3.18日作业

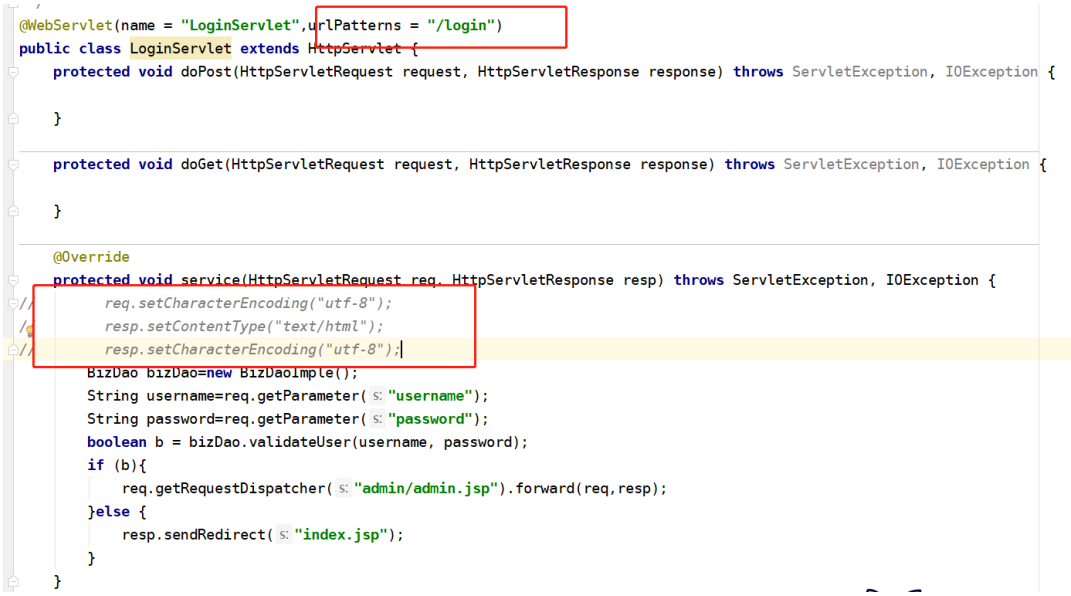
作业1：用过滤器设置新闻发布系统的编码

思路

1. 代码重构,将之前的每个servlet中设置编码的代码删除，做测试
2. 然后新建一个过滤器(MyFilter)
3. 在过滤器中设置请求和响应的编码格式
4. 最后运行项目，看测试结果

具体实现

1. 首先先跑一下我们的项目看有没有出现乱码问题
2. 然后先随便注释一下一个servlet的设置编码的代码



```
@WebServlet(name = "LoginServlet",urlPatterns = "/login")
public class LoginServlet extends HttpServlet {
    protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

    }

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

    }

    @Override
    protected void service(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
//        req.setCharacterEncoding("utf-8");
//        resp.setContentType("text/html");
//        resp.setCharacterEncoding("utf-8");
        BizDao bizDao=new BizDaoImple();
        String username=req.getParameter( s: "username");
        String password=req.getParameter( s: "password");
        boolean b = bizDao.validateUser(username, password);
        if (b){
            req.getRequestDispatcher( s: "admin/admin.jsp").forward(req,resp);
        }else {
            resp.sendRedirect( s: "index.jsp");
        }
    }
```

