

Software Development Lifecycle (SDLC)

SOFTWARE DEVELOPMENT LIFE CYCLE



IDEATION

Brainstorming ideas that solve a particular problem faced by target users.



REQUIREMENTS

Interacting with stakeholders and users to collect and document project requirements



DESIGN

Creating the architecture of a software system and its elements.



DEVELOPMENT

Building the software using a programming language by the development team.



TESTING

Evaluating the quality of software with the aim of finding and fixing defects



DEPLOYMENT

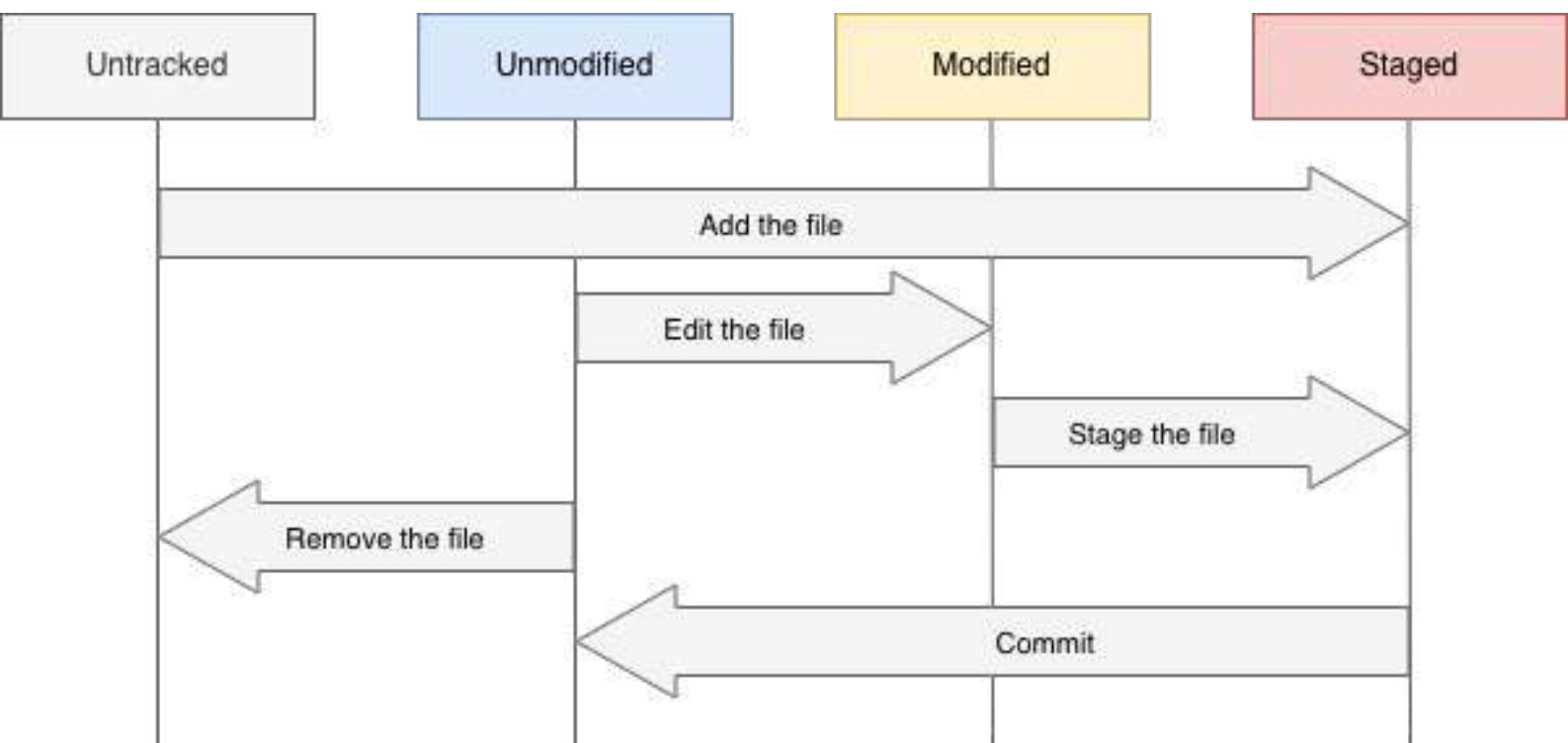
Preparing the software to run and operate in a specific environment.



