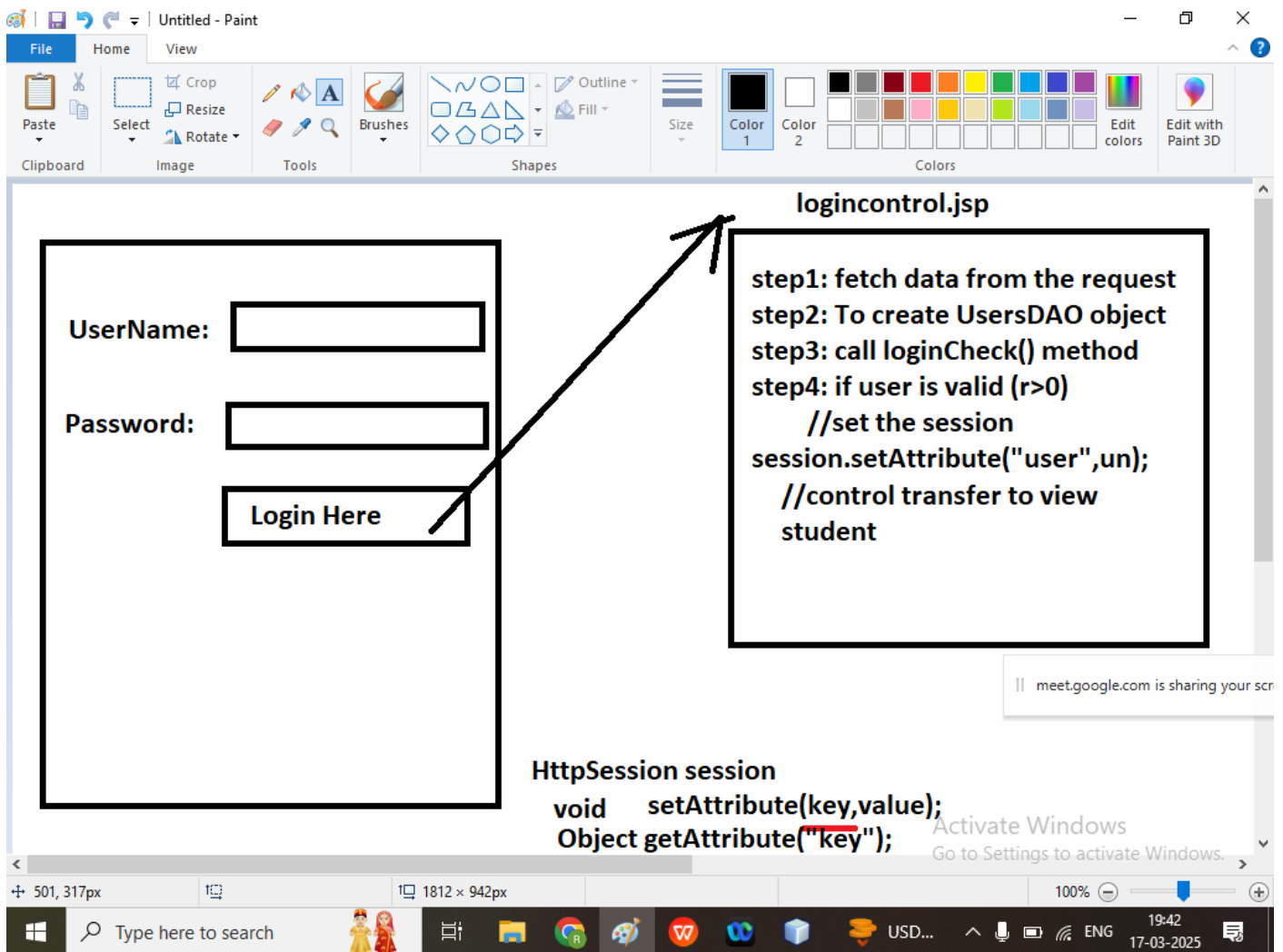


Q1. Explain Session in jsp?

