

Spring Framework

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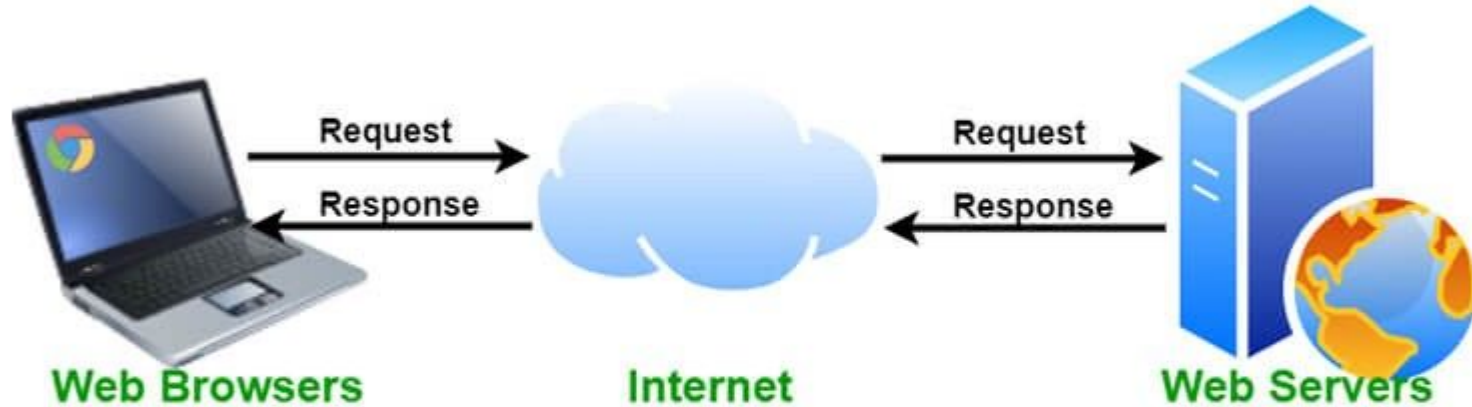
Web Server Definition

- A Web server is a program that generates and transmits responses to client requests for Web resources.
- Handling a client request consists of several key steps:
 - Parsing the request message
 - Checking that the request is authorized
 - Associating the URL in the request with a file name
 - Constructing the response message
 - Transmitting the response message to the requesting client

Steps in Handling a Client Request

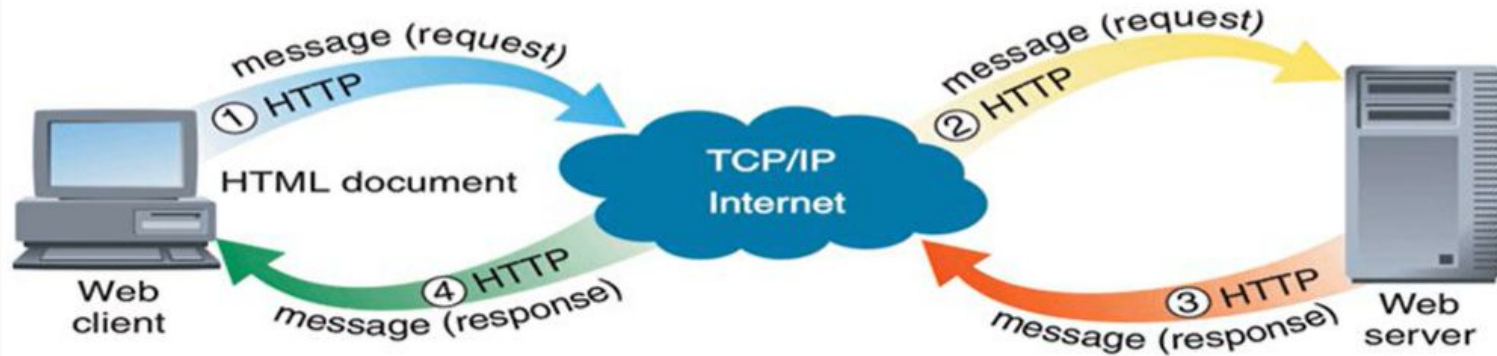
- A Web server proceeds through the following steps in handling an HTTP request:
 - Read and parse the HTTP request message
for example GET the resource /foo.htm
 - Translate the URL to a file name
for example the resource be located in the base directory
such as /www, where the URL
http://www.bar.com/foo/index.html corresponds to
the file of www/foo/index.html
 - Determine whether the request is authorized
 - Generate and transmit the response that includes
header to show the status information

