登录注册

一、项目要求：

1、使用HTML+CSS+JavaScript创建静态网页；

2、使用验证码进行登录验证；

3、使用servlet进行服务器端的事务处理；

4、使用servlet转发进行页面跳转；

5、使用Tomcat作为后台服务器。

二、项目实现

1、整体的功能介绍

本程序主要完成登录功能和注册功能。

登录界面对应的代码为login.html文件，login.css文件，后台控制代码为CheckCodeServlet文件，loginServlet文件，successServlet文件，failServlet文件。

注册界面对应的代码为regist.html文件，login.css文件，后台控制代码为registServlet文件，registsuccessServlet文件，registfailServlet文件。

1. 流程图

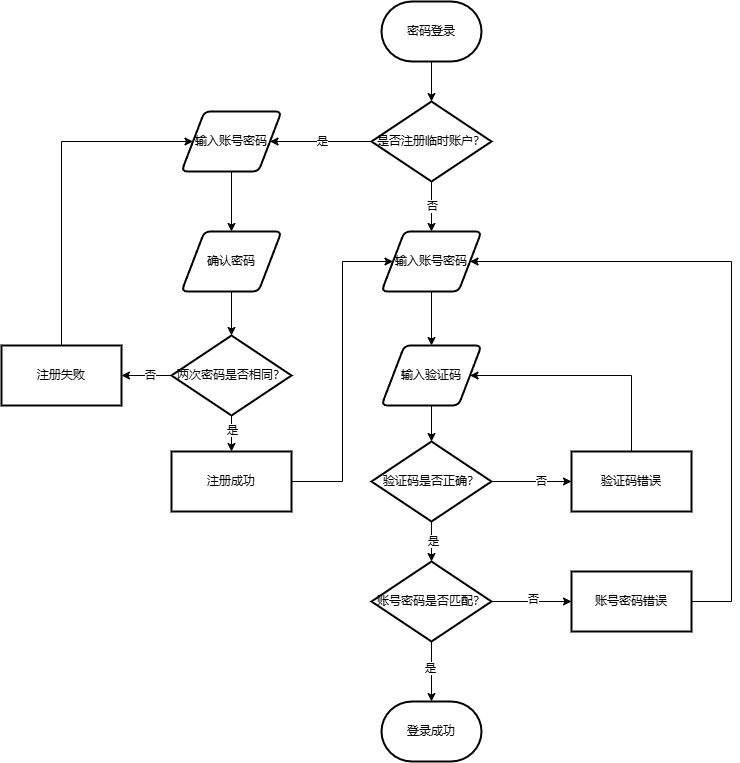


图1-1 流程图

3、具体的实现

（1）登录界面

对应的界面为：

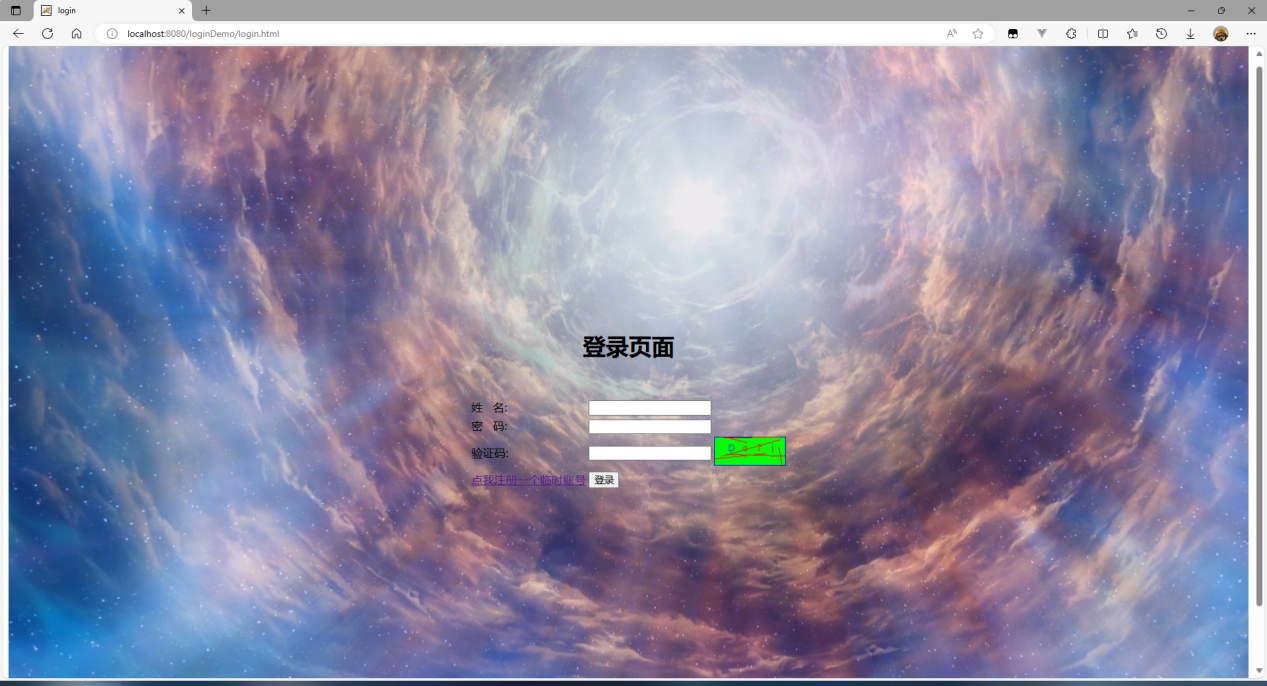


图2-1 登录界面login.html

界面代码login.html

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>login</title>

<link rel="stylesheet" type="text/css" href="css/login.css">

</head>

<body>

<div class="box">

<div class="title">

<h1>登录页面</h1>

</div>

<div class="login">

<form action="/loginDemo/loginServlet" method="post">

<table>

<tr>

<td class="left-title">姓&nbsp;&nbsp;&nbsp;名:</td>

<td colspan="2"><input type="text" class="input"

name="username"></td>

</tr>

<tr>

<td class="left-title">密&nbsp;&nbsp;&nbsp;码:</td>

<td colspan="2"><input type="password" class="input"

name="password"></td>

</tr>

<tr>

<td class="left-title">验证码:</td>

<td><input type="text" class="checkinput" name="checkcode"></td>

<td><img id="checkcode1" src="/loginDemo/CheckCodeServlet" /></td>

</tr>

<tr>

<td><a href="regist.html">点我注册一个临时账号</a></td>

<td><input type="submit" class="btn" value="登录"></td>

</tr>

</table>

</form>

</div>

</div>

</body>

</html>

后台代码为loginServlet.java：

package com.demo.zyh;

import java.io.IOException;

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;

@WebServlet("/loginServlet")

public class loginServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

request.setCharacterEncoding("utf-8");

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

String checkinput = request.getParameter("checkcode");

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

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

