Assignment-1 ( JavaScript Marathon)

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

Ans :- JavaScript is mainly used to create applications which are dynamic. It’s a language which can be understood by web browsers. Browsers can read JavaScript, interpret it and then run the program, creating powerful client-side experiences.

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

Ans :-

|  |  |
| --- | --- |
| **Client-Side** | **Server-side** |
| We work for frontend | We work for backend |
| It runs on the client’s machine | It runs on the web browser |
| It does not interact with the server to process data | It requires interaction with the server to process the data |
| Languages are HTML, CSS, JavaScript etc | Languages are PHP, ASP.Net etc |
| Less secure as compared to Server-side | More secure than Client-side |
| Visible to the users and dynamic | Not visible to the client side of the application |

1. **What is Nodejs?**

Ans :- Node.js is an open-source, cross-platform JaveScript runtime environment. Have the capability to run outside the browser, thus making it very performant. This app runs on single thread without creating multiple threads.

1. **Explain Scope in JavaScript**

Ans:- Scope is a policy that manages the accessibility of the variables. In JavaScript scopes are created by code blocks, functions, modules. While “const” and “let” variables are scoped by code blocks, functions or modules, “var” variables are scoped only by functions or modules. Scopes can be nested.

1. **JavaScript is asynchronous or synchronous.**

Ans :- JavaScript is synchronous. Its single-threaded, non-blocking, concurrent programming language with multiple flexibilities. The JavScript engine maintains a stack data structure called “function execution stack”

1. **JavaScript is Single-threaded or Multi-threaded.**

JavScript is single-threaded.

1. **Explain DOM in your own word.**

DOM stands for Document Object model.

Few methods to select element in the document :-

* getElementById()
* querySelector()
* querySelectorAll()