

Contract Management System

# Adjust Program Structure

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Iterative development on the basis of [Login](#).

In the iteration of Create Project, a 3 layer project structure in conjunction with MVC design idea is established.

In the iteration of Register and Login, we implemented functions of registration, login and logoff. [Servlet, a commonly used component of Java EE, is used in the development of view layer.](#)

## **(1) Servlet as view**

Servlet outputs HTML pages relating to functions of Register, Login, etc. For example, ToLoginServlet outputs HTML login page.

## **(2) Servlet as controller**

Servlet calls business logic to process businesses like Register, Login, etc. It controls page jumping and message passing. For example, LoginServlet processes login request.

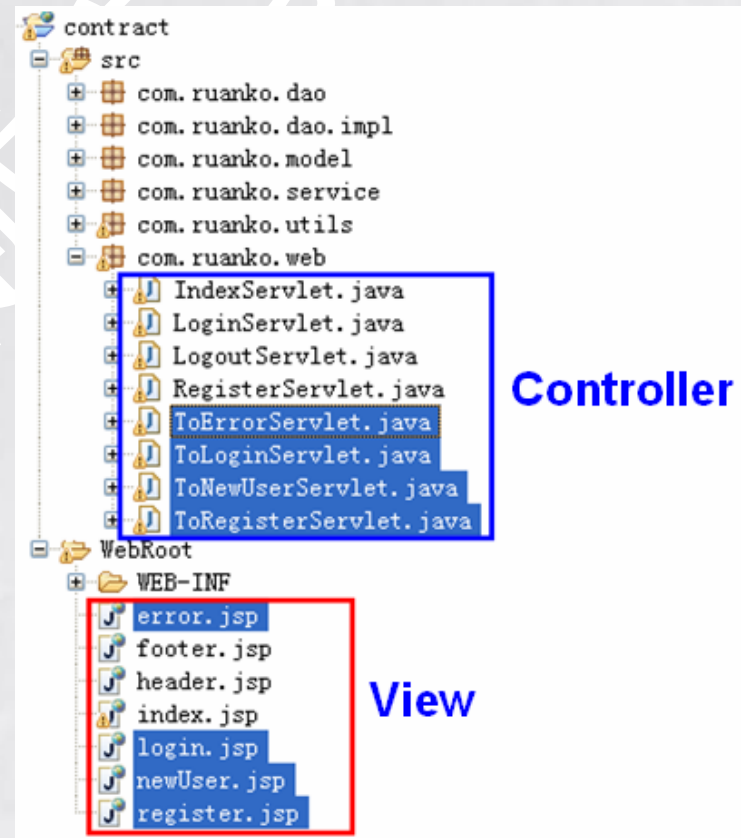
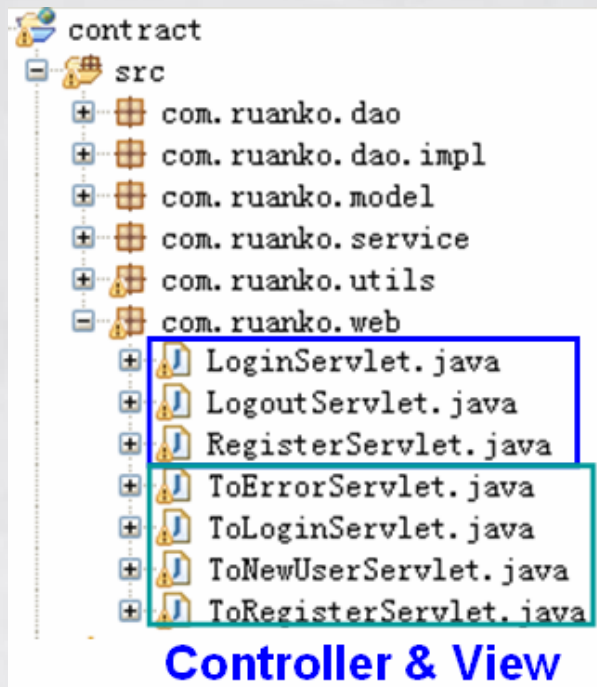
To output HTML pages, Servlet needs more codes for the export of HTML label and page information line by line. It reuses no any designed HTML page, like login.htm.

