

Spring MVC Architecture

Summary

The Spring Framework can use the web frameworks such as Struts or Webwork, but it also has MVC Web framewok.

Spring MVC has below characteristics as below other than Model, View and Controller.

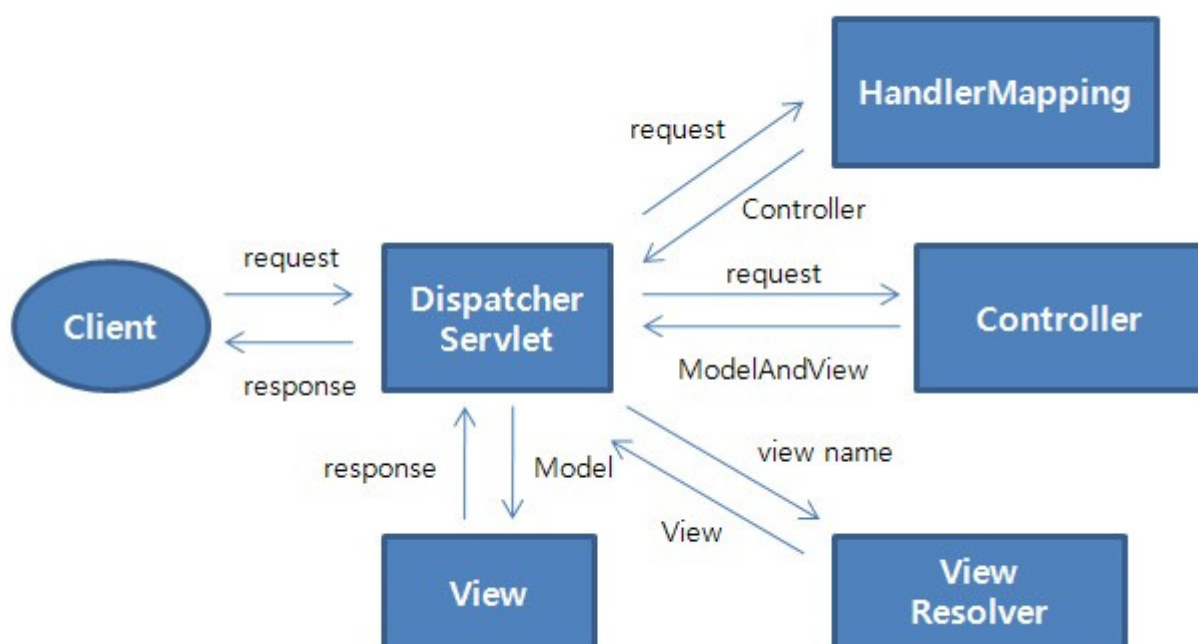
- Role of each components such as DispatcherServlet, HandlerMapping, Controller, Interceptor, ViewResolver and View is clearly separated.
- By providing various interfaces and implementation classes on components of HandlerMapping, Controller, View, it can be used selectively.
- The codes concentrated to business logic can be written by writing the classes of POJO and POJO-style without inheriting or referring to special classes in writing Controller(@MVC) and form class (command class).
- It provides the data mapping function between the web request parameter and the command class.
- It provides the validator and error processing function to verify the data.
- It provides the tag to easily configure the JSP Form.

Description

The key components of the Spring MVC(Model-View-Controller) is as below.

| Component | Summary |
|-------------------|--|
| DispatcherServlet | Handles the life cycle of front controller, web request and response of the Spring MVC Framework |
| HandlerMapping | Decides which controller handles the URL in web request. |
| Controller | Operates the business logic and reflects the result data to ModelAndView. |
| ModelAndView | Consists of model data object and page information (or view object) which the controller reflects the operation results. |
| ViewResolver | Decides which view to select. |
| View | Displays the result data, the model object. |

The relations and flow of these components are as following:



1. The DispatcherServlet receives the request first when there is a request from the client.
2. HandlerMapping returns the controller for the request.

3. The controller implements (calls) the business logic, reflects the result data on the ModelAndView to return.
4. ViewResolver returns the view object by receiving the view name.
5. View receives the model object for rendering.

This guideline is written for Spring 2.5.6.

Reference

- [The Spring Framework - Reference Documentation 2.5.6](#)
- [Spring Framework API Documentation 2.5.6](#)