**Java Web开发**

**实验二**

**作业报告**

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| --- | --- |
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| 完 成 时 间 | 2019年3月9日 |

# 实验题目

1. 新建项目，练习教材上相关例子Hello.java文件，P29。并练习如何在Tomcat服务器上发布该文件
2. HelloServlet文件内容



1. 请分别用注释法和文件配置法（web.xml）来完成对HelloServlet文件的发布。

注释法访问的地址是 <http://127.0.0.1:8080/项目工程名/test2/hello.view>（请注意要根据题目要求修改代码中的注释内容）

文件配置法的地址是<http://127.0.0.1:8080/项目工程名/test2/hello.do>

1. 请编写WelcomeYou.java文件，代码内容如下图，



* 1. 图中第25行是何意思？
  2. 编写好之后请用如下两个地址来分别访问该文件：

http://127.0.0.1:8080/项目工程名/test2/welcome?user=‘李华’

http://127.0.0.1:8080/项目工程名/test2/welcome?user=‘Lihua’

记录下浏览器的显示内容，并分析其原因。

1. 新建项目，练习教材上相关例子P39
2. 请编写程序，完成以下功能：
3. 一个邮箱注册表单register.html文件，具体见图。
4. 自行编写两个html文件，一个success.jsp成功页面，一个fail.jsp失败页面。
5. 点击注册按钮后，跳转到成功页面success.jsp。
6. 尝试：能否在成功页面显示该用户的昵称，邮箱名称？比如“开心，恭喜你！你的happyToday@163.com”
7. 注意注册页面的表单应当提交什么请求方式
8. 如果下一步，我还希望能把失败页面加上去，怎么办？

# 分析与设计

实验要求用到注释法和文件部署法；

通过不同方式访问地址

进行一个表单的注册

# 关键源码（部分）

注释法：

package cc.openhome;

import java.io.IOException;

import java.io.PrintWriter;

import javax.servlet.ServletConfig;

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 Hello

\*/

@WebServlet(name = "HelloServlet",description = "HelloServlet", urlPatterns = {"/hello.view"}, loadOnStartup = 1 )

public class Hello extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public Hello() {

super();

// TODO Auto-generated constructor stub

}

/\*\*

\* @see Servlet#init(ServletConfig)

\*/

public void init(ServletConfig config) throws ServletException {

// TODO Auto-generated method stub

super.init(config);

System.out.println("servletname:");

}

/\*\*

\* @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());

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

PrintWriter out = response.getWriter();

out.append("Hello Servlet! <br>");

out.append("servletname: " + getServletName() + "<br>");

out.println("<html><body>");

out.println("<h1>Hello!<br><br>hello,welcome to you</br></br></h1>");

out.println("</body></html>");

}

/\*\*

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

\*/

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

// TODO Auto-generated method stub

doGet(request, response);

}

}

文件部署法：

package cc.openhome;

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;

/\*\*

\* Servlet implementation class HelloServlet

\*/

@WebServlet("/HelloServlet")

public class HelloServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public HelloServlet() {

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());

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

PrintWriter out = response.getWriter();

out.append("Hello Servlet! <br>");

out.append("servletname: " + getServletName() + "<br>");

out.println("<html><body>");

out.println("<h2>Hello!!!!<br><br>hello,welcome to you</br></br></h2>");

out.println("</body></html>");

}

/\*\*

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

\*/

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

// TODO Auto-generated method stub

doGet(request, response);

}

} package cc.openhome;

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;

/\*\*

\* Servlet implementation class HelloServlet

\*/

@WebServlet("/HelloServlet")

public class HelloServlet extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public HelloServlet() {

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());

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

PrintWriter out = response.getWriter();

out.append("Hello Servlet! <br>");

out.append("servletname: " + getServletName() + "<br>");

out.println("<html><body>");

out.println("<h2>Hello!!!!<br><br>hello,welcome to you</br></br></h2>");

out.println("</body></html>");

}

/\*\*

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

\*/

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

// TODO Auto-generated method stub

doGet(request, response);

}

}

Web.xml:

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

<web-app xmlns:xsi=*"http://www.w3.org/2001/XMLSchema-instance"* xmlns=*"http://java.sun.com/xml/ns/javaee"* xsi:schemaLocation=*"http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-app\_3\_0.xsd"* id=*"WebApp\_ID"* version=*"3.0"*>

<servlet>

<servlet-name>HelloServlet</servlet-name>

<servlet-class>cc.openhome.HelloServlet</servlet-class>

<load-on-startup>1</load-on-startup>

</servlet>

<servlet-mapping>

<servlet-name>HelloServlet</servlet-name>

<url-pattern>/hello.do</url-pattern>

</servlet-mapping>

<display-name>Web</display-name>

<welcome-file-list>

<welcome-file>index.html</welcome-file>

<welcome-file>index.htm</welcome-file>

<welcome-file>index.jsp</welcome-file>

<welcome-file>default.html</welcome-file>

<welcome-file>default.htm</welcome-file>

<welcome-file>default.jsp</welcome-file>

</welcome-file-list>

</web-app>

WelcomeYou.java:

