**Product details portal**

**Admin table:**

CREATE TABLE `tbladmin` (

`id` bigint(20) NOT **NULL** AUTO\_INCREMENT,

`added\_date` datetime NOT **NULL**,

`email` varchar(100) NOT **NULL**,

`password` varchar(100) NOT **NULL**,

`name` varchar(100) NOT **NULL**,

PRIMARY KEY (`id`)

) ;

**Cart table:**

CREATE TABLE `tblcart` (

`id` bigint(20) NOT **NULL** AUTO\_INCREMENT,

`discount\_price` varchar(200) DEFAULT **NULL**,

`quantity` int(11) NOT **NULL**,

`total\_price` varchar(200) DEFAULT **NULL**,

`customer\_id` bigint(20) NOT **NULL**,

`product\_id` bigint(20) NOT **NULL**,

`mrp\_price` varchar(200) DEFAULT **NULL**,

PRIMARY KEY (`id`)

) ;

**Customer table:**

CREATE TABLE `tblcustomer` (

`id` int(11) NOT **NULL** AUTO\_INCREMENT,

`address` varchar(255) NOT **NULL**,

`added\_date` timestamp **NULL** DEFAULT CURRENT\_TIMESTAMP,

`email` varchar(100) NOT **NULL**,

`gender` varchar(6) NOT **NULL**,

`name` varchar(50) NOT **NULL**,

`password` varchar(60) NOT **NULL**,

`phone` varchar(200) NOT **NULL**,

`pin\_code` varchar(255) NOT **NULL**,

PRIMARY KEY (`id`)

) ;

**Orders table:**

CREATE TABLE `tblorders` (

`id` int(11) NOT **NULL** AUTO\_INCREMENT,

`order\_no` int(11) DEFAULT **NULL**,

`customer\_name` varchar(200) DEFAULT **NULL**,

`mobile\_number` varchar(100) DEFAULT **NULL**,

`email\_id` varchar(100) DEFAULT **NULL**,

`address` varchar(400) DEFAULT **NULL**,

`address\_type` varchar(100) DEFAULT **NULL**,

`pincode` varchar(100) DEFAULT **NULL**,

`image` varchar(200) DEFAULT **NULL**,

`product\_name` varchar(400) DEFAULT **NULL**,

`quantity` int(11) DEFAULT **NULL**,

`product\_price` varchar(100) DEFAULT **NULL**,

`product\_selling\_price` varchar(100) DEFAULT **NULL**,

`product\_total\_price` varchar(100) DEFAULT **NULL**,

`order\_status` varchar(100) DEFAULT **NULL**,

`order\_date` timestamp **NULL** DEFAULT CURRENT\_TIMESTAMP,

`payment\_mode` varchar(100) DEFAULT **NULL**,

`payment\_id` int(11) DEFAULT **NULL**,

PRIMARY KEY (`id`)

) ;

**Products table:**

CREATE TABLE `tblproduct` (

`id` bigint(20) NOT **NULL** AUTO\_INCREMENT,

`active` varchar(100) DEFAULT **NULL**,

`code` varchar(5) DEFAULT **NULL**,

`create\_date` timestamp NOT **NULL** DEFAULT CURRENT\_TIMESTAMP,

`description` varchar(255) DEFAULT **NULL**,

`image` varchar(100) DEFAULT **NULL**,

`image\_name` varchar(400) DEFAULT **NULL**,

`name` varchar(30) DEFAULT **NULL**,

`price` varchar(200) DEFAULT **NULL**,

`mrp\_price` varchar(200) DEFAULT **NULL**,

`product\_category` varchar(100) DEFAULT **NULL**,

PRIMARY KEY (`id`)

) ;

**Connection to database:**

package com.connection;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

public **class** DatabaseConnection {

//Creating database Connection in java online shopping system

public static Connection connection;