Client Server Architecture



Two Tier Architecture

- Two-tier client/server architecture has one client and one server



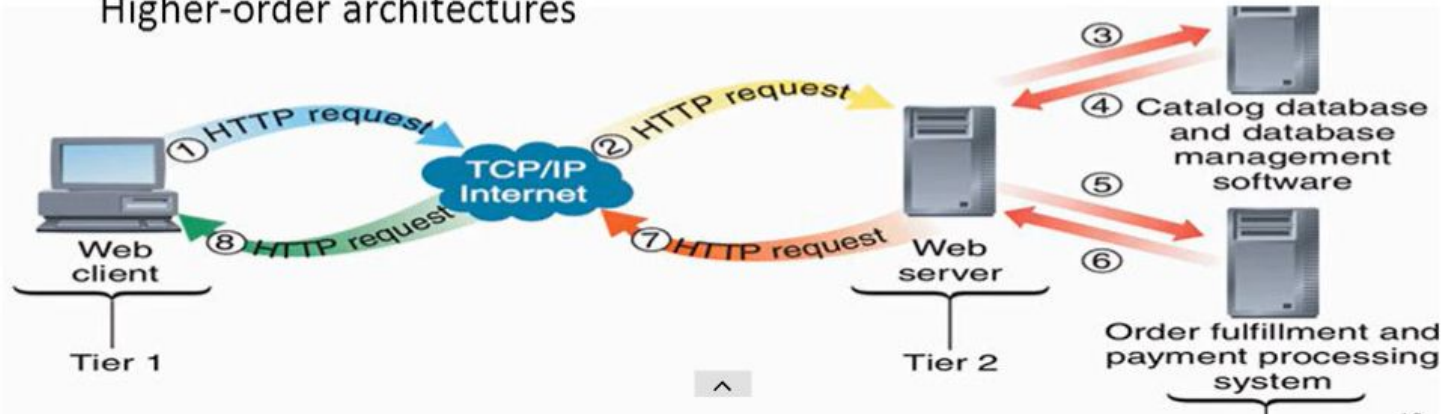
Three/N - Tier Architecture

Three-tier architecture

Extends two-tier architecture to allow additional processing (e.g., collection of data from a database) before responses to requests are made

