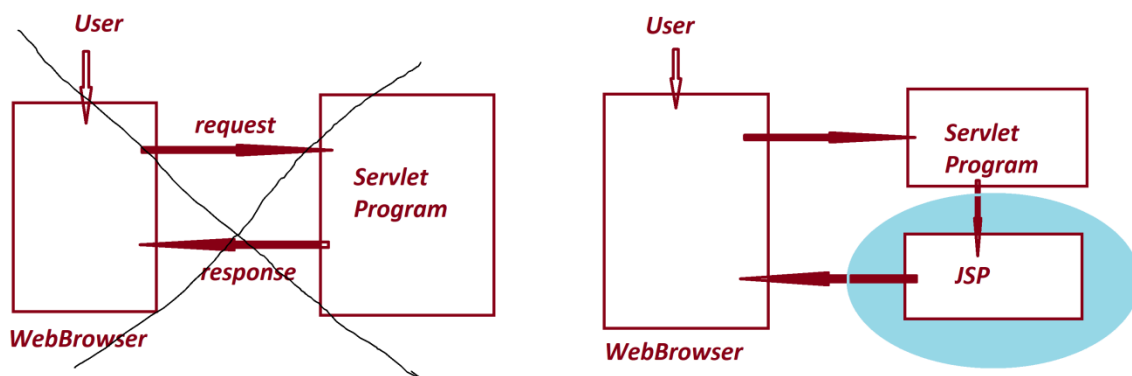


Dt : 24/10/2024(Day-25)

Note:

- (i)'ServletRequest' and 'ServletResponse' objects of Servlet-Program-1 can be reused by Servlet-program-2 in forward communication process.
  - (ii)Every Servlet-Program in application will have its own ServletConfig-Object, but total WebApplication will have only one ServletContext-Object.
- 



**\*imp**

**JSP Programming:**

- =>JSP stands for 'Java Server Page' and which is response from WebApplication.
- =>JSP is tag-based-programming language and which is more simple when compared to Servlet programming.
- =>In JSP the programs are saved with (.jsp) as an extension.

Ex:

View.jsp

- =>JSP programs are combination of both HTML code and Java Code.
- =>We use the following JSP-tags to write Java-Code in JSP programs:

