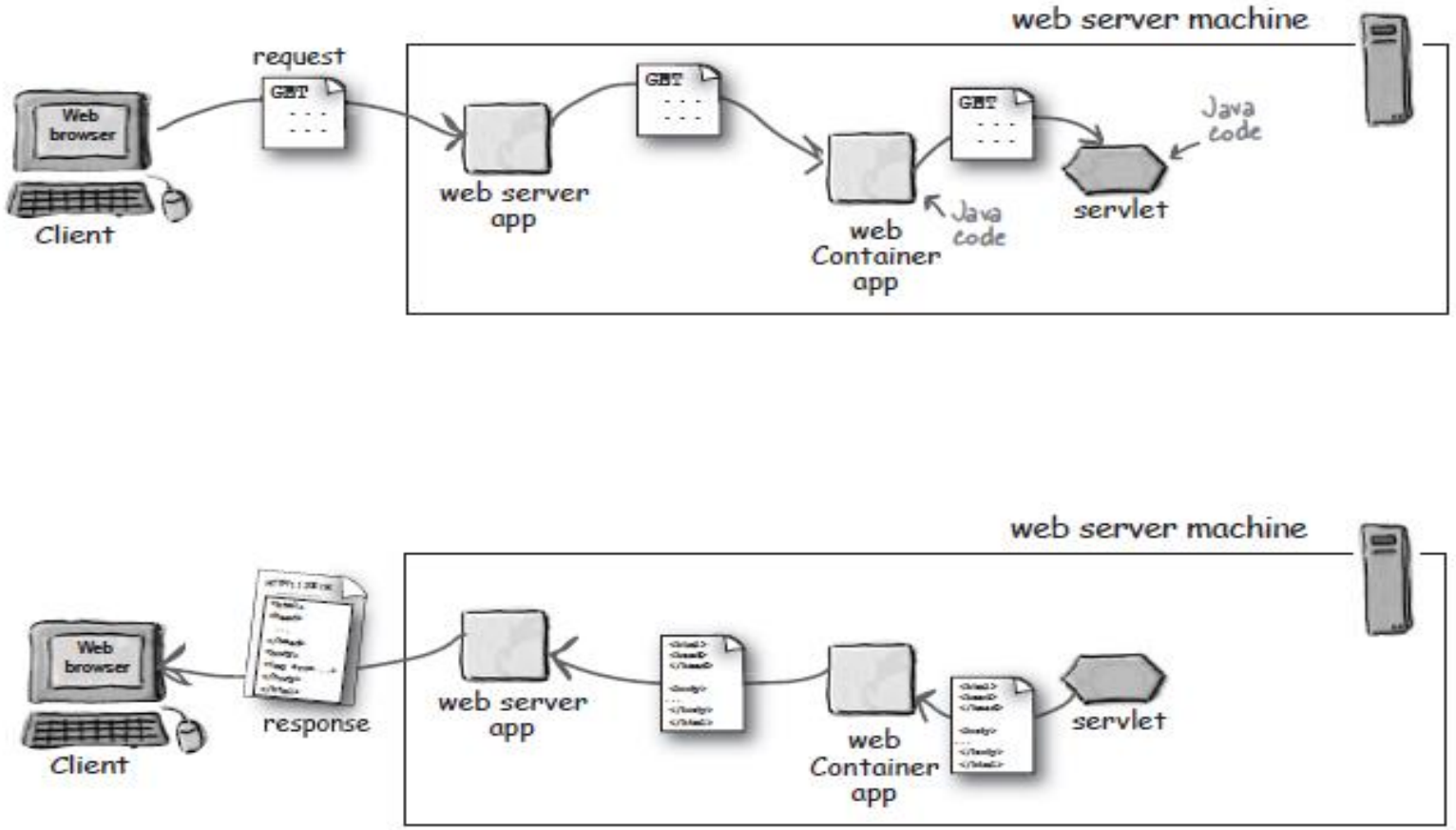
Веб програмирање

Аудиториска вежба 2

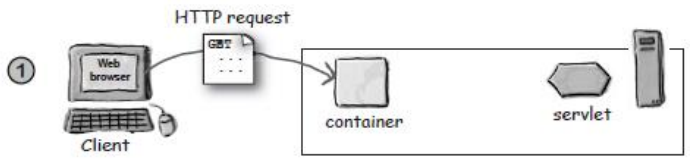
Дарко Сасански

Web App Architecture

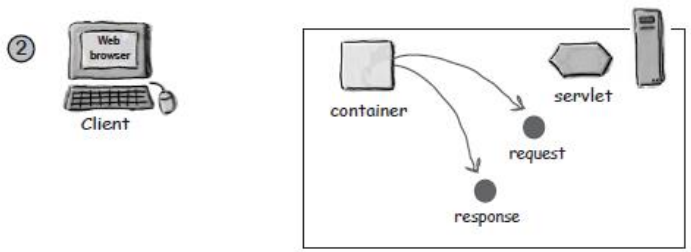


What does the Container give you?

