

SpringMVCDemo

Pom.xml

```
<dependency>
    <groupId>org.springframework</groupId>
    <artifactId>spring-webmvc</artifactId>
    <version>6.2.5</version>
</dependency>
<dependency>
    <groupId>jakarta.servlet.jsp.jstl</groupId>
    <artifactId>jakarta.servlet.jsp.jstl-api</artifactId>
    <version>3.0.0</version>
</dependency>
<dependency>
    <groupId>org.springframework</groupId>
    <artifactId>spring-aspects</artifactId>
    <version>6.2.5</version>
</dependency>
```

Web.xml

```
<servlet>
    <servlet-name>dispatcher</servlet-name>
    <servlet-class>org.springframework.web.servlet.DispatcherServlet</servlet-class>
    <init-param>
        <param-name>contextClass</param-name>
        <param-value>
org.springframework.web.context.support.AnnotationConfigWebApplicationContext
    </param-value>
```

```

    </init-param>
    <init-param>
        <param-name>contextConfigLocation</param-name>
        <param-value>in.ga.config.AppConfig</param-value>
    </init-param>
    <load-on-startup>1</load-on-startup>
</servlet>

<servlet-mapping>
    <servlet-name>dispatcher</servlet-name>
    <url-pattern>/</url-pattern>
</servlet-mapping>

```

Studentinfo.jsp

```

<%@ page contentType="text/html; charset=UTF-8" %>
<html>
<head><title>Student Info</title></head>
<body>
    <h2>${info}</h2>
</body>
</html>

```

display.jsp

```

<%@ page contentType="text/html; charset=UTF-8" %>
<html>
<head><title>Model Demo</title></head>
<body>
    <h2>${message}</h2>
</body>

```

</html>

LoggingAspect.java

```
package in.ga.aspect;
```

```
import org.aspectj.lang.JoinPoint;
```

```
import org.aspectj.lang.annotation.*;
```

```
import org.springframework.stereotype.Component;
```

```
@Aspect
```

```
@Component
```

```
public class LoggingAspect {
```

```
    @Before("execution(* in.ga.service.*.*(..))")
```

```
    public void logBefore(JoinPoint joinPoint) {
```

```
        System.out.println("Calling method: " + joinPoint.getSignature().getName());
```

```
    }
```

```
}
```

AppConfig.java

```
package in.ga.config;
```

```
import org.springframework.context.annotation.*;
```

```
import org.springframework.web.servlet.config.annotation.*;
```

```
import org.springframework.web.servlet.view.InternalResourceViewResolver;
```

```
@Configuration
```

```
@EnableWebMvc
```

```
@ComponentScan(basePackages = "in.ga")
```

```
@EnableAspectJAutoProxy
```

```

public class AppConfig implements WebMvcConfigurer {

    @Bean

    public InternalResourceViewResolver viewResolver() {

        InternalResourceViewResolver vr = new InternalResourceViewResolver();

        vr.setPrefix("/WEB-INF/views/");

        vr.setSuffix(".jsp");

        return vr;

    }

}

```

StudentController.java

```

package in.ga.controller;

import in.ga.service.StudentService;

import org.springframework.beans.factory.annotation.Autowired;

import org.springframework.stereotype.Controller;

import org.springframework.web.bind.annotation.*;

import org.springframework.ui.Model;

import org.springframework.web.servlet.ModelAndView;

@Controller

public class StudentController {

    @Autowired

    private StudentService studentService;

    @GetMapping("/student/{id}")

    public String getStudentById(@PathVariable("id") String id, Model model) {

```

```
        model.addAttribute("info", studentService.getStudentInfo(id));  
        return "studentinfo";  
    }  
}
```

```
@GetMapping("/search")  
public String search(@RequestParam("name") String name, Model model) {  
    model.addAttribute("info", "Searched student: " + name);  
    return "studentinfo";  
}  
}
```

```
@GetMapping("/model")  
public String withModel(Model model) {  
    model.addAttribute("message", "Hello from Model");  
    return "display";  
}  
}
```

```
@GetMapping("/modelandview")  
public ModelAndView withModelAndView() {  
    ModelAndView mv = new ModelAndView("display");  
    mv.addObject("message", "Hello from ModelAndView");  
    return mv;  
}  
}
```

StudentService.java

```
package in.ga.service;
```

```
import org.springframework.stereotype.Service;
```

```
@Service  
  
public class StudentService {  
    public String getStudentInfo(String id) {  
        return "Student ID: " + id + ", Name: Gaurav";  
    }  
}
```