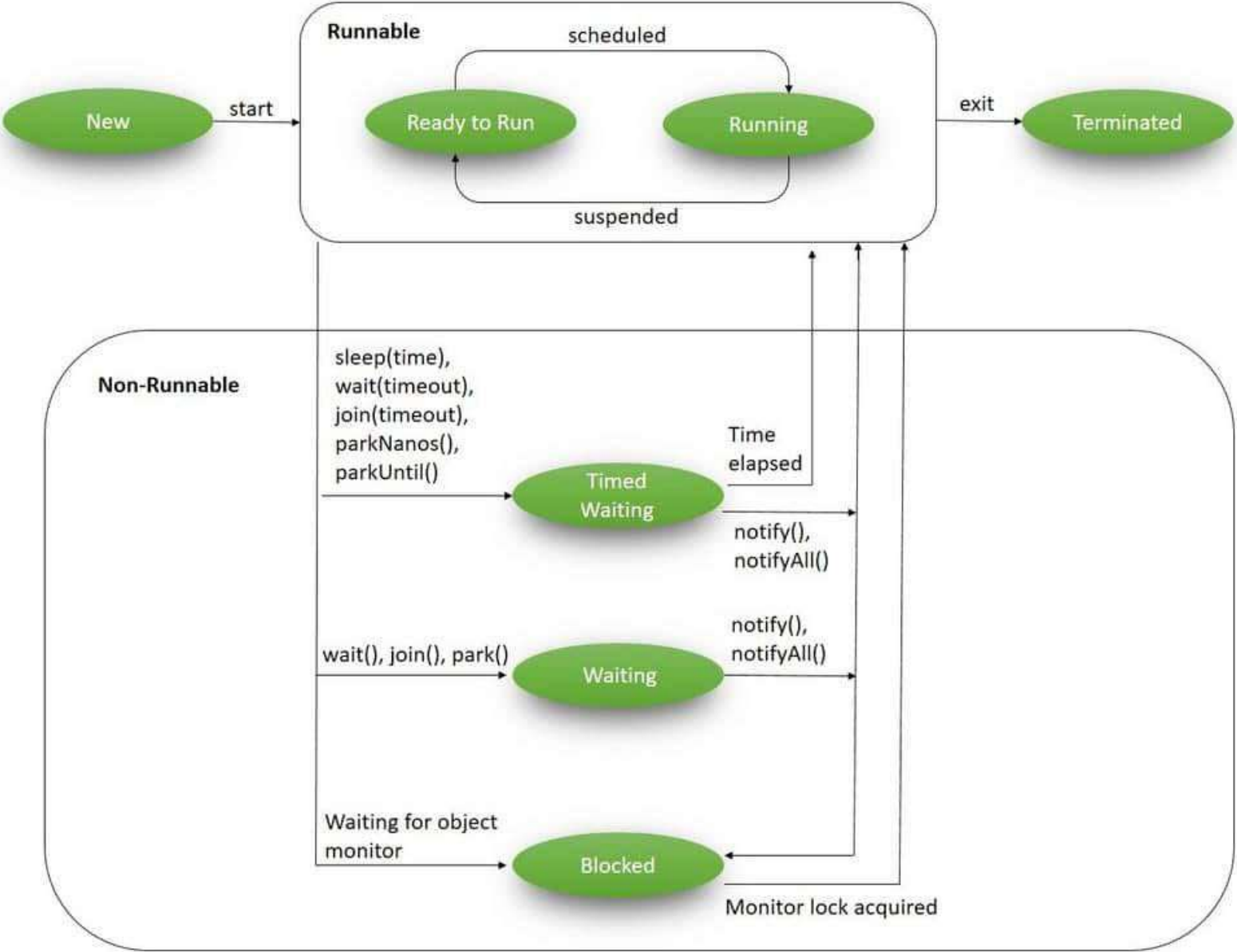
MAINTENANCE

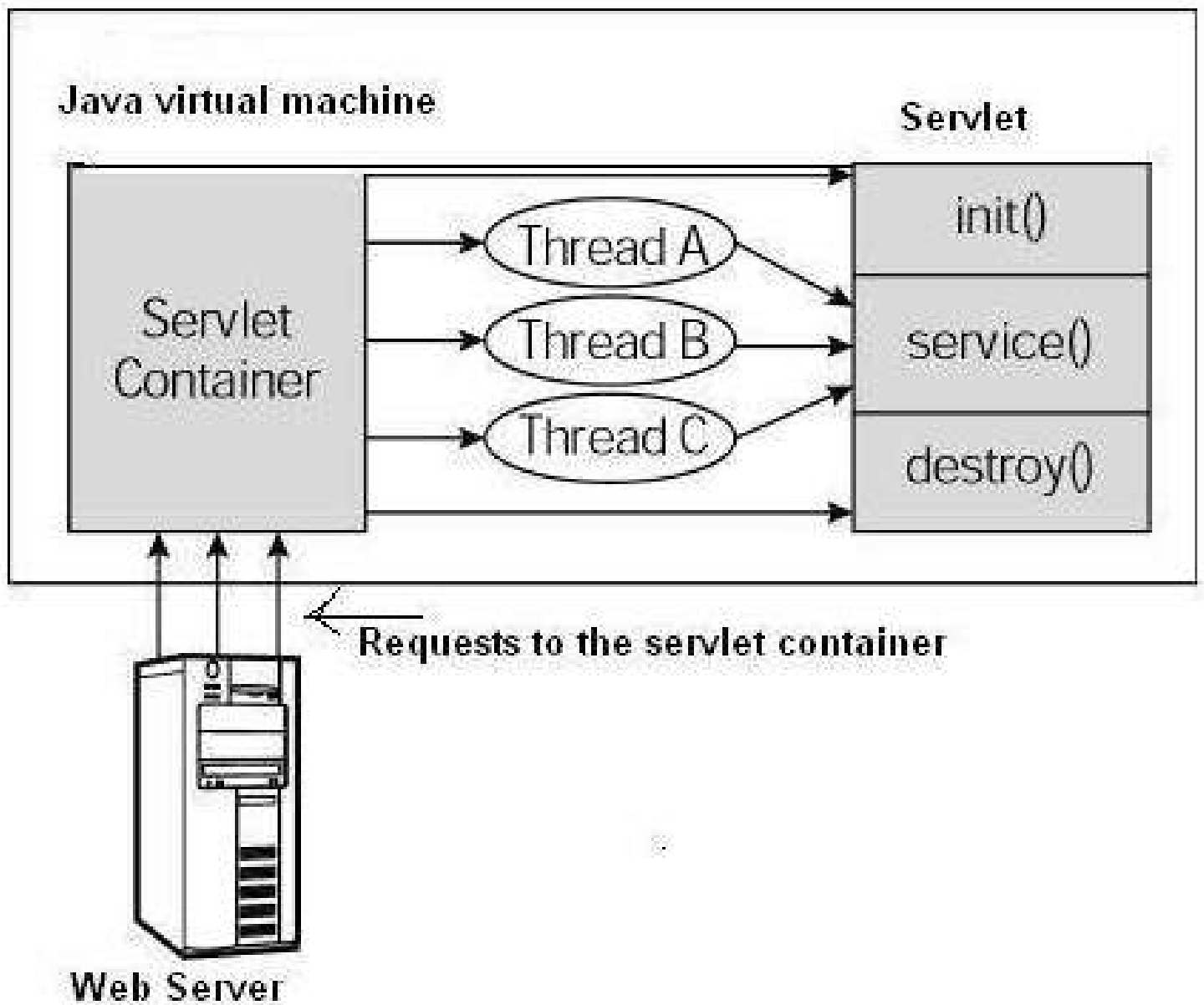
Updating and supporting the software after it has been delivered to the market.