How the container handles a request?



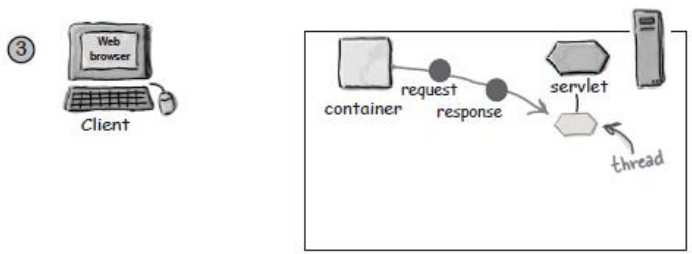
User clicks a link that has a URL to a servlet instead of a static page.



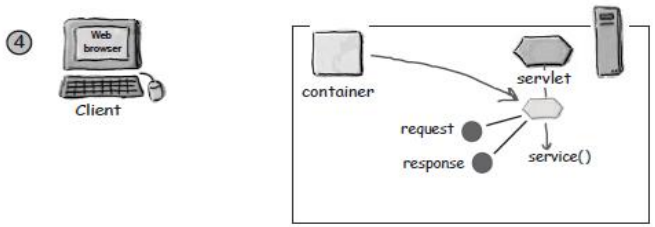
The container "sees" that the request is for a servlet, so the container creates two objects:

1) HttpServletResponse

2) HttpServletRequest

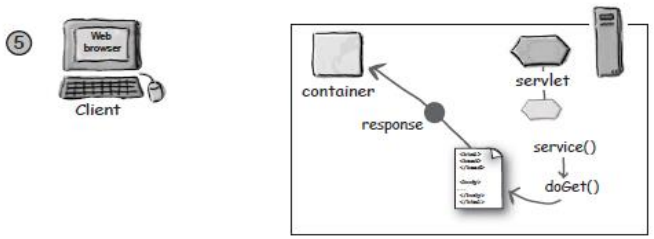


The container finds the correct servlet based on the URL in the request, creates or allocates a thread for that request, and passes the request and response objects to the servlet thread.

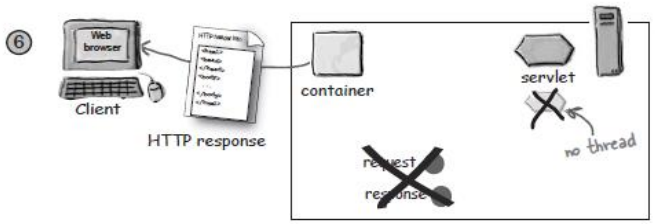


The container calls the servlet's service() method. Depending on the type of request, the service() method calls either the doGet() or doPost() method.

For this example, we'll assume the request was an HTTP GET.

