**Dharmsinh Desai University, Nadiad**

**Department of Information Technology**

**Advanced Java Technology, IT619**

**B.Tech. IT, Sem: VI**

**Experiment – 09**

**Submitted By**

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**Aim:**  Create custom tags: date and header. The date tag is used to display current date

and header tag is used to print the header in proper format. The header tag has following

attributes: align, border, bgcolor, color, font, and size. Show the usage of these two tags

in your JSP page. The align, color, font, and size are for alignment of text, color of text,

font-family for text, and size of text respectively. The border, and bgcolor are for border

size of box containing text, and background color of box respectively.

**Code:**

**date.tld**

<?xml version="1.0" encoding="UTF-8"?>

<taglib version="2.1" xmlns="http://java.sun.com/xml/ns/javaee" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-jsptaglibrary\_2\_1.xsd">

<tlib-version>1.0</tlib-version>

<short-name>date</short-name>

<uri>/WEB-INF/tlds/Date</uri>

<tag>

<name>DateHandler</name>

<tag-class>EXP9.DateHandler</tag-class>

<body-content>empty</body-content>

</tag>

</taglib>

**header.tld**

<?xml version="1.0" encoding="UTF-8"?>

<taglib version="2.1" xmlns="http://java.sun.com/xml/ns/javaee" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-jsptaglibrary\_2\_1.xsd">

<tlib-version>1.0</tlib-version>

<short-name>header</short-name>

<uri>/WEB-INF/tlds/header</uri>

<tag>

<name>HeaderHandler</name>

<tag-class>EXP9.HeaderHandler</tag-class>

<body-content>JSP</body-content>

<attribute>

<name>align</name>

<rtexprvalue>true</rtexprvalue>

<type>java.lang.String</type>

</attribute>

<attribute>

<name>color</name>

<rtexprvalue>true</rtexprvalue>

<type>java.lang.String</type>

</attribute>

<attribute>

<name>font</name>

<rtexprvalue>true</rtexprvalue>

<type>java.lang.String</type>

</attribute>

<attribute>

<name>size</name>

<rtexprvalue>true</rtexprvalue>

<type>java.lang.String</type>

</attribute>

<attribute>

<name>border</name>

<rtexprvalue>true</rtexprvalue>

<type>java.lang.String</type>

</attribute>

<attribute>

<name>bgcolor</name>

<rtexprvalue>true</rtexprvalue>

<type>java.lang.String</type>

</attribute>

</tag>

</taglib>

**DateHandler.java**

package EXP9;

import java.util.Calendar;

import javax.servlet.jsp.JspWriter;

import javax.servlet.jsp.JspException;

import javax.servlet.jsp.tagext.JspFragment;

import javax.servlet.jsp.tagext.SimpleTagSupport;

public class DateHandler extends SimpleTagSupport {

@Override

public void doTag() throws JspException {

JspWriter out = getJspContext().getOut();

try {

out.print(Calendar.getInstance().getTime());

}

catch (java.io.IOException ex) {

throw new JspException("Error in DateHandler tag", ex);

}

}

}

**HeaderHandler.java**

package EXP9;

import java.io.IOException;

import javax.servlet.jsp.JspException;

import javax.servlet.jsp.JspWriter;

import javax.servlet.jsp.tagext.BodyContent;

import javax.servlet.jsp.tagext.BodyTagSupport;

public class HeaderHandler extends BodyTagSupport {

private String align;

private String color;

private String font;

private String size;

private String border;

private String bgcolor;

public HeaderHandler() {

super();

}

@Override

public int doStartTag() throws JspException {

if(bgcolor==null)

setBgcolor("white");

if(align==null)

setAlign("left");

if(font==null)

setFont("Arial");

if(color==null)

setColor("Black");

if(size==null)

setSize("5");

if(border==null)

setBorder("0");

String header="<table bgcolor=\'"+bgcolor+"\' border=\'"+border+"\' align=\'"+align+"\'>";

header += "<tr><td><font face=\'"+font+"\' color=\'"+color+"\' size=\'"+size+"\'>";

try{

pageContext.getOut().write(header);

}catch(IOException ioe){

ioe.printStackTrace();

}

return EVAL\_BODY\_INCLUDE;