[It makes the program too complex to read or edit by using Servlet in the output of HTML page.](#)

# Function

Is it possible to abstract functions of page layout, display and input verification out of Servlet, so that Servlet concentrates itself on controller and designed HTML pages may be reused?

Hereby **program structure adjustment shall be made**. JSP components provided in Java EE are adopted to implement functions of page layout, display and input verification. **That is to say, use JSP as view for the view layer and Servlet as controller.**



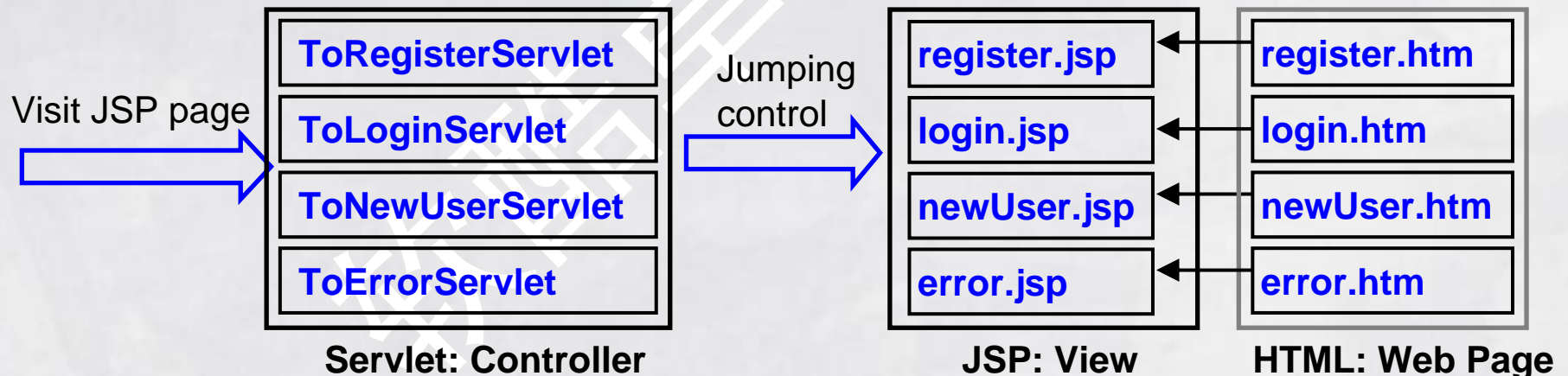
# Design

In the mode of Java EE development, JSP is taken as the view of Model2(JSP+Servlet+JavaBean) and Servlet as controller. By taking JSP as view, HTML page can be well reused. The character of readability and editing of codes is improved.

In this iteration, we'll bring JSP in the adjustment of program structure.

- (1) The adjustment is made on Servlet in view layer only. No modification will be made on business logic layer or data access layer.
- (2) The implementation of functions of page layout, display and input verification is handled by JSP.
- (3) Servlet focuses on request processing. To get parameters of the request, and call business logic layer for the processing of businesses including JSP page skipping control and data transfer.

Following illustrates the relation of JSP view and skipping controller Servlet.





Iterative development on the basis of [Login](#).

[Firstly](#), bring HTML page in and convert it into JSP page. Modify Servlet and write JSP to implement the function of registration, login and logoff.

[Secondly](#), create error.jsp as exception page. When error occurs, the page is uniformly jumped to error.jsp.

[Finally](#), abstract JSP page and generate header.jsp for public header and footer.jsp for public footer. Modify register.jsp and login.jsp by bringing in header and footer for a complete JSP page.

**Step 1, adjust program structure to implement registration function.**

**Step 2, adjust program structure to implement login function.**

**Step 3, guide to page error.jsp collectively.**

**Step 4, abstract JSP page.**

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Thanks

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