

# Overview of Spring Boot's Internal Architecture

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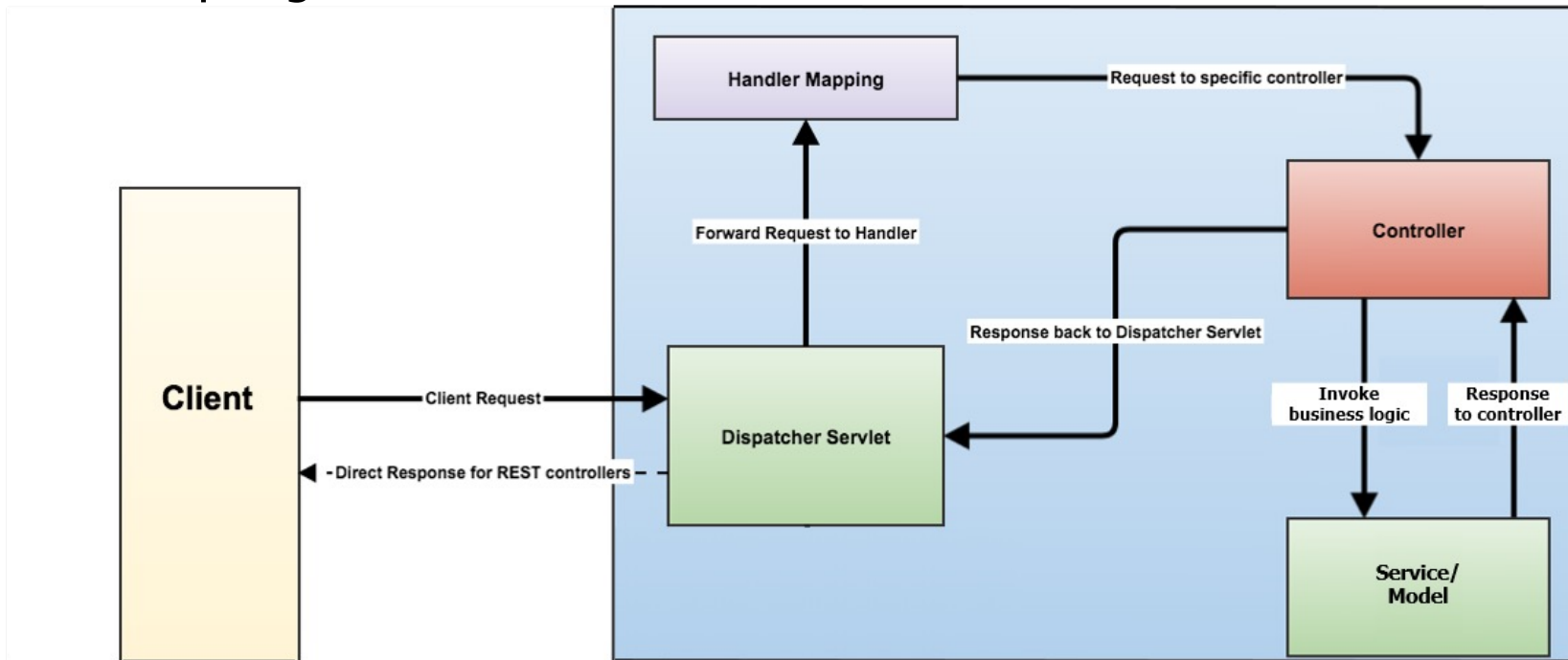
**Institute for Software  
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**Vanderbilt University  
Nashville, Tennessee, USA**



# Learning Objectives in this Lesson

- Understand the internal software architecture of Spring Boot



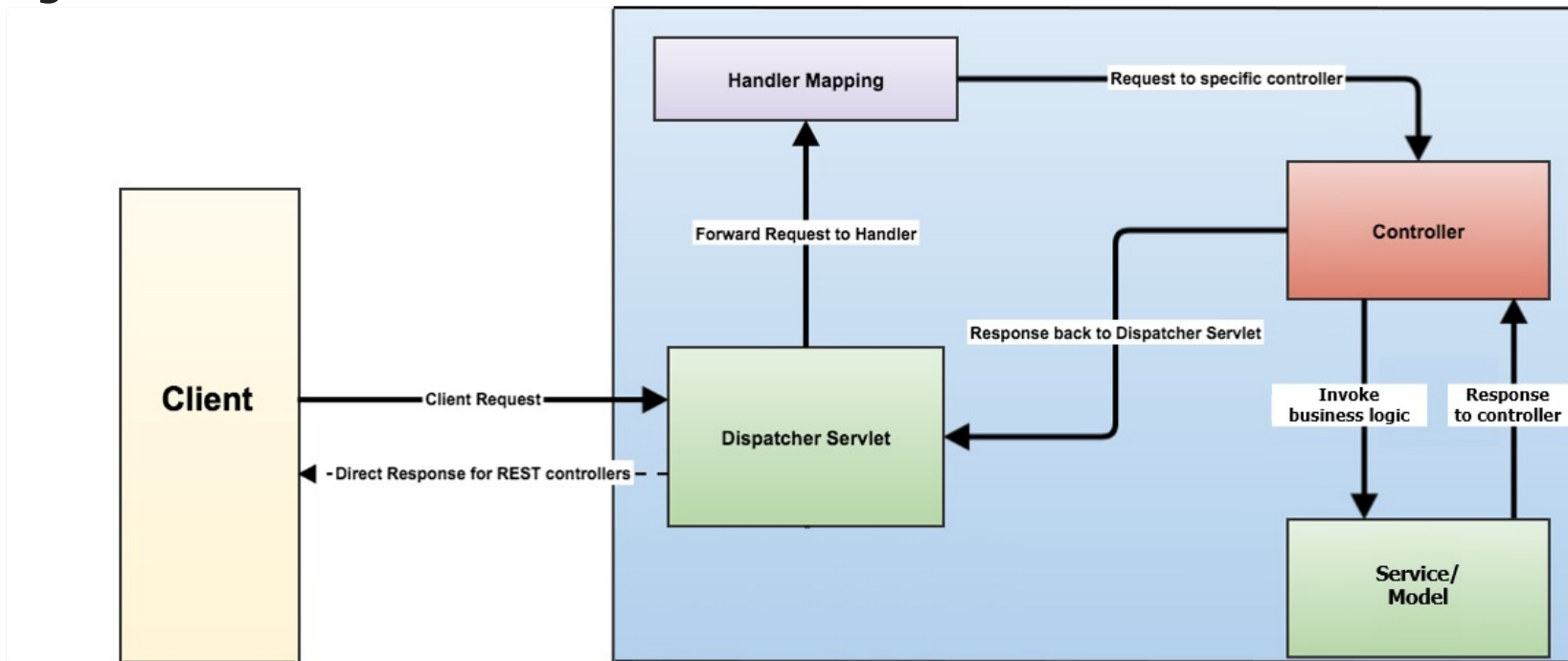
This architecture is similar (though not identical) for WebMVC & WebFlux