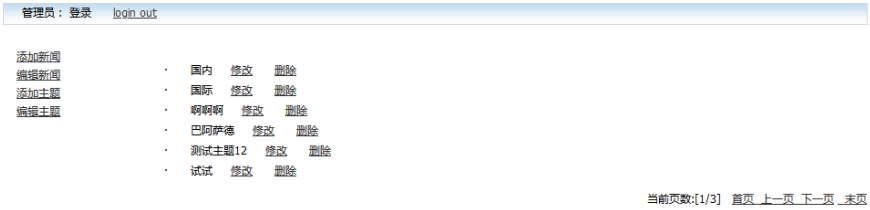
3. 然后新建一个过滤器Filter
4. 在Filter的doFilter方法中编写如下代码

```
 public void doFilter(ServletRequest req, ServletResponse resp, FilterChain chain) throws ServletException, IOException {
        HttpServletRequest httpServletRequest=(HttpServletRequest) req;
        HttpServletResponse HttpServletResponse=(HttpServletResponse) resp;
        httpServletRequest.setCharacterEncoding("utf-8");
        HttpServletResponse.setCharacterEncoding("utf-8");
        chain.doFilter(req, resp);
    }
```

```
 */
@WebFilter(filterName = "MyFilter")
public class MyFilter implements Filter {
    public void destroy() {
    }

    public void doFilter(ServletRequest req, ServletResponse resp, FilterChain chain) throws ServletException, IOException {
        HttpServletRequest httpServletRequest=(HttpServletRequest) req;
        HttpServletResponse HttpServletResponse=(HttpServletResponse) resp;
        httpServletRequest.setCharacterEncoding("utf-8");
        HttpServletResponse.setCharacterEncoding("utf-8");
//        MyRequest myRequest=new MyRequest(httpServletRequest);
        chain.doFilter(req, resp);
    }

    public void init(FilterConfig config) throws ServletException {
    }

}
```

这里可以不用强转，直接用servletRequest设置编码好像也可以

5. 然后再运行项目发现之前删除的servlet设置编码的也没有出现乱码,那么就可以把所有的servlet的编码设置都去掉了



作业2：设置登录之后，3分钟以后将用户的session销毁

思路

1. 首先实现监听器，监听我们的session
2. 在我们的用户登录的实体类即User类中实现监听接口
3. 在登录的servlet中获取登录的用户名和密码，然后保存到User对象中,用session存储起来，并且设置好session的销毁时间
4. 测试观察结果即可

具体实现

1. 创建监听器,实现session监听的接口

```
@WebListener()
public class MyListener implements HttpSessionListener, HttpSessionAttributeListener {
```

2. 然后listener的具体代码如下

```
import javax.servlet.annotation.WebListener;
import javax.servlet.http.HttpSessionAttributeListener;
import javax.servlet.http.HttpSessionBindingEvent;
import javax.servlet.http.HttpSessionEvent;
import javax.servlet.http.HttpSessionListener;

@WebListener()
public class MyListener implements HttpSessionListener,
HttpSessionAttributeListener {

    @Override
    public void attributeAdded(HttpSessionBindingEvent
httpSessionBindingEvent) {
```

```
        System.out.println("session中添加了"+httpSessionBindingEvent.getName()+"|值为"+httpSessionBindingEvent.getValue());
    }

    @Override
    public void attributeRemoved(HttpSessionBindingEvent httpSessionBindingEvent) {
        System.out.println("session中移除了"+httpSessionBindingEvent.getName()+"|值为"+httpSessionBindingEvent.getValue());
    }

    @Override
    public void attributeReplaced(HttpSessionBindingEvent httpSessionBindingEvent) {
        System.out.println("session中替换了"+httpSessionBindingEvent.getName()+"|值为"+httpSessionBindingEvent.getValue());
    }

    @Override
    public void sessionCreated(HttpSessionEvent httpSessionEvent) {
        System.out.println("session被创建了");
    }

    @Override
    public void sessionDestroyed(HttpSessionEvent httpSessionEvent) {
        System.out.println("session销毁了");
    }
}
```

3. 我们的User类实现监听接口HttpSessionBindingListener并且编写重写方法

```
@Override
public void valueBound(HttpSessionBindingEvent httpSessionBindingEvent) {
    //在这里我们打印出把userInfo放入session的时间
    System.out.println("把Person存放到session中: "+httpSessionBindingEvent.getValue()+new java.util.Date().toString());
}
@Override
public void valueUnbound(HttpSessionBindingEvent httpSessionBindingEvent) {
    //这里我们打印一下移除的时间
    System.out.println("把Person移除了到session中: "+httpSessionBindingEvent.getValue()+new java.util.Date().toString());
}
```

