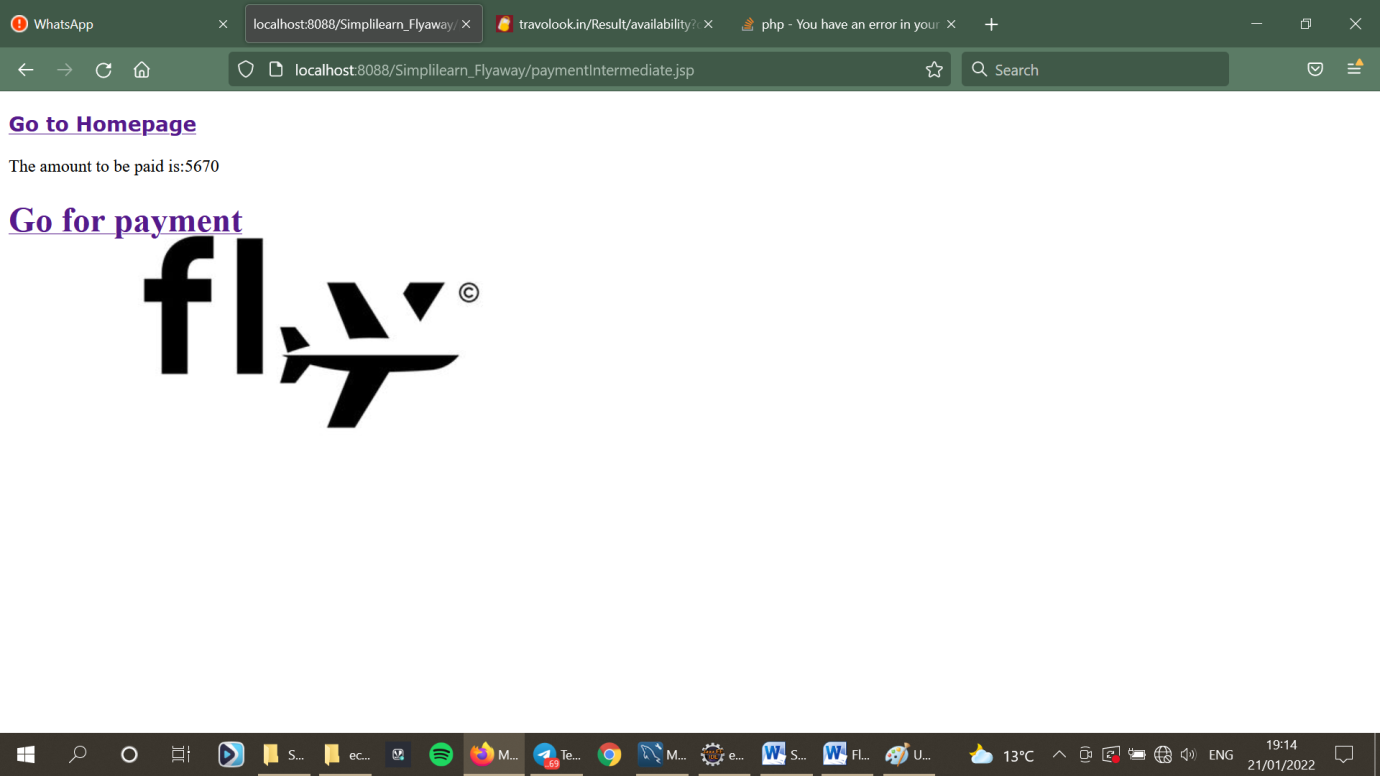
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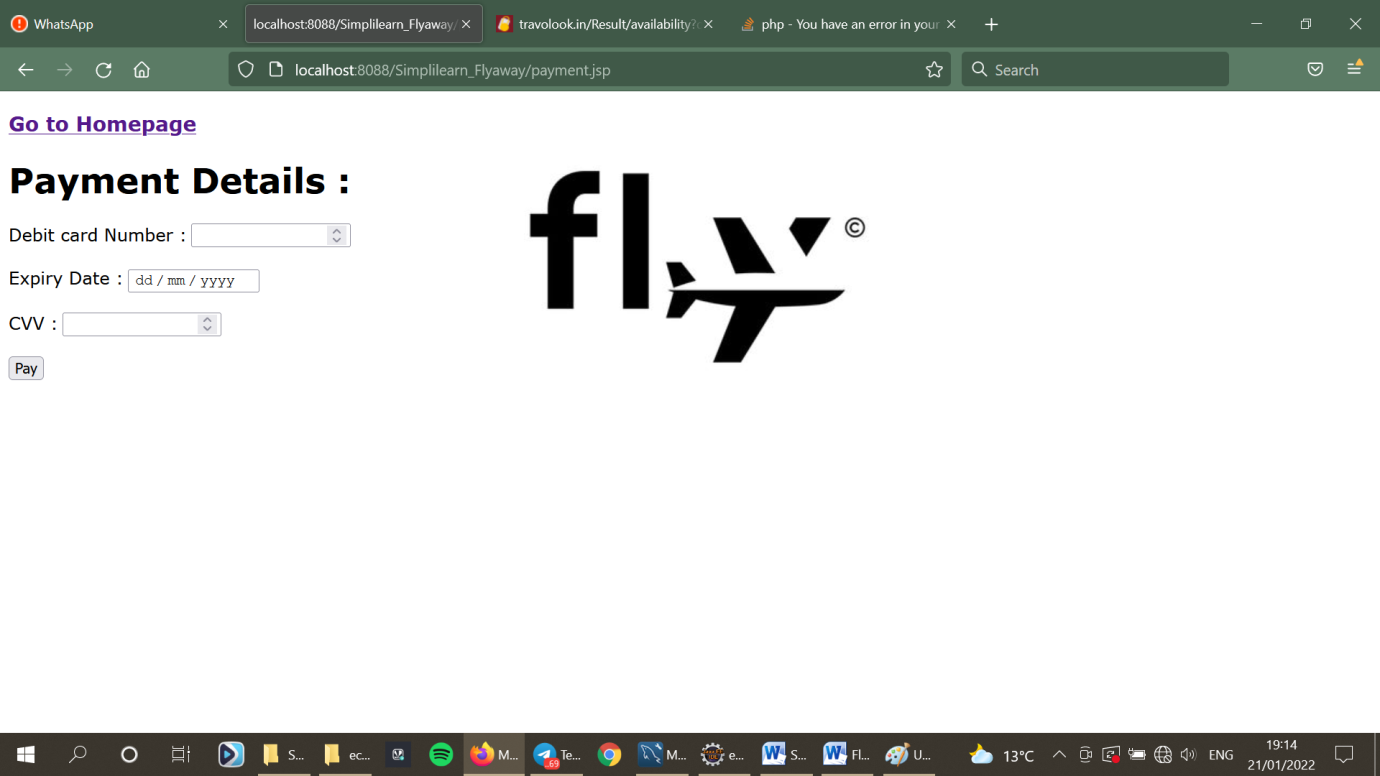