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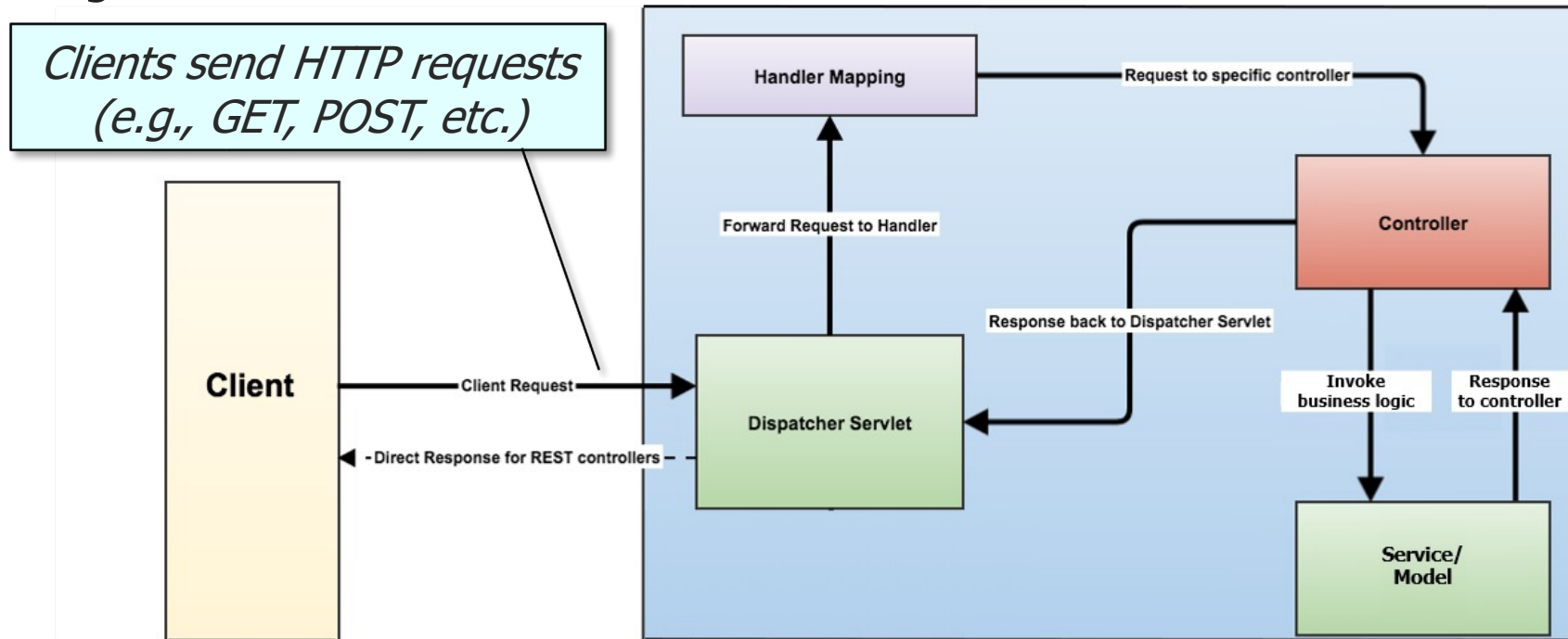
- Internally Spring Boot leverages Servlets & associated HTTP request/response processing



See [www.javadevjournal.com/spring-mvc/spring-controllers](http://www.javadevjournal.com/spring-mvc/spring-controllers)

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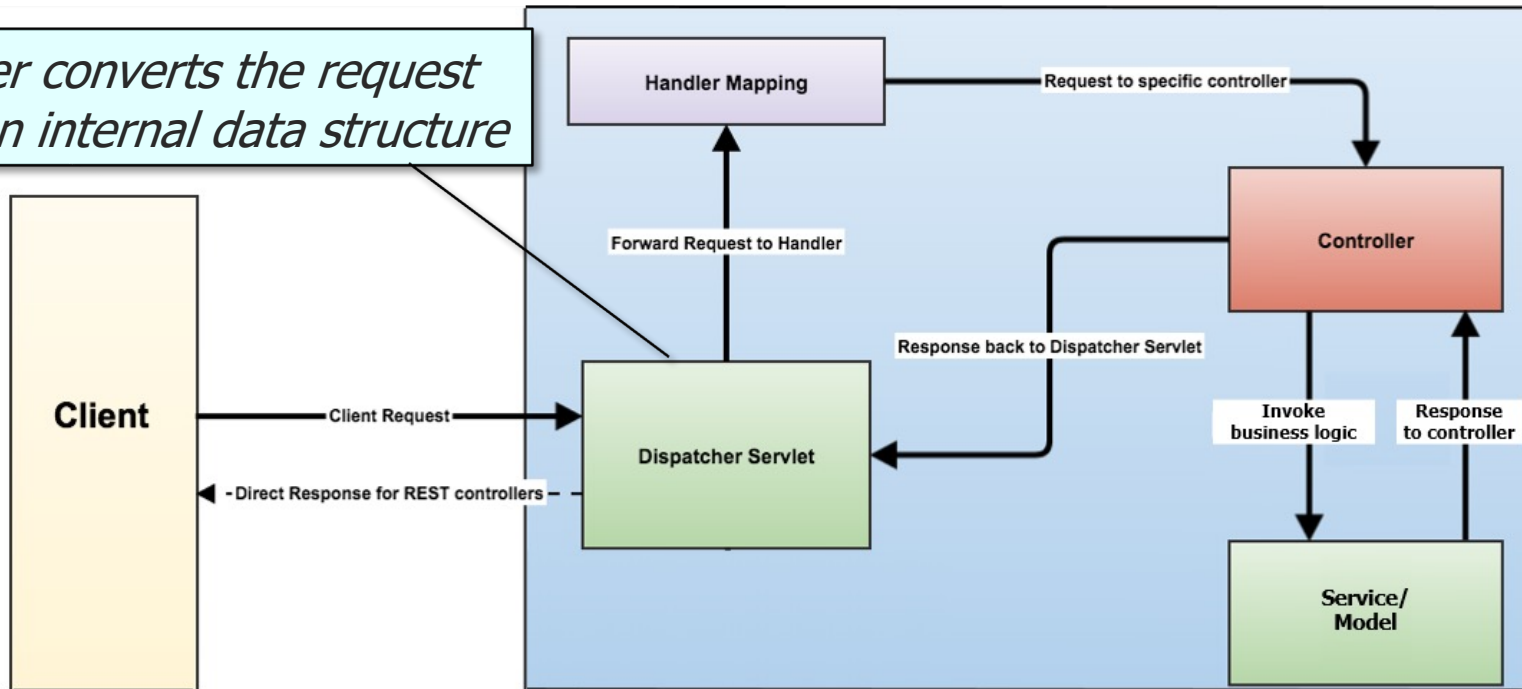