HttpSession session = request.getSession();

String checkcode\_session = (String) session.getAttribute("checkcode\_session");

Object uname = (String) session.getAttribute("uname");

String Suname = (String) uname;

Object pwd = (String) session.getAttribute("pwd");

String Spwd = (String) pwd;

String usernamelist[] = new String[] { "詹宇昊", "zyh", "ZhanYuHao", "JamesHao", "zhanyuhao", Suname };

String passwordlist[] = new String[] { "22023237", "22023237", "22023237", "22023237", "22023237", Spwd };

if (checkcode\_session.equalsIgnoreCase(checkinput)) {

if ((username == null || username.isEmpty()) || (password == null || password.isEmpty())) {

request.setAttribute("error\_massage", "用户名或密码不能为空！");

request.getRequestDispatcher("/failServlet").forward(request, response);

} else {

boolean isMatch = false;

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

if (username.equals(usernamelist[i]) && password.equals(passwordlist[i])) {

request.setAttribute("username", username);

request.getRequestDispatcher("/successServlet").forward(request, response);

isMatch = true;

break;

}

}

if (!isMatch) {

request.setAttribute("error\_massage", "用户名或密码输入错误！");

request.getRequestDispatcher("/failServlet").forward(request, response);

}

}

} else {

request.setAttribute("error\_massage", "验证码输入错误，请重新登录");

request.getRequestDispatcher("/failServlet").forward(request, response);

}

}

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

doGet(request, response);

}

}

登录成功界面：

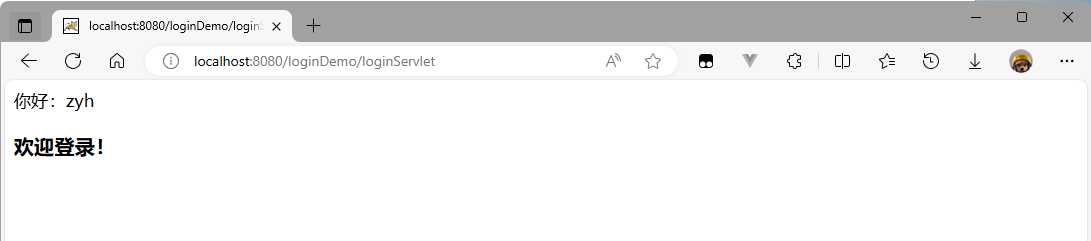


图2-2 登录成功界面successServlet

对应的代码为：

package com.demo.zyh;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/successServlet")

public class successServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

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

String username = (String) request.getAttribute("username");

response.getWriter().write("你好：" + username + "<h3>欢迎登录！</h3>");

