# 实验三 JSP内置对象的应用

## 实验目的与要求

1. 理解并掌握JSP内置对象的主要应用技术。
2. 参考教材的有关内容与示例，按要求编写并调试相应的程序。

## 实验内容

参见教材P332～333实验3的实验内容之1～5。

## 实验代码

JSPController.java

package com.shf.mvc.controller;  
  
import org.springframework.stereotype.Controller;  
import org.springframework.ui.Model;  
import org.springframework.web.bind.annotation.PathVariable;  
import org.springframework.web.bind.annotation.RequestMapping;  
  
@Controller  
public class JSPController *{* @RequestMapping*(*"/counter"*)* public String Counter*(*Model model*){* return "Counter";  
 *}* @RequestMapping*(*"/register"*)* public String Register*(*Model model*){* return "register";  
 *}* @RequestMapping*(*"/registerMethods"*)* public String RegisterMethods*(){* return "registerMethods";  
 *}* @RequestMapping*(*"/times"*)* public String Times*(){* return "times";  
 *}* @RequestMapping*(*"/login"*)* public String Login*(){* return "login";  
 *}* @RequestMapping*(*"/loginMethods"*)* public String LoginMethods*(){* return "loginMethods";  
 *}* @RequestMapping*(*"/welcome"*)* public String Welcome*(){* return "welcome";  
 *}* @RequestMapping*(*"/error"*)* public String Error*(){* return "error";  
 *}* @RequestMapping*(*"/vote"*)* public String Vote*(){* return "vote";  
 *}* @RequestMapping*(*"/voteAdd/{id}"*)* public String VoteAdd*(*@PathVariable String id,Model model*){* System.*out*.println*(*id*)*;  
 model.addAttribute*(*"id",id*)*;  
 return "voteAdd";  
 *}  
}*

### 实验1

Register.jsp

*<%@* page contentType="text/html;charset=UTF-8" language="java" *%>  
<*html*>  
<*style*>* #container*{* width: 400px;  
 margin: 0 auto;  
 text-align: center;  
 line-height: 30px;  
 *}  
</*style*>  
<*head*>  
 <*title*>*Title*</*title*>  
</*head*>  
<*body*>  
<*div id="container"*>  
 <*h1*>*学生注册*</*h1*>  
 <*form action="registerMethods" method="post"*>* 学号： *<*input type="text" name="id"*> <*br*>* 密码： *<*input type="text" name="pwd"*><*br*>* 姓名： *<*input type="text" name="name"*><*br*>* 性别： *<*input type="text" name="sex"*><*br*>* 出生年月： *<*input type="date" name="birthday"*><*br*>* 兴趣爱好：  
 *<*input type="checkbox" name="reading" value="读书"*>* 读书  
 *<*input type="checkbox" name="exercise" value="运动"*>* 运动  
 *<*input type="checkbox" name="music" value="音乐"*>* 音乐  
 *<*input type="checkbox" name="art" value="美术"*>* 美术  
 *<*input type="checkbox" name="travel" value="旅游"*>* 旅游*<*br*>  
  
 <*input type="submit" value="提交"*>  
 <*input type="reset" value="重置"*>  
 </*form*>  
</*div*>  
  
</*body*>  
</*html*>*

registerMethods.jsp

*<%@* page contentType="text/html;charset=UTF-8" language="java" *%>  
<*html*>  
<*style*>* #container*{* width: 400px;  
 margin: 0 auto;  
 text-align: center;  
 line-height: 30px;  
 *}  
</*style*>  
<*head*>  
 <*title*>*Title*</*title*>  
</*head*>  
<*body*>*<%  
 request.setCharacterEncoding*(*"utf-8"*)*;  
 String id = request.getParameter*(*"id"*)*;  
 String pwd = request.getParameter*(*"pwd"*)*;  
 String name = request.getParameter*(*"name"*)*;  
 String sex = request.getParameter*(*"sex"*)*;  
 String birthday = request.getParameter*(*"birthday"*)*;  
 String reading = request.getParameter*(*"reading"*)*;  
 String exercise = request.getParameter*(*"exercise"*)*;  
 String music = request.getParameter*(*"music"*)*;  
 String art = request.getParameter*(*"art"*)*;  
 String travel = request.getParameter*(*"travel"*)*;  
%>  
*<*div id="container"*>  
 <*h1*>*注册信息*</*h1*>  
 <*form*>* 学号： *<*input type="text" name="id" value="<%=id%>"*> <*br*>* 密码： *<*input type="text" name="pwd" value="<%=pwd%>"*><*br*>* 姓名： *<*input type="text" name="name" value="<%=name%>"*><*br*>* 性别： *<*input type="text" name="sex" value="<%=sex%>"*><*br*>* 出生年月： *<*input type="date" name="birthday" value="<%=birthday%>"*><*br*>* 兴趣爱好: *<*textarea rows="10"*>* <%=reading!=null?reading:""%>  
 <%=exercise!=null?exercise:""%>  
 <%=music!=null?music:""%>  
 <%=art!=null?art:""%>  
 <%=travel!=null?travel:""%>  
 *</*textarea*>  
 </*form*>  
</*div*>  
  
