

JavaServer Pages - JSP Implicit Object

Objectives:

1. Understanding about JSP.
2. Understanding about JSP implicit Objects.

4.1 Building Shopping Cart in JSP

Step 1. Create a web application in Netbeans

Step 2. Edit the **index.jsp** file as below:

```
<%@page import="java.util.ArrayList"%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
    <head>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
        <style>
            h1
            {
                color: yellowgreen;
                font-style: italic;
            }
            div
            {
                margin-left: auto;
                margin-right: auto;
                width: 300px;
            }
            input[type=text]
            {
                width:150px;
                text-align:left;
                border:thin solid gray;
                padding: 2px 5px 2px 5px;
                border-radius: 3px 3px 3px 3px;
            }
            input[type=submit]
            {
                width:75px;
                text-align:center;
                border:thin solid gray;
                padding: 3px 5px 3px 5px;
                border-radius: 3px 3px 3px 3px;
                background-color: orange;
            }
        </style>
    </head>
    <body>
        <div>
            <h1>Shopping Cart</h1>
            <input type="text" value="Name" />
            <input type="submit" value="Add" />
        </div>
    </body>
</html>
```

```

        input[type=submit]:hover
        {
            width:75px;
            text-align:center;
            border:thin solid gray;
            padding: 3px 5px 3px 5px;
            border-radius: 3px 3px 3px 3px;
            background-color: yellowgreen;
        }
    </style>

    <title>JSP Page</title>
</head>
<body>
    <div>
        <h1>Shopping card demo</h1>
        <%
            if (request.getParameter("btnOK") != null) {
                codes.item item = new codes.item();

item.setId(Integer.parseInt(request.getParameter("txtID")));

item.setPrice(Integer.parseInt(request.getParameter("txtPrice")));

item.setQuantity(Integer.parseInt(request.getParameter("txtQuantity")));
                java.util.ArrayList orders = new ArrayList();
                if (session.getAttribute("Orders") != null) {
                    orders = (java.util.ArrayList)
session.getAttribute("Orders");
                }
                orders.add(item);
                session.setAttribute("Orders", orders);

                response.sendRedirect("cart.jsp");
            }
        %>

        <form method="post">
            <table>
                <tr>

```

```

        <td>
            ID</td>
        <td>
            <input type="text" name="txtID" />
        </td>
    </tr>
    <tr>
        <td>
            Price
        </td>
        <td>
            <input type="text" name="txtPrice"/>
        </td>
    </tr>
    <tr>
        <td>
            Quantity
        </td>
        <td>
            <input type="text" name="txtQuantity"/>
        </td>
    </tr>
    <tr>
        <td>
        </td>
        <td>
            <input type="submit" value="OK" name="btnOK"/>
        </td>
    </tr>
</table>
</form>
</div>
</body>
</html>

```

Step 3. Create a jsp file named **cart.jsp** and add some code as below:

```

<%@page import="java.util.ArrayList"%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>

```

```
<head>
  <meta http-equiv="Content-Type" content="text/html; charset=UTF-
8">
  <title>JSP Page</title>
  <style>
    h1
    {
      color: yellowgreen;
      font-style: italic;
    }
    div
    {
      margin-left: auto;
      margin-right: auto;
      width: 300px;
    }

    table
    {
      border: 1px solid gray;
      padding: 3px 3px 3px 3px;
    }

    th
    {
      color: brown;
    }
    .back
    {
      width:75px;
      text-align:center;
      border:thin solid gray;
      padding: 2px 5px 2px 5px;
      border-radius: 3px 3px 3px 3px;
      background-color: orange;
    }
    .back:hover
    {
      width:75px;
      text-align:center;
```

```

        border:thin solid gray;
        padding: 3px 5px 3px 5px;
        border-radius: 3px 3px 3px 3px;
        background-color: yellowgreen;
    }
</style>
</head>
<body>
    <div>
        <h1>Your card</h1>
        <table>
            <tr>
                <th>ID</th>
                <th>Price</th>
                <th>Quantity</th>
                <th>Total</th>
                <th>Operator</th>
            </tr>
            <%
                java.util.ArrayList orders = new ArrayList();
                codes.item item = new codes.item();
                if (session.getAttribute("Orders") != null) {
                    orders = (java.util.ArrayList)
session.getAttribute("Orders");
                }

                int count = orders.size() - 1;
                while (count > 0) {
                    item = (codes.item) orders.get(count);

                    if (request.getParameter("id") != null) {
                        if (item.getId() ==
Integer.parseInt(request.getParameter("id"))) {
                            orders.remove(item);
                            count--;
                            continue;
                        }
                    }

                    out.print("<tr>");