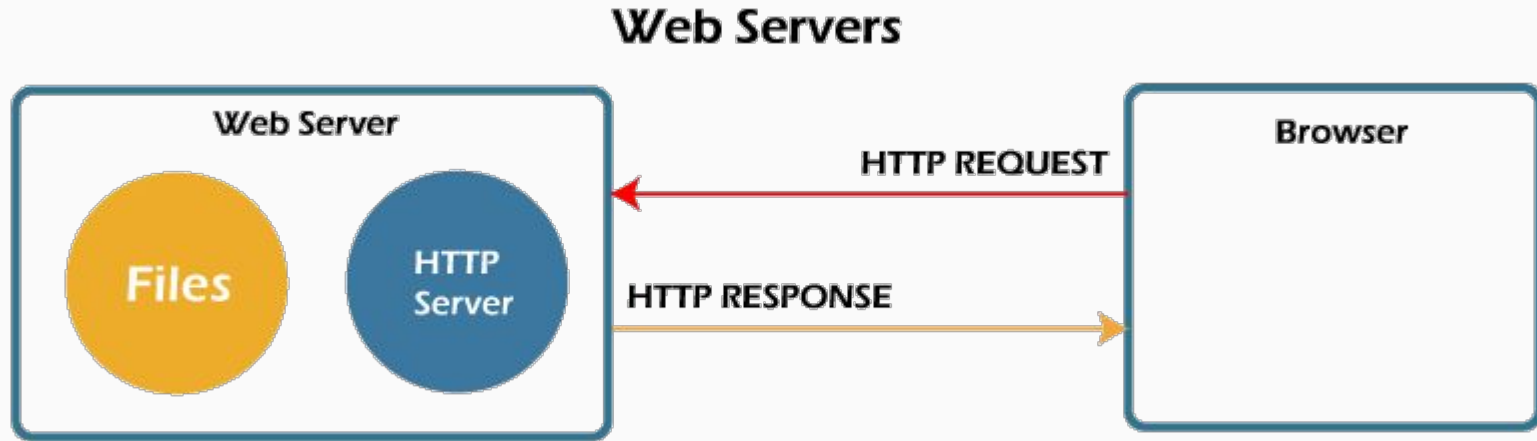
N-tier architectures

Higher-order architectures



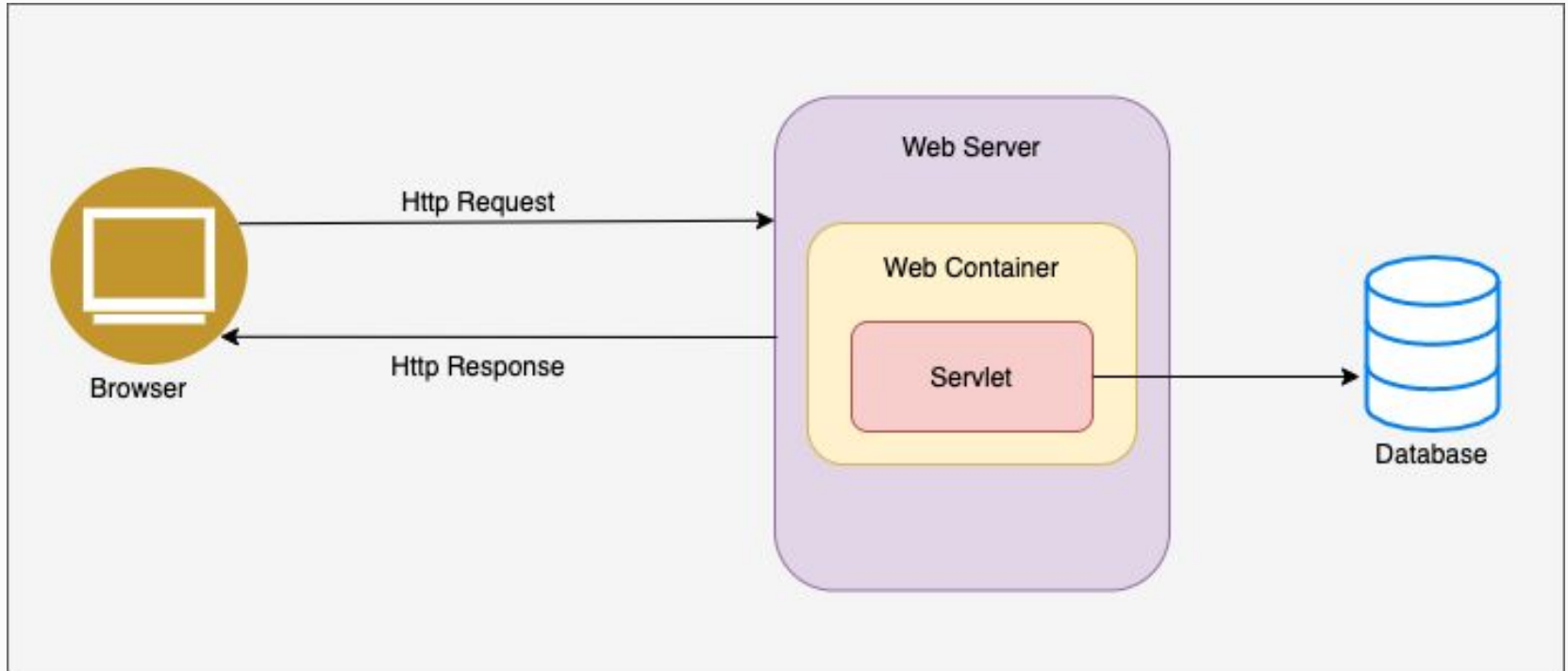
Web Server Vs Web Container Vs Application server