//Creating universal method to open connect will mysql database

public static Connection getConnection() {

**try** {

//Registering with mysql Driver

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

connection = DriverManager.getConnection("jdbc:mysql://localhost:3306/shoppingsystem", "root", "yourpassword");

} **catch** (Exception e) {

e.printStackTrace();

}

**return** (connection);

}

//Creating universal method to close connect will mysql database

public static **void** CloseConnection() {

**if** (connection != **null**) {

**try** {

connection.close();

connection = **null**;

} **catch** (SQLException ex) {

ex.printStackTrace();

}

}

}

//Creating universal method to query for retrieving information

public static ResultSet getResultFromSqlQuery(String SqlQueryString) {

//Creating Resultset object

ResultSet rs = **null**;

**try** {

//Checking whether the connection is null or null

**if** (connection == **null**) {

getConnection();

}

//Querying the query

rs = connection.createStatement().executeQuery(SqlQueryString);

} **catch** (Exception ex) {

ex.printStackTrace();

}

**return** rs;

}

//Creating universal method to query for inserting or updating information in mysql database

public static int insertUpdateFromSqlQuery(String SqlQueryString) {

int i = 2;

**try** {

//Checking whether the connection is null or null

**if** (connection == **null**) {

getConnection();

}

//Querying the query

i = connection.createStatement().executeUpdate(SqlQueryString);

} **catch** (Exception ex) {

ex.printStackTrace();

}

**return** i;

}

}

Defining new customer registering servlet

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

import com.connection.DatabaseConnection;

@WebServlet("/AddCustomer")

public **class** AddCustomer **extends** HttpServlet {

protected **void** doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

//Retrieving values from the frontend

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

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

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

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

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

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

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

//Creating Session

HttpSession hs = request.getSession();

//Inserting all values inside the database

**try** {

//Connecting database connection and querying in the database

int addCustomer = DatabaseConnection.insertUpdateFromSqlQuery("insert into tblcustomer(address,email,gender,name,password,phone,pin\_code)values('" + address + "','" + email + "','" + gender + "','" + name + "','" + password + "','"

+ mobile + "','" + pincode + "')");

//If customer registered successfully in java online shopping system

**if** (addCustomer > 0) {

String message = "Customer register successfully.";

//Passing message via session.

hs.setAttribute("success-message", message);

//Sending response back to the user/customer

response.sendRedirect("customer-register.jsp");

} **else** {

//If customer fails to register

String message = "Customer registration fail";

//Passing message via session.

hs.setAttribute("fail-message", message);

//Sending response back to the user/customer

response.sendRedirect("customer-register.jsp");

}

} **catch** (Exception ex) {

ex.printStackTrace();

}

}

}

### Defining customer login servlet:

import java.io.IOException;

import java.sql.ResultSet;

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.connection.DatabaseConnection;

@WebServlet("/CustomerLogin")

public **class** CustomerLogin **extends** HttpServlet {

protected **void** doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

//Getting all data from user/customer

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

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

//Creating Session

HttpSession hs = request.getSession();

**try** {

//Creating Resultset

ResultSet resultset = **null**;

//Query to check Login Details

resultset = DatabaseConnection.getResultFromSqlQuery("select \* from tblcustomer where email='" + email + "' and password='" + password + "'");

//Checking whether the details of user are null or not

**if** (email != **null** && password != **null**) {

**if** (resultset.next()) {

//Storing the login details in session

hs.setAttribute("id", resultset.getInt("id"));

hs.setAttribute("name", resultset.getString("name"));

//Redirecting response to the index.jsp

response.sendRedirect("index.jsp");

} **else** {

//If wrong credentials are entered in java online shopping system

String message = "You have enter wrong credentials";

hs.setAttribute("credential", message);

//Redirecting response to the customer-login.jsp

response.sendRedirect("customer-login.jsp");

}

} **else** {

//If username or password is empty or null

String message = "User name or Password is null";

hs.setAttribute("credential", message);