See [developer.mozilla.org/en-US/docs/Web/HTTP/Methods](https://developer.mozilla.org/en-US/docs/Web/HTTP/Methods)

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*The dispatcher converts the request contents into an internal data structure*

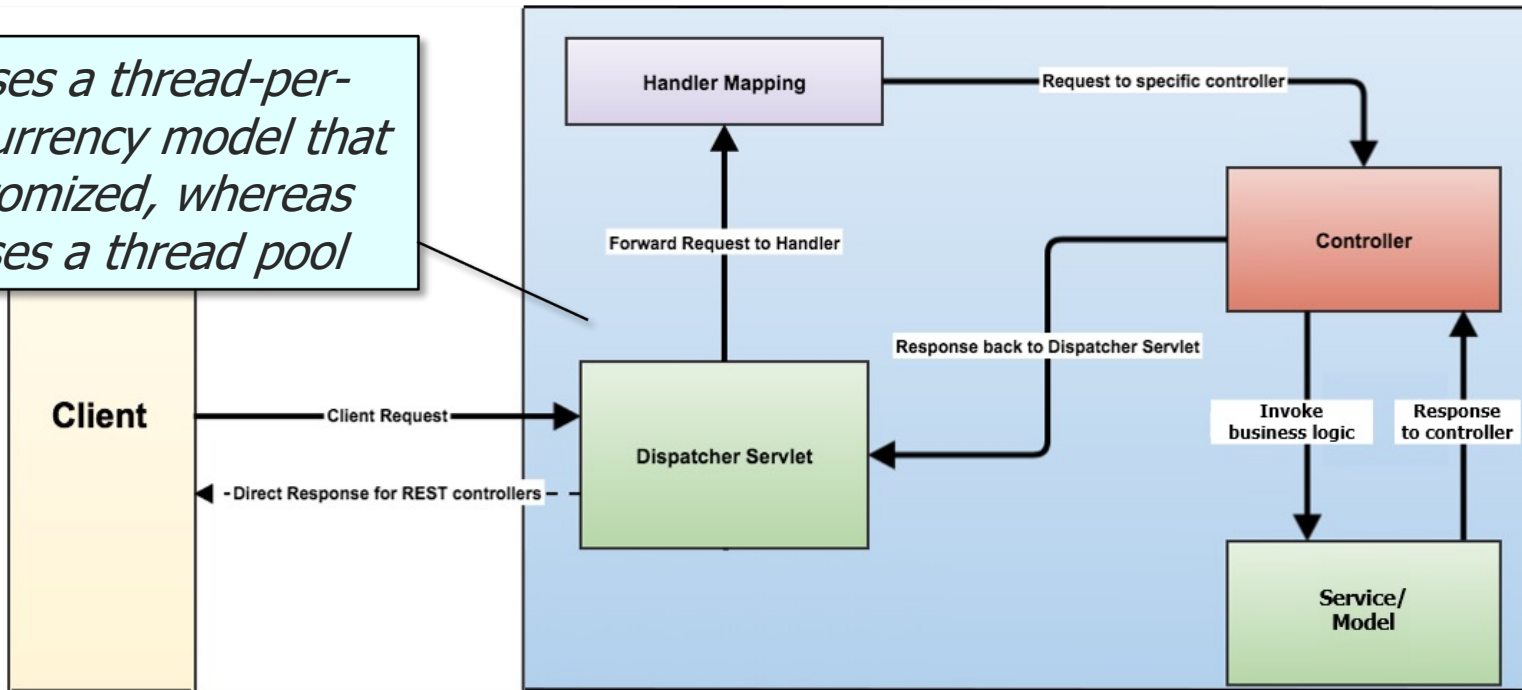


See [www.baeldung.com/spring-dispatcherservlet](http://www.baeldung.com/spring-dispatcherservlet)

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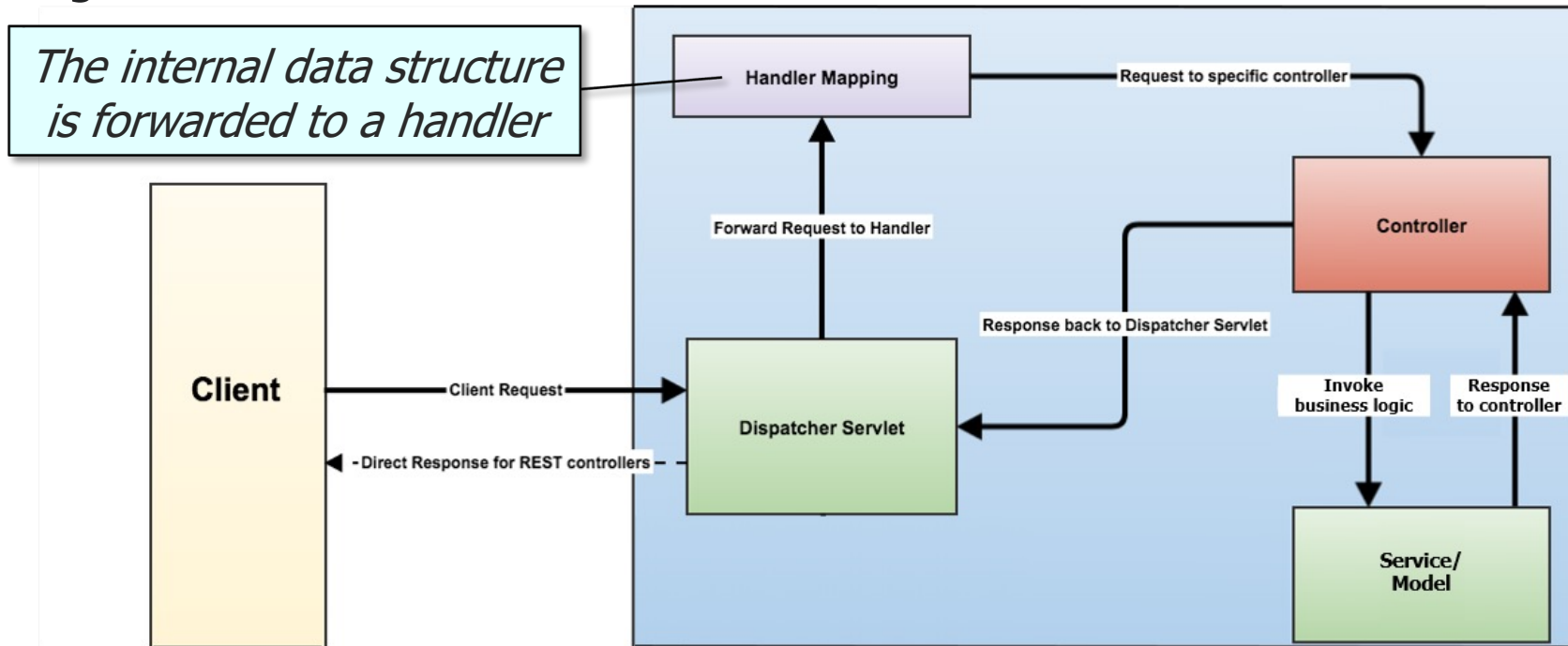
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*WebMVC uses a thread-per-request concurrency model that can be customized, whereas WebFlux uses a thread pool*