Web Server



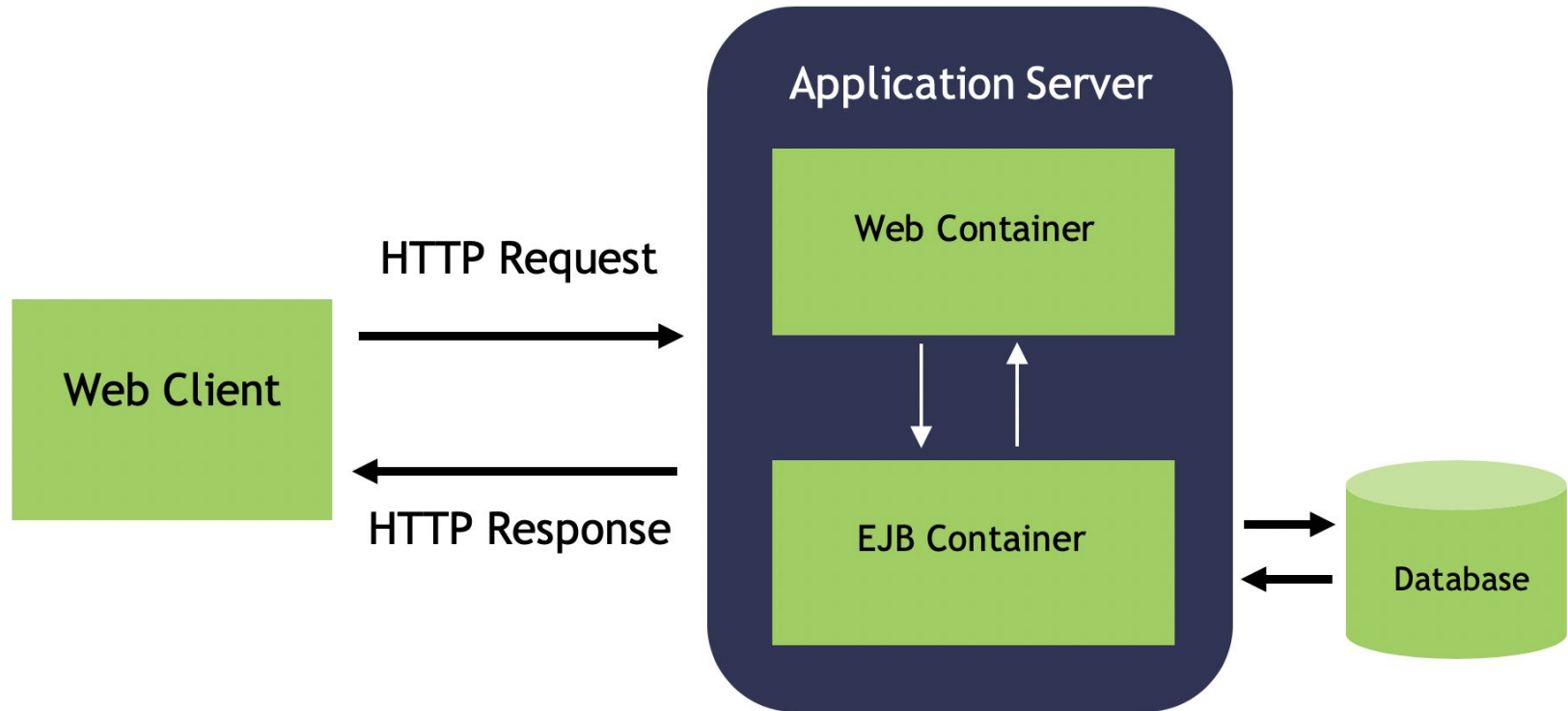
Web Server Vs Web Container Vs Application server

