**Java Web开发**

**实验四**

**作业报告**

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| --- | --- |
| 学院 | 计算机 |
| 所在系班级 | 2017软件工程系11班 |
| 学号姓名 | 04172208姚华仕 |
| 指导教师 | 郭晓燕 |
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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）

1.1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！

1.2猜数功能，猜错猜对及输入不正确的情况分别处理

1.3注册功能、发帖功能等皆可

1. 文件上传（选做）

利用Servlet中的Part接口实现文件的上传（可附加在第1题）中。

# 分析与设计

第1.1题：用了LoginServlet.java,student.java,ValiStudent.java和success.jsp,fail.jsp,login.jsp

第1.2题：用了guess.jsp,GuessServlet.java

第2题：用了 UploadServlet.java,upload.jsp

# 关键源码（部分）

1.1题

**package** test;

**import** java.io.IOException;

**import** javax.servlet.ServletException;

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

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

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

**import** javax.servlet.annotation.\*;

@SuppressWarnings("serial")

@WebServlet("/login.do")

**public** **class** LoginServlet **extends** HttpServlet {

String success="/success.jsp";

String fail="/three/fail.jsp";

**public** **void** doPost(HttpServletRequest request,

HttpServletResponse response)

**throws** ServletException, IOException {

request.setCharacterEncoding("utf-8");

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

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

Student u=**new** Student();

u.setName(name);

u.setPwd(pwd);

request.setAttribute("user",u);

ValiStudent va=**new** ValiStudent(u);

**boolean** flag=va.validate();

**if** (flag){

request.getRequestDispatcher(success).

forward(request, response);

}**else**{

response.sendRedirect(fail);

}

}

**public** **void** doGet(HttpServletRequest request, HttpServletResponse response)

**throws** ServletException, IOException {

doPost(request,response);

}

}

**package** test;

**public** **class** Student {

**private** String name;

**private** String pwd;

**public** String getName() {

**return** name;

}

**public** **void** setName(String name) {

**this**.name = name;

}

**public** String getPwd() {

**return** pwd;

}

**public** **void** setPwd(String pwd) {

**this**.pwd = pwd;

}

}

**package** test;

**public** **class** ValiStudent {

**private** Student stu;

**public** ValiStudent(Student stu){

**this**.stu=stu;

}

**public** **boolean** validate(){

**boolean** flag=**false**;

**if** ((**null**!=stu.getName()) && !("".equals(stu.getName()))

&& (**null**!=stu.getPwd()) && (stu.getPwd().length()==6))

flag=**true**;

**return** flag;

}

}

<%@page contentType=*"text/html;charset=utf-8"*%><HTML>

<BODY bgcolor=*cyan*>

<FORM action=*"../three/login.do"* method=*post* name=*form*>

<Font size=*8*>

<BR>用户名:<INPUT type=*"text"*name=*"username"*>

<BR>学 号:<INPUT type=*"text"*name=*"id"*>

<BR>密 码:<INPUT type=*"password"*name=*"pwd"*>

<BR>所在专业:

<input type=*"checkbox"* name=*"major"* value=*"计算机"* >计算机

<input type=*"checkbox"* name=*"major"* value=*"软件工程"* >软件工程

<input type=*"checkbox"* name=*"major"* value=*"网络工程"* >网络工程

</BR>

<INPUT TYPE=*"hidden"* value=*"这是隐藏信息"* name=*"secret"*>

<p><INPUT TYPE=*"submit"* value=*"登录"* name=*"submit"*>

<INPUT TYPE=*"reset"* value=*"取消"* name=*"reset"*>

</FONT>

</FORM>

</BODY>

</HTML>

<%@page pageEncoding=*"utf-8"* %>

<html>

<head>

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

<title>登录成功</title>

</head>

<body><font size=*8* color=*red* > <% request.setCharacterEncoding("utf-8");

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

String yourID=request.getParameter("id");