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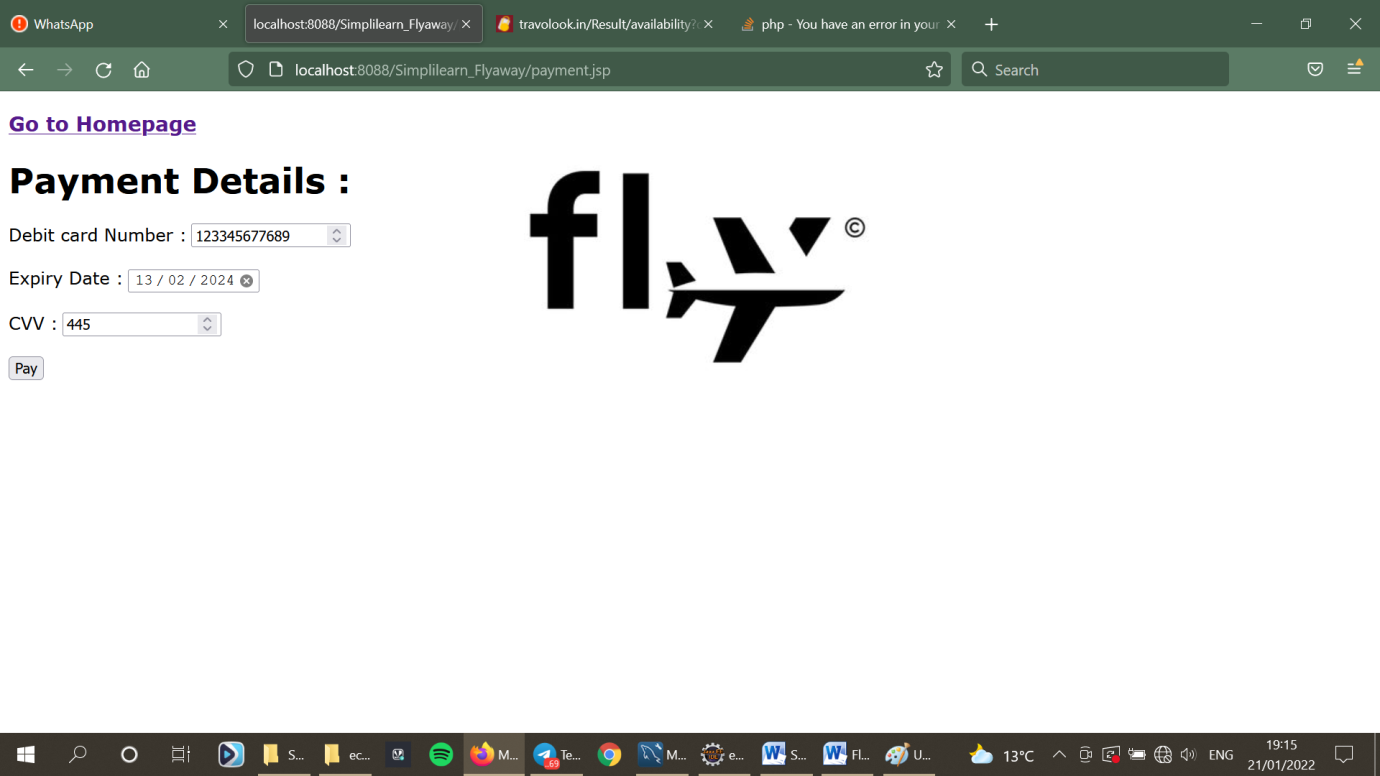
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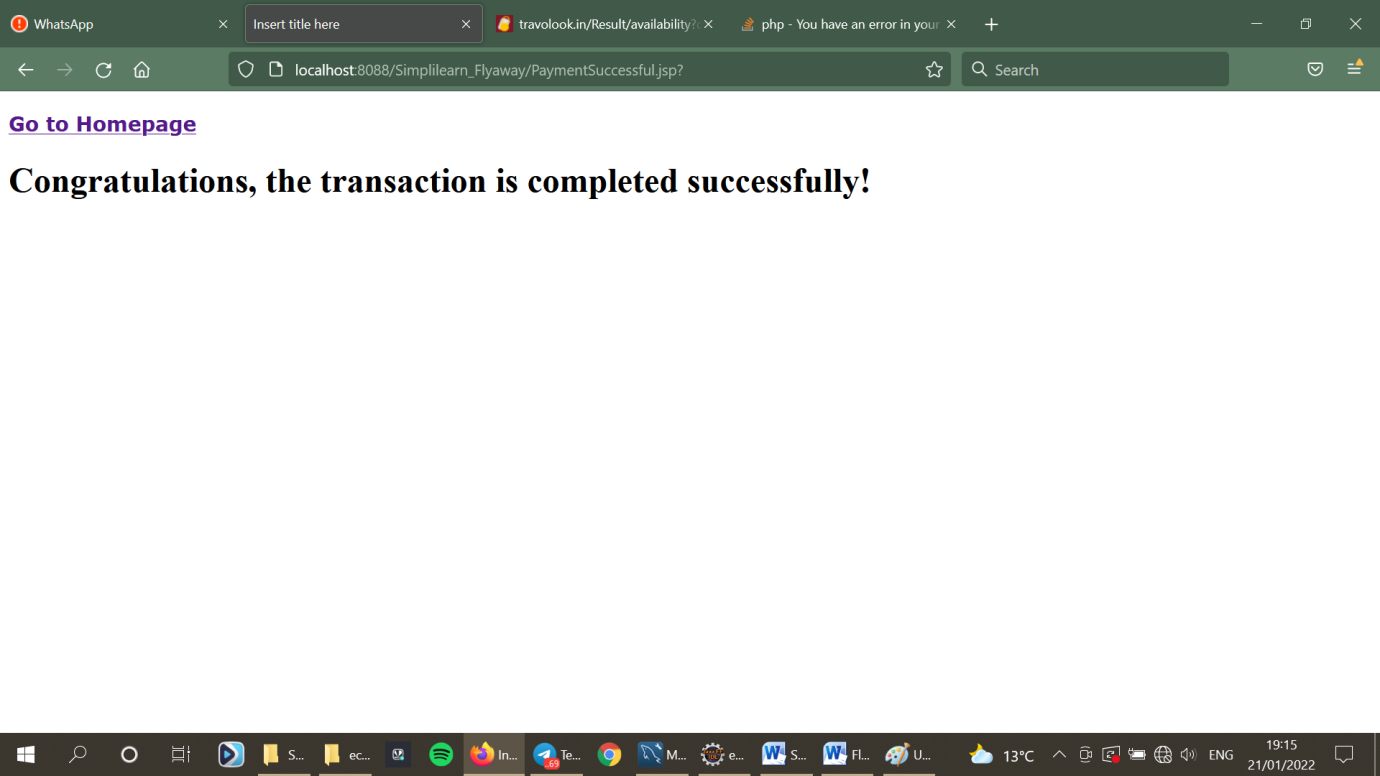