//Redirecting response to the customer-login.jsp

response.sendRedirect("customer-login.jsp");

}

} **catch** (Exception e) {

e.printStackTrace();

}

}

}

#### **Defining admin login servlet:**

import java.io.IOException;

import java.sql.Connection;

import java.sql.ResultSet;

import java.sql.Statement;

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.connection.DatabaseConnection;

@WebServlet("/AdminLogin")

public **class** AdminLogin **extends** HttpServlet {

protected **void** doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

**try** {

//Getting all the parameters from the frontend (admin)

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

String pass = request.getParameter("upass");

//Retriving our session

HttpSession hs = request.getSession();

//Calling Connection method

Connection con = DatabaseConnection.getConnection();

//Creating Statement

Statement st = con.createStatement();

//Querying inside the database

ResultSet resultset = st.executeQuery("select \* from tbladmin where email='" + email + "' AND password='" + pass + "'");

//If all the details are correct

**if** (resultset.next()) {

hs.setAttribute("uname", resultset.getString("name"));

//Redirecting admin to dashboard page

response.sendRedirect("dashboard.jsp");

} **else** {

//If details are wrong

String message = "You have enter wrong credentials";

hs.setAttribute("credential", message);

//Redirecting admin to admin login page

response.sendRedirect("admin-login.jsp");

}

} **catch** (Exception e) {

System.out.println(e);

}

}

}

### Defining servlet for adding product in the database:

import java.io.File;

import java.io.IOException;

import java.util.List;

import java.util.Random;

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 org.apache.commons.fileupload.FileItem;

import org.apache.commons.fileupload.disk.DiskFileItemFactory;

import org.apache.commons.fileupload.servlet.ServletFileUpload;

import com.connection.DatabaseConnection;

@WebServlet("/AddProducts")

public **class** AddProducts **extends** HttpServlet {

//Path where all the images are stored

private final String UPLOAD\_DIRECTORY = "ENTER\_YOUR\_DIRECTORY\_PATH";

@Override

protected **void** doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

//Creating session in java online shopping project

HttpSession session = request.getSession();

**if** (ServletFileUpload.isMultipartContent(request)) {

**try** {

//Taking all image requests

List<FileItem> multiparts = **new** ServletFileUpload(**new** DiskFileItemFactory()).parseRequest(request);

String imageName = **null**;

String productName = **null**;

String productQuantity = **null**;

String productPrice = **null**;

String descrip = **null**;

String mrpPrice = **null**;

String status = **null**;

String category = **null**;

//SALTCHARS to generate unique code for product

String SALTCHARS = "ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890";

StringBuilder salt = **new** StringBuilder();

Random rnd = **new** Random();

**while** (salt.length() < 3) { // length of the random string.

int index = (int) (rnd.nextFloat() \* SALTCHARS.length());

salt.append(SALTCHARS.charAt(index));

}

String code = salt.toString();

**for** (FileItem item : multiparts) {

**if** (!item.isFormField()) {

//Getting image name

imageName = **new** File(item.getName()).getName();

//Storing in the specified directory

item.write(**new** File(UPLOAD\_DIRECTORY + File.separator + imageName));

//Retrieving all information from frontend of online shopping system

FileItem pName = (FileItem) multiparts.get(0);

productName = pName.getString();

FileItem price = (FileItem) multiparts.get(1);

productPrice = price.getString();

FileItem description = (FileItem) multiparts.get(2);

descrip = description.getString();

FileItem mprice = (FileItem) multiparts.get(3);

mrpPrice = mprice.getString();

FileItem fstatus = (FileItem) multiparts.get(4);

status = fstatus.getString();

FileItem pcategory = (FileItem) multiparts.get(5);

category = pcategory.getString();

}

}

**try** {

int id = 0;

String imagePath = UPLOAD\_DIRECTORY + imageName;