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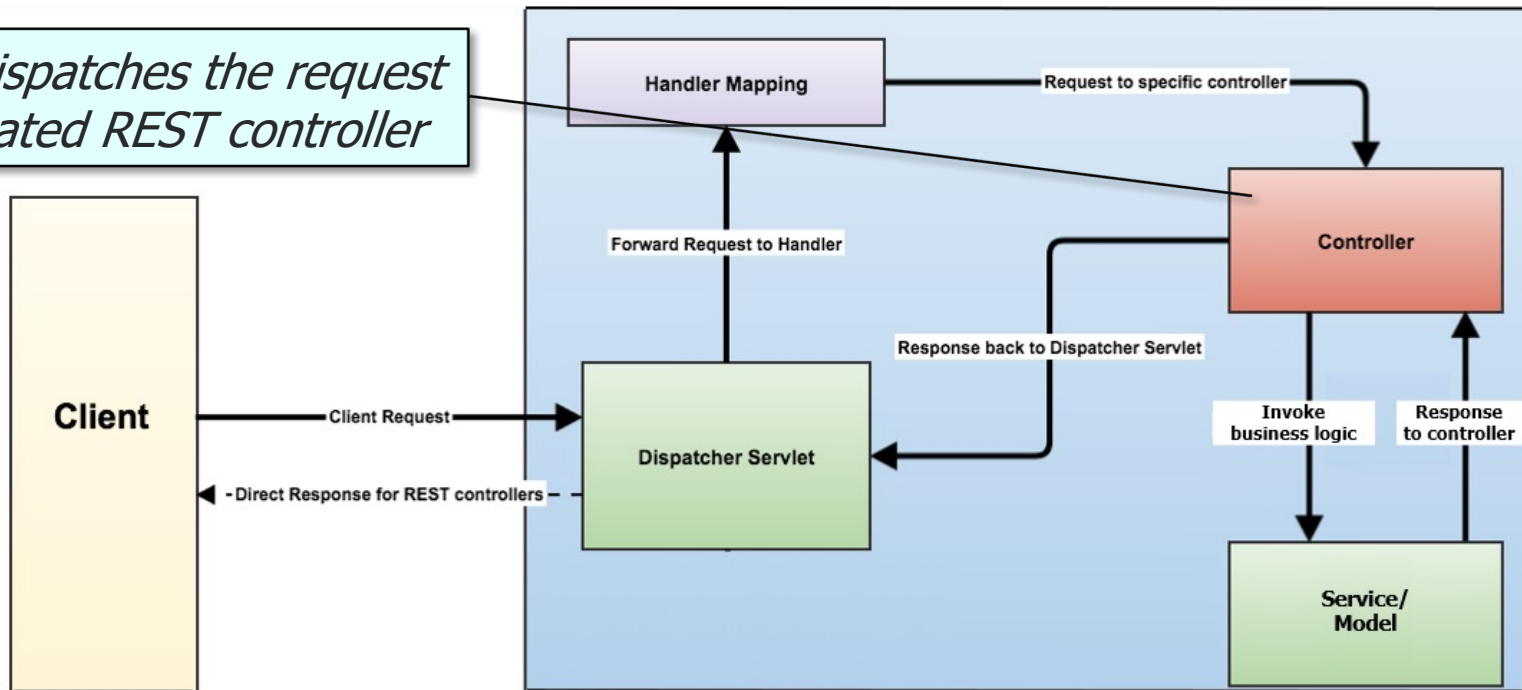
See [docs.oracle.com/javaee/7/api/javax/servlet/http/HttpServletRequest.html](https://docs.oracle.com/javaee/7/api/javax/servlet/http/HttpServletRequest.html)



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*The handler dispatches the request on the associated REST controller*

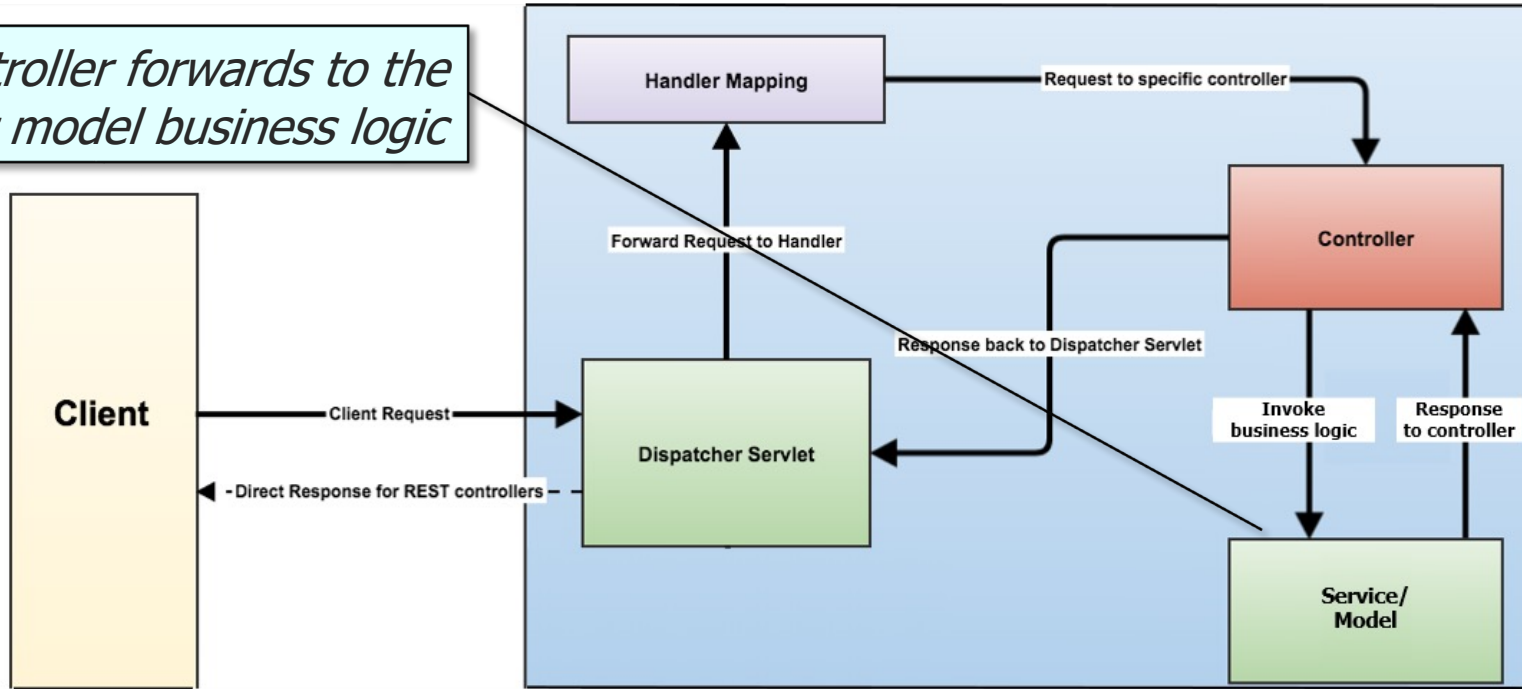


See [spring.io/guides/tutorials/rest](https://spring.io/guides/tutorials/rest)