</*body*>  
</*html*>*

### 实验二

Times.jsp

*<%@* page import="java.util.Date" *%><%--  
 Created by IntelliJ IDEA.  
 User: SHF  
 Date: 2021/10/14  
 Time: 8:45  
 To change this template use File | Settings | File Templates.  
--%>  
<%@* page contentType="text/html;charset=UTF-8" language="java" *%>  
<*html*>  
<*head*>  
 <*title*>*Title*</*title*>  
</*head*>  
<*body*>* <%  
 if*(*session.isNew*()){* application.setAttribute*(*"time",new Date*())*;  
 %>  
  
 *<*h1*>*欢迎新用户登录*</*h1*>  
 <*h3*>*现在的时间为：<%=new Date*()*%>*</*h3*>* <%  
 *}*else*{* %>  
  
 *<*h1*>*欢迎老顾客！*</*h1*>  
 <*h3*>*现在的时间为：<%=new Date*()*%>*</*h3*>  
 <*h3*>*你上次访问的时间为：<%=application.getAttribute*(*"time"*)*%>*</*h3*>* <%  
 *}* %>  
*</*body*>  
</*html*>*

### 实验三

Counter.jsp

*<%@* page contentType="text/html;charset=UTF-8" language="java" *%>  
<*html*>  
<*head*>  
 <*title*>*Title*</*title*>  
</*head*>  
<*body*>*<%  
 int n = 0;  
 String counter = *(*String*)* application.getAttribute*(*"counter"*)*;  
 if *(*counter != null*)* n = Integer.*parseInt(*counter*)*;  
 if *(*session.isNew*())* ++n;  
 counter = String.*valueOf(*n*)*;  
 application.setAttribute*(*"counter", counter*)*;  
%>  
*<*h1*>*您是第  
 <%=counter%>  
 个访问本站的用户。*</*h1*>  
</*body*>  
</*html*>*

### 实验四

Login.jsp

*<%@* page contentType="text/html;charset=UTF-8" language="java" *%>  
<*html*>  
<*head*>  
 <*title*>*Title*</*title*>  
</*head*>  
<*body*>  
<*form action="/loginMethods" method="post"*>* 用户名： *<*input type="text" name="username"*> <*br*>* 密码： *<*input type="password" name="password"*> <*br*>  
 <*input type="submit" value="提交"*>  
</*form*>  
</*body*>  
</*html*>*

loginMethods.jsp

*<%@* page contentType="text/html;charset=UTF-8" language="java" *%>  
<*html*>  
<*head*>  
 <*title*>*Title*</*title*>  
</*head*>  
<*body*>* <%  
 String username = request.getParameter*(*"username"*)*;  
 String password = request.getParameter*(*"password"*)*;  
 if *(*username.equals*(*"abc"*)*&&password.equals*(*"123"*)){* request.getRequestDispatcher*(*"/welcome"*)*.forward*(*request,response*)*;  
 session.setAttribute*(*"username",username*)*;  
 *}* else *{* request.getRequestDispatcher*(*"/error"*)*.forward*(*request,response*)*;  
 *}* %>  
*</*body*>  
</*html*>*

Welcome.jsp

*<%@* page contentType="text/html;charset=UTF-8" language="java" *%>  
<*html*>  
<*head*>  
 <*title*>*Title*</*title*>  
</*head*>  
<*body*>  
<*h1*>*您好，  
 <%  
 String username = *(*String*)* session.getAttribute*(*"username"*)*;  
 if *(*username==null*)* request.getRequestDispatcher*(*"/login"*)*.forward*(*request,response*)*;  
 %>  
 <%=username%>  
 欢迎进入我的的网站*</*h1*>  
</*body*>  
</*html*>*

