

# Contract Management System

## View Layer Development

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## 1. Introduction

Enter registration information on a specific registration page. User name, password and password confirmation are three essentials for the registration of a valid user account. The user name should be a unique character string made of 4-20 Chinese characters, letters, numbers and underlines. Password should be a string of 6-12 characters. The password confirmation should be consistent with password information.

When the registration information is submitted for approval, any incomplete item or incorrect format found will be prompted with message “Registration Failure!” on registration page. If all registration items are verified correct, the application form will be delivered and message “Registration Success” will be displayed on the page. If program exception occurs, display “System Error” instead then.

## 2. Input

Enter following data on the page.

- (1) User name
- (2) Password
- (3) Password confirmation

## 3 . Processing

- (1) Verify registration data: user name, password and password confirmation are three required items. If any of them is verified incomplete or incorrect, prompt user of the message on registration page.
- (2) Verify the uniqueness of user name, or no identical user names are allowed.
- (3) If the registration data is verified correct, save it.

## 4. Output

### (1) Registration success

Display “Registration Success!” on registration page.

### (2) Registration failure

- ① Prompt user of errant message for invalid registration data input.
- ② Display “Registration Failure!” on registration page.

### (3) System error

Display “System Error!” on registration page.

Iterative design idea is adopted in the development of registration function.

## Iteration 1, view layer development.

Design the layout of register page. Receive register data and process registration request. And call business logic layer to process registration request and display the result.

## Iteration 2, business logic layer development.

Carry out the business logic layer development. Implement the logic processing of register and call DAO to save register.

## Iteration 3, data access layer development.

Carry out data access layer development. Implement the storage of register information, and fulfill the complete process of register function in 3L structure.

In this iteration, the development of view layer is the focus of implementation.

(1) Create register page

Create **ToRegisterServlet class** in view layer to output HTML register page.

(2) Process register application

Create **RegisterServlet class** in view layer to receive register information and process the request.



## 1.ToRegisterServlet class design

Create `ToRegisterServlet` class in `com.ruanko.web` of the project, inheriting from `javax.servlet.http.HttpServlet`.

Output HTML page in `ToRegisterServlet` class, to receive register data and display processing result.

Register data delivered by `ToRegisterServlet` class is accepted and processed in `RegisterServlet` class.

The access configuration of both `ToRegisterServlet` class and `RegisterServlet` class are implemented in `web.xml`.

The output register form and data are as follow.

```
public class ToRegisterServlet extends HttpServlet {
    .....
    public void doGet() {
        .....
        //output register form
        <form action=" " method="post">
            User name: <input type="text" name="name"/>
            Password: <input type="password" name="password"/>
            Repeat password:<input type="password" name="password2"/>
            <input type="submit" value="Submit"/>
        </form>
        .....
    }
}
```

## 2. RegisterServlet class design

Create `RegisterServlet` in `com.ruanko.web` of the project, inheriting from `javax.servlet.http.HttpServlet`.

`RegisterServlet` class gets register data from `ToRegisterServlet` class, and verify the completion and format of it.

According the verification result, output prompting message on the console and ask the user to enter correct information if necessary.

After the information is verified correct, output message "Registration Successful!" on the console to finish processing.

```
public class RegisterServlet extends HttpServlet {
    .....
    public void doPost() {
        .....
        //Get the user's name, password and repeat password
        String name = request.getParameter("name");
        .....
        if(the required contents are empty){ //verify registration information
            //...Output message
        } else if (the two passwords do not match) {
            //... Output message
        } else {
            //...Output"Registration Successful!"
        }
    }
}
```

# Implementation

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

Firstly, design register page. Create [ToRegisterServlet](#) class for the output of [HTML register page](#).

Secondly, create [RegisterServlet](#) class. Receive registration information and process registration request.

**Step 1, design register page.**

**Step 2, create ToRegisterServlet.**

**Step 3, create RegisterServlet.**



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Thanks

Register