### Java 验证码



### 1、servlet上画图片：

**public** **class** UserCheckServlet **extends** HttpServlet {

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

**throws** ServletException, IOException {

**this**.doPost(request, response);

}

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

**throws** ServletException, IOException {

// 验证码图片的宽度。

**int** width = 70;

// 验证码图片的高度。

**int** height = 30;

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

Graphics2D g = buffImg.createGraphics();

// 创建一个随机数生成器类。

Random random = **new** Random();

// 设定图像背景色(因为是做背景，所以偏淡)

g.setColor(getRandColor(200,250));

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

// 创建字体，字体的大小应该根据图片的高度来定。

Font font = **new** Font("Times New Roman", Font.*HANGING\_BASELINE*, 28);

// 设置字体。

g.setFont(font);

// 画边框。

g.setColor(Color.*BLACK*);

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

// 随机产生155条干扰线，使图象中的认证码不易被其它程序探测到。

//g.setColor(Color.GRAY);

g.setColor(getRandColor(160,200));

**for** (**int** i = 0; i < 155; i++) {

**int** x = random.nextInt(width);

**int** y = random.nextInt(height);

**int** xl = random.nextInt(12);

**int** yl = random.nextInt(12);

g.drawLine(x, y, x + xl, y + yl);

}

// randomCode用于保存随机产生的验证码，以便用户登录后进行验证。

StringBuffer randomCode = **new** StringBuffer();

// 设置默认生成4个验证码

**int** length = 4;

// 设置备选验证码:包括"a-z"和数字"0-9"

String base = "abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789";

**int** size = base.length();

// 随机产生4位数字的验证码。

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

// 得到随机产生的验证码数字。

**int** start = random.nextInt(size);

String strRand = base.substring(start, start + 1);

// 用随机产生的颜色将验证码绘制到图像中。

// 生成随机颜色(因为是做前景，所以偏深)

//g.setColor(getRandColor(1, 100));

//调用函数出来的颜色相同，可能是因为种子太接近，所以只能直接生成

g.setColor(**new** Color(20+random.nextInt(110),20+random.nextInt(110),20+random.nextInt(110)));

g.drawString(strRand, 15 \* i + 6, 24);

// 将产生的四个随机数组合在一起。

randomCode.append(strRand);

}

// 将四位数字的验证码保存到Session中。

HttpSession session = request.getSession();

session.setAttribute("rand", randomCode.toString());

//图象生效

g.dispose();

// 禁止图像缓存。

response.setHeader("Pragma", "no-cache");

response.setHeader("Cache-Control", "no-cache");

response.setDateHeader("Expires", 0);

response.setContentType("image/jpeg");

// 将图像输出到Servlet输出流中。

ServletOutputStream sos = response.getOutputStream();

ImageIO.*write*(buffImg, "jpeg", sos);

sos.flush();

sos.close();

}

Color getRandColor(**int** fc, **int** bc) {// 给定范围获得随机颜色

Random random = **new** Random();

**if** (fc > 255)

fc = 255;

**if** (bc > 255)

bc = 255;

**int** r = fc + random.nextInt(bc - fc);

**int** g = fc + random.nextInt(bc - fc);

**int** b = fc + random.nextInt(bc - fc);

**return** **new** Color(r, g, b);

}

}

### 2、Js/js文件：

**function** $(id){

**return** document.getElementById(id);

}

/\*\*刷新iframe\*\*/

**function** refreshCode(){

window.frames["codeFrame"].location.reload();

}

### 3、jsp

<iframe src=*"userCheck.do"* id=*"codeFrame"* name=*"codeFrame"* frameborder=*"no"* border=*"0"* height=*"35"* width=*"102"*></iframe>

<a href=*"javascript:void(0);"* onclick="refreshCode();">看不清，换一张</a>

### 2.获取其中验证码

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

String validateC = (String)request.getSession().getAttribute("rand");

String veryCode = request.getParameter("checkCode");

PrintWriter out = response.getWriter();

**if** (veryCode == **null** || "".equals(veryCode)) {

out.print("<script language='javascript'>");

out.println("alert('验证码为空')");

out.print("</script>");

} **else** {

**if** (validateC.compareToIgnoreCase(veryCode) == 0) {

out.print("<script language='javascript'>");

out.println("alert('验证码正确')");

out.print("</script>");

} **else** {

out.print("<script language='javascript'>");

out.println("alert('验证码错误')");

out.print("</script>");

}

}

out.flush();

out.close();

#### 1. 新建.提交到servlet页面

String path = **null**;

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

**throws** ServletException, IOException {

**this**.doPost(request, response);

}

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

String validateC = (String)request.getSession().getAttribute("rand");

String veryCode = request.getParameter("checkCode");

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

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

**if** (veryCode == **null** || "".equals(veryCode)) {

request.setAttribute("user", "验证码为空");

path="./index.jsp";

} **else** {

**if** (validateC.compareToIgnoreCase(veryCode) == 0) {

**try**{

UserDao.*login*(username, password);

request.setAttribute("user", "登录成功");

path = "./user.jsp";

}**catch**(UsernameNotFoundException e) {

request.setAttribute("user", "用户名错误");

path="./index.jsp";

}**catch**(PasswordNotFoundException e) {

request.setAttribute("user", "密码错误");

path="./index.jsp";

}

} **else** {

request.setAttribute("user", "验证码错误");

path="./index.jsp";

}

} request.getRequestDispatcher(path).forward(request, response); }

#### Index.Jsp页面

<form action=*"./addUser.do"* method=*"post"*>

用户名 :<input type=*"text"* name=*"username"*><br>

&nbsp;&nbsp;密码：<input type=*"text"* name=*"password"*><br>

验证码：<input type=*"text"* name=*"checkCode"*><iframe src=*"userCheck.do"* id=*"codeFrame"* name=*"codeFrame"* frameborder=*"no"* border=*"0"* height=*"35"* width=*"102"*></iframe>

<a href=*"javascript:void(0);"* onclick="refreshCode();">看不清，换一张</a> <input type=*"submit"* name=*"submit"* value=*"提交"*>

</form>