//Querying to insert product in the table

int i = DatabaseConnection.insertUpdateFromSqlQuery("insert into tblproduct(id,active,code,description,image,image\_name,name,price,mrp\_price,product\_category) values('" + id + "','" + status + "','" + code + "','" + descrip + "','" + imagePath + "','" + imageName + "','" + productName + "','" + productPrice + "','" + mrpPrice + "','" + category + "')");

//If product inserted successfully in the database

**if** (i > 0) {

String success = "Product added successfully.";

//Adding method in session.

session.setAttribute("message", success);

//Response send to the admin-add-product.jsp

response.sendRedirect("admin-add-product.jsp");

}

} **catch** (Exception e) {

e.printStackTrace();

}

} **catch** (Exception ex) {

//If any error occurred while uploading product image

request.setAttribute("message", "File Upload Failed due to " + ex);

}

} **else** {

request.setAttribute("message", "Sorry this Servlet only handles file upload request");

}

}

}

### Defining add to cart servlet:

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

import com.connection.DatabaseConnection;

@WebServlet("/AddToCart")

public **class** AddToCart **extends** HttpServlet {

@Override

protected **void** doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

int id = 0;

//Getting all the parameters from the user

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

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

String mrp\_price = request.getParameter("mrp\_price");

HttpSession hs = request.getSession();

**try** {

//If user session is null user have to re-login

**if** ((String) hs.getAttribute("name") == **null**) {

response.sendRedirect("customer-login.jsp");

//Inserting cart details to the database

} **else** {

int customerId = (int) hs.getAttribute("id");

//Querying to the database.

int addToCart = DatabaseConnection.insertUpdateFromSqlQuery("insert into tblcart values('" + id + "','" + price + "',1,'" + price + "','" + customerId + "','" + productId + "','" + mrp\_price + "')");

**if** (addToCart > 0) {

response.sendRedirect("index.jsp");

}

}

} **catch** (Exception e) {

e.printStackTrace();

}

}

}

#### **Defining servlet for admin to get current products status:**

import com.connection.DatabaseConnection;

import java.io.IOException;

import java.sql.ResultSet;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/CustomerProductsOrderStatus")

public **class** CustomerProductsOrderStatus **extends** HttpServlet {

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

**try** {

int statusMode = 0;

//Taking input from admin order-id to get the order status from the database of online shopping system in Java

ResultSet rs = DatabaseConnection.getResultFromSqlQuery("select order\_status from tblorders where order\_no='" + request.getParameter("orderId") + "'");

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

**if** (rs.getString(1).equals("Deliver")) {

statusMode = DatabaseConnection.insertUpdateFromSqlQuery("update tblorders set order\_status='Pending' where order\_no='" + request.getParameter("orderId") + "'");

} **else** {

statusMode = DatabaseConnection.insertUpdateFromSqlQuery("update tblorders set order\_status='Deliver' where order\_no='" + request.getParameter("orderId") + "'");

}

}

**if** (statusMode > 0) {

//Sending response back to admin-all-orders.jsp page when sql query executed successfully

response.sendRedirect("admin-all-orders.jsp");

} **else** {

//Sending response back to admin-all-orders.jsp page

response.sendRedirect("admin-all-orders.jsp");