}

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

doGet(request, response);

}

}

账号密码输入错误界面：

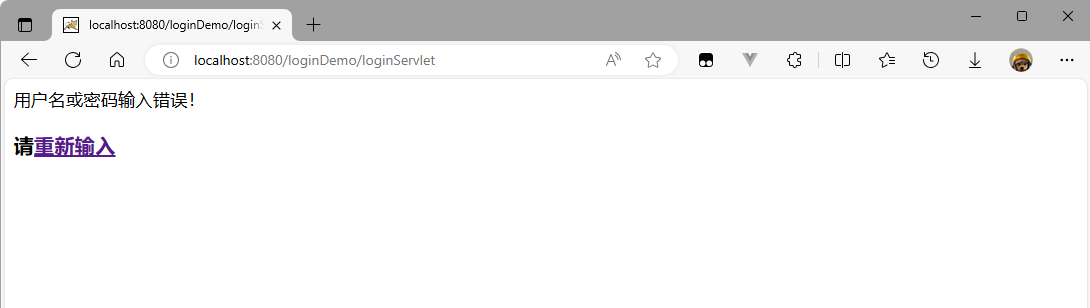


图2-3 账号密码输入错误界面failServlet

验证码输入错误界面：

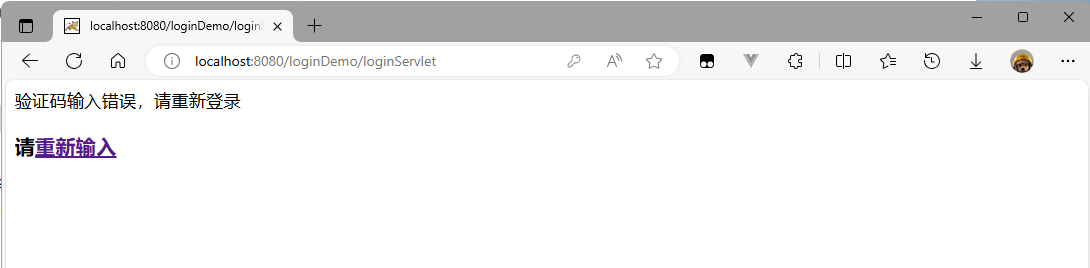


图2-4 验证码输入错误界面failServlet

对应的代码为：

package com.demo.zyh;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/failServlet")

public class failServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

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

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

String error\_massage = (String)request.getAttribute("error\_massage");

response.getWriter().write(error\_massage+"<h3>请<a href='/loginDemo/login.html'>重新输入</a></h3>");

}

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

doGet(request, response);

}

}

验证码后台代码：  
package com.demo.zyh;

import java.awt.Color;

import java.awt.Graphics;

import java.awt.image.BufferedImage;

import java.io.IOException;

import java.util.Random;

import javax.imageio.ImageIO;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/CheckCodeServlet")

public class CheckCodeServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

int width = 100;

int height = 40;

BufferedImage image = new BufferedImage(width, height, BufferedImage.TYPE\_INT\_RGB);

Graphics g = image.getGraphics();

g.setColor(Color.GREEN);

g.fillRect(0, 0, width, height);

g.setColor(Color.BLUE);

g.drawRect(0, 0, width - 1, height - 1);

String str = "ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz1234567890";

Random ran = new Random();

String str1 = "";

for (int i = 1; i <= 4; i++) {

int index = ran.nextInt(str.length());

char ch = str.charAt(index);

str1 = str1 + ch;

g.drawString(ch + "", width / 5 \* i, height / 2);

request.getSession().setAttribute("checkcode\_session", str1);

g.setColor(Color.RED);

}

for (int j = 0; j < 6; j++) {

int x1 = ran.nextInt(width);

int x2 = ran.nextInt(width);

int y1 = ran.nextInt(height);

int y2 = ran.nextInt(height);

g.drawLine(x1, y1, x2, y2);

}

ImageIO.write(image, "jpg", response.getOutputStream());

}

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

doGet(request, response);

