**Source Code :-**

**Product.java**

**package** com.model;

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

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

**private** String name;

**private** String description;

**public** String toString() {

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

}

**public** Product() {

**super**();

}

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

**super**();

**this**.id = id;

**this**.name = name;

**this**.description = description;

}

**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;

}

**public** String getDescription() {

**return** description;

}

**public** **void** setDescription(String description) {

**this**.description = description;

}

}

**ProductRegisterationServlet.java**

package com.servlet;

import java.io.IOException;

import java.util.regex.Matcher;

import java.util.regex.Pattern;

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;

/\*@WebServlet("/ProductRegistrationServlet")\*/

public class ProductRegistrationServlet extends HttpServlet

{

private static final long serialVersionUID = 1L;

public static final String regex = "^[1-9][0-9]\*$";

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

{

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

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

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

//Validate the inputs

if(!validID(id))

{

response.setContentType("text/html");

response.getWriter().println("<h4><span style='color:red'>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><span style='color:red'>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 if(description.equals(""))

{

response.setContentType("text/html");

response.getWriter().println("<h4><span style='color:red'>That Description <q>" + description + "</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"));

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

response.sendRedirect("validProduct.jsp");

}

}

//Makes sure the id is a valid one

private static boolean validID(String idTest)

{

Pattern pattern = Pattern.compile(regex);

Matcher matcher = pattern.matcher(idTest);

if(idTest.length() > 8)

return false;

else if (matcher.matches())

return true;

else

return false;

}

}

**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>

Description<input type=*"text"* name=*"description"*>

<br>

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

</form>

</body>

</html>

**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") %> Description: <%= session.getAttribute("description") %>

</body>

</head>

</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\_2\_5.xsd"* id=*"WebApp\_ID"* version=*"2.5"*>

<display-name>PracticeProject4</display-name>

<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>

<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>