<https://toolsqa.com/git/git-life-cycle/>

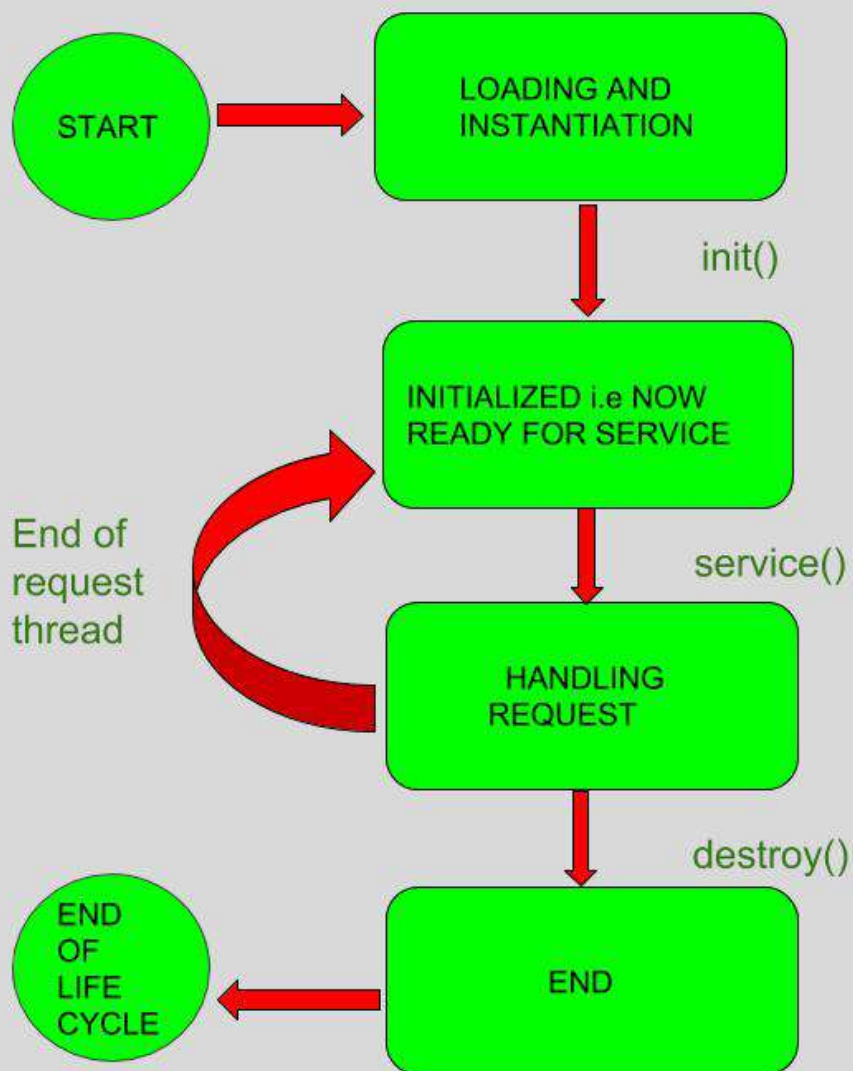


<https://www.baeldung.com/java-thread-lifecycle>