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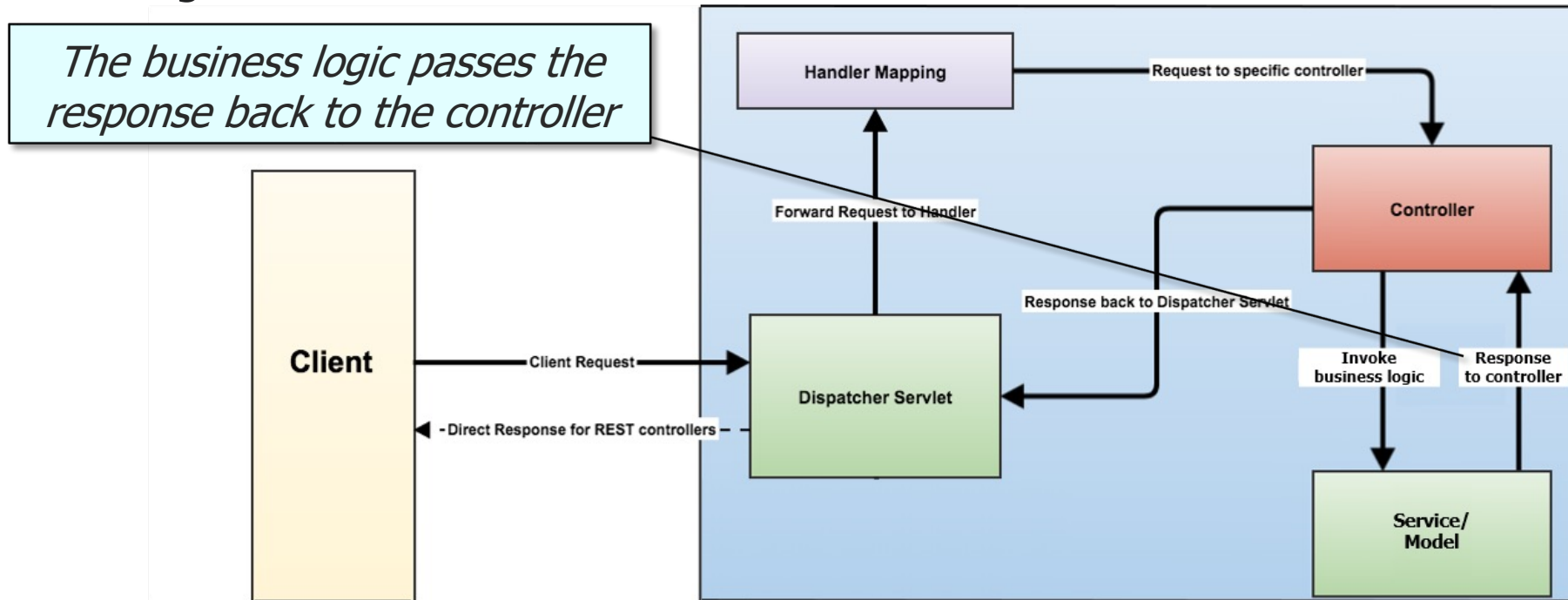
*The REST controller forwards to the service and/or model business logic*



See [www.tutorialspoint.com/spring\\_boot/spring\\_boot\\_service\\_components.htm](http://www.tutorialspoint.com/spring_boot/spring_boot_service_components.htm)

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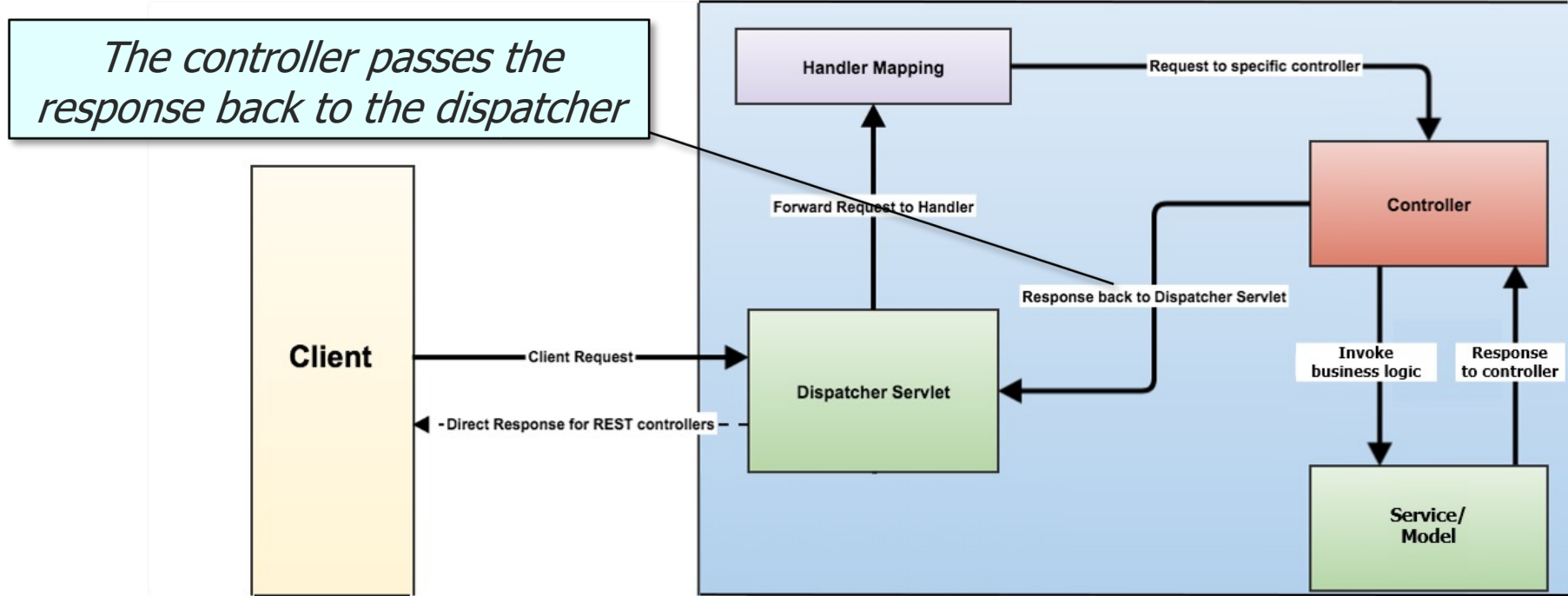
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These interactions are performed by Java method calls

