

## SESSION 16 PROGRAMS(SERVLETS)

### Program 1

#### employeeForm.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>
<form action="EmployeeServlet">
    <label for="name">Enter name</label><br>
    <input type="text" id="name" name="name"><br>
    <label for="address">Enter Address</label><br>
    <input type="text" id="address" name="address"><br>
    <input type="submit" value="submit">
</form>
</body>
</html>
```

### Program 2 (EmployeeServlet)

```
import java.io.IOException;
import java.io.PrintWriter;

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.servlet.http.HttpSession;

/**
 * Servlet implementation class EmployeeServlet
 */
@WebServlet("/EmployeeServlet")
```

## Core Java Training

---

```
public class EmployeeServlet extends HttpServlet {
    private static final long serialVersionUID = 1L;

    /**
     * @see HttpServlet#HttpServlet()
     */
    public EmployeeServlet() {
        super();
        // TODO Auto-generated constructor stub
    }

    /**
     * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse
    response)
     */
    protected void doGet(HttpServletRequest request, HttpServletResponse
    response) throws ServletException, IOException {
        // TODO Auto-generated method stub
        PrintWriter out = response.getWriter();
        HttpSession session = request.getSession();
        RequestDispatcher rd =
        request.getRequestDispatcher("employeeView.jsp");

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

        out.println("Welcome " + name);
        out.println("<br>");
        out.println("Courier has been dispatched to your address at
    "+address);
        /*
        session.setAttribute("name", name);
        session.setAttribute("address", address);
        response.sendRedirect("employeeView.jsp");
        */

        rd.include(request, response);
    }

    /**
     * @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse
    response)
     */
}
```

## Core Java Training

---

```
protected void doPost(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
    // TODO Auto-generated method stub
    doGet(request, response);
}