**package** cc.openhome;

**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;

/\*\*

\* Servlet implementation class WelcomeYou

\*/

@WebServlet("/welcome")

**public** **class** WelcomeYou **extends** HttpServlet {

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

/\*\*

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

\*/

**public** WelcomeYou() {

**super**();

// **TODO** Auto-generated constructor 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());

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

String welcomeInfo = "Welcome you "+ user +"同学！";

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

PrintWriter out = response.getWriter();

out.println("<html>");

out.println("<head><title>欢迎页面</title></head>");

out.println("<body>");

out.println(welcomeInfo);

out.println("</body>");

out.println("</html>");

out.flush();

out.close();

}

/\*\*

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

\*/

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

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

doGet(request, response);

}

}

PathServlet:

**package** cc.openhome;

**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;

/\*\*

\* Servlet implementation class PathServlet

\*/

@WebServlet(description = "MyServlet", urlPatterns = { "/servlet/\*" })

**public** **class** PathServlet **extends** HttpServlet {

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

/\*\*

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

\*/

**public** PathServlet() {

**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());

PrintWriter out = response.getWriter();

out.println("<html>");

out.println("<head>");

out.println("<title>Servlet Pattren</title>");

out.println("</head>");

out.println("<body>");

out.println(request.getRequestURI() + "<br>");

out.println(request.getContextPath() + "<br>");

out.println(request.getServletPath() + "<br>");

out.println(request.getPathInfo());

out.println("</body>");

out.println("</html>");

out.close();

}

/\*\*

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

\*/

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

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

doGet(request, response);

}

}

Register:

**package** cc.openhome;

**import** java.io.BufferedWriter;

**import** java.io.File;

**import** java.io.FileWriter;

**import** java.io.IOException;

**import** java.util.ArrayList;

**import** java.util.List;

**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.swing.text.html.HTMLDocument.HTMLReader.IsindexAction;

/\*\*

\* Servlet implementation class Register

\*/

@WebServlet("/Register.do")

**public** **class** Register **extends** HttpServlet {

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

**private** **static** **final** String ***ERROR\_VIEW*** = "fail.view";

**private** **static** **final** String ***SUCCESS\_VIEW*** = "success.view";

**private** **static** **final** String ***USERS*** ="zhansunny@163.com" ;

/\*\*

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

\*/

**public** Register() {

**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());

response.setContentType("text/html");

response.setCharacterEncoding("UTF-8");

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

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

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

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

List<String> errors = **new** ArrayList<String>();

**if**(isInvalidEmail(email)){

errors.add("未填写");

}

**if**(isInvalidUsername(username)){

errors.add("用户名为空");

}

**if**(isInvalidPassword(password,confirmedPasswd)){

errors.add("请确认密码符合格式");

}

String resultPage= ***ERROR\_VIEW***;

**if**(!errors.isEmpty()){

request.setAttribute("errors", errors);

}**else**{

resultPage = ***SUCCESS\_VIEW***;

creatUserData(email,username,password);

}

request.getRequestDispatcher(resultPage).forward(request, response);

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

}

**private** **void** creatUserData(String email, String username, String password) **throws** IOException {

File userhome = **new** File(***USERS*** + "/" + username);

userhome.mkdir();

BufferedWriter writer = **new** BufferedWriter(**new** FileWriter(userhome + "/profile"));

writer.write(email + "/t" + password);

writer.close();

}

**private** **boolean** isInvalidPassword(String password, String confirmedPasswd) {

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

**return** **false**;

}

**private** **boolean** isInvalidUsername(String username) {

**for** (String file : **new** File (***USERS***).list()){

**if**(file.equals(username)){

**return** **true**;

}

}

**return** **false**;

}

**private** **boolean** isInvalidEmail(String email) {

**return** **false**;

}

/\*\*

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

\*/

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

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

doGet(request, response);

}

}

Error:

package cc.openhome;

import java.io.IOException;

import java.io.PrintWriter;

import java.util.List;

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 Fail

\*/

@WebServlet("/error.view")

public class Error extends HttpServlet {

private static final long serialVersionUID = 1L;

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public Error() {

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());

}

/\*\*

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

\*/

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

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

PrintWriter out = response.getWriter();

out.println("<html>");

out.println("<head>");

out.println("<meta content='text/html; charset=UTF-8'>");