Error.jsp

*<%@* page contentType="text/html;charset=UTF-8" language="java" *%>  
<*html*>  
<*head*>  
 <*title*>*Title*</*title*>  
</*head*>  
<*body*>  
<*h1*>*用户名或密码错误*</*h1*>  
</*body*>  
</*html*>*

### 实验五

Vote.jsp

*<%@* page import="java.util.Arrays" *%>  
<%@* page import="java.util.Date" *%><%--  
 Created by IntelliJ IDEA.  
 User: SHF  
 Date: 2021/10/14  
 Time: 9:27  
 To change this template use File | Settings | File Templates.  
--%>  
<%@* page contentType="text/html;charset=UTF-8" language="java" *%>  
<*html*>  
<*head*>  
 <*title*>*Title*</*title*>  
</*head*>  
<*body*>*<%  
 int asp=application.getAttribute*(*"asp"*)*!=null? *(*int*)* application.getAttribute*(*"asp"*)* :0;  
 int jsp=application.getAttribute*(*"jsp"*)*!=null? *(*int*)* application.getAttribute*(*"jsp"*)* :0;  
 int php=application.getAttribute*(*"php"*)*!=null? *(*int*)* application.getAttribute*(*"php"*)* :0;  
 int aspNet=application.getAttribute*(*"aspNet"*)*!=null? *(*int*)* application.getAttribute*(*"aspNet"*)* :0;  
 application.setAttribute*(*"asp",asp*)*;  
 application.setAttribute*(*"jsp",jsp*)*;  
 application.setAttribute*(*"php",php*)*;  
 application.setAttribute*(*"aspNet",aspNet*)*;  
  
 session.setMaxInactiveInterval*(*-1*)*;  
 if *(*session.isNew*()){* session.setAttribute*(*"flag","1"*)*;  
 *}* else *{* session.setAttribute*(*"flag","0"*)*;  
 *}*%>  
*<*h3*>*您喜欢哪种Web变成技术？只能投一票喔*</*h3*>  
<*table border="1"*>  
 <*tr*>  
 <*td*>*ASP*</*td*>  
 <*td*>*JSP*</*td*>  
 <*td*>*PHP*</*td*>  
 <*td*>*ASP.NET*</*td*>  
 </*tr*>  
 <*tr*>  
 <*td*>*得票数： *<*em*>*<%=application.getAttribute*(*"asp"*)*%>*</*em*></*td*>  
 <*td*>*得票数： *<*em*>*<%=application.getAttribute*(*"jsp"*)*%>*</*em*></*td*>  
 <*td*>*得票数： *<*em*>*<%=application.getAttribute*(*"php"*)*%>*</*em*></*td*>  
 <*td*>*得票数： *<*em*>*<%=application.getAttribute*(*"aspNet"*)*%>*</*em*></*td*>  
 </*tr*>  
 <*tr*>  
 <*td*><*a href="/voteAdd/asp"*>*投一票*</*a*></*td*>  
 <*td*><*a href="/voteAdd/jsp"*>*投一票*</*a*></*td*>  
 <*td*><*a href="/voteAdd/php"*>*投一票*</*a*></*td*>  
 <*td*><*a href="/voteAdd/aspNet"*>*投一票*</*a*></*td*>  
 </*tr*>  
</*table*>  
<*h1 style="color: red"*>*<%=session.getAttribute*(*"notice"*)*==null?"":session.getAttribute*(*"notice"*)*%>*</*h1*>  
</*body*>  
</*html*>*