}
```

### Program 3 employeeView.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 name = request.getParameter("name");
        //String address = request.getParameter("address");

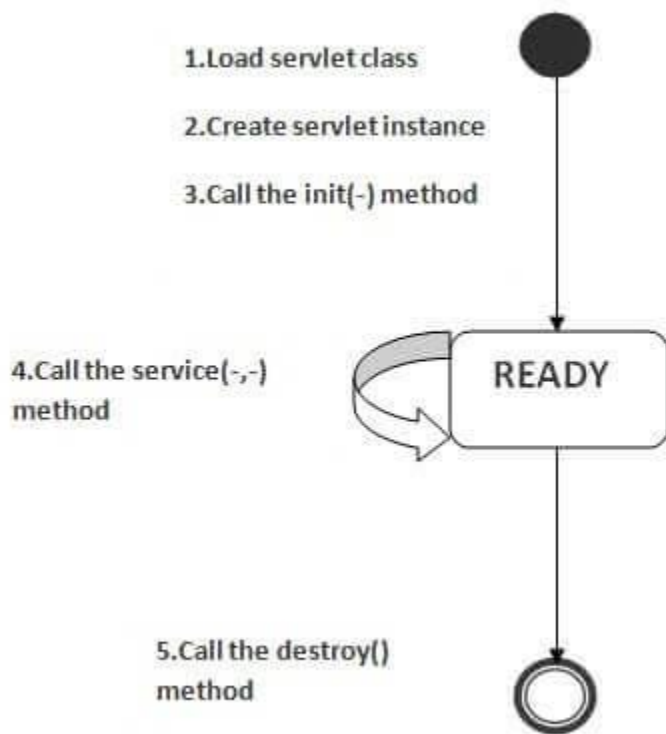
        String name =(String) session.getAttribute("name");
        String address =(String) session.getAttribute("address");

        out.println("Welcome "+name);
        out.println("<br>");
        out.println("Courier has been dispatched to your address at
"+address);

        //session.invalidate();
    %>

</body>

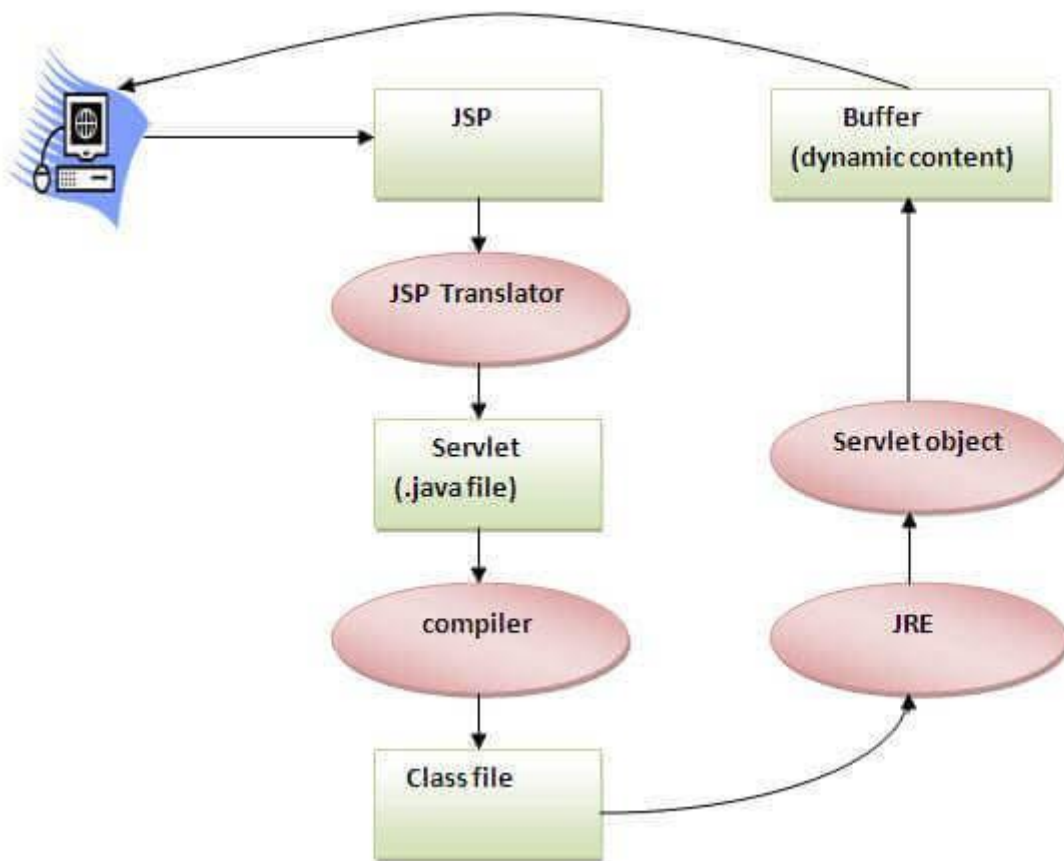
</html>
```



## Life Cycle of a Servlet (Servlet Life Cycle)

The web container maintains the life cycle of a servlet instance. Let's see the life cycle of the servlet:

1. Servlet class is loaded.
2. Servlet instance is created.
3. init method is invoked.
4. service method is invoked.
5. destroy method is invoked.



### The Lifecycle of a JSP Page

The JSP pages follow these phases:

- Translation of JSP Page
- Compilation of JSP Page
- Classloading (the classloader loads class file)
- Instantiation (Object of the Generated Servlet is created).
- Initialization ( the container invokes `jspInit()` method).
- Request processing ( the container invokes `_jspService()` method).
- Destroy ( the container invokes `jspDestroy()` method).

### SESSION 16 ASSIGNMENTS

1. Write a Program to create Student.jsp. Create Student info fields like Roll No , Name , Std , Div , Age , Gender , Subjects . Call StudentDisplay Servlet. Display in this Servlet all the details entered in Student.jsp .
2. Enhance the above program . From StudentDisplay Servlet, redirect response to StudentOutput.jsp. Before redirecting , put all students data in Session object . Now Display students data in StudentOutput.jsp
3. In assignment 2 , Use Request Dispatcher include & forward method in place of response.sendRedirect method .