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

out.println("<P> 你的姓名:"+yourName+"</P>");

out.println("<P> 你的学号:"+yourID+"</P>");

out.println("<P> 所在专业:"+yourmajor+"</P>");%>

<a href=*"login.jsp"*>登录成功,欢迎你！</a>

</font></body>

</html>

<%@page pageEncoding=*"utf-8"* %>

<html>

<head>

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

<title>注册失败</title>

</head>

<body><font size=*8* color=*red* >

<a href=*"login.jsp"*>用户名或密码错误，注册失败</a>

</font></body>

</html>

1.2题

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

<html>

<head>

<%@ page language=*"java"* contentType=*"text/html; charset=UTF-8"*

pageEncoding=*"UTF-8"*%>

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

<title>猜数字游戏</title>

</head>

<body>

<h1>猜数字游戏</h1>

<%-- <font color="black"><%=request.getAttribute("a") %></font> --%>

<font color=*"black"*>${requestScope.a}${count}</font>

<form action=*"*${pageContext.request.contextPath}*/GuessServlet"* method=*"post"*>

请输入一个0到100的数字：<input type=*"text"* name=*"b"*/><br/>

<input type=*"hidden"* name=*"times"* value=*"*${times}*"*/>

<input type=*"submit"* value=*"开始"*/>

</form>

</body>

</html>

**package** cc.test;

**import** java.io.IOException;

**import** java.net.URLDecoder;

**import** java.util.Random;

**import** javax.servlet.ServletException;

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

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

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

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

@SuppressWarnings("serial")

@WebServlet("/GuessServlet")

**public** **class** GuessServlet **extends** HttpServlet {

**public** GuessServlet() {

getnum(); }

**private** **int** num;//随机产生一个幸运数字

**public** **void** getnum(){

Random ran = **new** Random();

num = ran.nextInt(100); }

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

//1)接受用户输入的幸运数字

response.setContentType("text/html;charset=GB2312");

String guessnum = URLDecoder.*decode*(request.getParameter("b"),"utf-8");

//设置一个变量用于存储显示的结果共享到域对象中

String a = ""; //用于存储竞猜次数

**int** times = 0; //获取用户当前次数

String count = request.getParameter("times");

**if**(count!=**null** && !count.equals("")){

times = Integer.*parseInt*(count);

times++; }

**if**(guessnum!=**null** && !guessnum.equals("")){

**if**(times < 4){ // 因为接收的是字符串,所以要转型

**int** b = Integer.*parseInt*(guessnum); // 然后和num进行比较

**if** (b < num) { // 显示小了

a = "猜小了";

} **else** **if** (b > num) { // 显示大了

a = "猜大了";

} **else** { // 猜对了

a = "猜对了,游戏结束！"; //重新再生成答案

getnum();

times = -1;

}

}**else**{

a = "超过了5次机会，请重新再来"; //重新再生成答案

getnum();

times = -1;

} //把a存储到域对象中

request.setAttribute("a", a); //把次数返回给用户

request.setAttribute("count", "，重新再来，您还有"+(4-times)+"次机会");

request.setAttribute("times", times); //用request是因为他的范围小,注意,用request就必须用转发

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

}

}

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

doGet(request, response);

}

}

2题

**package** cc.openhome;

**import** java.io.\*;

**import** javax.servlet.ServletException;

**import** javax.servlet.annotation.MultipartConfig;

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

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

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

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

**import** javax.servlet.http.Part;

@SuppressWarnings("serial")

@MultipartConfig

@WebServlet("/upload.do")

**public** **class** UploadServlet **extends** HttpServlet {

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

request.setCharacterEncoding("utf-8");

Part part=request.getPart("photo");

String filename=getFilename(part);

writeTO(filename,part);

}

**private** String getFilename(Part part) {

String header=part.getHeader("Content-Disposition");

String filename=header.substring(header.indexOf("filename=\"")+38,header.lastIndexOf("\""));

**return** filename;

}

**private** **void** writeTO(String filename, Part part) **throws** IOException,FileNotFoundException {

InputStream in=part.getInputStream();

OutputStream out=**new** FileOutputStream("D:/workspace/"+filename);

**byte**[]buffer=**new** **byte**[1024];

**int** length=-1;

**while**((length=in.read(buffer))!=-1) {

out.write(buffer, 0, length);