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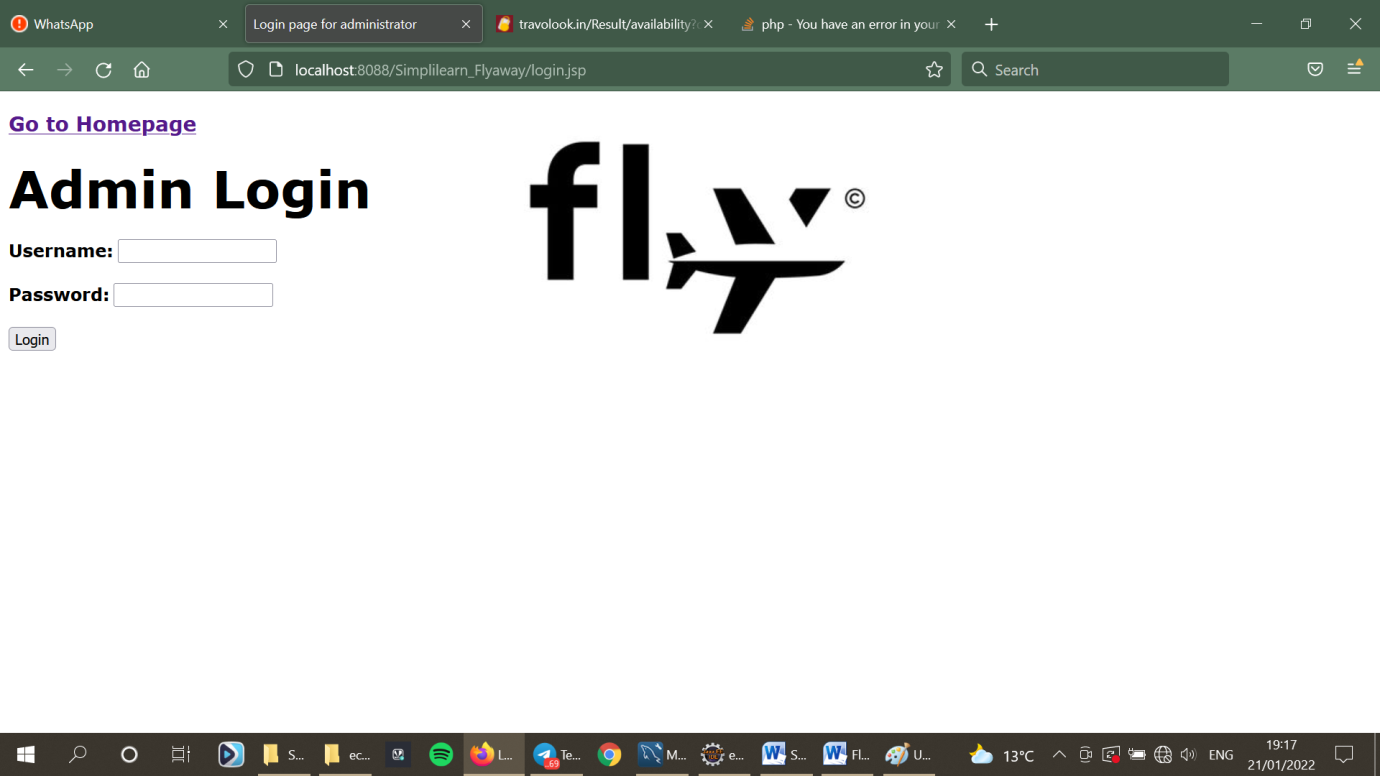
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