**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.

**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.

**Source Code**

index.html

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

<a href=*"list"*>Click here to get Product Info</a>

<br><br>

<form action=*"save"* method=*"post"*>

Product Name: <input type=*"text"* name=*"pname"*><br><br>

Product Price:<input type=*"text"* name=*"price"*><br><br>

<input type=*"submit"* value=*"Save"*/>

</form>

</body>

</html>

DatabaseConfig

package com.org.productdetails;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.SQLException;

public class DatabaseConfig {

private Connection connection;

public DatabaseConfig(String driver,String url,String user,String pwd) throws ClassNotFoundException,SQLException

{

Class.forName(driver);

this.connection= DriverManager.getConnection(url,user,pwd);

}

public Connection getConnection() {

return connection;

}

public void closeConnection() throws SQLException

{

this.connection.close();

}

}

ListServlet

package com.org.productdetails;

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.Connection;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import java.util.Properties;

import javax.servlet.ServletContext;

import javax.servlet.RequestDispatcher;

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.websocket.SendResult;

@WebServlet("/list")

public class ListServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

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

response.setContentType("text/html");

PrintWriter out=response.getWriter();

Properties props=new Properties();

props.load(getServletContext().getResourceAsStream("/WEB-INF/application.properties"));

try {

DatabaseConfig config=new DatabaseConfig(props.getProperty("driver"),

props.getProperty("url"), props.getProperty("username"), props.getProperty("password"));

Connection conn= config.getConnection();

Statement stmt= conn.createStatement(ResultSet.TYPE\_SCROLL\_INSENSITIVE,ResultSet.CONCUR\_READ\_ONLY);

ResultSet result =stmt.executeQuery("select id,name from eproduct");

out.print("<h1>Product List</h1><hr>");

while(result.next())

{

int id=result.getInt(1);

String name=result.getString(2);

out.print (id+" "+"<a href='details?id="+id+"'>"+name+"</a><br>");

}

} catch (ClassNotFoundException e) {

// TODO Auto-generated catch block

e.printStackTrace();

} catch (SQLException e) {

// TODO Auto-generated catch block

e.printStackTrace();

}

}

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

doGet(request, response);

}

}

Details

package com.org.productdetails;

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.Connection;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import java.util.Properties;

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("/details")

public class Details extends HttpServlet {

private static final long serialVersionUID = 1L;

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

response.setContentType("text/html");

PrintWriter out=response.getWriter();

Properties props=new Properties();

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

props.load(getServletContext().getResourceAsStream("/WEB-INF/application.properties"));

try {

DatabaseConfig config=new DatabaseConfig(props.getProperty("driver"),

props.getProperty("url"), props.getProperty("username"), props.getProperty("password"));

Connection conn= config.getConnection();

PreparedStatement stmt= conn.prepareStatement("select \* from eproduct where id=?");

stmt.setInt(1, Integer.parseInt(id));

ResultSet result=stmt.executeQuery();

out.print("<h1>Details</h1><hr>");

while(result.next())

{

out.print (id+" "+result.getString(2)+" " + result.getBigDecimal(3).toString()+

" "+result.getTimestamp(4).toString());

}

} catch (ClassNotFoundException e) {

// TODO Auto-generated catch block

e.printStackTrace();

} catch (SQLException e) {

// TODO Auto-generated catch block

e.printStackTrace();

}

}

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

doGet(request, response);

}

}

SaveServlet

package com.org.productdetails;

import java.io.IOException;

import java.io.PrintWriter;

import java.math.BigDecimal;

import java.sql.Connection;

import java.sql.PreparedStatement;

import java.sql.SQLException;

import java.util.Properties;

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("/save")

public class SaveServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

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

response.setContentType("text/html");

PrintWriter out=response.getWriter();

Properties props=new Properties();

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

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

props.load(getServletContext().getResourceAsStream("/WEB-INF/application.properties"));

try {

DatabaseConfig config=new DatabaseConfig(props.getProperty("driver"),

props.getProperty("url"), props.getProperty("username"), props.getProperty("password"));

Connection conn= config.getConnection();

PreparedStatement stmt= conn.prepareStatement("insert into eproduct (name,price) values (?,?)");

stmt.setString(1, name);

stmt.setBigDecimal(2, new BigDecimal(price));

int x=stmt.executeUpdate();

if(x>0)

System.out.println("Data Inserted Successfully");

else

System.out.println("Error while inserting a data");

response.sendRedirect("list");

} catch (ClassNotFoundException e) {

// TODO Auto-generated catch block

e.printStackTrace();

} catch (SQLException e) {

// TODO Auto-generated catch block

e.printStackTrace();

}

}

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

doGet(request, response);

}

}