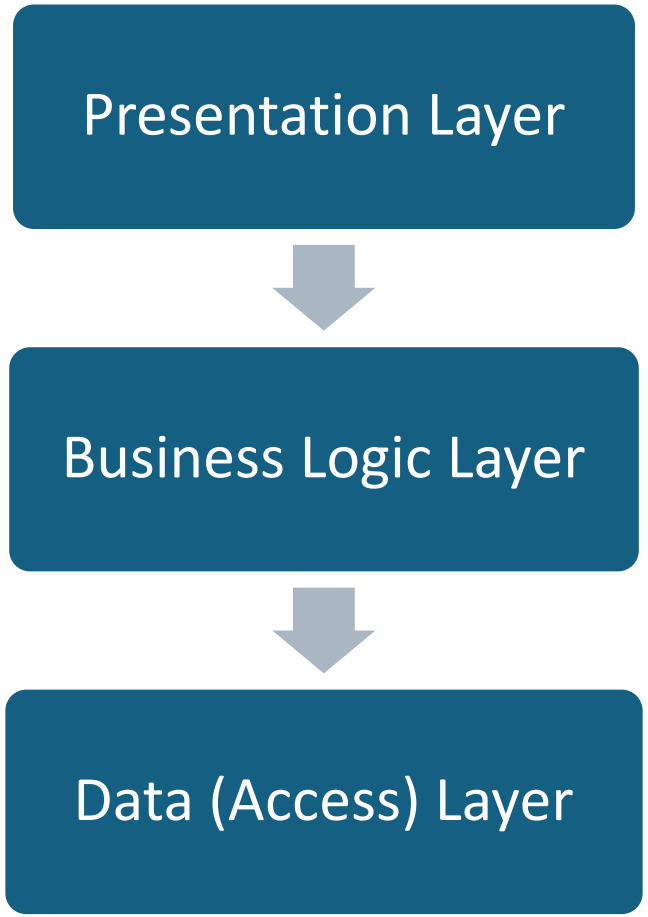


The doGet() method generates the dynamic page and stuffs the page into the response object. Remember, the container still has a reference to the response object!



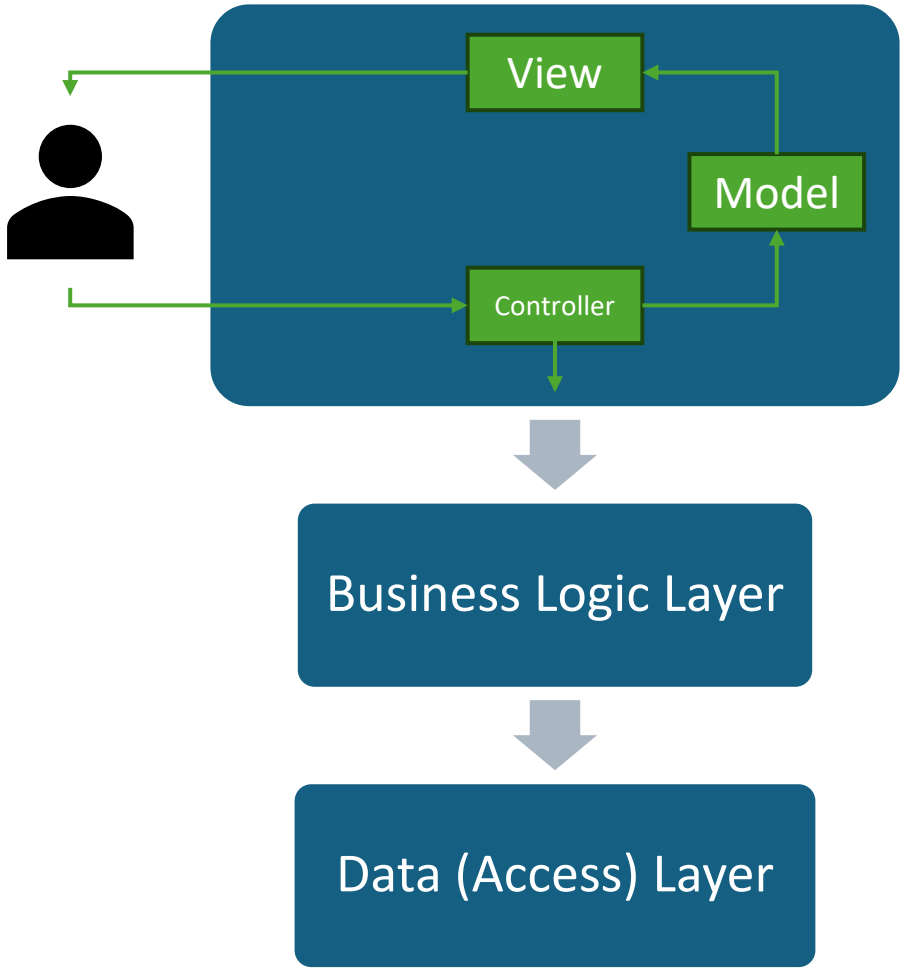
The thread completes, the container converts the response object into an HTTP response, sends it back to the client, then deletes the request and response objects.

Spring Boot Architecture



- **Presentation layer**: This is the user interface of the application that presents the application's features and data to the user.
- **Business logic (or Application) layer**: This layer contains the business logic that drives the application's core functionalities. Like making decisions, calculations, evaluations, and processing the data passing between the other two layers.
- **Data access layer (or Data) layer**: This layer is responsible for interacting with databases to save and restore application data.

Three-tier architecture vs MVC pattern



- The **MVC pattern** is only concerned with organizing the logic in the user interface (presentation layer).
- **Three-tier architecture** has a broader concern. It's about organizing the code in the whole application.
- The controller component of MVC is the connection point between the Presentation Layer and the Business Logic Layer.
- When an **HTTP request** is being processed, it calls the business logic layer. Based on the returned response, it updates the model, and chooses the right view to display to the user.