**Java Web开发**

**实验四**

**作业报告**

|  |  |
| --- | --- |
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# 实验题目

1. 将实验三的三题进行改写，在Servlet控制器中获取信息，验证后根据具体情况跳转到对应页面，成功请求转发到成功页面，否则重定向跳转到失败页面（可将动态验证码添加在页面上）

* 登录页面，提交用户名、密码及身份

改写一：支持中文，确保两种表单提交方式（get、post）都支持中文，另外对程序的空对象情况进行处理。

改写二：比如登录页面除了之前的用户名、密码另外再加上所在专业（计算机、软件工程及网络工程，单选框或下拉列表框皆可），登录成功后根据身份进行跳转，进入对应的页面，页面需显示\*\*\*\*专业学号姓名。登录失败转向失败页面，并进行报错！

* 猜数页面，猜错猜对及输入不正确的情况分别处理，后台随机生成一个0-100的数，让用户猜。最多猜五次，每次猜完后要对用户提示“猜大了”或“猜小了”，如果相等，提示“猜对了，游戏结束！”

# 分析与设计

1、进一步熟练Servlet中的请求对象的使用；

2、学会在Servlet中两种自动跳转：请求转发和重定向；

3、学习使用请求对象上传文件、存储数据；

# 关键源码（部分）

login.jsp:

<%@ page language=*"java"* import=*"java.util.\*"* pageEncoding=*"utf-8"*%>

<%

String path = request.getContextPath();

String basePath = request.getScheme()+"://"+request.getServerName()+":"+request.getServerPort()+path+"/";

%>

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">

<html>

<head><title>登录页面</title></head>

<style type = *"text/css"*>

**body**{

background-image: *url()*;

}

</style>

<body>

<form action=*"ServletLogin"* method=*"post"* name=*"form"*>

<table width=*"432"* border=*"0"* cellspacing=*"10"*>

<tbody>

<tr>

<td align=*"center"* valign=*"left"*> 用户名：<input type=*"text"* name=*"username"*/><br/></td>

</tr>

<tr>

<td align=*"center"* valign=*"left"*> 密码：<input type=*"password"* name=*"userpassword"*/><br/></td>

</tr>

<tr>

<td align=*"center"* valign=*"left"*>专业:

<select name = *"major"* id = *"major"*>

<option value = *"计科"*>计科</option>

<option value = *"软件工程"*>软件工程</option>

<option value = *"网络工程"*>网络工程</option>

</select></td>

</tr>

<tr>

<td align=*"ce"* valign=*"left"*><input type=*"submit"* value=*"立即登录"*></td>

</tr>

</tbody>

</table>

</form>

</body>

</html>

success.jsp:

<%@ page language=*"java"* import=*"java.util.\*"* pageEncoding=*"utf-8"*%>

<%

String path = request.getContextPath();

String basePath = request.getScheme()+"://"+request.getServerName()+":"+request.getServerPort()+path+"/";

%>

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">

<html>

<head><title>登录成功页面</title></head>

<body>

<p align=*"center"*>登录成功<%=request.getAttribute("info1") %>

</p >

</body>

</html>

**Fail.jsp:**

<span style="font-family: *Calibri*; background-color: *rgb(255, 255, 255)*;"></span><pre name=*"code"* class=*"html"*><%@ page language=*"java"* import=*"java.util.\*"* pageEncoding=*"utf-8"*%>

<%

String path = request.getContextPath();

String basePath = request.getScheme()+"://"+request.getServerName()+":"+request.getServerPort()+path+"/";

%>

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">

<html>

<head><title>登录失败页面</title></head>

<body>

<p align=*"center"*>登录失败<%=request.getAttribute("info2") %>

<a href = *"login.jsp"*>请重新登录</a>

</p >

</body>

ServletLogin:

**package** cc.openhome;

**import** java.io.IOException;

**import** java.nio.charset.Charset;

**import** javax.servlet.ServletException;

**import** javax.servlet.annotation.WebServlet;

**import** javax.servlet.http.HttpServlet;

**import** javax.servlet.http.HttpServletRequest;

**import** javax.servlet.http.HttpServletResponse;

/\*\*

\* Servlet implementation class ServletLogin

\*/

@WebServlet(description = "MyLoginServlet", urlPatterns = { "/ServletLogin" })

**public** **class** ServletLogin **extends** HttpServlet {

**private** **static** **final** **long** ***serialVersionUID*** = 1L;

/\*\*

\* **@see** HttpServlet#HttpServlet()

\*

\*/

**public** ServletLogin() {

**super**();

// **TODO** Auto-generated constructor stub

}

/\*\*

\* **@see** Servlet#destroy()

\*/

**public** **void** destroy() {

// **TODO** Auto-generated method stub

}

/\*\*

\* **@see** HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

**protected** **void** doGet(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, IOException {

// **TODO** Auto-generated method stub

response.getWriter().append("Served at: ").append(request.getContextPath());

request.setCharacterEncoding("UTF-8");//支持中文

}

/\*\*

\* **@see** HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

\*/

**protected** **void** doPost(HttpServletRequest request, HttpServletResponse response) **throws** ServletException, IOException {

// **TODO** Auto-generated method stub

response.setContentType("text/html");

request.setCharacterEncoding("UTF-8");

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

String userPassword=request.getParameter("userpassword");

String info="";

**if**(("sunny".equals(userName))&& "04171427".equals(userPassword))

{

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

info=userName+" !"+ " 你的学号是："+"04171427 !"+" 你的专业是:"+ major;

request.setAttribute("info1", info);

request.getRequestDispatcher("/success.jsp")