Web Containers

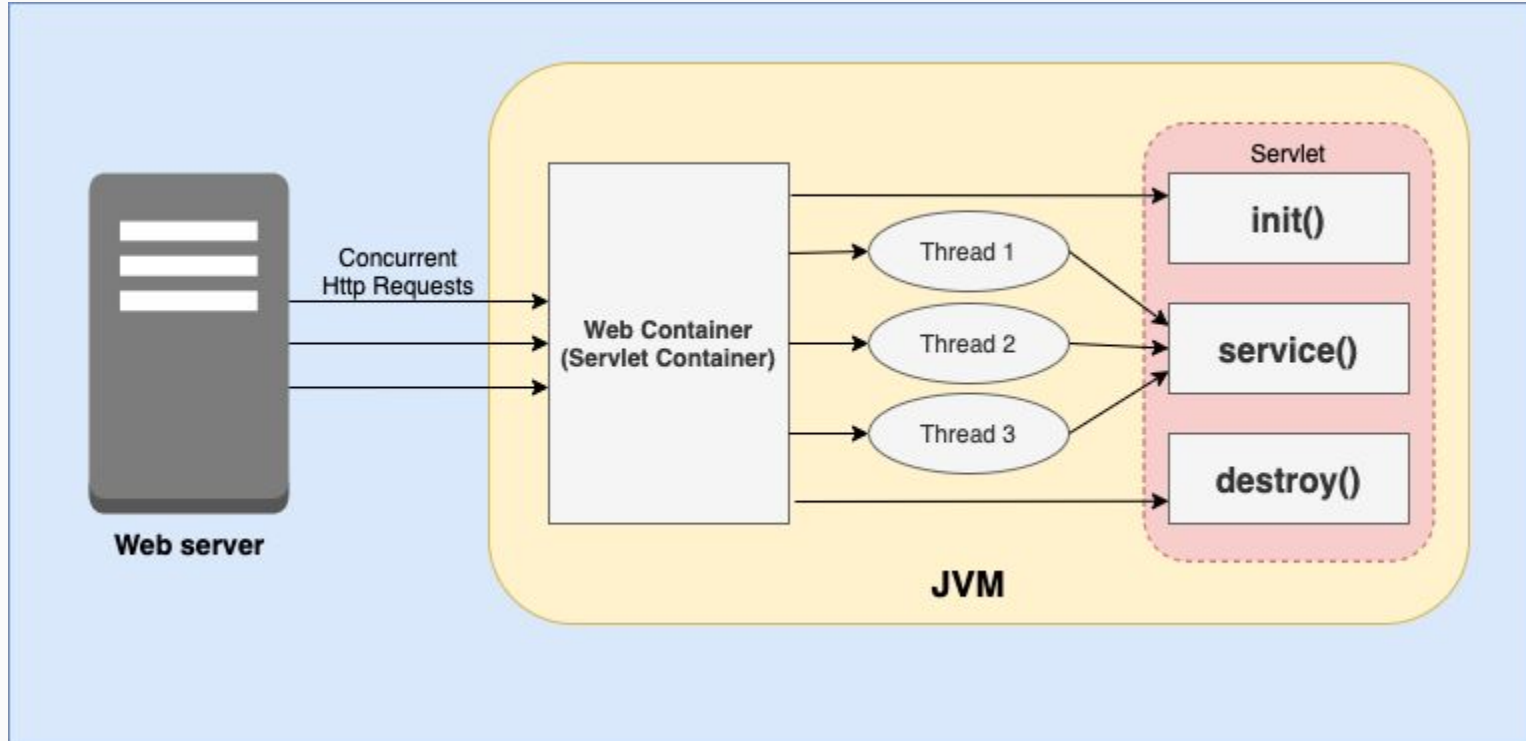


Web Server Vs Web Container Vs Application server

Application Servers

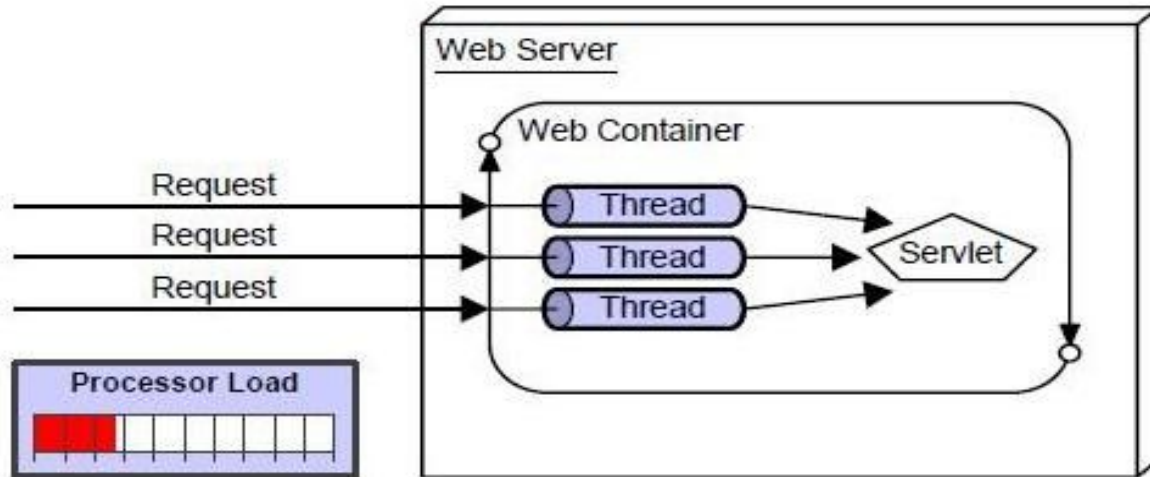


Servlet