}

@Override

public int doEndTag() throws JspException {

try{

pageContext.getOut().write("</font></td></tr></table>");

}catch(IOException ioe){

ioe.printStackTrace();

}

return EVAL\_PAGE;

}

public void setAlign(String align) {

this.align = align;

}

public void setColor(String color) {

this.color = color;

}

public void setFont(String font) {

this.font = font;

}

public void setSize(String size) {

this.size = size;

}

public void setBorder(String border) {

this.border = border;

}

public void setBgcolor(String bgcolor) {

this.bgcolor = bgcolor;

}

}

**date.jsp**

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

<%@ taglib uri="/WEB-INF/tlds/Date.tld" prefix="m" %>

<!DOCTYPE html>

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

<title>Date JSP Page</title>

</head>

<body>

Current Date and Time:- <m:DateHandler/>

</body>

</html>

**header.jsp**

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

<%@taglib prefix="header" uri="/WEB-INF/tlds/header.tld" %>

<!DOCTYPE html>

<html>

<head>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

<title>Header Tag Page</title>

</head>

<body>

<h1>Hello World!</h1>

<header:HeaderHandler align="left">

Header Tag with align.

</header:HeaderHandler>

<header:HeaderHandler color="black" bgcolor="gray">

Header Tag with color and bgcolor.

</header:HeaderHandler><br>

<header:HeaderHandler size="4" border="3" font="Arial">

Header Tag with border, size and font.

</header:HeaderHandler><br>

<header:HeaderHandler size="6" border="3" font="Arial" align="Left" bgcolor="powderblue" color="red">

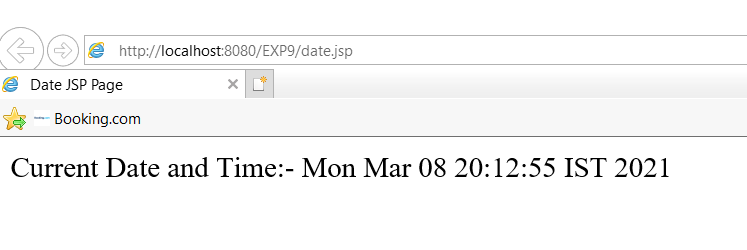
Header Tag with all parameter.

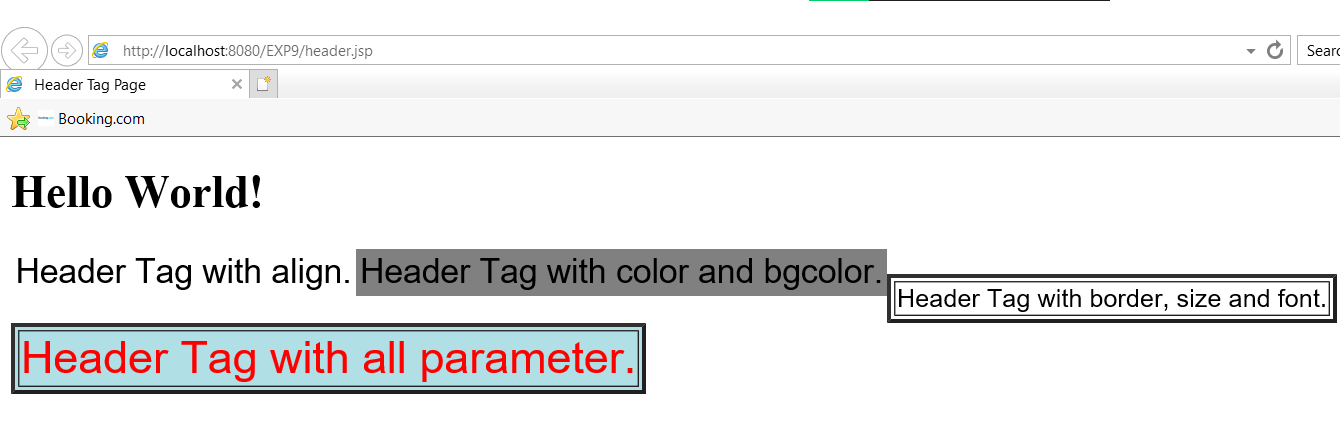
</header:HeaderHandler>

</body>

</html>

**Input/Output:**

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