}

}

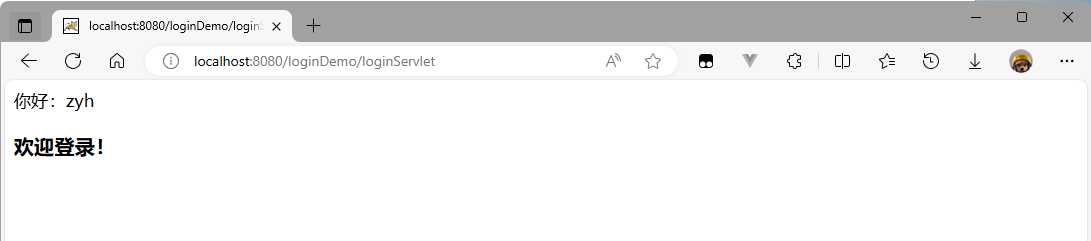
登录成功界面：  


图2-5 登录成功界面

对应的代码为：

package com.demo.zyh;

import java.io.IOException;

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;

@WebServlet("/registsuccessServlet")

public class registsuccessServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

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

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

HttpSession session = request.getSession();

Object uname = (String)session.getAttribute("uname");

response.getWriter().write(uname+"，注册成功!<h3>返回<a href=/loginDemo/login.html?username=uname>登录</a></h3>");

}

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

doGet(request, response);

}

}

（2）注册界面

对应的界面为：

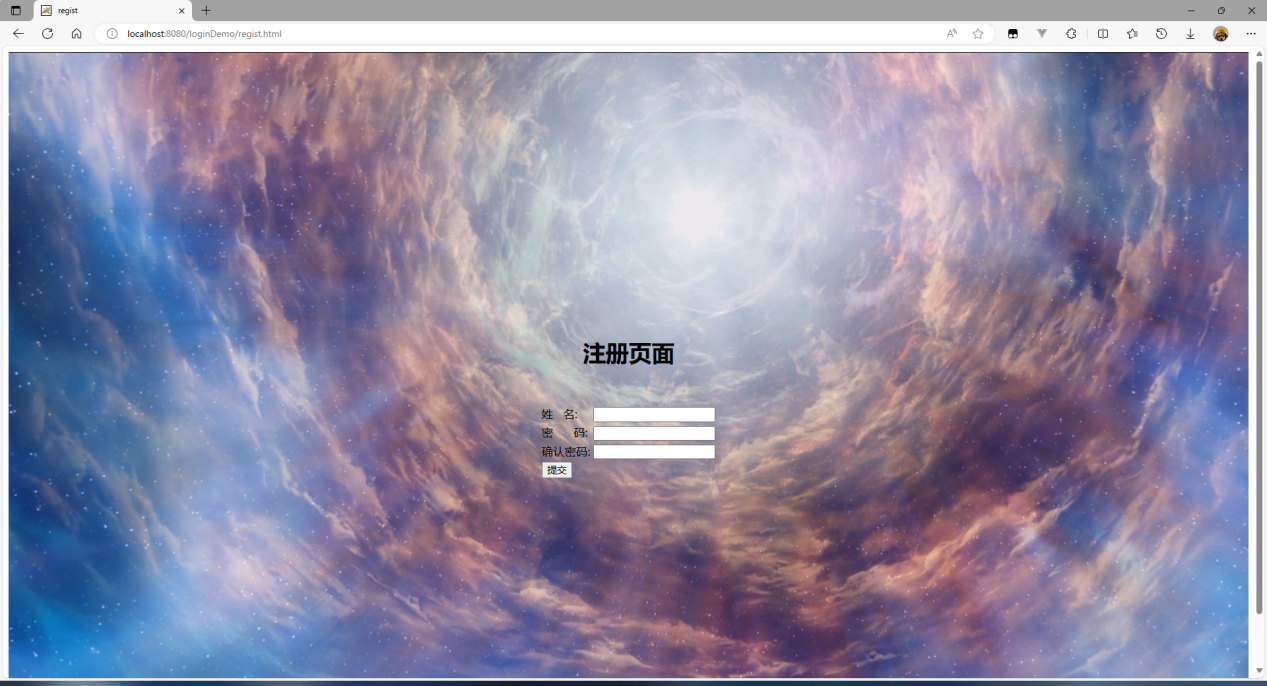


图3-1 注册界面regist.html

界面代码为：

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>regist</title>

<link rel="stylesheet" type="text/css" href="css/login.css">

</head>

<body>

<div class="box">

<div class="title">

<h1>注册页面</h1>

</div>

<div class="login">

<form action="/loginDemo/registServlet" method="post">

<table>

<tr>

<td class="left-title">姓&nbsp;&nbsp;&nbsp;名:</td>

<td><input type="text" class="input" name="username"></td>

</tr>

<tr>

<td class="left-title">密&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;码:</td>