}

} **catch** (Exception e) {

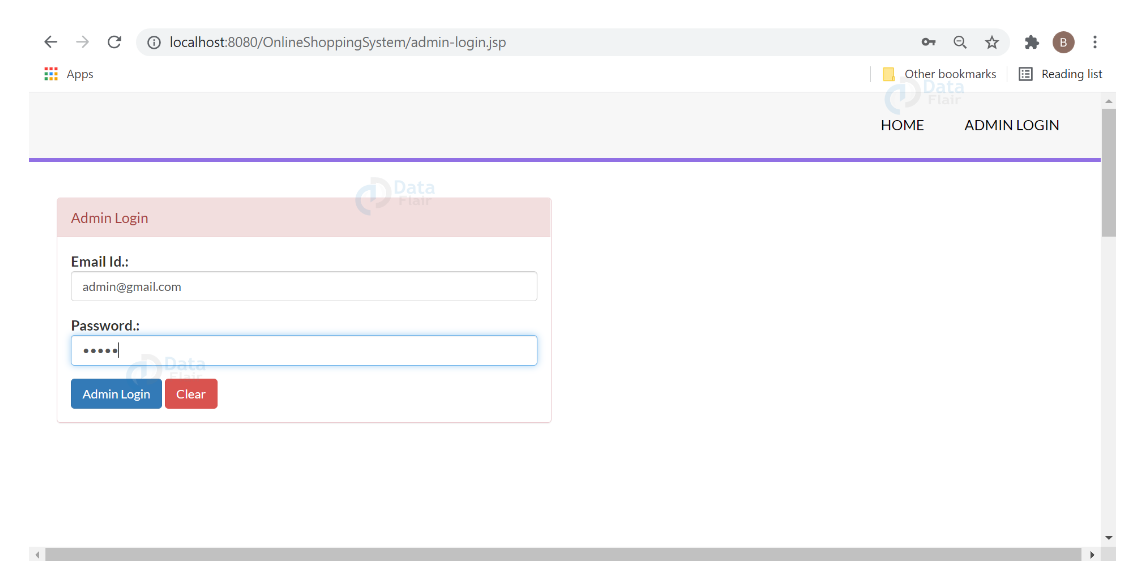
e.printStackTrace();