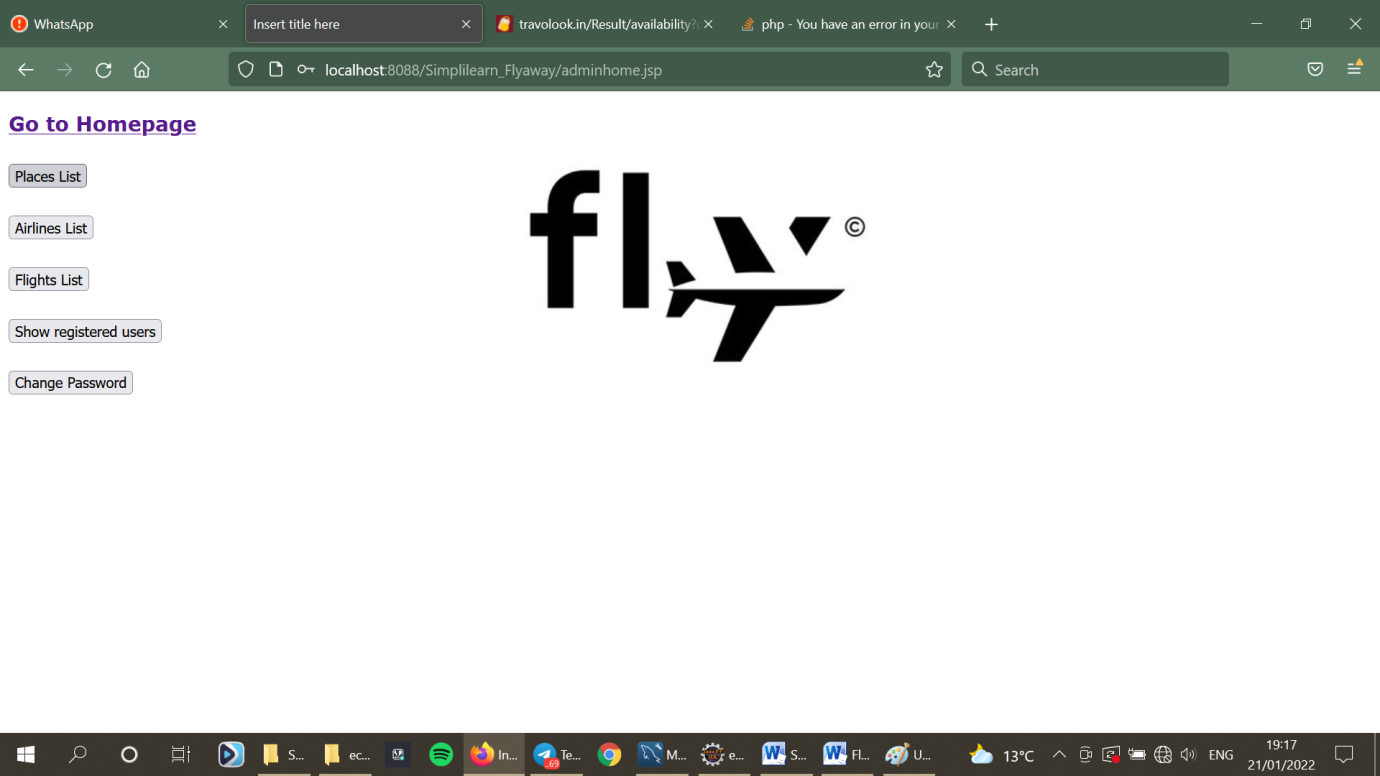
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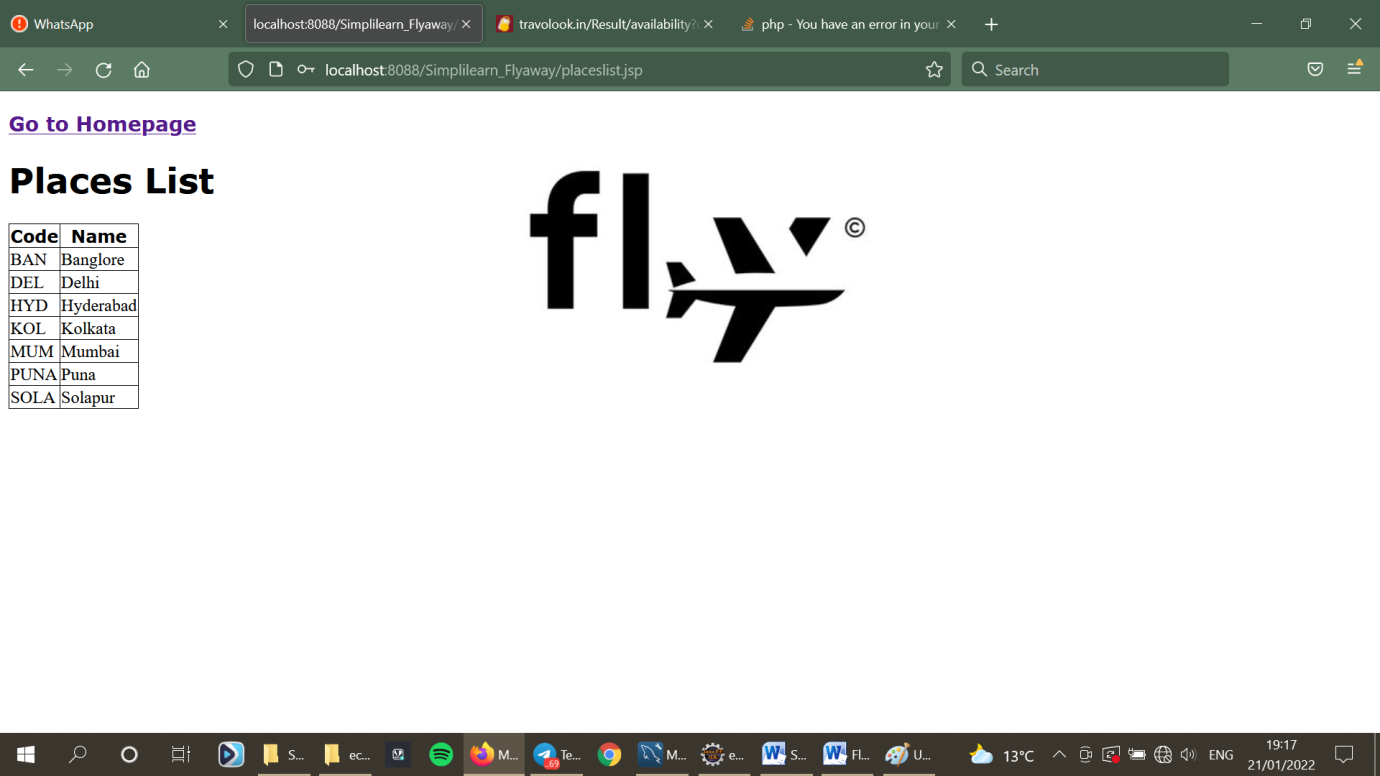
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