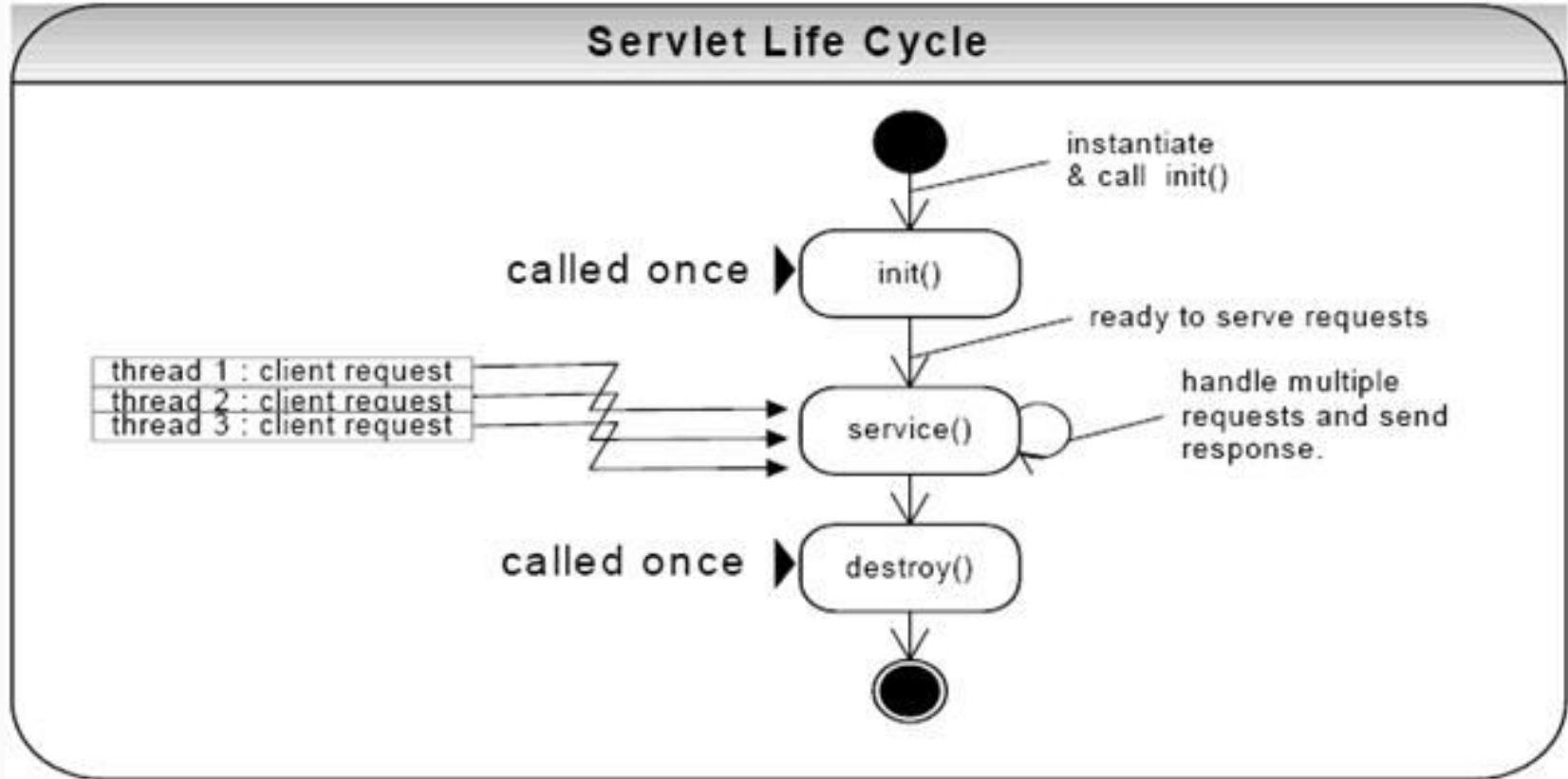


Servlet

- A Servlet container can have multiple servlets running concurrently.
- Servlet processes multiple request using multiple worker threads.