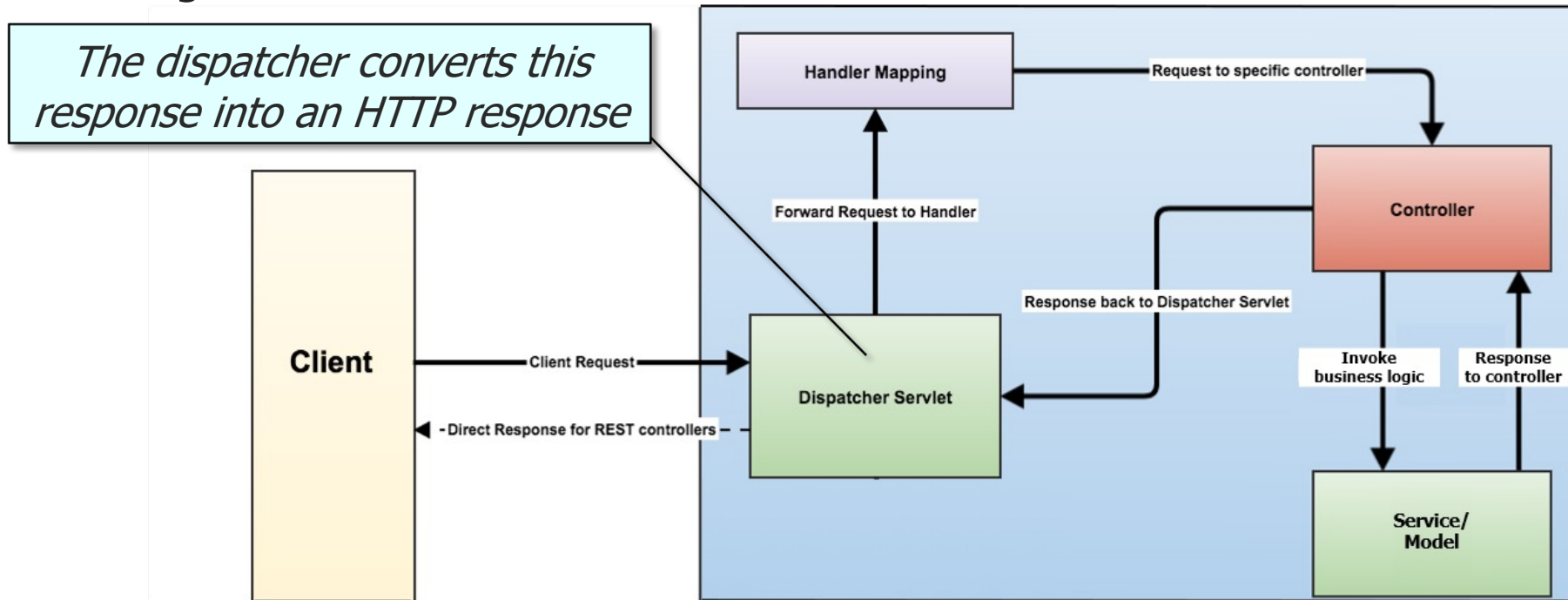
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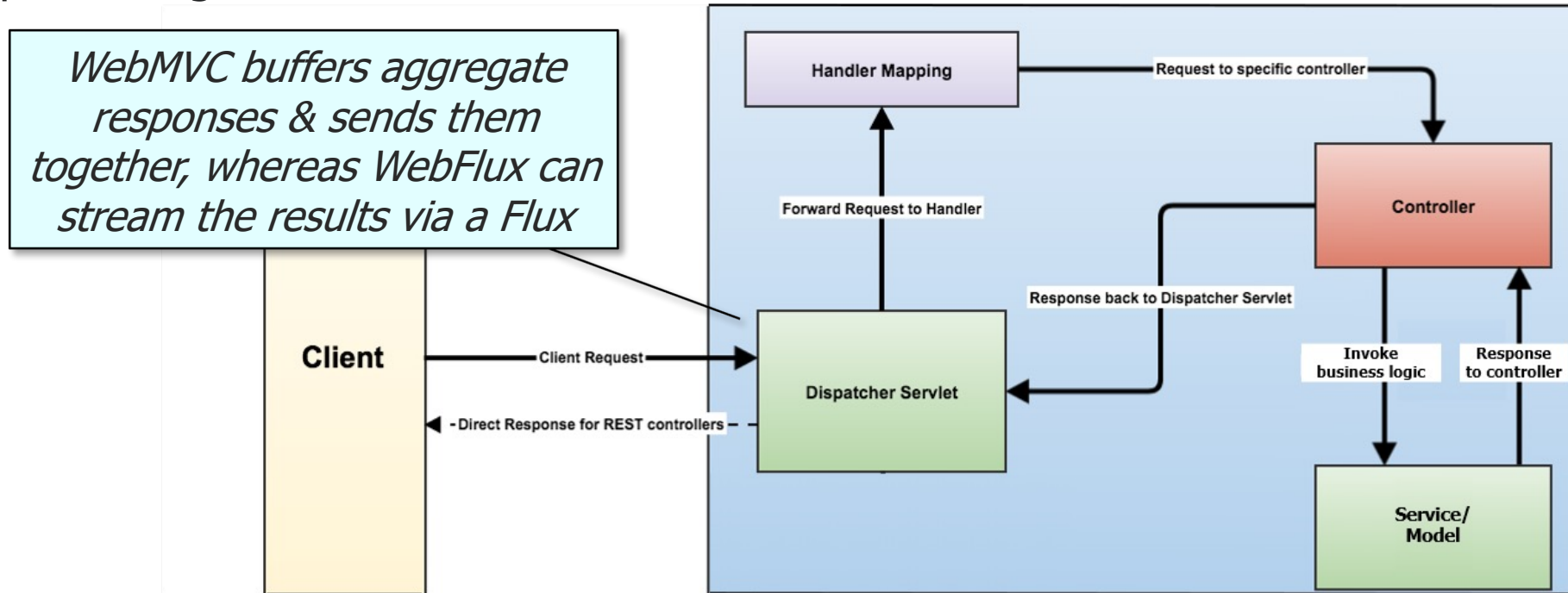
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See [www.toolsqa.com/client-server/http-response](http://www.toolsqa.com/client-server/http-response)

