SSWS Introduction

Server-side technologies refer to the various applications, scripts, operations, etc., that are executed within the web server itself. They are designed for developing mainly applications that run in the background, similarly to client-side technologies, which are executed on the client’s browser. How each technology handles data, or clients’ input, is what sets them apart. For example, manipulating databases are reserved for server-side technologies as there is a direct connection between the database and the server.

Java EE (Enterprise Edition) is commonly used within the industry for the development of Java applications.

References

<https://www.upwork.com/hiring/development/server-side-scripting-back-end-web-development-technology/>

april 17 notes - started by nic, pls supply more info, thank you.

Server Side Web Scripting (SSWS)

- commonly used in web development that includes deployment of scripts in web servers.

- produces responses to the user clients.

Java Servlets

- handles client requests by generating responses to such requests.

- applications implemented on web servers.

- part of the Java Enterprise Edition (EE), which are used for transaction-based applications.

- hosted in a servlet container that provides the environment which the servlet runs, as well as controls the 'servlet lifecycle'.

Java Servlet 3.1 (Java EE 7)

The servlet lifecycle

~ instantiation >> constructor call

the constructor call

-creates an instance of the servlet to service client requests

-invoked implicitly by the servlet container when the servlet is called upon to service client request and no instance currently exists.

~ initialization >> init() method

invoked only once intended for any start up init code

~ request handling >> service() method

invoked for each client request

performs whatever logic to serve request and generate response

multi-threaded servlet instance; 'thread safe'

~ destruction >> destroy() method

invoked before servlet instance is 'unloaded', housekeeping cleanup code.

HTTP Servlets

- handles HTTP request and generates responses

- hosted in a web container, that takes cares of HTTP Requests conversion to HTTP Responses

- service() method call is routed to a doXXX() call

doXXX calls are: doGet,doPost,doPut,doDelete,doTrace,doOptions,doHead

the doXXX call requires two arguments

1. HTTPServletRequest

2. HTTPServletResponse