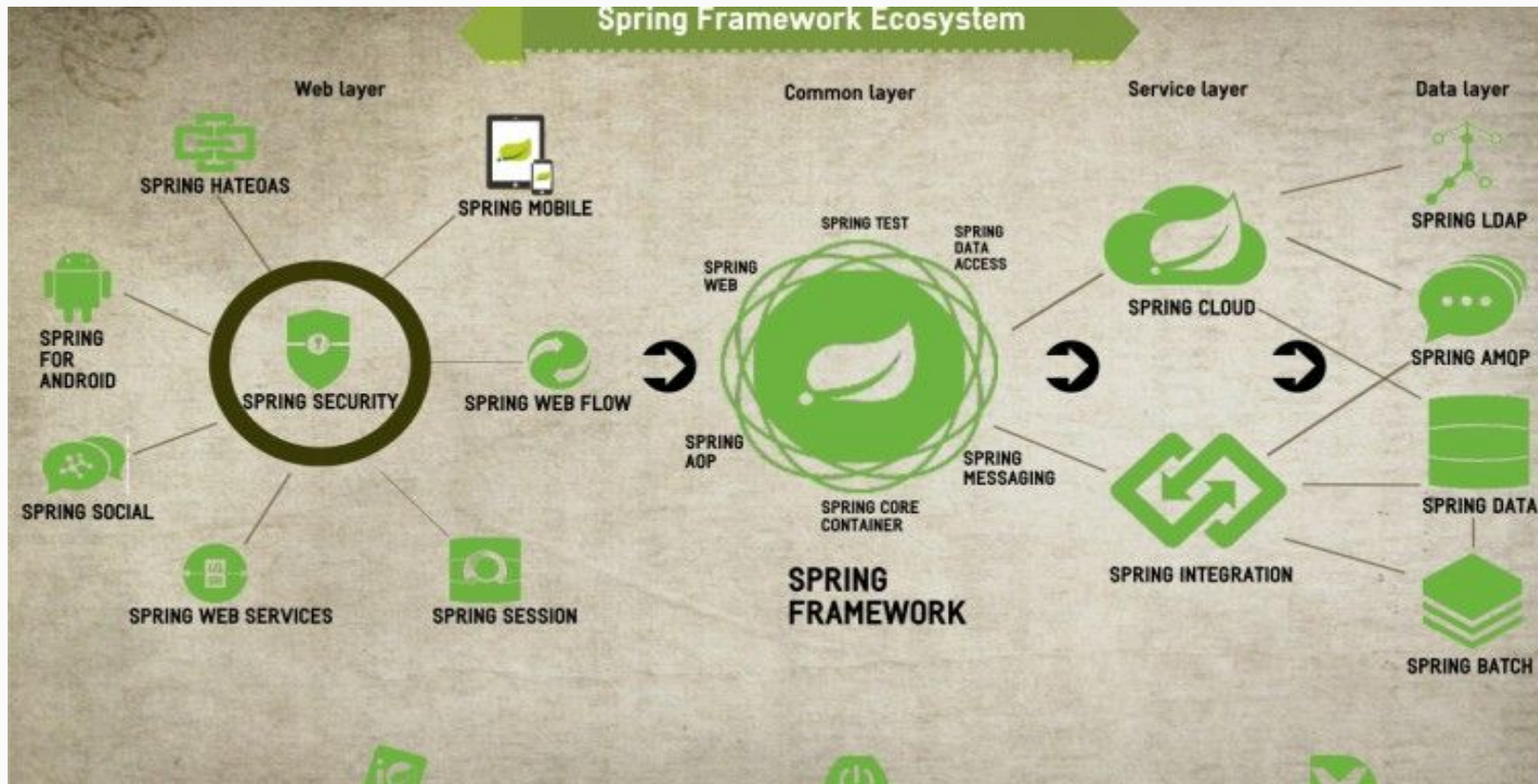
Servlet Lifecycle



What is Spring Framework?

- Spring Framework was created by Rod Johnson(2003) and released under Apache 2.0 license.
- The most popular application development framework for enterprise Java.
- An Open source Java platform.
- Provides to create high performing, easily testable and reusable code.
- is organized in a modular fashion.
- simplifies java development.

Spring Ecosystem



Spring Key Modules