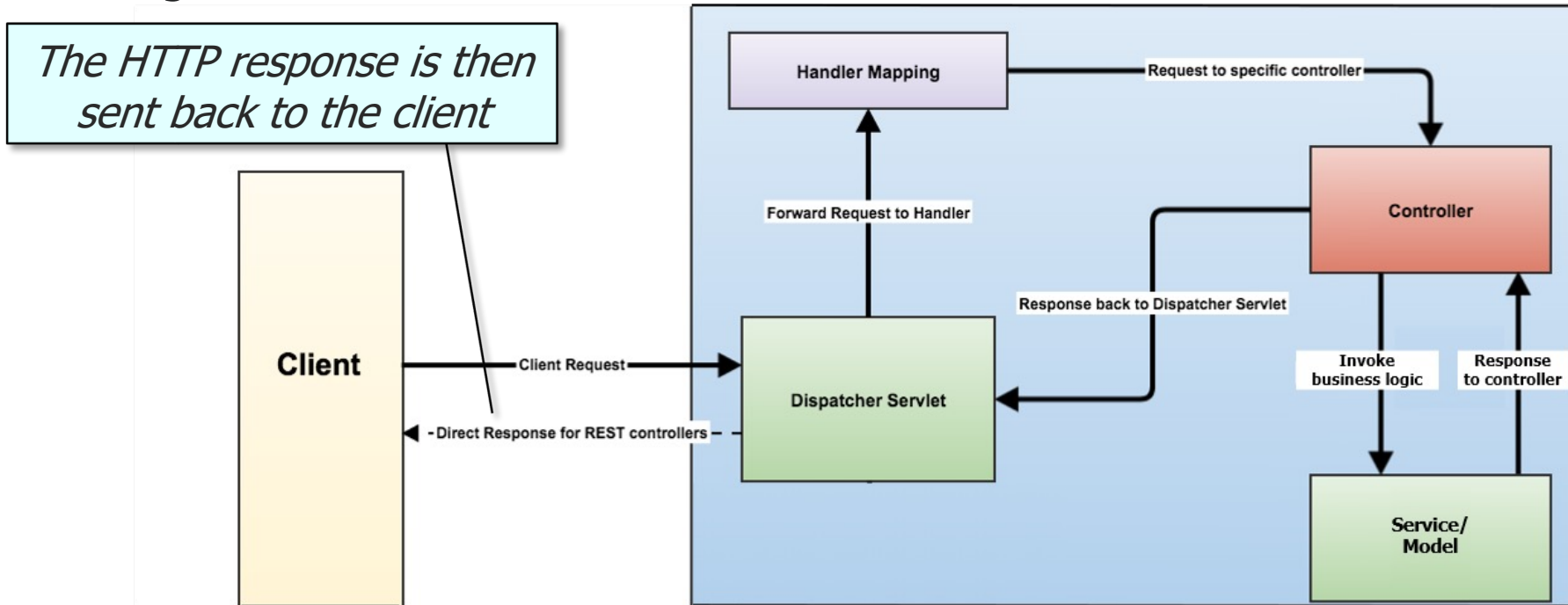
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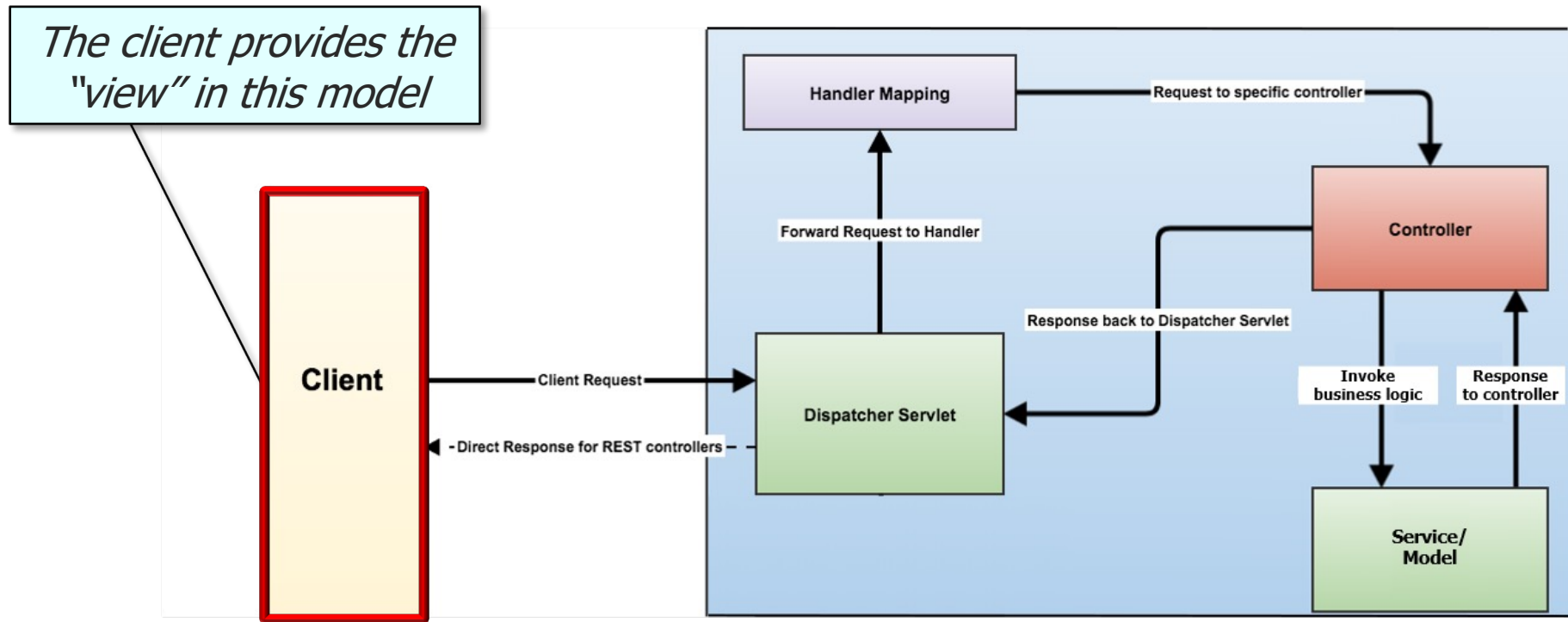
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- Spring Boot implements the Model-View-Controller (MVC) pattern

