Servlets

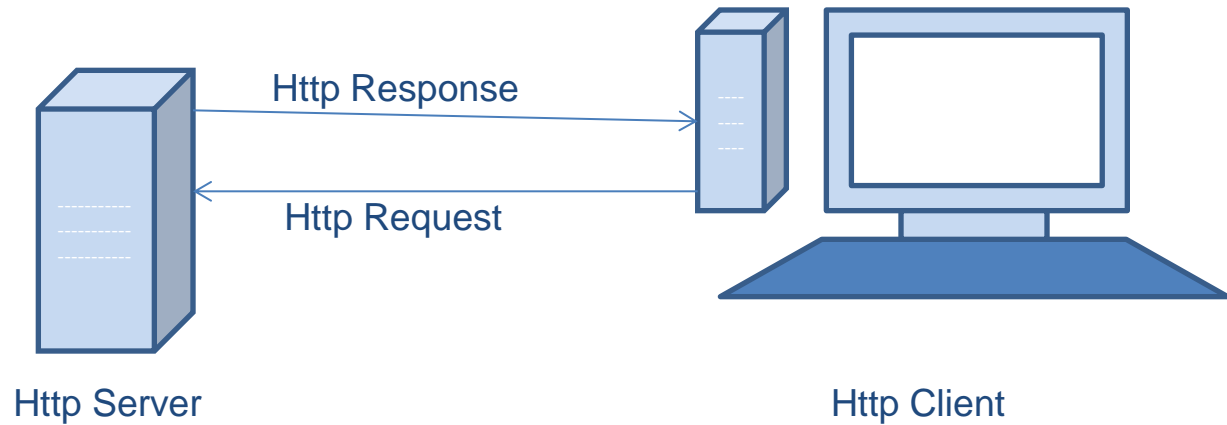*Authored by : Sangeeta Joshi*   *Presented by: Sangeeta Joshi*

Agenda

- Basics of HTTP & HTML

- What is a Servlet?

- Servlet Lifecycle

HTTP Basics

Http Response

Http Request

Http Server

Http Client

HTTP

- HTTP stands for Hypertext Transfer Protocol

- HTTP uses the client-server model

- HTTP client - a browser ,sends requests to an HTTP server (Web server)

- Server returns a response message, usually the requested resource

- HTTP is a Stateless protocol

- The default port for HTTP servers to listen on is 80

HTTP Methods

GET   : The request data gets appended to the request URL.

POST   : The request data is passed as part of message body

HEAD   :   Similar to GET, except it asks the server to return the
           response headers only (No message body)

 PUT   :   To upload a resource on server
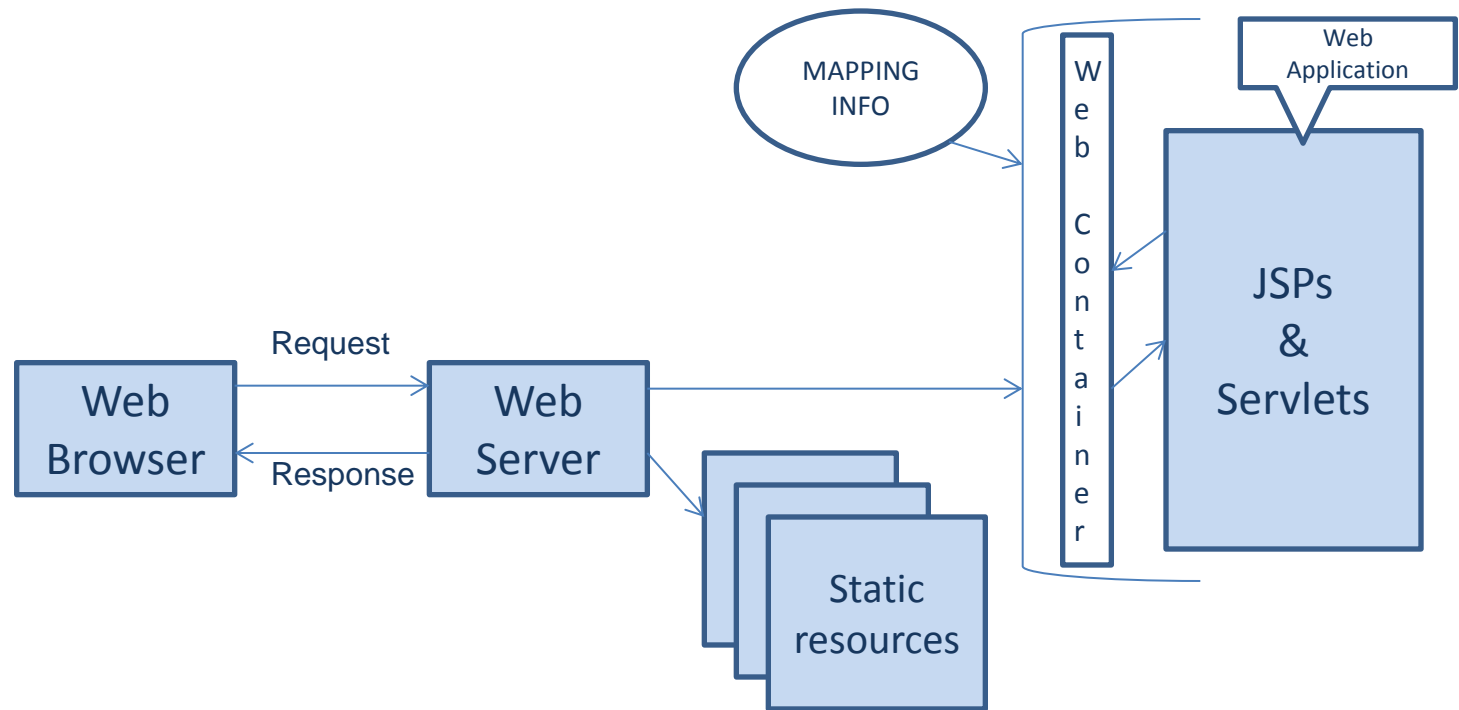
DELETE : To delete a resource from server

