

Java Servlets 3.0

Lesson 01: Java Web Applications



Lesson Objectives

In this lesson, we will learn:

- An overview of Web Applications
- What are Web Components?
- What are JEE containers?



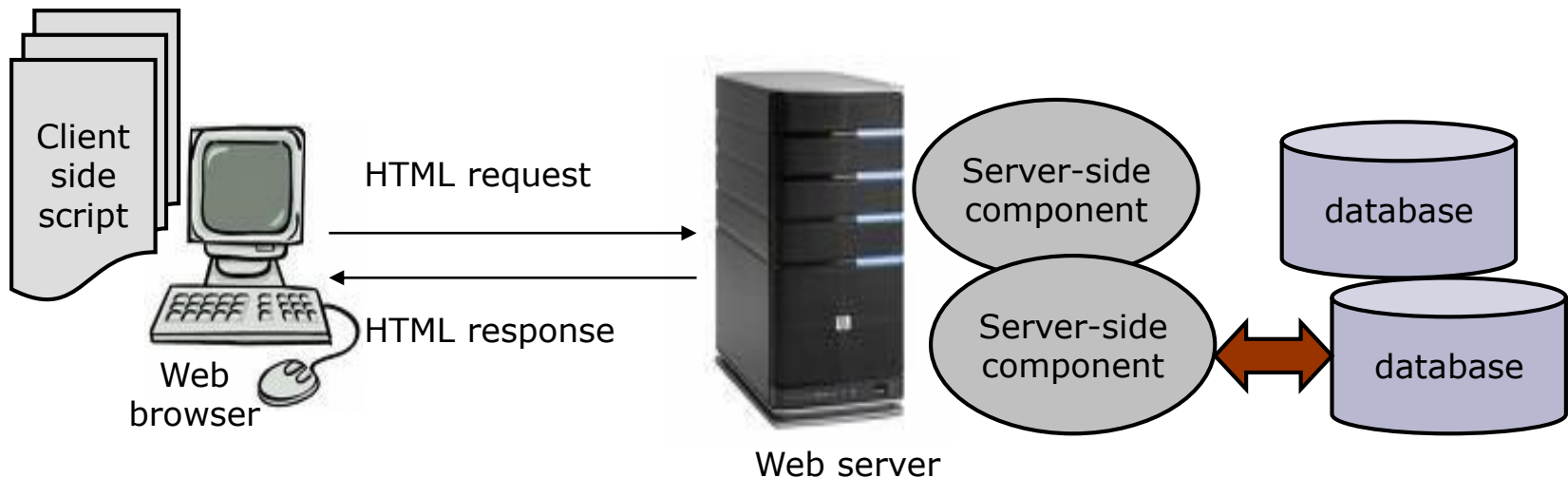


1.1: Web Applications – An Overview

Server-Side Applications

Client-side scripting versus Server-side scripting:

- Client-side scripts run on the client-side of a client-server application.
- Server-side scripts/code run on the server-end of a client-server application.





1.1: Web Applications – An Overview

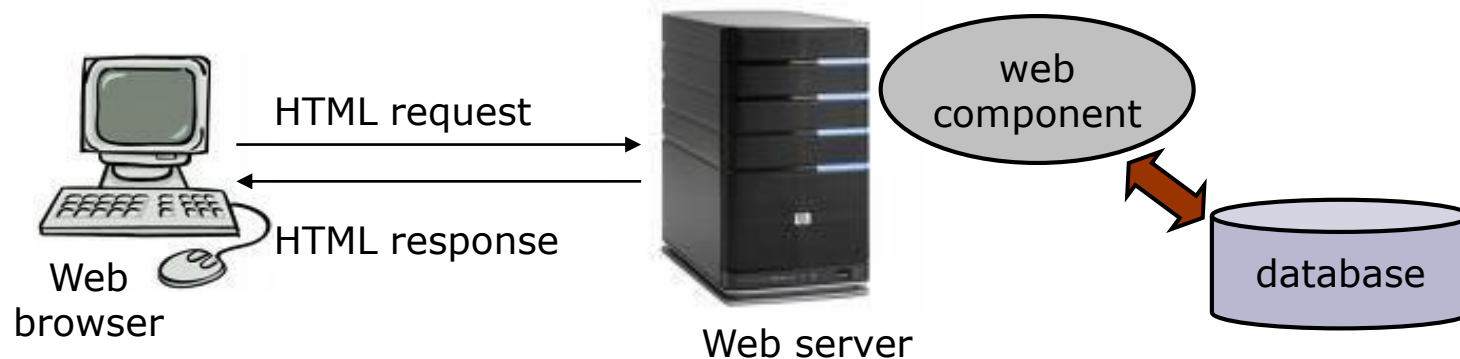
Server-Side Applications

A web application is ...

- an application that is accessed via web browser over a network such as the Internet or an intranet

A Web Client typically uses HTTP protocol to communicate with a Web Server to request for services.

A Web component is a software entity that provides a response to a web request. For example: Servlets and JSP





Using Web Components in Application Design

JEE specifies two types of web components:

- A servlet is a component (a Java class) that extends the functionality of a Web server in a portable and efficient manner.
- The JavaServer Pages technology provides an extensible way to generate dynamic content for a Web client.



1.3: What are JEE Containers?

Java EE Containers, Components & Services

Java EE containers provide a runtime environment for components that include security, concurrency, life-cycle management, transaction, deployment, and other services. They can be classified as:

- Web containers: Host web components like Servlets and JSP
 - For example: Apache's Tomcat Server, Sun's Java Web Server
- Application containers: Host business components for developing enterprise-based applications.
 - For example: BEA System's Weblogic, IBM's Websphere Application Server, Redhat's WildFly server.

Summary



In this lesson, we have learnt:

- An overview of Web Applications
- What are Web Components?
- What are JEE containers?



Review Questions



Question 1: A ____ is a software entity that provides a response to a web request.

- Option 1: Web Component
- Option 2: HTML page
- Option 3: Javascript
- Option 4: Web Server



Question 2: WildFly is actually an example of a:

- Option 1: Web Server
- Option 2: Application server