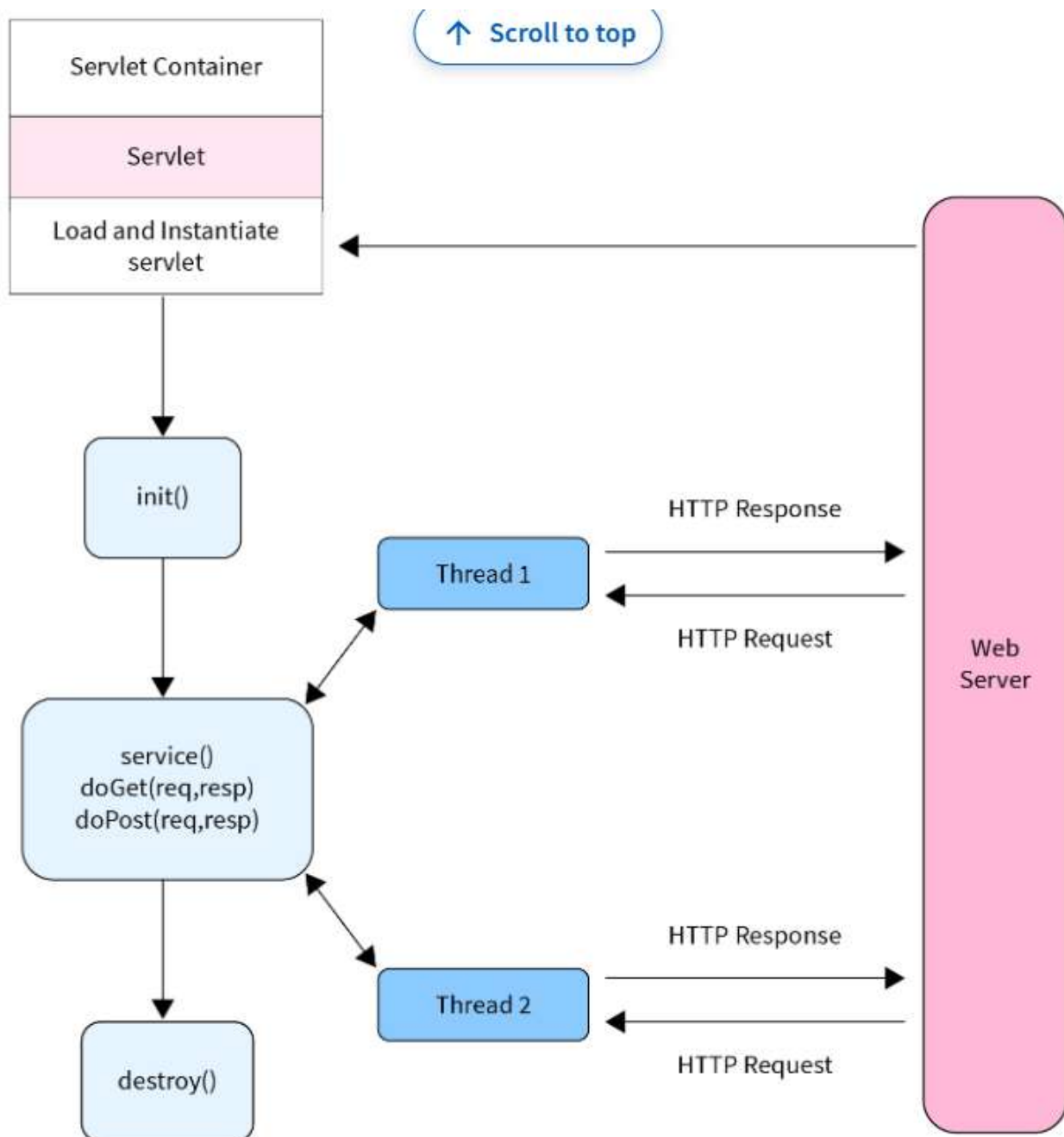




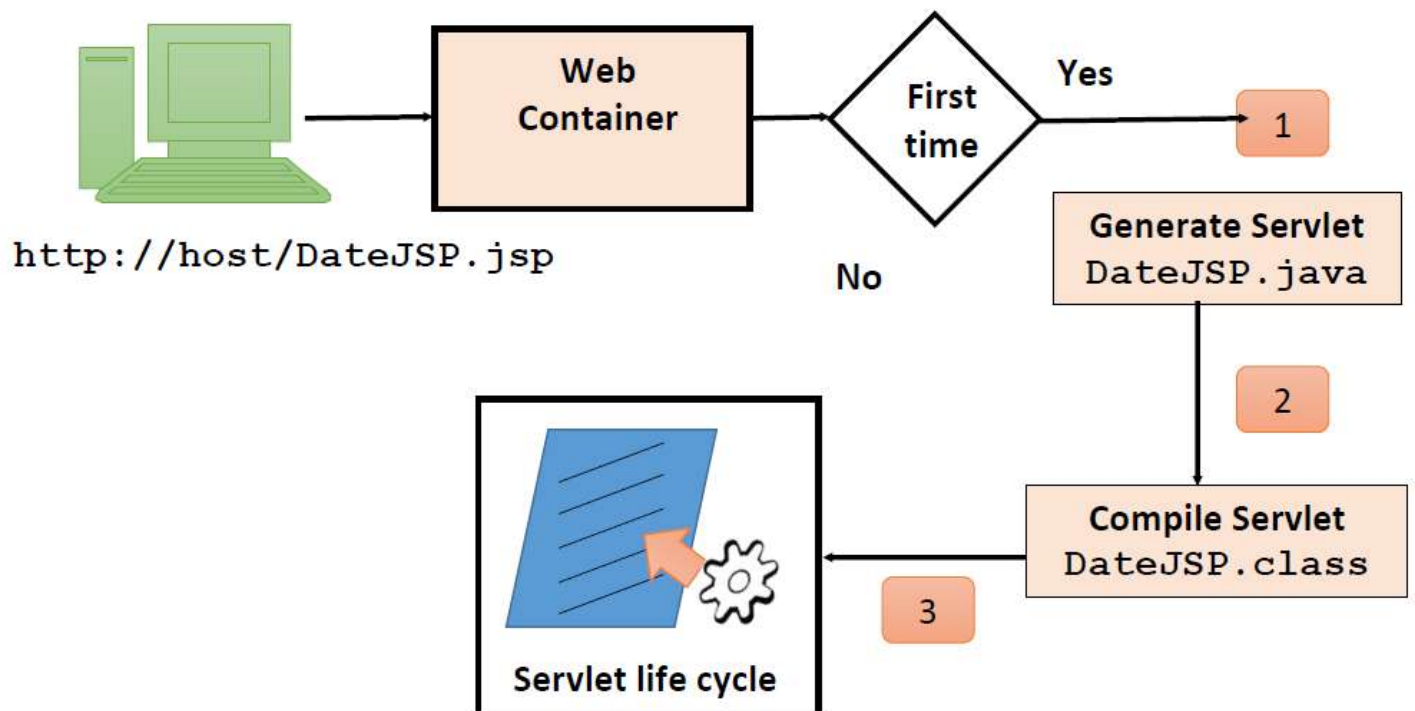
Servlet LC (2)