List<String> errors = (List<String>) request.getAttribute("errors");

out.println("<body>");

out.println("</ul>");

out.println("<a href = 'register.html'>返回注册页面</a>");

out.println("</body>");

out.println("</html>");

doGet(request, response);

}

}

Success:

**package** cc.openhome;

**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;

/\*\*

\* Servlet implementation class Success

\*/

@WebServlet("/success.view")

**public** **class** Success **extends** HttpServlet {

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

/\*\*

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

\*/

**public** Success() {

**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());

}

/\*\*

\* **@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;charset = utf-8");

PrintWriter out = response.getWriter();

out.println("<html>");

out.println("<body>");

out.println("<h1>" + request.getParameter(("username") + "注册成功</h1>"));

out.println("<a href = 'index.html'> 回首页登录</a>");

out.println("</body>");

out.println("</html>");

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

doGet(request, response);

}

}

Index.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>

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

<title>Insert title here</title>

</head>

<body>

注册成功

</body>

</html>

Register.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>

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

<title>Insert title here</title>

</head>

<body>

注册页面

<br>

<%

//销毁session

session.invalidate();

%>

<form action=*"Register"* method = *"get"*>

邮箱账户：<input type=*"text"*name = *"username"*><br>

密码：<input type=*"password"*name = *"password"*><br>

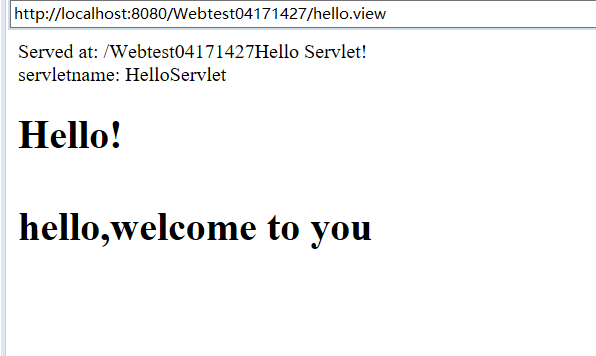
<input type=*"submit"* value=*"注册"*>

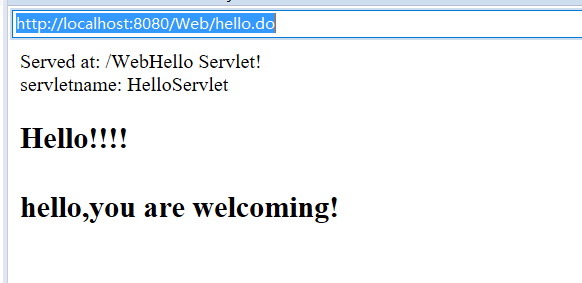
</form>

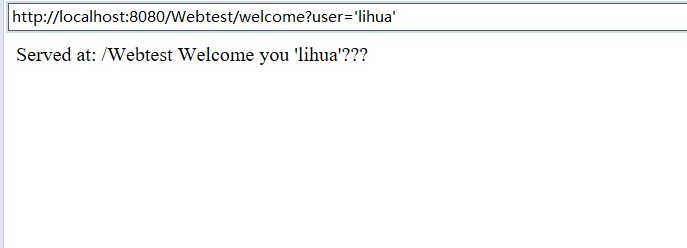
</body>

</html>

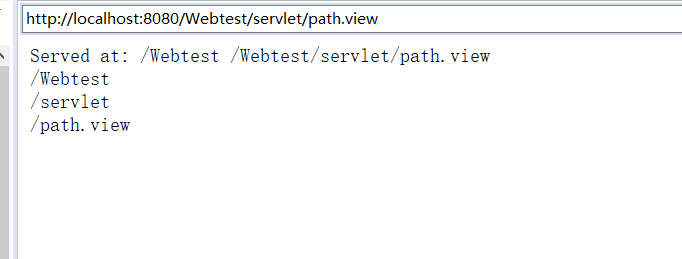
# 运行效果图

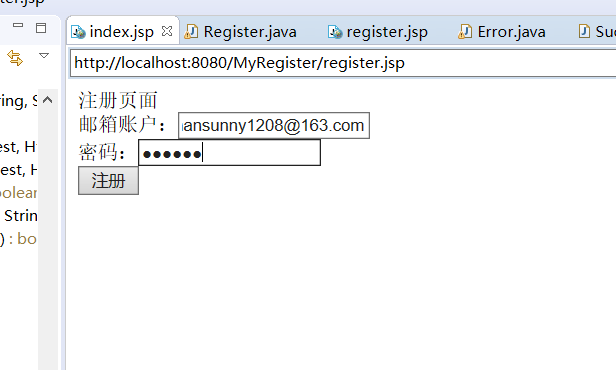












# 收获与问题

相关注释法与文件部署法搞得差不多清楚了，但是对于表单注册登录这部分，还没有弄得那么透彻，希望自己继续进步。