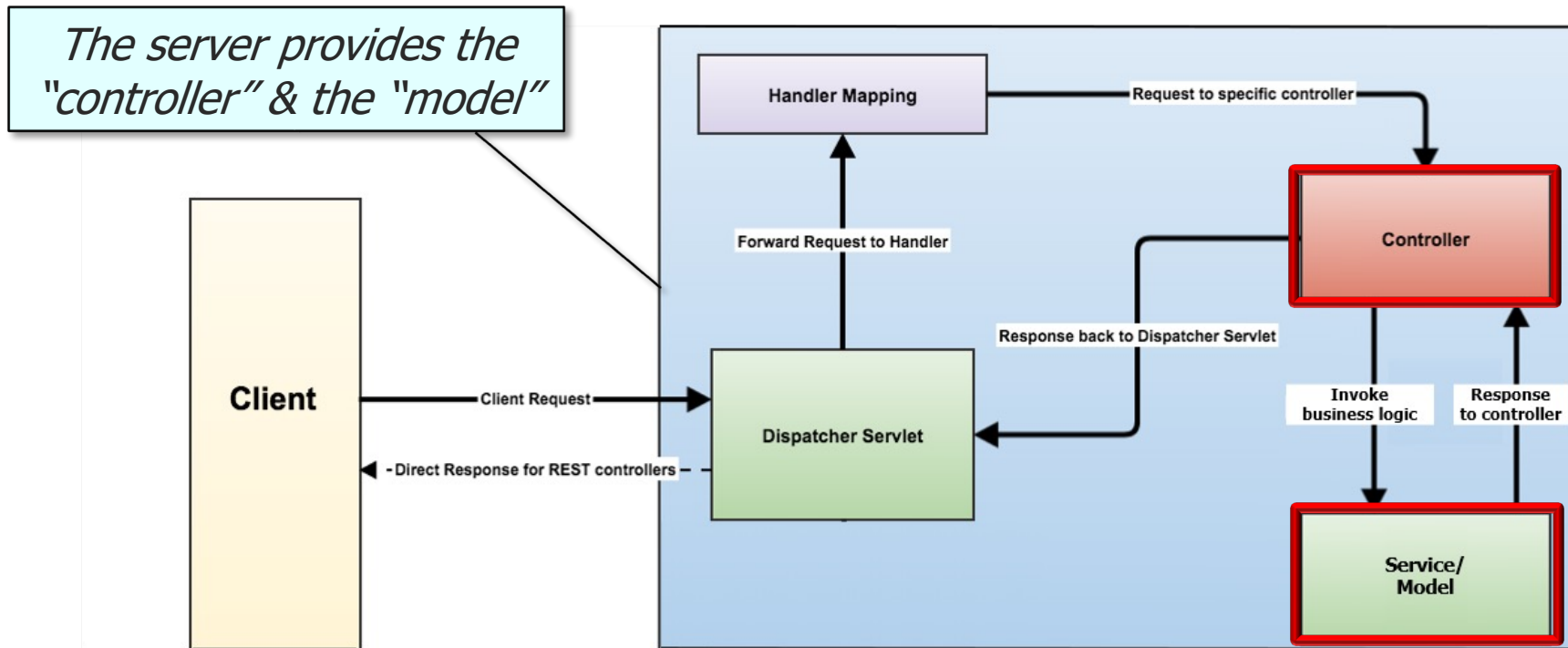


See [en.wikipedia.org/wiki/Model-view-controller](https://en.wikipedia.org/wiki/Model-view-controller)



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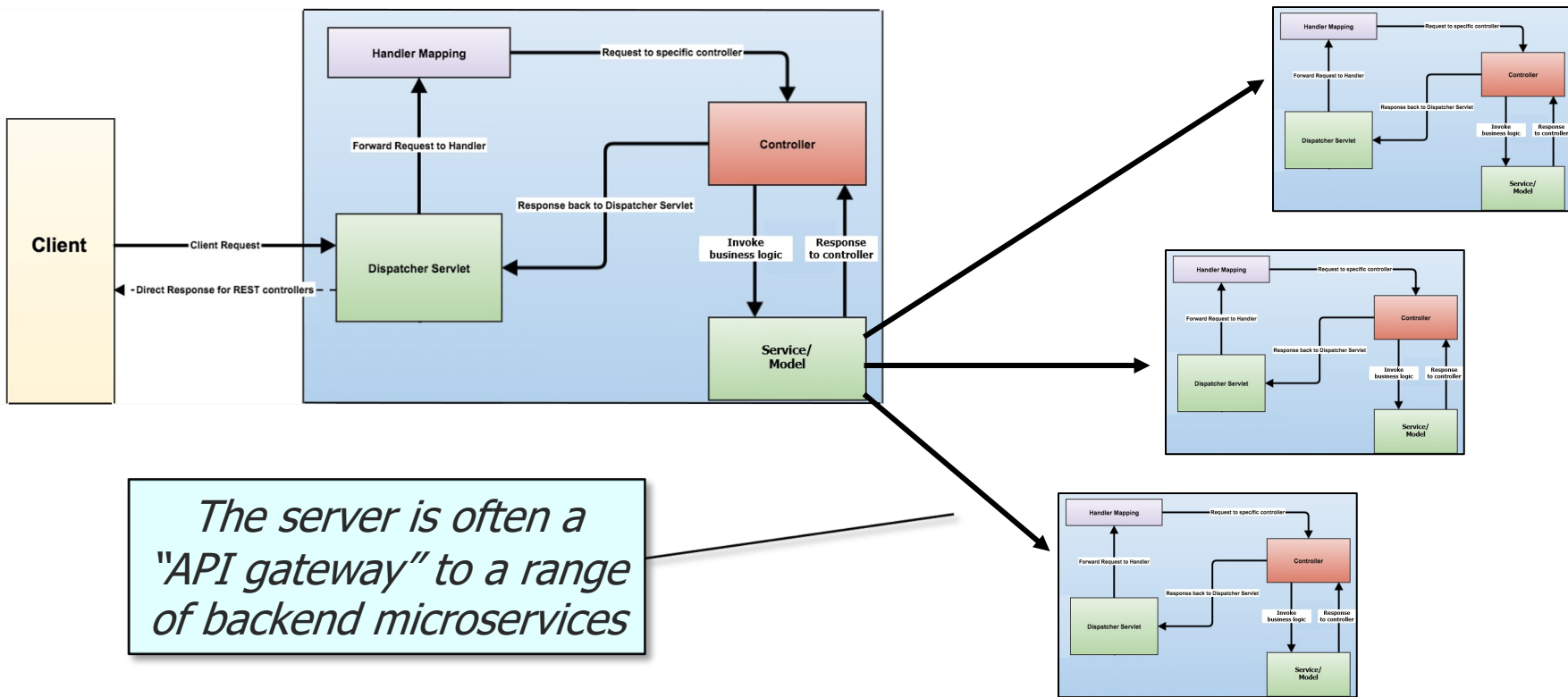
- Spring Boot implements the Model-View-Controller (MVC) pattern



See [en.wikipedia.org/wiki/Model-view-controller](https://en.wikipedia.org/wiki/Model-view-controller)

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See [spring.io/microservices](https://spring.io/microservices)

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# End of Overview of Spring Boot's Internal Architecture