**Practice project**

Create a servlet-based web application that shows a form to enter product details. Capture the details in a servlet and then display the data that was entered.

**Code:**

Index.html

<!DOCTYPE html>

<html>

<head>

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

<title>Insert title here</title>

</head>

<body>

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

ID<input type=*"text"*name=*"id"*>

<br>

Name<input type=*"text"*name=*"name"*>

<br>

<button type=*"submit"*>Register new product</button>

</form>

</body>

</html>

----------------------------------------------------

Product.java class

**package** com.classes;

**public** **class** Product {

**private** **int** id;

**private** String name;

**public** String toString() {

**return**"Product [id=" + id + ", name=" + name + "]";

}

**public** Product() {

**super**();

}

**public** Product(**int** id, String name) {

**super**();

**this**.id = id;

**this**.name = name;

}

**public** **int** getId() {

**return** id;

}

**public** **void** setId(**int** id) {

**this**.id = id;

}

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

}

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ProductRegistrationServlet servlet:

**package** com.servlet;

**import** java.io.IOException;

**import** java.util.regex.\*;

**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;

/\*\*

\* Servlet implementation class ProductRegistrationServlet

\*/

@WebServlet("/ProductRegistrationServlet")

**public** **class** ProductRegistrationServlet **extends** HttpServlet {

**private** **static** **final** **long** ***serialVersionUID*** = 1L;

/\*\*

\* **@see** HttpServlet#HttpServlet()

\*/

**public** ProductRegistrationServlet() {

**super**();

// **TODO** Auto-generated constructor stub

}

/\*\*

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

\*/

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

// **TODO** Auto-generated method stub

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

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

//Validate the inputs

**if**(!*validID*(id))

{

response.setContentType("text/html");

response.getWriter().println("<h4>That ID <q>" + id + "</q> does not match the numeric format or is too big.</h4>");

response.getWriter().println("<br><form method=\"post\" action=\"product.html\"><button type=\"submit\">Try Again</button></form>");

}

**else** **if**(name.equals(""))

{

response.setContentType("text/html");

response.getWriter().println("<h4>That Name <q>" + name + "</q> is invalid.</h4>");

response.getWriter().println("<br><form method=\"post\" action=\"product.html\"><button type=\"submit\">Try Again</button></form>");

}

**else**

{

HttpSession ses = request.getSession();

ses.setAttribute("id", request.getParameter("id"));

ses.setAttribute("name", request.getParameter("name"));

response.sendRedirect("validProduct.jsp");

}

}

//Makes sure the id is a valid one

**private** **static** **boolean** validID(String idTest)

{

Pattern pattern = Pattern.*compile*(idTest);

Matcher matcher = pattern.matcher(idTest);

**if**(idTest.length() > 8)

**return** **false**;

**else** **if** (matcher.matches())

**return** **true**;

**else**

**return** **false**;

}

}

----------------------------------------------------------

ValidProduct.jsp

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

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

<!DOCTYPE html PUBLIC"-//W3C//DTD HTML 4.01 Transitional//EN""http://www.w3.org/TR/html4/loose.dtd">

<html>

<head>

<meta http-equiv=*"Content-Type"*content=*"text/html; charset=ISO-8859-1"*>

<title>Valid Product</title>

</head>

<body>

<%= session.getAttribute("name") %> has been registered to product.ID: <%= session.getAttribute("id") %>

</body>

</html>

Web.xml

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

<web-app xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns=*"http://Java.sun.com/xml/ns/javaee"* xsi:schemaLocation=*"http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-app\_3\_0.xsd"* id=*"WebApp\_ID"* version=*"3.0"*>

<display-name>DisplayDetails</display-name>

<welcome-file-list>

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

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

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

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

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

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

</welcome-file-list>

<servlet>

<description></description>

<display-name>ProductRegistrationServlet</display-name>

<servlet-name>ProductRegistrationServlet</servlet-name>

<servlet-class>com.servlet.ProductRegistrationServlet</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>ProductRegistrationServlet</servlet-name>

<url-pattern>/ProductRegistrationServlet</url-pattern>

</servlet-mapping>

</web-app>