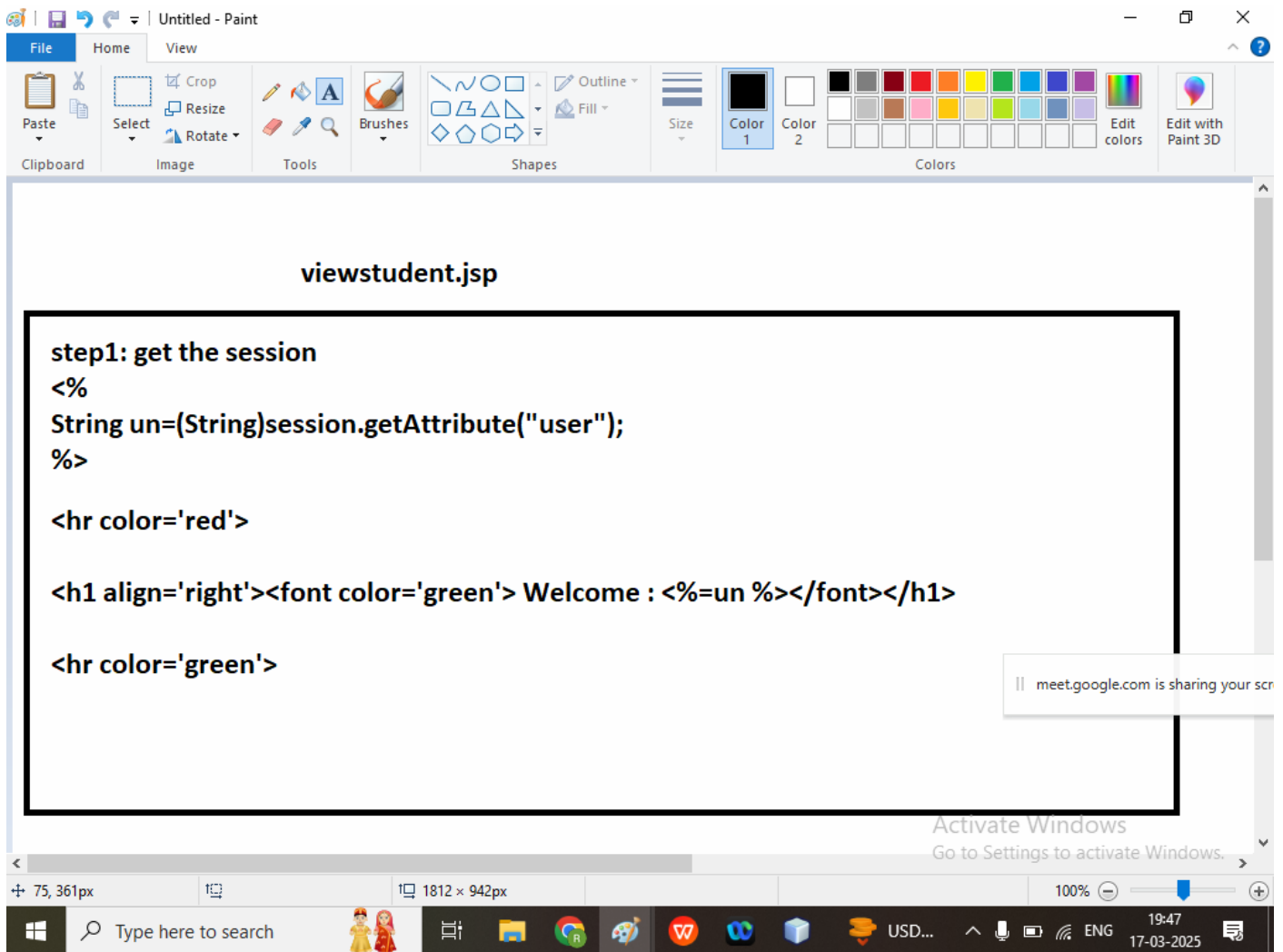
Ans: In jsp a, session is used to maintain user specific information across multiple request of a particular client. The `HttpSession(interface)` implicit object(session) is used to track user interactions and store data that needs to be persisted through a user visit