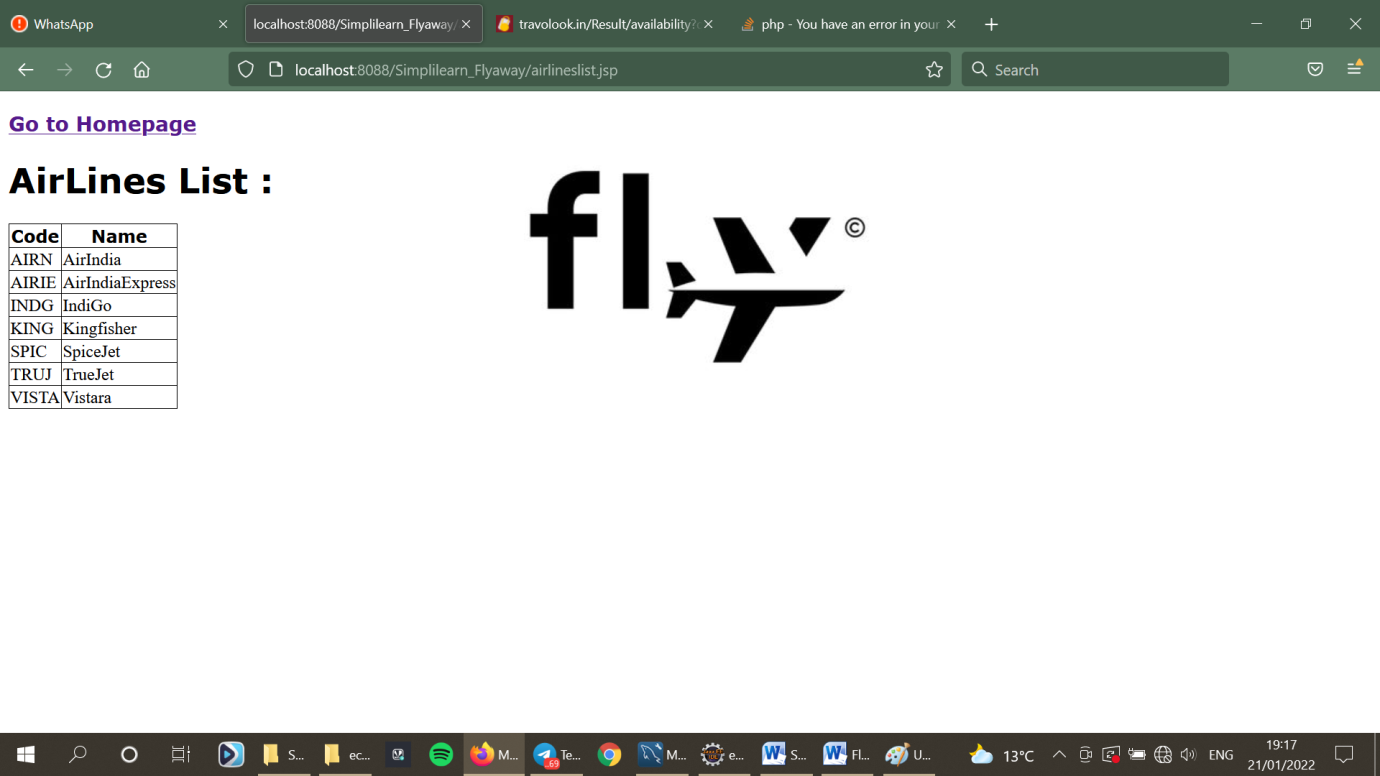
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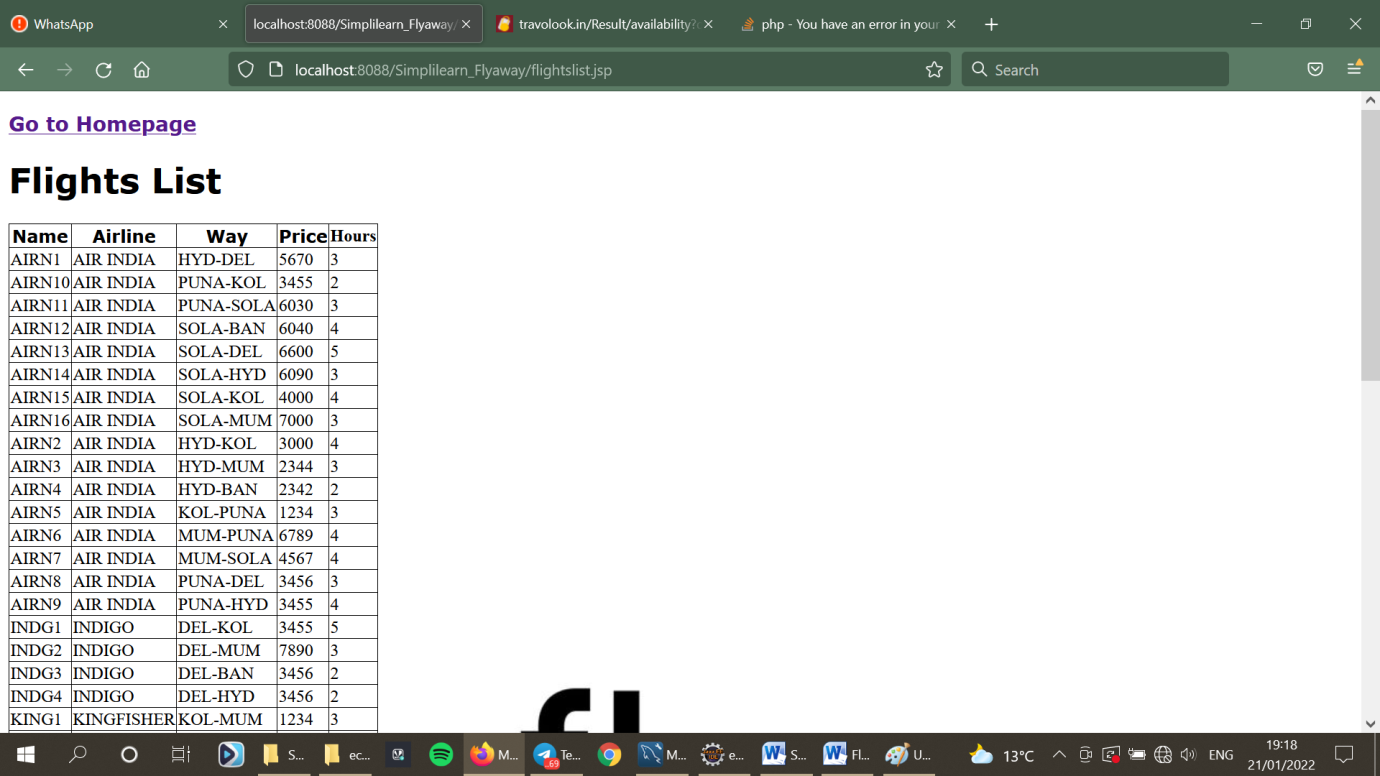
