

Experiment No: 13 Implement session management using servlet.

Program:

Index.html:

```
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Session Management</title>
</head>
<body style="font-family: Arial, sans-serif; background-color: #f4f4f4; text-align: center; padding: 50px;">
  <h1 style="color: #333;">Session Management Example</h1>
  <p style="color: #555;">Click the link below to start a session:</p>
  <p><a href="SessionServlet" style="color: #007bff; text-decoration: none;">Start a session</a></p>
</body>
</html>
```

Web.xml:

```
<?xml version="1.0" encoding="UTF-8"?>
<web-app>
  <servlet>
    <servlet-name>SessionServlet</servlet-name>
    <servlet-class>SessionServlet</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>SessionServlet</servlet-name>
    <url-pattern>/SessionServlet</url-pattern>
  </servlet-mapping>
  <welcome-file-list>
    <welcome-file>index.html</welcome-file>
  </welcome-file-list>
</web-app>
```

SessionServlet.java:

```
import jakarta.servlet.ServletException; import
jakarta.servlet.http.HttpServlet; import
jakarta.servlet.http.HttpServletRequest; import
jakarta.servlet.http.HttpServletResponse; import
jakarta.servlet.http.HttpSession; import
java.io.IOException; import java.io.PrintWriter;
```

```
public class SessionServlet extends HttpServlet {    protected void doGet(HttpServletRequest request,
HttpServletResponse response)          throws ServletException, IOException {    HttpSession session =
request.getSession();    session.setAttribute("exampleAttribute", "This is a session attribute.");
```

```
response.setContentType("text/html");    PrintWriter out = response.getWriter();    out.println("<html>");
out.println("<head>");    out.println("<title>Session Management Example</title>");
out.println("</head>");    out.println("<body style='font-family: Arial, sans-serif; background-color:
#f0f0f0;'>");    out.println("<h2 style='color: #333;'>Session Management Example</h2>");
out.println("<h3>Session Information:</h3>");    out.println("<p><strong>Session ID:</strong> " +
session.getId() + "</p>");    out.println("<p><strong>Attribute set:</strong> " +
session.getAttribute("exampleAttribute") + "</p>");    out.println("</body>");    out.println("</html>");
}
}
```

Output:

Session Management Example

Click the link below to start a session:

[Start a session](#)

Session Management Example

Session Information:

Session ID: AB9EF12B39AD6CF93B48F1FD2A656548

Attribute set: This is a session attribute.

Experiment No: 14

Implement simple demo program using JSP.

Program:

demo.jsp

```
<%@ page language="java" contentType="text/html" %>
<%@ page import="java.text.*,java.util.*" %>
<html>
<body>
    <h1 style="color:blue;">Welcome to Tomcat! Simple JSP Program</h1>
    <p style="color:green;">This is a concise and informative JSP example.</p>
<p><strong>JSP Syntax:</strong></p>
<ul>
    <li>JSP code is enclosed in <code>%> tags.</li>
    <li>You can include Java imports using <code>%@ page import="package.name.*" %>.</li>
    <li>HTML and JSP elements can be combined seamlessly.</li>
    <li>Inline styles can be applied using the `style` attribute.</li>
</ul>
</body>
</html>
```

Output:

Welcome to Tomcat! Simple JSP Program

This is a concise and informative JSP example.

JSP Syntax:

- JSP code is enclosed in `<% %>` tags.
- You can include Java imports using `<%@ page import="package.name.*" %>`.
- HTML and JSP elements can be combined seamlessly.
- Inline styles can be applied using the `style` attribute.