Session Tracking meant for to identify particular user

We use HttpSession implicit object session with following methods



Viewstudent.jsp



Login.jsp

```
<%--
Document : login
Created on : 12 Mar, 2025, 8:38:21 PM
Author : Admin
--%>

<%@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>
</head>
<body>
<form action="logincontrol.jsp">
<table width="60%">

<tr>
<td>USERNAME: </td>
<td><input type="text" name="un"></td>
</tr>
```

```

        <tr>
            <td>PASSWORD: </td>
            <td><input type="password" name="ps"></td>
        </tr>

        <tr>
            <td>&nbsp;</td>
            <td><input type="submit" value="Login"></td>
        </tr>
    </table>
</form>
</body>
</html>

```

Logincontrol.jsp(Set the session only one time)

```

<%--
    Document   : logincontrol
    Created on : 12 Mar, 2025, 8:39:32 PM
    Author    : Admin
--%>

<%@page import="com.ram.dao.UsersDAO"%>
<%@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>
    </head>
    <body>
        <%
            String un=request.getParameter("un");
            String ps=request.getParameter("ps");

            UsersDAO ud=new UsersDAO();
            int r=ud.loginCheck(un, ps);
            if(r>0){
                session.setAttribute("user", un);
                //set the session
                response.sendRedirect("viewstudent.jsp");
            }else{
                out.println("Login Fail Please Try Again....");
                RequestDispatcher rd=request.getRequestDispatcher("login.jsp");
                rd.include(request, response);
            }
        %>
    </body>
</html>

```

Viewstudent.jsp (use to get the session)

```

<%--
    Document   : viewstudent
    Created on : 12 Mar, 2025, 7:58:10 PM
    Author    : Admin
--%>

<%@page import="com.ram.bean.StudentBean"%>
<%@page import="java.util.ArrayList"%>

```

```

<%@page import="com.ram.dao.StudentDAO"%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>View Student</title>
</head>
<body>
<%
if(session.getAttribute("user")==null){
    response.sendRedirect("login.jsp");
}
//step1: Fetch data from the session
String un=(String)session.getAttribute("user");
%>
<hr color="green">
<h1><font color="blue"> Welcome : <%=un %></font></h1>
<hr color="red">

<h1>All Student Data</h1>
<h1><a href="addstudent.jsp">Add New Student </a></h1>
<table border="1" align="center">
<tr>
<th>SID</th>
<th>NAME</th>
<th>ENROLL</th>
<th>P</th>
<th>C</th>
<th>M</th>
<th>H</th>
<th>E</th>
<th>Total</th>
<th>Percentage</th>
<th>EDIT</th>
<th>DELETE</th>

</tr>
<%
//step1: Create an Object of StudentDAO class
StudentDAO sd=new StudentDAO();
ArrayList<StudentBean> all=sd.findAll();

for(StudentBean sb:all){
%>
<tr>
<td><%=sb.getSid() %></td>
<td><%=sb.getName() %></td>
<td><%=sb.getEnroll() %></td>
<td><%=sb.getP() %></td>
<td><%=sb.getC() %></td>
<td><%=sb.getM() %></td>
<td><%=sb.getH() %></td>
<td><%=sb.getE() %></td>
<td><%=sb.getTotal() %></td>
<td><%=sb.getPer() %></td>
<td><a href="editform.jsp?sid=<%=sb.getSid() %>">EDIT</a></td>
<td><a href="delete.jsp?sid=<%=sb.getSid() %>">DELETE</a></td>

</tr>
<%
}
%>