Servlet LC (3)



Ch8 : JSP Life Cycle

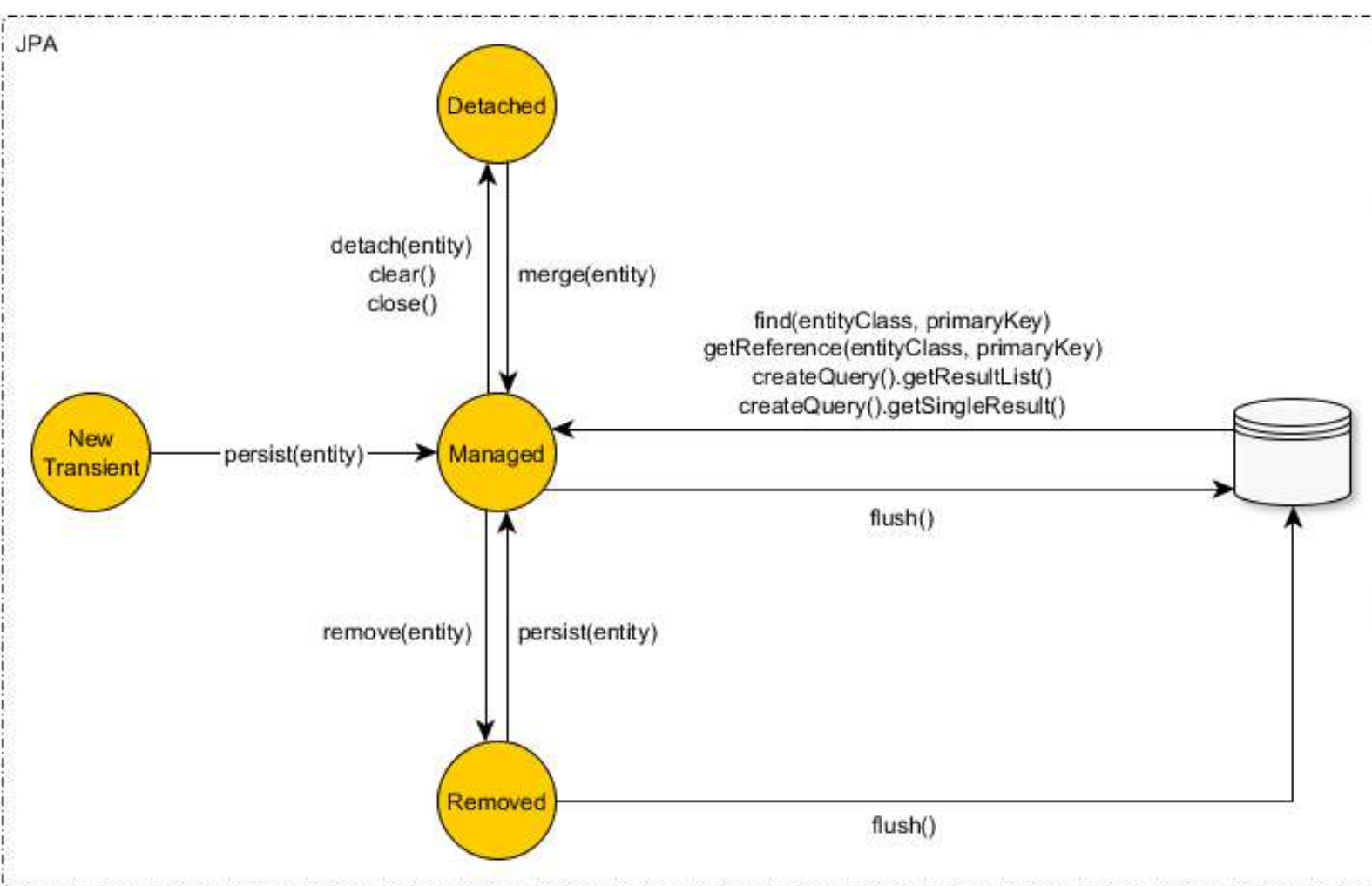


Ch8 : JSP Life Cycle

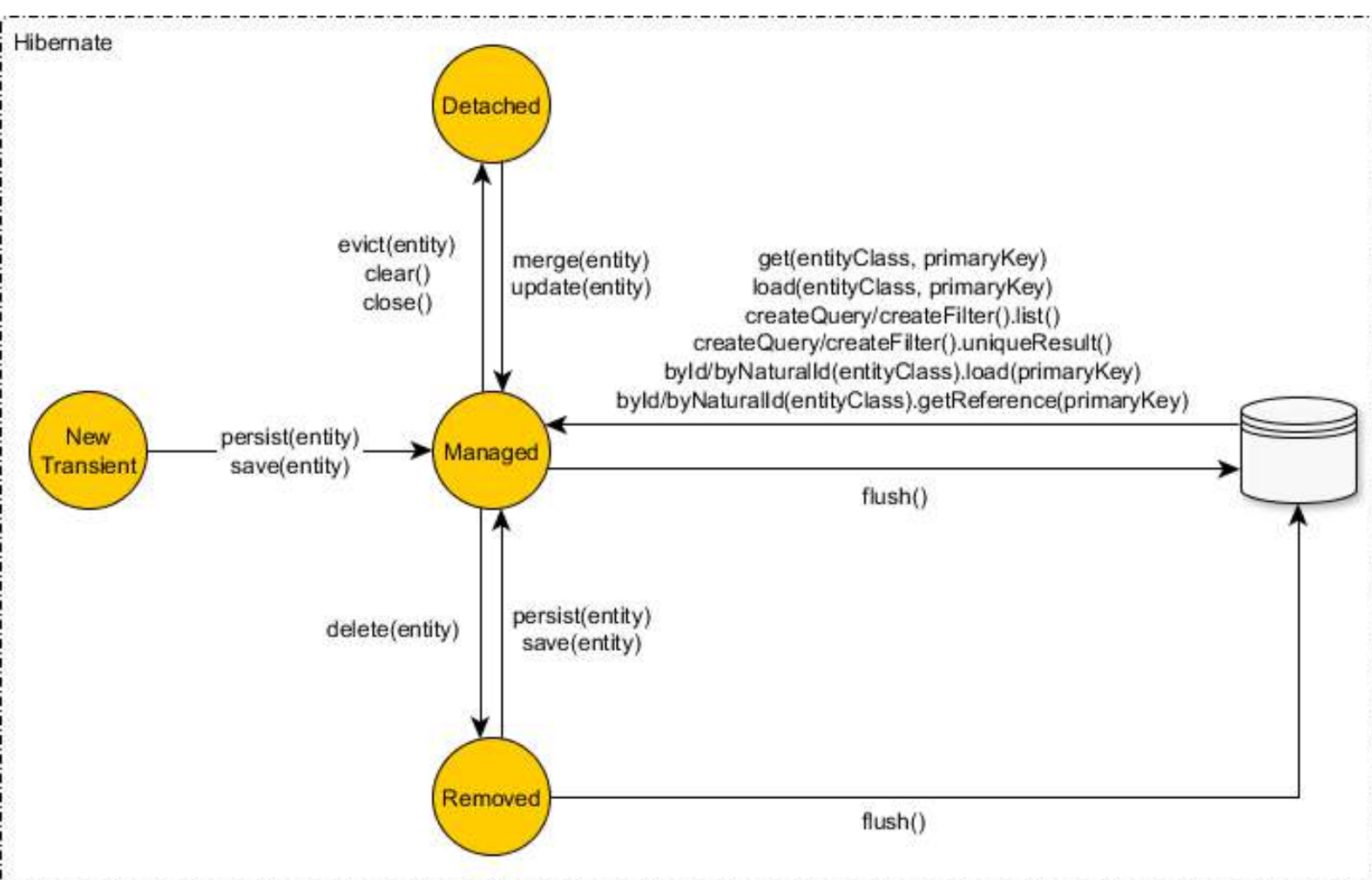
	JSP page translated into servlet	Servlet compiled	Servlet loaded into server's memory	jspInit called	_jspService called
Page first written					
Request1	Yes	Yes	Yes	Yes	Yes
Request2	No	No	No	No	Yes
Server restarted					
Request3	No	No	Yes	Yes	Yes
Request4	No	No	No	No	Yes
Page modified					
Request5	Yes	Yes	Yes	Yes	Yes
Request6	No	No	No	No	Yes