<td><input type="password" class="input" name="password1"></td>

</tr>

<tr>

<td class="left-title">确认密码:</td>

<td><input type="password" class="input" name="password2"></td>

</tr>

<tr>

<td><input type="submit" class="btn" value="提交"></td>

</tr>

</table>

</form>

</div>

</div>

</body>

</html>

后台代码为：

package com.demo.zyh;

import java.io.IOException;

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;

@WebServlet("/registServlet")

public class registServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

request.setCharacterEncoding("utf-8");

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

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

String password1 = request.getParameter("password1");

String password2 = request.getParameter("password2");

HttpSession session = request.getSession();

session.setAttribute("uname", username);

session.setAttribute("pwd", password1);

if (password1 != null && password2 != null && username != null) {

if (password1.equals(password2)) {

request.setAttribute("uname", username);

request.setAttribute("pwd", password1);

request.getRequestDispatcher("/registsuccessServlet").forward(request, response);

}else {

request.getRequestDispatcher("/registfailServlet").forward(request, response);

}

} else {

request.getRequestDispatcher("/registfailServlet").forward(request, response);

}

}

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

doGet(request, response);

}

}

注册失败界面：

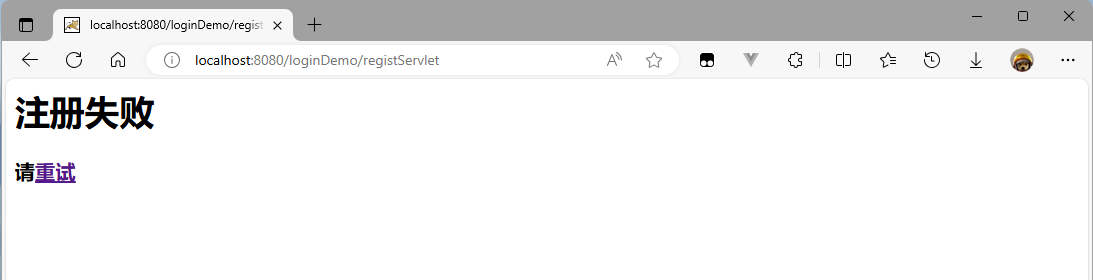


图3-2 注册失败界面

对应的代码为：

package com.demo.zyh;

import java.io.IOException;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/registfailServlet")

public class registfailServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

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

response.getWriter().write("<h1>注册失败</h1><h3>请<a href='/loginDemo/regist.html'>重试</a></h3>");

}

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

doGet(request, response);

}

}

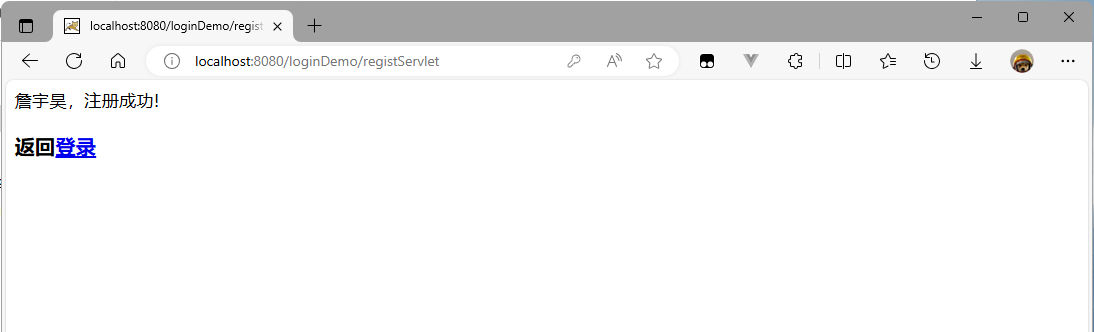
注册成功界面：  


图3-3 注册成功界面

对应的代码为：

package com.demo.zyh;

import java.io.IOException;

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;

@WebServlet("/registsuccessServlet")

public class registsuccessServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

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

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

HttpSession session = request.getSession();

Object uname = (String)session.getAttribute("uname");

response.getWriter().write(uname+"，注册成功!<h3>返回<a href=/loginDemo/login.html?username=uname>登录</a></h3>");

}

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

doGet(request, response);

}

}