```

```
</table>
</body>
</html>
```

Editform.jsp (get the session)

```
<%--
    Document   : editform
    Created on : 12 Mar, 2025, 8:13:09 PM
    Author    : Admin
--%>

<%@page import="com.ram.bean.StudentBean"%>
<%@page import="com.ram.dao.StudentDAO"%>
<%@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>
    </head>
    <body>
        <%
            //step1: Fetch Id from the Request
            int sid=Integer.parseInt(request.getParameter("sid"));
            //step2: Create Object of StudentDAO
            StudentDAO sd=new StudentDAO();
            //step3: Call findById()
            StudentBean sb=sd.findById(sid);
            %>
            <%

                //step1: Fetch data from the session
                String un=(String)session.getAttribute("user");
                %>
                <hr color="green">
                <h1> <font color="blue"> Welcome : <%=un %></font></h1>
                <hr color="red">

            <form action="update.jsp" method="post">
                <table width="60%">
                    <tr>
                        <td>SID: </td>
                        <td><input type="text" name="sid" value=<%=sb.getSid() %>></td>
                    </tr>
                    <tr>
                        <td>NAME: </td>
                        <td><input type="text" name="name" value=<%=sb.getName() %>></td>
                    </tr>
                    <tr>
                        <td>ENROLLMENT: </td>
                        <td><input type="text" name="enroll" value=<%=sb.getEnroll() %>></td>
                    </tr>
                    <tr>
                        <td>Physics: </td>
                        <td><input type="text" name="p" value=<%=sb.getP() %>></td>
                    </tr>
                    <tr>
                        <td>Chemistry: </td>
                        <td><input type="text" name="c" value=<%=sb.getC() %> ></td>
                    </tr>
                    <tr>
                        <td>English: </td>
```

```
<td><input type="text" name="e" value=<%=sb.getE() %>></td>
</tr>
<tr>
<td>Maths: </td>
<td><input type="text" name="m" value=<%=sb.getM() %>></td>
</tr>
<tr>
<td>Hindi: </td>
<td><input type="text" name="h" value=<%=sb.getH() %>></td>
</tr>
<tr>
<td>&nbsp;</td>
<td><input type="submit" value="Update Student"></td>
</tr>
</table>
</form>

</body>
</html>
```

Q1. What are Cookies?

Cookies are the text files which are stored on the client machine by the server.

They are used to track the information for various purposes.

It supports HTTP cookies using servlet technology

The cookies are set in the HTTP Header.

If the browser is configured to store cookies, it will keep information until expiry date.

JSP cookies methods

Following are the cookies methods:

Public void setMaxAge(int expiry)

It sets the maximum time which should apply till the cookie expires

Public int getMaxAge()

It returns the maximum age of cookie in JSP

Public String getName()

It returns the name of the cookie

Public void setValue(String value)

Sets the value associated with the cookie

Public String getValue()

Get the value associated with the cookie

Q2. How to Handle Cookies in JSP?

Ans:

Creating the cookie object

Setting the maximum age

Sending the cookie in HTTP response headers

Q3. How to read cookie?

Ans:

we will create an object of Cookie type and an array of Cookie type which will get all the cookies using request.getCookie() method of HttpServletRequest. Then we will get the name and value of these cookies using the getName() and getValue() method by applying the if loop.

Q4. How to Delete Cookies?

To delete cookies, set the age of the cookie to zero using the setMaxAge() method.

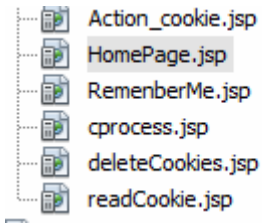
Delete Cookies Example in JSP

we have set the cookie to zero to delete the cookie using the `setMaxAge()` method. After that add it to the HTTP Response Headers to delete this cookie.

Q5. Remember Username and Password Example in JSP?

In this example, we are using cookies to remember username and password features. In the `RememberMe.jsp` file, we have created username and password fields with a Remember Me checkbox, which will check for a cookie. If the cookie is found it will set the value of fields with the cookie values. In the `HomePage.jsp` file we will display username and password. If the user has checked the “Remember Me” check box, the JSP will add a username and password as a cookie.