Web Server Technologies
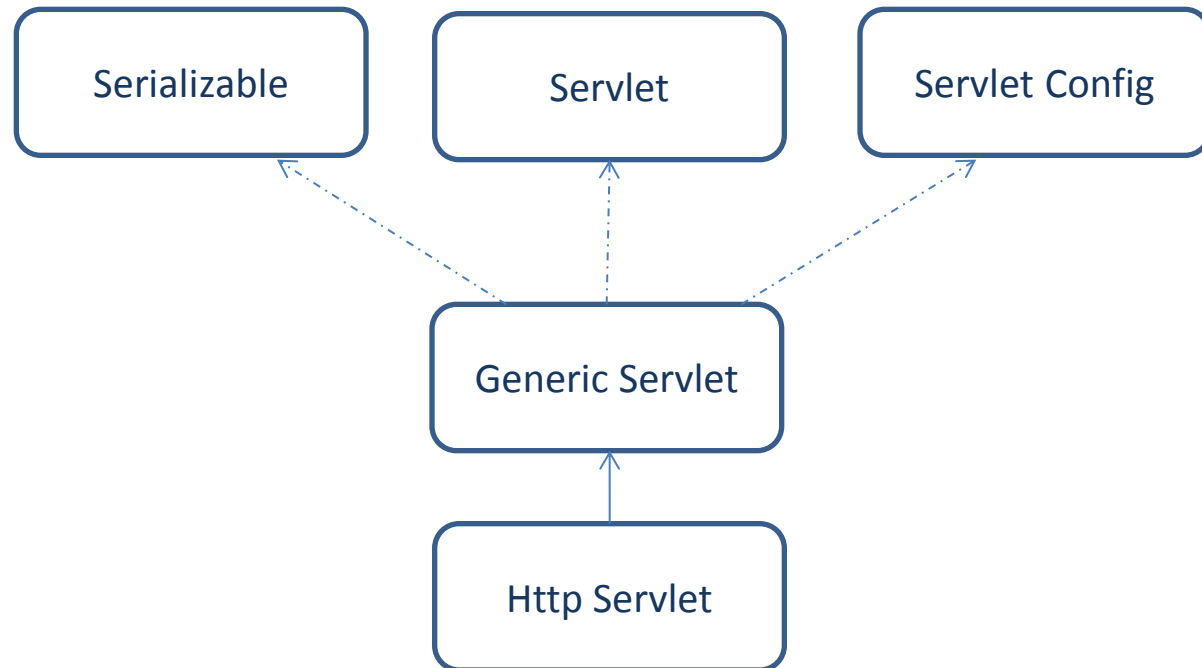
- CGI

- NSAPI

- Servlet

- JSP

- ASP

Advantages of Servlet Technology

- Efficient

- Persistent

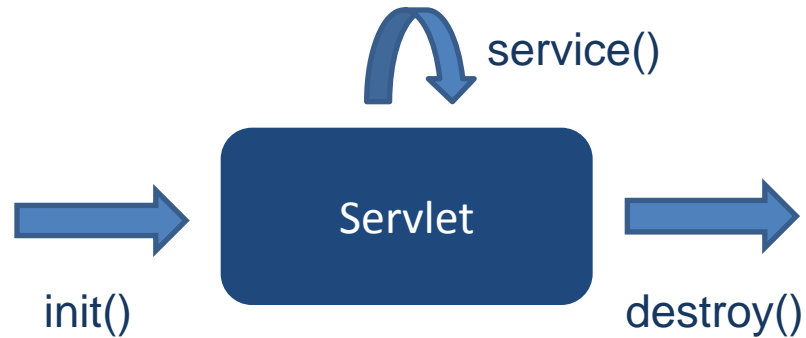- Portable

- Robust

- Extensible

- Secure

Request Response Flow

Servlet

```
┌─────────────────┐      ┌─────────────────┐      ┌─────────────────┐
│   Serializable  │      │     Servlet     │      │  Servlet Config │
└─────────────────┘      └─────────────────┘      └─────────────────┘
          ↖                       ↑                       ↗
              ↖                   ↑                   ↗
                  ┌─────────────────────────────┐
                  │       Generic Servlet       │
                  └─────────────────────────────┘
                                ↑
                  ┌─────────────────────────────┐
                  │        Http Servlet         │
                  └─────────────────────────────┘
```

Servlet Life Cycle

Any Questions?