}

in.close();

out.close();

}

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

doGet(request,response);

}

}

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

<html>

<head>

<%@ page language=*"java"* contentType=*"text/html; charset=UTF-8"*

pageEncoding=*"UTF-8"*%>

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

<title>文件上传</title>

</head>

<body>

<form action=*"upload.do"* method=*"post"*enctype=*"multipart/form-data"*>

上传照片：<input type=*"file"* name=*"photo"* /><br><br>

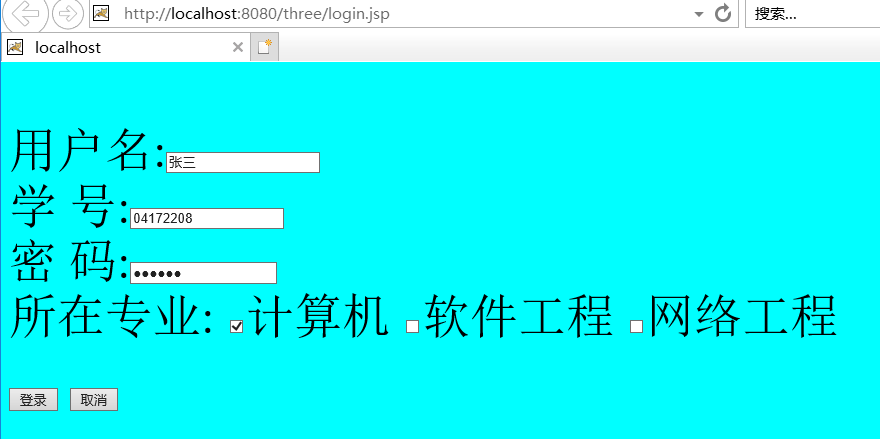
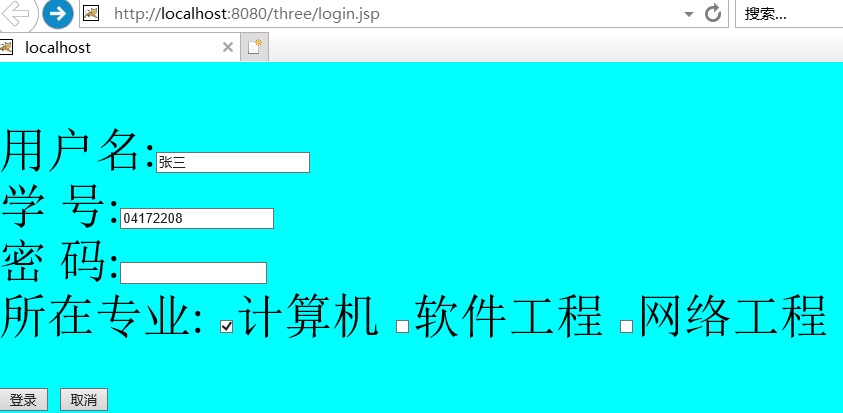
<input type=*"submit"* value=*"上传"* name=*"upload"* /></form>

</body>

</html>

# 运行效果图

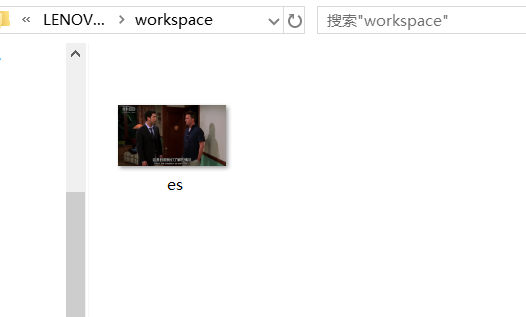
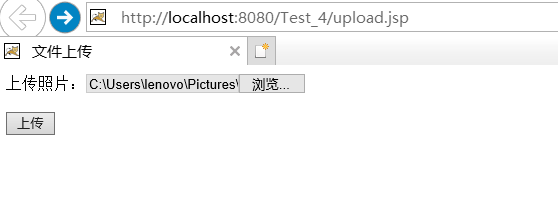
1.1

1.2



2.



# 收获与问题

对文件的上传有了一些了解