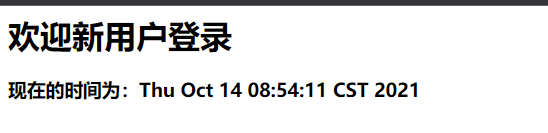
voteAdd.jsp

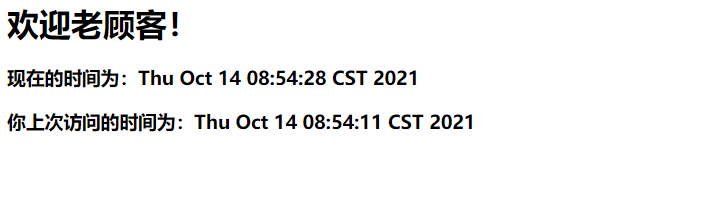
*<%@* page contentType="text/html;charset=UTF-8" language="java" *%>  
<*html*>  
<*head*>  
 <*title*>*Title*</*title*>  
</*head*>  
<*body*>*<%  
 int asp=application.getAttribute*(*"asp"*)*!=null? *(*int*)* application.getAttribute*(*"asp"*)* :0;  
 int jsp=application.getAttribute*(*"jsp"*)*!=null? *(*int*)* application.getAttribute*(*"jsp"*)* :0;  
 int php=application.getAttribute*(*"php"*)*!=null? *(*int*)* application.getAttribute*(*"php"*)* :0;  
 int aspNet=application.getAttribute*(*"aspNet"*)*!=null? *(*int*)* application.getAttribute*(*"aspNet"*)* :0;  
 String flag = *(*String*)* session.getAttribute*(*"flag"*)*;  
  
 if *(*flag=="1"*) {* String id = *(*String*)* request.getAttribute*(*"id"*)*;  
 System.*out*.println*(*id*)*;  
 if *(*"asp".equals*(*id*))* asp++;  
 if *(*"jsp".equals*(*id*))* jsp++;  
 if *(*"php".equals*(*id*))* php++;  
 if *(*"aspNet".equals*(*id*))* aspNet++;  
 *}* else *{* session.setAttribute*(*"notice","只能投一票喔"*)*;  
 *}* application.setAttribute*(*"asp",asp*)*;  
 application.setAttribute*(*"jsp",jsp*)*;  
 application.setAttribute*(*"php",php*)*;  
 application.setAttribute*(*"aspNet",aspNet*)*;  
  
 response.sendRedirect*(*"/vote"*)*;  
%>  
*</*body*>  
</*html*>*

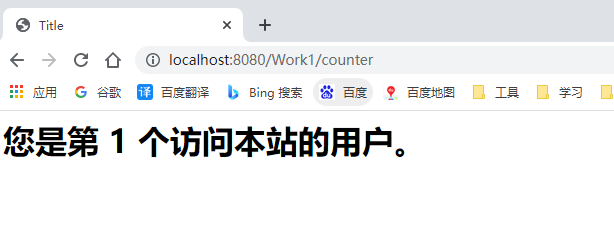
## 实验截图

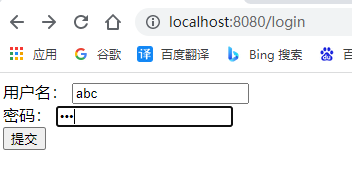




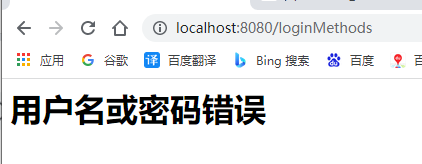


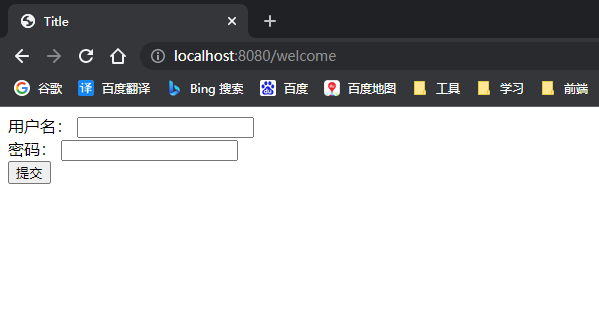




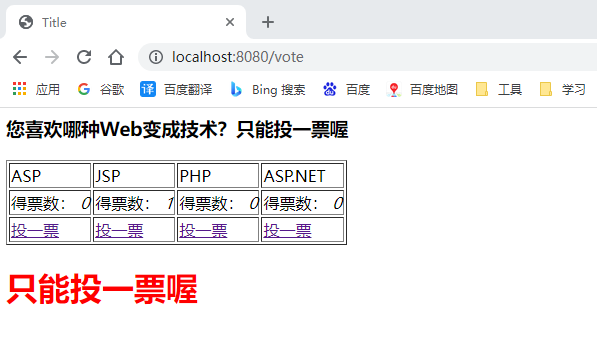












## 实验小结

通过本次实验我学会了JSP内置对象的使用方法。掌握request对象、response对象、session对象、application对象的使用方法，并能够根据JSP的各种内置对象进行基本web应用的开发。