PHASE2-SECOND-PROJECT WRITEUP

DESCRIPTION

**Project objective:**  
Create a servlet-based application that shows a form to enter a product ID. The product ID is then validated, and product details are retrieved from the database and displayed to the user. You need to create a product table in MySQL and prepopulate it with data. Use JDBC to do all database processing.

**Background of the problem statement:**  
As a part of developing an e-commerce web application, the admin backend requires a module that can retrieve product information based on the product ID.

**You must use the following:**

●    Eclipse as the IDE  
●    Apache Tomcat as the web server  
●    MySQL Connector for JDBC functionality

**Following requirements should be met:**

●    Create an HTML page to take in a product ID  
●    Set up JDBC to work with the application  
●    Create a servlet that will take the product ID and use JDBC to query the database for the product  
●    If the product is found, the servlet will display the product details, otherwise it will show an error message  
●    Document the step-by-step process involved in completing this task

**HTML: ProductDetails.html**

<!DOCTYPE html>

<html>

<head>

<meta charset=*"UTF-8"*>

<title>Insert title here</title>

</head>

<body>

<form action=*"Retrieve"* method=*"GET"*>

<table>

<tr>

<td>Enter ProductID</td>

<td><input type=*"text"* name=*"ProductID"*></td>

<td><input type=*"submit"* value=*"Search"*></td>

</tr>

</table>

</form>

</body>

</html>

**Servlet: Retrieve.java**

package com.simplilearn.jdbc;

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import javax.servlet.ServletException;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

/\*\*

\* Servlet implementation class Retrieve

\*/

public class Retrieve extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public Retrieve() {

super();

// TODO Auto-generated constructor stub

}

/\*\*

\* @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

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

PrintWriter pw = response.getWriter();

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

pw.println("<h1>Product Details</h1>");

pw.print("<table border='1'><tr><th><pid>ProductID</th><th>ProductNAME</th><th>ProductPRICE</th></tr>");

try

{

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

Connection con=DriverManager.getConnection("jdbc:mysql://localhost:3306/ecommerce","root","surya1981");

Statement st = con.createStatement();

ResultSet rs=st.executeQuery("select \* from product where ProductID="+ProductID+"");

while(rs.next())

{

pw.print("<tr><td>");

pw.print(rs.getString(1));

pw.print("</td>");

pw.print("<td>");

pw.print(rs.getString(2));

pw.print("</td>");

pw.print("<td>");

pw.print(rs.getString(3));

pw.print("</td>");

}

con.close();

}

catch (ClassNotFoundException e) {

e.printStackTrace();

}

catch (SQLException e) {

e.printStackTrace();

}

}

/\*\*

\* @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

\*/

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

// TODO Auto-generated method stub

doGet(request, response);

}

}

**Table:**

create database ecommerce;

use ecommerce;

create table product(ProductID int, ProductNAME varchar(100), ProductPRICE decimal(10,2));

desc table product;

insert into product values(101,'HP Laptop',12000);

insert into product values(102,'Acer Laptop',13000);

insert into product values(103,'Lenovo Laptop',14000);

select \* from product;

**XML: web.xml**

<?xml version=*"1.0"* encoding=*"UTF-8"*?>

<web-app id=*"WebApp\_ID"* version=*"2.5"*

xmlns=*"http://java.sun.com/xml/ns/javaee"*

xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xsi:schemaLocation=*"http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-app\_2\_5.xsd"*>

<display-name>Phase2-SecondProject</display-name>

<servlet>

<display-name>Retrieve</display-name>

<servlet-name>Retrieve</servlet-name>

<servlet-class>com.simplilearn.jdbc.Retrieve</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>Retrieve</servlet-name>

<url-pattern>/Retrieve</url-pattern>

</servlet-mapping>

<session-config>

<session-timeout>60</session-timeout>

</session-config>

<welcome-file-list>

<welcome-file>index.html</welcome-file>

<welcome-file>index.htm</welcome-file>

<welcome-file>index.jsp</welcome-file>

<welcome-file>default.html</welcome-file>

<welcome-file>default.htm</welcome-file>

<welcome-file>default.jsp</welcome-file>

</welcome-file-list>

</web-app>

**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**