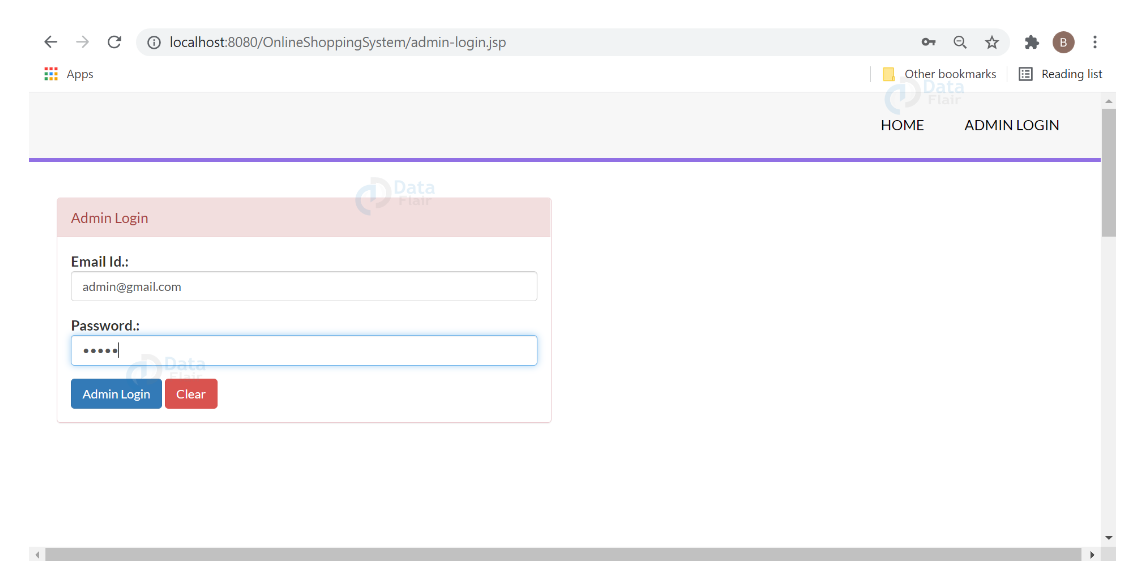
}

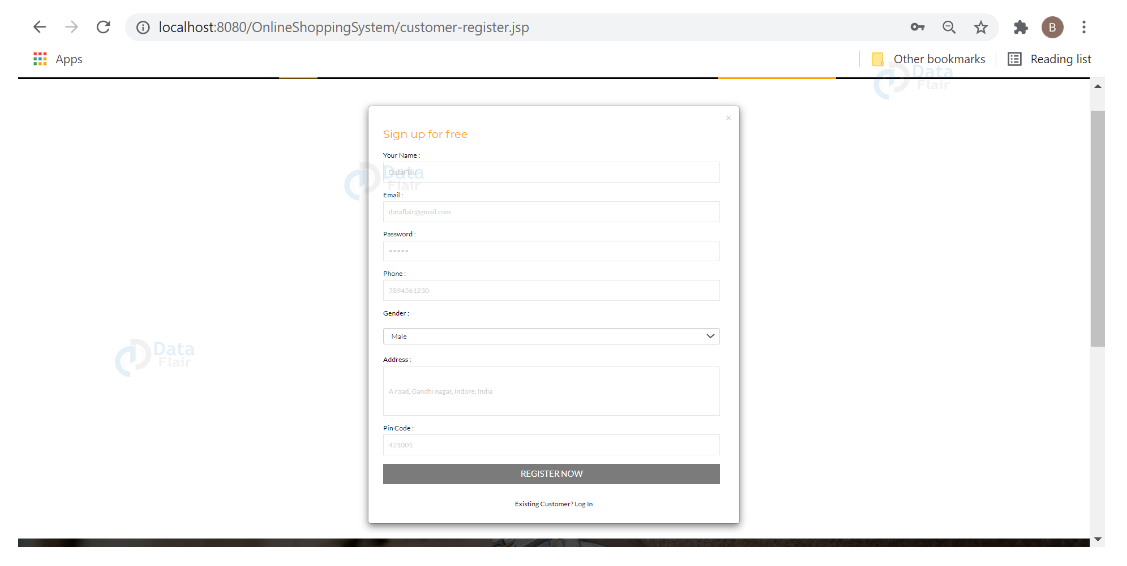
}

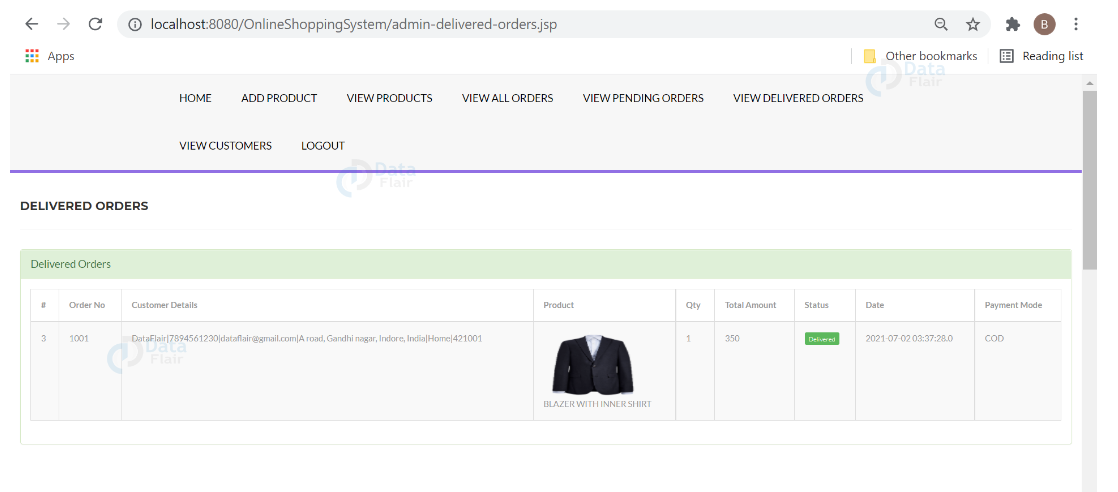
}

**Output:**

****

****

****

****