**Admin**

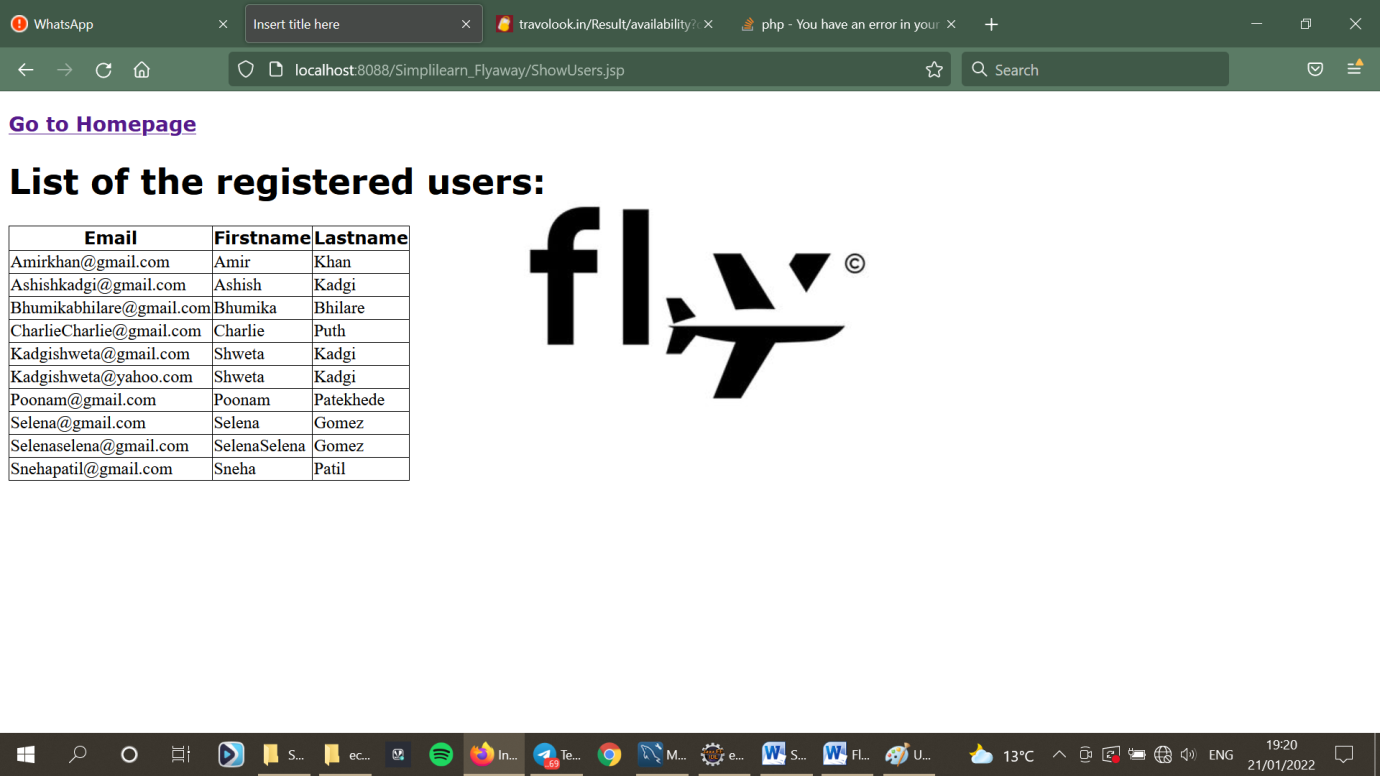
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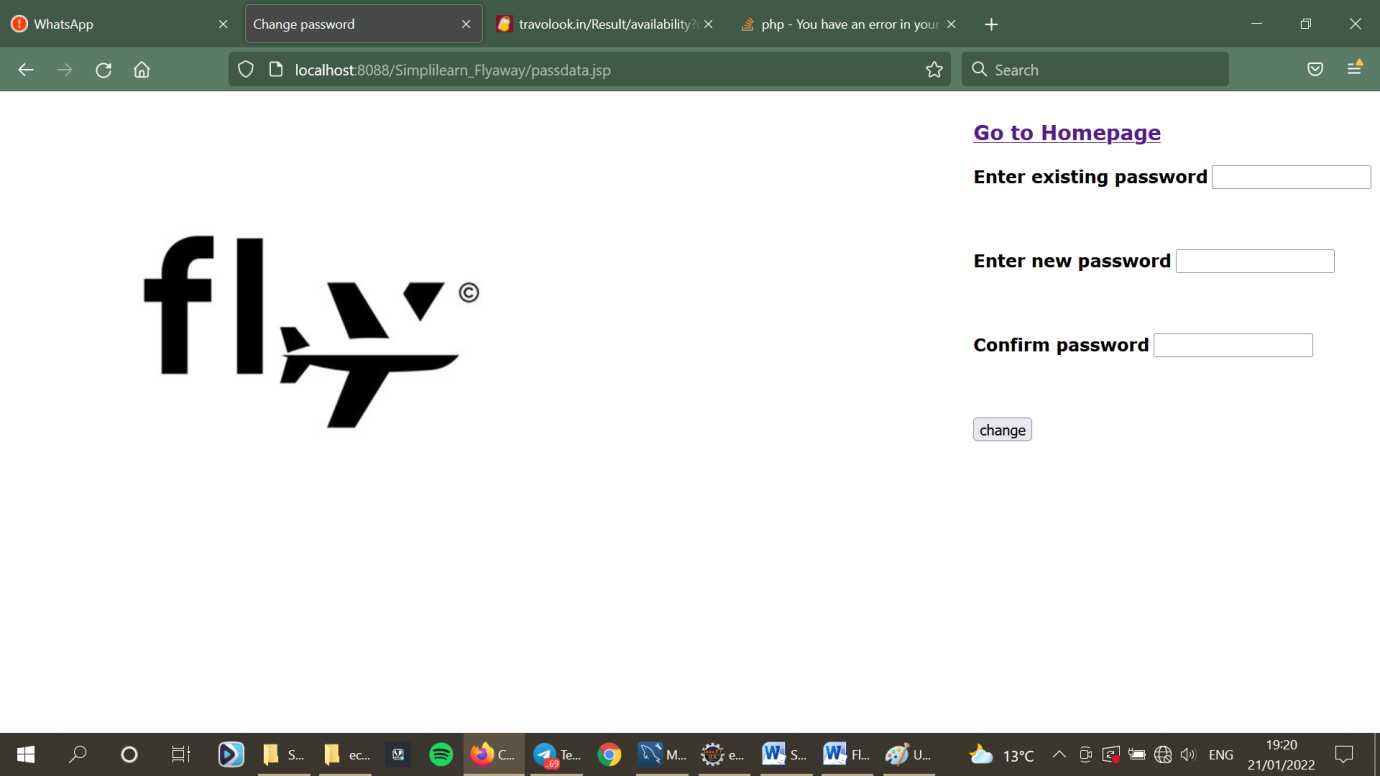
