javax.servlet.http.Cookie

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=> Cookie is a Text information that stores on client side and this

information can access anywhere in web Application.

=> There are 2 types of Cookie

1. In Memory Cookie

2. Persistent Cookie

1. In Memory Cookie

_____

=> such type Cookie should store in Browser memory and it is automatically deleted when browser is Closed.

2.Persistent Cookie

_____

=> Such type Cookie should store for specific Time, after this duration, it is automatically deleted after this duration.

Note: Cookie is applicable only for HttpServlet.

Creating Object of Cookie

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Cookie ck1=new Cookie("user","analyze");

Cookie ck2= new Cookie("pswd","Lucknow");

How to make Persistent Cookie

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ck2.setMaxAge(30*24*60*60);//30 days here Time is given in Second

Add Cookie on Client Side

_____

response.addCookie(ck1);

response.addCookie(ck2);

How to get Data from Cookie

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Cookie ck[]=request.getCookies();

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

{

out.print.println("Cookie Name"+ck[i].getName());

out.print.println("Cookie Value"+ck[i].getValue());

}

Updating Value of Cookie

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ck1=new Cookie("user","Analyze Infotech");

Note

_____ Using Program we can not delete Cookie

JSP(Java Server Pages)

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=> JSP is a Server Side Scripting Language.

=> Every Scripting Language is Based of Tags, So JSP is also Based on Tags.

=> A JSP File can have HTML, CSS , Java Script and Java Code

=> A JSP file has .jsp extn.

=> Every JSP Page is converted in Servlet by JSP Container.

jspFile.jsp => ServletFile.java => ByteCode.class => Conversion into Machine Code and Execution

Advantages of JSP compare to Servlet

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=>A JSP file does not need to structure of Class and Object, it works like scripting Language.

=>A JSP file can have HTML Code normally, it does not need of out.println()

=> Execution of JSP Page is faster than Servlet.

=> A JSP File also support implicit Object for use full classes and Interface.

Implicit Object for JSP File

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Page page

PrintWriter out

ServletConfig config

HttpServletRequest request

HttpServletResponse response

HttpSession session

Cookie cookie

JSP Tags

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=> There are 5 types of JSP Tags

1. Directive Tag

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=> Directive Tag is used to import specific Class, Package or it is also used to extends Class.

<%@page import="java.util.*"%>

<%@page import="DB.*"%>

<%@include file="header.jsp"%>

<%@include file="footer.html"%>

2. Declarative Tag

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=> Declarative Tag is used to declare Variable and function, which can access anywhere in web Page.

```
<%!
String cname="Analyze";
String city="Lucknow";
int sum=0;
void sum(int n)
{
for(int i=1;i<=n;i++)
{
sum=sum+i;
}
}
%>
```

3. Scriptlet Tag

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=> Scriptlet Tag is most use full Tag in JSP and it can have any valid Statement of Java.

```
<%
int a=10;
int b=20;
```

```
int c=a+b;
System.out.println("Addition="+c);

%>
```

4. Expression Tag

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=> Expression Tag is used to execute single java Statement and it also prints its output.

```
<%=cname%>
```

or

```
<%
out.println(cname);
%>
```

5. Implicit Object

_____

=> JSP supports some use full implicit Objects

Page page

PrintWriter out

ServletConfig config

HttpServletRequest request

HttpServletResponse response

HttpSession session

Cookie cookie

Note : A JSP page always exists in Web Pages

Note: <%-- Comment --%> is used for JSP Comment

```
<%--  JSP Tag Demonstration --%>
<%-- Directive Tag --%>
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<%@page import="java.util.Date" language="java" %>
<%-- Declarative tag --%>
<%!
String company="Analyze infotech";
//Function
int pinCode()
{
 return 226021;
}
%>
<!DOCTYPE html>
<html>
   <head>
      <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
      <title>JSP Page</title>
   </head>
   <body>
      <h1>JSP Tag Implementation</h1>
```

```
      <form action="">
   Enter Employee Name:<input type="text" name="user">
    <br><input type="submit" value="submit">
      </form>

      <%-- scriptlet Tag --%>
      <%
if(request.getParameter("user")!=null)
{
   String uname=request.getParameter("user");
 out.println("<h2>Welcome "+uname+" in "+company+"</h2>");

}

%>

<%-- Expression Tag --%>
       <br>Company Name:<%=company%>
      <br>Pin Code : <%=pinCode()%>
   <br><br>

   </body>
</html>
```

```
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```

```
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%>

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      <br>Company Name:<%=company%>
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  <br><br>

  </body>
</html>
```

```
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<!DOCTYPE html>
<html>
  <head>
     <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
     <title>JSP Page</title>
  </head>
  <body>
     <%!
     String college="IET Lucknow";
     int total;
     float per;
     int findTotal(int m1,int m2,int m3)
     {
      total=m1+m2+m3;
```

```
 return total;
}

float findPer()
{
 per=total/3.0f;
 return per;
}

String findDivision()
{
 if(per>=60)
 return "First Division";
 else if(per>=50)
 return "Second Division";
 else if(per>=40)
        return "Third Division";
else
        return "Fail";

   }
%>

<h1>Student Marksheet</h1>
<form action="">
<br>StuName:<input type="text" name="sname">
<br>Subject1:<input type="number" name="sub1">
<br>Subject2:<input type="number" name="sub2">
```

```
<br>Subject3:<input type="number" name="sub3">
<br><input type="submit"  value="Submit">


</form>
<%
 if (request.getParameter("sname")!=null)
 {
String sname=request.getParameter("sname");
int sub1=Integer.parseInt(request.getParameter("sub1"));
int sub2=Integer.parseInt(request.getParameter("sub2"));
int sub3=Integer.parseInt(request.getParameter("sub3"));
out.println("<br><br>College Name "+college);
out.println("<br>Student Name "+sname);
out.println("<br>Subject1 Marks "+sub1);
out.println("<br>Subject2 Marks "+sub2);
out.println("<br>Subject3 Marks "+sub3);
out.println("<br>Total Marks  "+findTotal(sub1, sub2, sub3));
out.println("<br>Percentage  "+findPer());
out.println("<br>"+findDivision());
 }
%>


  </body>
</html>
```