

DAY 1: Assignment (JAVA SCRIPT Community Classes by ineuron)

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1. **Explain the use of JavaScript (or What you can do using a JavaScript)**

Answer: Javascript has various applications like building the backend, browser, mobile application, API, cloud, Typescript, Machine Learning, and Blockchain above all you can also do Data Structure and Algorithm in Javascript.

2. **What is the difference between client-side and server-side?**

Answer:

Client-Side:

1. In client-side process run at the end of the users.
2. User resources and computing power is utilized.
3. Do not need interaction with the server to load.
4. The client can request the server for webpages.
5. Examples: HTML, CSS, Javascript, Mobile applications etc.

Server-Side

1. In the server-side process and requests are executed at the server.
2. Server resources and computing power is utilized.
3. Require interaction with the server
4. The server provides the front-end part to the user according to the request generated by the user.
5. Example: PHP, Python, Ruby, C#, and JavaScript (NodeJS).

3. **What is Nodejs?**

Answer: Nodejs is a javascript runtime, it is event-driven and designed to build scalable network applications. Nodejs is deadlock-free runtime where processes don't affect other processes.

4. Explain Scope in JavaScript

Answer: Scope is a block in the programming languages which determines the visibility, availability, and accessibility of a variable or an object

JavaScript has three types of Scope.

1. Block Scope
2. Function Scope
3. Global Scope

5. JavaScript is asynchronous or synchronous.

Answer:

Asynchronous: In this, the process is executed in parallel to prevent conflict between the processes. Requests, long long calculations, and file operations are done in an asynchronous as the page remains responsive and the user experience is unaffected.

Synchronous: Synchronous code runs in sequence this means each process must wait for another process to run.

6. JavaScript is Single-threaded or Multi-threaded.

Answer: JavaScript is a Single-threaded programming language as it has only a single call stack.

7. Explain DOM in your own word.

Answer: DOM is a Document Object Model, It is useful for HTML, XML files. It represents the file in the form of a tree structure which makes it easy to implement javascript upon that.

Document → file

Object → Tags and element

Model → Layout or structure