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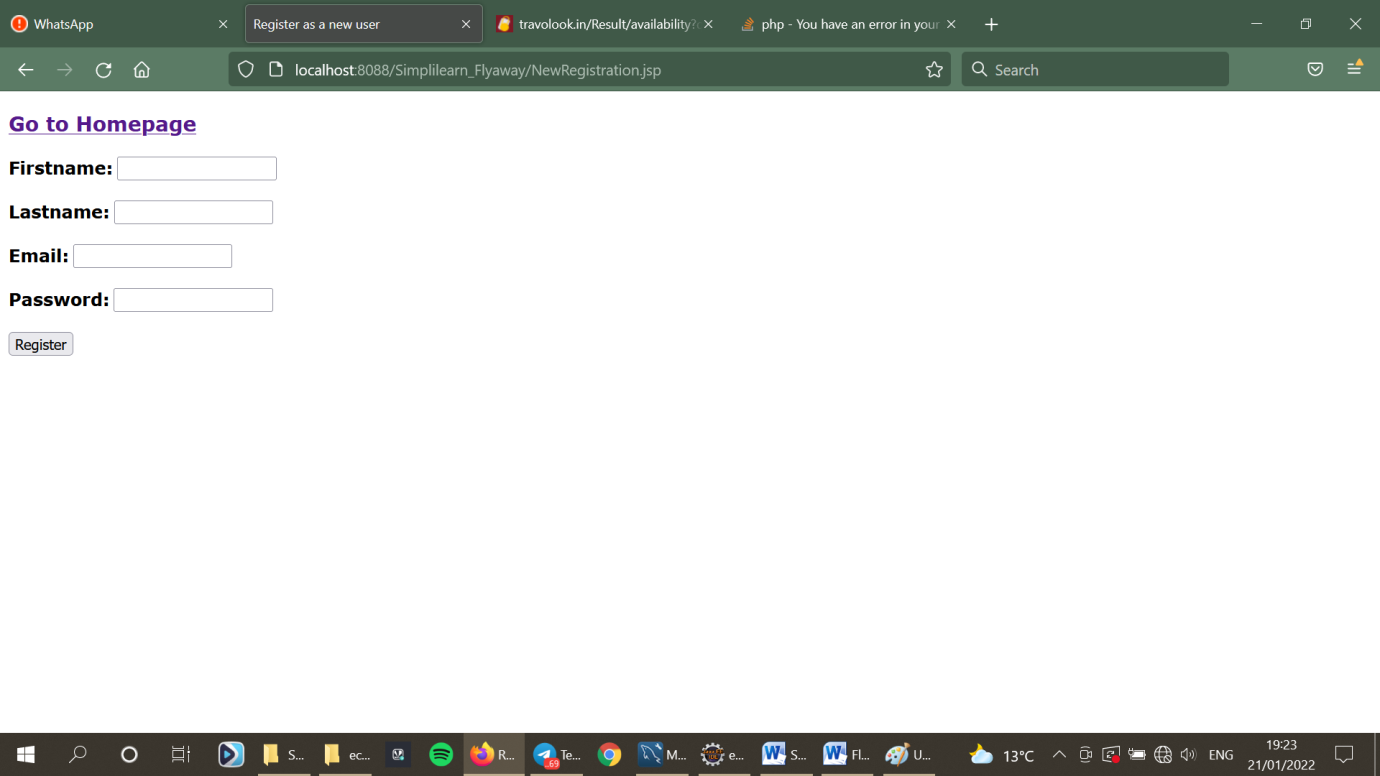
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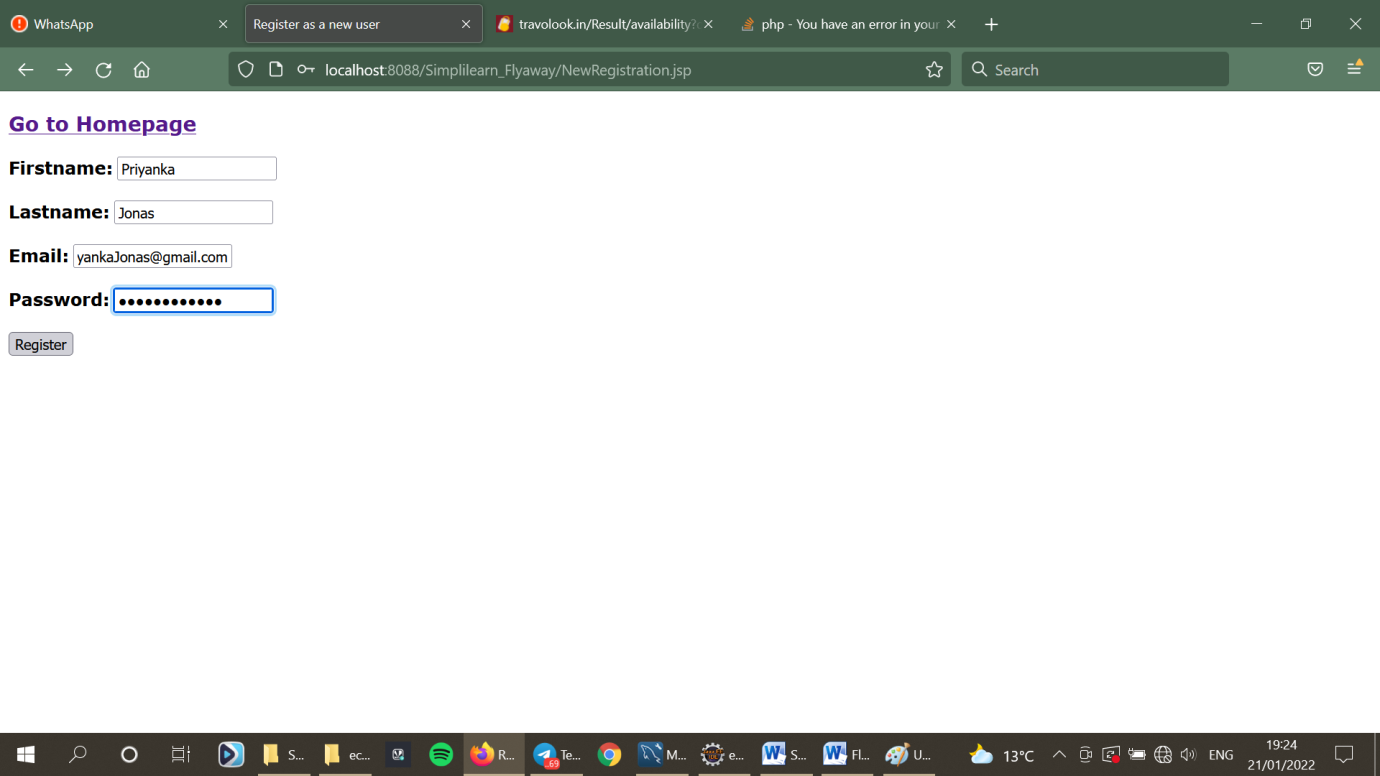