Create Following JSP Page for Cookie



1. Action_cookie.jsp

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="ISO-8859-1">
```

```
<title>Example Cookies</title>
```

```
</head>
```

```
<body>
```

```
<h1>Setting Cookies</h1>
```

```
<form action="cprocess.jsp" method="GET">
```

```
First Name: <input type="text" name="first_name"> <br /><br/>
```

```
Last Name: <input type="text" name="last_name" /><br/><br/>
```

```
<input type="submit" value="Submit" />
```

```
</form>
```

```
</body>
```

```
</html>
```

2. Cprocess.jsp

<%

// Create cookies for first and last names.

```
Cookie firstName = new Cookie("first_name",  
request.getParameter("first_name"));
```

```
Cookie lastName = new Cookie("last_name",  
request.getParameter("last_name"));
```

// Set expiry date after one hour for both the cookies.

```
firstName.setMaxAge(60 * 60);
```

```
lastName.setMaxAge(60 * 60);
```

// Add both the cookies in the response header.

```
response.addCookie(firstName);
```

```
response.addCookie(lastName);
```

%>

<html>

<body>

<h1>Setting Cookies</h1>


```
<b>First Name:</b><%=request.getParameter("first_name")%><br
/><br/>
<b>Last Name:</b><%=request.getParameter("last_name")%>
</body>
</html>
```

3. readCookie.jsp

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

<title>Read Cookies</title>
</head>
<body>
<h1>Read Cookies </h1>
<%
    Cookie cookie = null;
    Cookie[] cookies = null;
    cookies = request.getCookies();
    if (cookies != null) {
```

```
for (int i = 0; i < cookies.length; i++) {  
    cookie = cookies[i];  
    out.print("Name : " + cookie.getName() + ", ");  
    out.print("Value: " + cookie.getValue() + " <br/>");  
}  
} else {  
    out.println("<h2>No cookies founds</h2>");  
}  
%>  
</body>  
</html>
```

4. deleteCookies.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>Delete Cookies</title>  
</head>  
<body>
```

<h1>Delete Cookies</h1>

<%

Cookie cookie = null;

Cookie[] cookies = null;

cookies = request.getCookies();

if (cookies != null) {

for (int i = 0; i < cookies.length; i++) {

cookie = cookies[i];

if ((cookie.getName()).compareTo("first_name") == 0) {

cookie.setMaxAge(0);

response.addCookie(cookie);

out.print("Deleted cookie: " + cookie.getName() + "
");

}

out.print("Name : " + cookie.getName() + ", ");

out.print("Value: " + cookie.getValue() + "
");

}

}

%>

</body>

</html>

5. RemenberMe.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>Login Form</title>
    </head>
    <body>
        <%
            Cookie[] cookies = request.getCookies();
            String username = "";
            String password = "";
            if (cookies != null) {
                for (int i = 0; i < cookies.length; i++) {
                    Cookie cookie = cookies[i];
                    if (cookie.getName().equals("username-cookie")) {
                        username = cookie.getValue();
                    } else if (cookie.getName().equals("password-cookie")) {
                        password = cookie.getValue();
                    }
                }
            }
        %>
```



```
<form name="logonform" action="HomePage.jsp"
method="POST">
    Username: <input type="text" name="username"
value="<%=username%>" />
    <br /> <br /> Password:<input type="password"
name="password"
value="<%=password%>" /> <br />
<br /> Remember Me<input type="checkbox"
name="rememberMe" value="true" />
<br /><br /><input type="submit" value="Submit" />
</form>
</body>
</html>
```

6. HomePage.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>Display Details</title>
</head>
```

<body>

<%

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

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

String message = "Username is : " + username + "
 Password is : " + password;

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

if (rememberMe != null) {

Cookie usernameCookie = new Cookie("username-cookie", username);

Cookie passwordCookie = new Cookie("password-cookie", password);

usernameCookie.setMaxAge(60*60);

passwordCookie.setMaxAge(60*60);

response.addCookie(usernameCookie);

response.addCookie(passwordCookie);

}

%>

 <%=message%>

</body>

</html>