Clean Lifecycle	Default Lifecycle		Site Lifecycle
pre-clean	validate	test-compile	pre-site
clean	initialize	process-test-classes	site
post-clean	generate-sources	test	post-site
	process-sources	prepare-package	site-deploy
	generate-resources	package	
	process-resources	pre-integration-test	
	compile	integration-test	
	process-classes	post-integration-test	
	generate-test-sources	verify	
	process-test-sources	install	
	generate-test-resources	deploy	
	processs-test-resources		

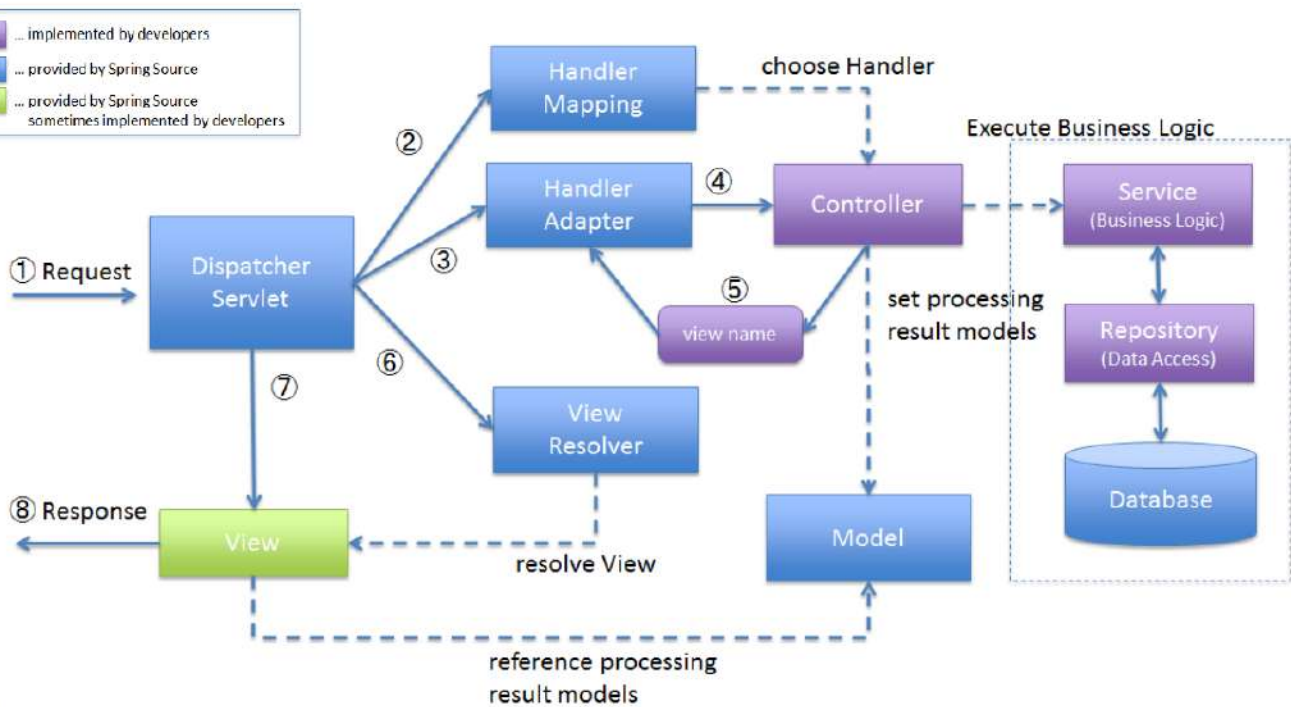
ORM Context LC (JPA)



ORM Context LC (Hibernate)



Request Life Cycle



Spring Bean Lifecycle CheatSheet



Spring Bean - POJO (Plain Old Java Object) managed by the IoC container (Spring)

Bean annotations:

@Bean @Component @Service
 @Controller @RestController @Repository