1.Scripting tags

**2.Directive tags**

**3.Action tags**

**1.Scripting tags:**

**=>Scripting tags means basic tags used to write normal code in JSP programs.**

**Types:**

**(a)Scriptlet tag**

**(b)Expression tag**

**(c)Declarative tag**

**(a)Scriptlet tag:**

**=>Scriptlet tag is used to write Normal JavaCode in JSP programs.**

**syntax:**

**<%**

**----JavaCode----**

**%>**

**(b)Expression tag:**

**=>Expression tag is used to assign the value to variable or which is used to**

**send data directly to WebBrowser.**

**syntax:**

**<%=**

**-----Value/Expression----**

**%>**

**(c)Declarative tag:**

**=>Declarative tags are used to declare variable and methods in JSP-Programs.**

**syntax:**

**<%!**

**-----Variables;methods-----**

**%>**

---

**2.Directive tags:**

**=>Directive tags will specify the informations of current JSP program.**

**=>Types:**

**(a)@page**

**(b)@include**

**(c)@taglib**

**(a)@page:**

**=>'@page' will provide specifications of current running JSP page.**

**=>This tag will specify Language used,setContentType,include,...**

**syntax:**

**<%@page ....%>**

**(b)@include:**

**=>'@include' used to include the file in current JSP program**

**syntax:**

**<%@include file="file\_name"%>**

**(c)@taglib:**

**=>'@taglib' is used to link external libraries to current running JSP program.**

**syntax:**

**<%@taglib url=....%>**

---

### **3.Action tags:**

**=>Actions tags are used to perform some action at execution process.**

**=>Types:**

**(a)<jsp:include>**

**(b)<jsp:forward>**

**(c)<jsp:param>**

**(d)<jsp:useBean>**

**(e)<jsp:setProperty>**

**(f)<jsp:getProperty>**

**(a)<jsp:include>:**

**=><jsp:include> will perform include communication in JSP programs.**

**syntax:**

**<jsp:include page="name"...>**

**(b)<jsp:forward>:**

**=><jsp:forward> will perform forward communication in JSP programs.**

**syntax:**

**<jsp:forward page="name"...>**

**(c)<jsp:param>:**

**=><jsp:param> is subtag of <jsp:forward> and which is used to send parameter-value in forward communication process.**

**syntax:**

**<jsp:forward>**

**<jsp:param name="para-name" value="value"/>**

**</jsp:forward>**

**(d)<jsp:useBean>:**

**=><jsp:useBean> is used to instantiate bean object or access the existing bean object.**

**syntax:**

**<jsp:useBean id="var"...>**

**(e)<jsp:setProperty>:**

**=><jsp:setProperty> is used to load the data to bean Object.**

**syntax:**

**<jsp:useBean property="pro-name" param="para-name" name="bean-name">**

**(f)<jsp:getProperty>:**

**=><jsp:getProperty> is used to get the data from bean Object.**

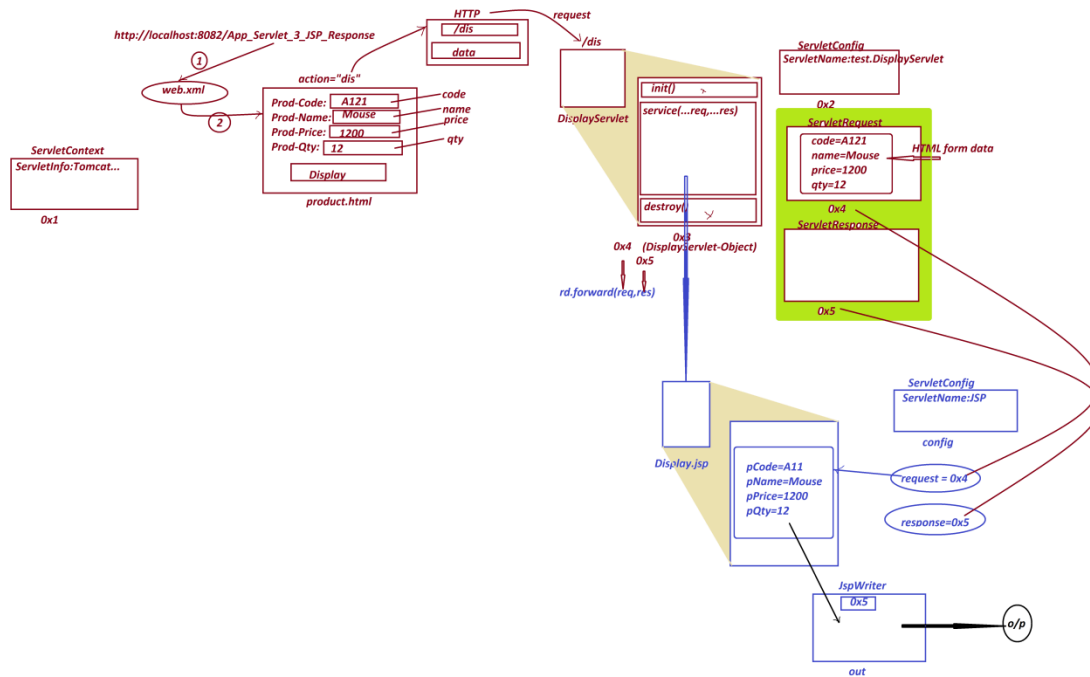
**syntax:**

**=><jsp:getProperty property="pro-name" name="bean-name">**

=====

**Ex-Application:(Demonstrating JSP-Response)**

## Layout:



ProjectName : App\_Servlet\_3\_JSP\_Response

product.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Insert title here</title>
</head>
<body>
<form action="dis" method="post">
ProductCode:<input type="text" name="code"><br>
ProductName:<input type="text" name="name"><br>
ProductPrice:<input type="text" name="price"><br>
ProductQty:<input type="text" name="qty"><br>
<input type="submit" value="Display">
</form>
</body>
</html>
```

web.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<web-app>
    <welcome-file-list>
        <welcome-file>product.html</welcome-file>
    </welcome-file-list>
</web-app>

```

**DisplayServlet.java**

```

package test;

import java.io.*;

import jakarta.servlet.*;
import jakarta.servlet.annotation.*;

@SuppressWarnings("serial")
@WebServlet("/dis")

public class DisplayServlet extends GenericServlet
{
    @Override

    public void service(ServletRequest req,ServletResponse res)throws ServletException,
    IOException
    {
        RequestDispatcher rd = req.getRequestDispatcher("Display.jsp");

        rd.forward(req, res);
    }
}

```

**Display.jsp**

```

<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
    pageEncoding="ISO-8859-1"%>
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">

```

```
<title>Insert title here</title>
</head>
<body>
<%
String pCode = request.getParameter("code");
String pName = request.getParameter("name");
float pPrice = Float.parseFloat(request.getParameter("price"));
int pQty = Integer.parseInt(request.getParameter("qty"));
out.println("====ProductDetails====<br>");
out.println("ProductCode:"+pCode+"<br>");
out.println("ProductName:"+pName+"<br>");
out.println("ProductPrice:"+pPrice+"<br>");
out.println("ProductQty:"+pQty+"<br>");

%>
</body>
</html>
```

---