```

```

        out.print("<td>" + item.getId() + "</td>");
        out.print("<td>" + item.getPrice() + "</td>");
        out.print("<td>" + item.getQuantity() + "</td>");
        out.print("<td>" + item.getQuantity() *
item.getPrice() + "</td>");
        out.print("<td> <a href='?id=" + item.getId() +
"'>Delete</a></td>");
        count--;
        out.print("</tr>");
    }
    %>
</table>
<br/>
<a class="back" href="index.jsp">continue</a>
</div>
</body>
</html>

```

Step 4. Run and test the result.

4.2 Using include directive in JSP

Step 5. Create a web application in Netbeans

Step 6. Edit the **index.jsp** file as below:

```

<%@page contentType="text/html"%>
<%@page pageEncoding="UTF-8"%>
<html>
    <head>
        <meta http-equiv="Content-Type" content="text/html; charset=UTF-
8">
        <title>JSP Page</title>
    </head>
    <body>
        <h1>JSP Page</h1>
        <%@ include file="form.jsp"%>
    </body>
</html>

```

Step 7. Create a jsp file named **form.jsp** and add some code as below:

```

<%@page contentType="text/html"%>
<%@page pageEncoding="UTF-8"%>
<html>

```

```

<head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-
8">
    <title>JSP Page</title>
</head>
<body>
    <%
        String fNumber = request.getParameter("fNumber");
        String sNumber = request.getParameter("sNumber");
        String oper = request.getParameter("oper");
        String result="";
        if(oper!=null) {
            if(oper.equalsIgnoreCase("+"))
                result=(Integer.parseInt(fNumber)
Integer.parseInt(sNumber))+"";
            else if(oper.equalsIgnoreCase("-"))
                result=(Integer.parseInt(fNumber)
Integer.parseInt(sNumber))+"";
            else if(oper.equalsIgnoreCase("*"))
                result=(Integer.parseInt(fNumber)
Integer.parseInt(sNumber))+"";
            else if(oper.equalsIgnoreCase("/"))
                result=(Integer.parseInt(fNumber)
Integer.parseInt(sNumber))+"";
            else
                result="NaN";
        }
    %>
    <h1>This is demo simple JSP</h1>
    <form action="Input.jsp" method="post">
        <br>
        <table width="400px" border="1px" cellpadding="0">
            <tr>
                <td>
                    First number:
                </td>
                <td>
                    <input type="text" name="fNumber"
value="<%=fNumber%>"/>
                </td>
            </tr>
            <tr>

```



```

        <td>
            Second number:
        </td>
        <td>
            <input
value="<%=sNumber%>"/><br>
            type="text"
            name="sNumber"
        </td>
    </tr>
    <tr>
        <td>
            Operator:
        </td>
        <td>
            <input
value="<%=oper%>"/><br>
            type="text"
            name="oper"
        </td>
    </tr>
    <tr>
        <td>
            Result
        </td>
        <td>
            <input
value="<%=result%>">
            type="text"
            name="Result"
        </td>
    </tr>
    <tr>
        <td></td>
        <td>
            <input type="Submit" value=Submit>
        </td>
    </tr>
</table>
</form>
</body>
</html>

```

Step 8. Test the result.