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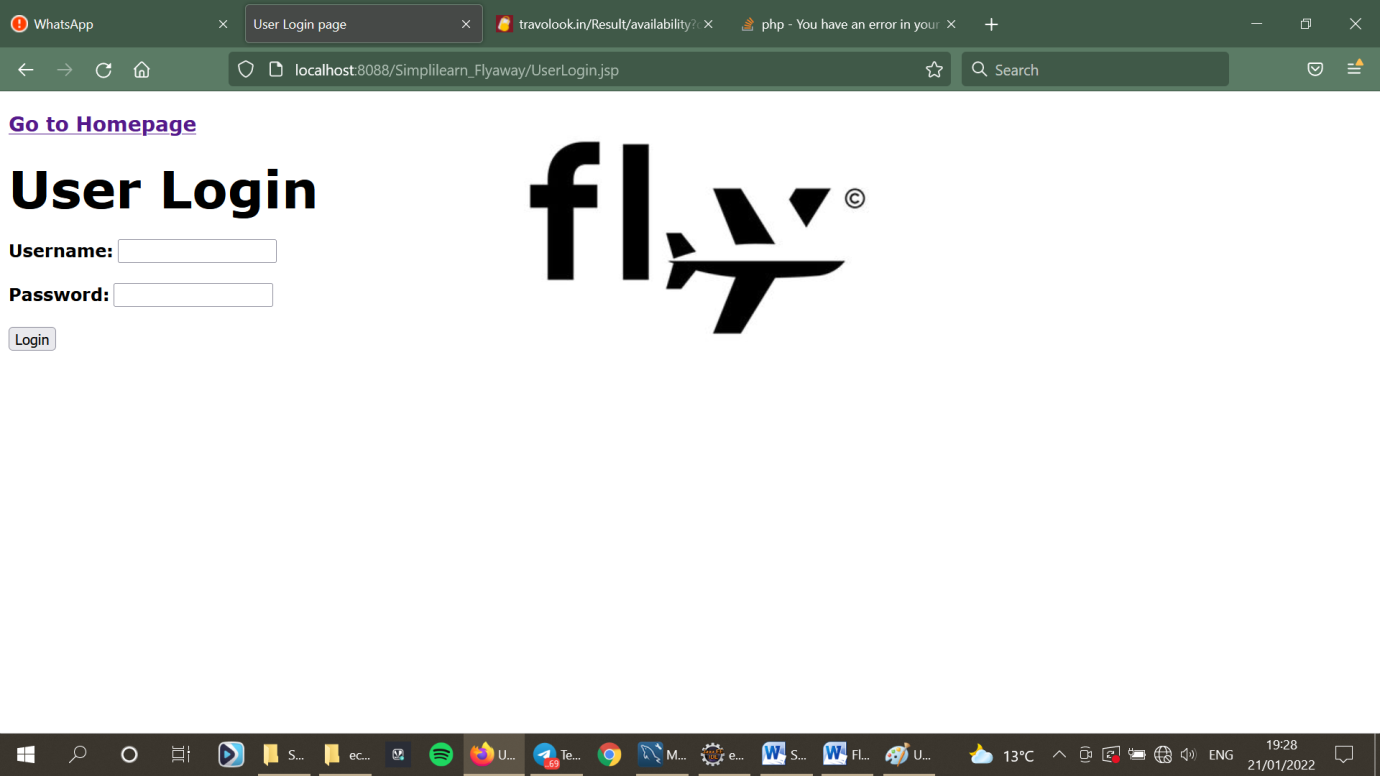
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