4. 在我们的loginServlet中编写Session，并且设置Session有效期

```java
protected void service(HttpServletRequest req, HttpServletResponse resp) throws ServletException, IOException {
//        req.setCharacterEncoding("utf-8");
//        resp.setContentType("text/html");
//        resp.setCharacterEncoding("utf-8");
        BizDao bizDao=new BizDaoImple();
        //获取session
        HttpSession session = req.getSession( b: true);
        //获取用户名和密码
        String username=req.getParameter( s: "username");
        String password=req.getParameter( s: "password");
        //生成我们的UserInfo实体类
        UserInfo userInfo=new UserInfo();
        //给实体类赋值
        userInfo.setPassword(password);
        userInfo.setUsername(username);
        //将我们的UserInfo对象放入session中
        session.setAttribute( s: "userInfo",userInfo);
        //设置session的时间,三分钟,然后观看时间
        session.setMaxInactiveInterval(180);//单位是秒
        boolean b = bizDao.validateUser(username, password);
        if (b){
            req.getRequestDispatcher( s: "admin/admin.jsp").forward(req,resp);
        }else {
            resp.sendRedirect( s: "comment");
        }
    }
}
```

这里写doGet方法中也可以

5. 运行项目，观察控制台结果

运行开始

```java
        //获取用户名和密码
        String username=req.getParameter( s: "username");
        String password=req.getParameter( s: "password");
        //生成我们的UserInfo实体类
        UserInfo userInfo=new UserInfo();
        //给实体类赋值
        userInfo.setPassword(password);
        userInfo.setUsername(username);
        //将我们的UserInfo对象放入session中
        session.setAttribute( s: "userInfo",userInfo);
        //设置session的时间,三分钟,然后观看时间
        session.setMaxInactiveInterval(180);//单位是秒
        boolean b = bizDao.validateUser(username, password);
        if (b){
            req.getRequestDispatcher( s: "admin/admin.jsp").forward(req,resp);
        }else {
            resp.sendRedirect( s: "comment");
        }
    }
```

```
LoginServlet › service()
Tomcat 7.0.96
Server | Tomcat Localhost Log | Tomcat Catalina Log
Output
把Person存放到session中：UserInfo{user_id=0, username='admin', password='admin'}Wed Mar 18 19:49:44 CST 2020
session中添加了userInfo|值为UserInfo{user_id=0, username='admin', password='admin'}
```

运行结束

```
        session.setAttribute( s: "userInfo",userInfo);
        //设置session的时间,三分钟,然后观看时间
        session.setMaxInactiveInterval(180);//单位是秒
        boolean b = bizDao.validateUser(username, password);
        if (b){
            req.getRequestDispatcher( s: "admin/admin.jsp").forward(req,resp);
        }else {
            resp.sendRedirect( s: "comment");
        }
    }
}
```

LoginServlet › service()

Tomcat 7.0.96

Server | Tomcat Localhost Log | Tomcat Catalina Log | Output

```
把Person存放到session中：UserInfo{user_id=0, username='admin', password='admin'}Wed Mar 18 19:49:44 CST 2020
session中添加了userInfo|值为UserInfo{user_id=0, username='admin', password='admin'}
Wed Mar 18 19:49:50 CST 2020 WARN: Establishing SSL connection without server's identity verification is not rec
session销毁了
把Person移除了到session中：UserInfo{user_id=0, username='admin', password='admin'}Wed Mar 18 19:53:20 CST 2020
session中移除了userInfo|值为UserInfo{user_id=0, username='admin', password='admin'}
session中移除了javax.servlet.jsp.jstl.fmt.request.charset|值为UTF-8
```

思考:既然session是一次会话期,那么我们可以用session来判断用户是否登录在线，以防止用户不在线还可以正常访问我们本来需要登录的页面?

1. 我们用户登录创建session
2. 然后在页面中做判断,用reqest取在session中的值,看我们的session用户是否存在,如果存在，才让访问，否则的话回到登录页面