.forward(request, response);//带请求的转发

}**else**{

response.sendRedirect("MyLogin/fail.jsp");//重定向

//request.getRequestDispatcher("/fail.jsp").forward(request, response);

}

doGet(request, response);

}

}

GuessYourNumber:  
package cc.openhpme;

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

import javax.servlet.http.HttpSession;

/\*\*

\* Servlet implementation class GuessYourNumber

\*/

@WebServlet("/GuessYourNumber")

public class GuessYourNumber extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public GuessYourNumber() {

super();

// TODO Auto-generated constructor stub

}

/\*\*

\* @see Servlet#destroy()

\*/

public void destroy() {

// TODO Auto-generated method stub

}

/\*\*

\* @see HttpServlet#service(HttpServletRequest request, HttpServletResponse response)

\*/

protected void service(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

// TODO Auto-generated method stub

}

/\*\*

\* @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)

\*/

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

// TODO Auto-generated method stub

response.getWriter().append("Served at: ").append(request.getContextPath());

}

/\*\*

\* @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse response)

\*/

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

request.setCharacterEncoding("UTF-8");

response.setContentType("text/html;charset = utf-8");

PrintWriter out = response.getWriter();

HttpSession session = request.getSession();//获取会话对象

int guessNumber = Integer.parseInt(request.getParameter("guessNumber"));//获取用户的猜测

Integer integer = (Integer) session.getAttribute("saveNumber");

int realNumber = integer.intValue();

System.out.println(realNumber);

System.out.println(guessNumber);

if(guessNumber > realNumber){

session.setAttribute("message", "大了");

out.println("猜大了");

response.sendRedirect("inputYourNumber.jsp");

}else if(guessNumber < realNumber){

session.setAttribute("message", "小了");

out.println("猜小了");

response.sendRedirect("inputYourNumber.jsp");

}else{

session.setAttribute("message", "你猜对了");

out.println("猜对了");

response.sendRedirect("inputYourNumber.jsp");

}

doGet(request, response);

}

}

getYourNumber.jsp:

<%@ page language=*"java"* import=*"java.util.\*"* pageEncoding=*"UTF-8"*%>

<%

String path = request.getContextPath();

String basePath = request.getScheme()+"://"+request.getServerName()+":"+request.getServerPort()+path+"/";

%>

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">

<html>

<head>

<base href=*"*<%=basePath%>*"*>

<title>用户输入数字</title>

</head>

<body>

<%

session.setAttribute("message", "请进行猜数");

**int** randomNumber = (**int**)(Math.random() \* 100 );//获取随机数字

session.setAttribute("saveNumber", **new** Integer(randomNumber));

%>

<p>刷新页面，重新获取

<br>单击猜数

<a href=*"inputNumber.jsp"*>猜数字</a>

</body>

</html>

inputNumber:

<%@ page language=*"java"* import=*"java.util.\*"* pageEncoding=*"UTF-8"*%>

<%

String path = request.getContextPath();

String basePath = request.getScheme()+"://"+request.getServerName()+":"+request.getServerPort()+path+"/";

%>

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">

<html>

<head>

<base href=*"*<%=basePath%>*"*>

<title>猜数字</title>

</head>

<body>

<%

String message = (String)session.getAttribute("message");

%>

<form action = *" GuessYourNumber"* method=*"post"* >

<input type = *"text"* name = *"guessNumber"* size = *9*>

<%=message %>

<input type = *"submit"* value = *"提交"*>

</form>

<form action=*"getYourNumber.jsp"* method=*"post"*>

<input type = *"submit"* value = *"刷新后的随机数字"*>

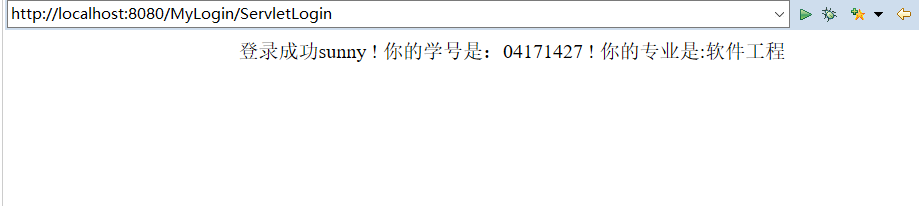
</form>

</body>

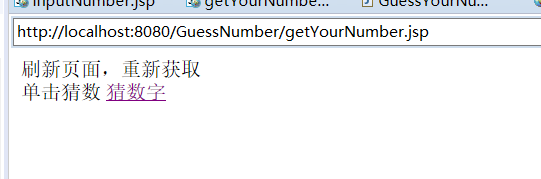
</html>

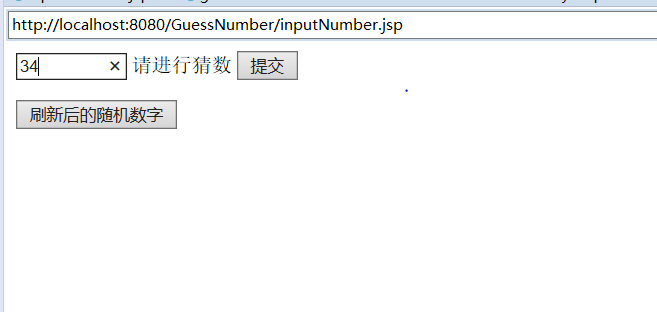
# 运行效果图











# 收获与问题

下载过程中遇见的问题挺多的，确实很麻烦好在成功解决；在程序实现过程中，遇到过很多次有问题的地方，该次实验还是很多地方不足，有待提升。