HTML, CSS, JS ← Java on desktop

Nodejs → Unix/Windows/Mac

JDBC

MONGO DB · Database

Why Web?

1. Availability across devices.
2. Accessibility from any location.
3. No additional s/w is required.

What U need?

1. A Dedicated machine(Web server) to contain UR data and files.
2. A Client Machine that can view UR content using INTERNET.

What is required as a Developer?
A program that can be viewed on a thin s/w called Browser. (HTML)

1. A Program that can do some computation on the Client machine after interacting wit the User.
2. That Program shall be light weight as the device may/may not have the hardware resources typically required for a Computer).
3. A Programming language with a interpreter would be prefered, as its light weight and can do quick computing of small data.
4. A server side programming language and technology to work with IO features of the Application.(SpringBoot with Java, C# with Web API, Python, PHP with CodeIngitor).

Web App development:
Mark up Language: (HTML).

1. Text that is marked with formats that is suited for display. Texts that can be linked with one another was called Hyper Text. (HTML).
2. Mark ups are provided using Tags in HTML. They are all Predefined.
3. This content was always text based. So that it can be available on all devices and Platforms.
4. This is standardized by an Organization called W3C.
5. Limitations:
    1. They are static.
    2. Content cannot be formated in a customized manner. (CSS).

How to handle dynamic content?

1. Scripting Languages shall provide dynamic content.
2. Developers can manipulate the structure of the HTML elements(DOM) using the scripting langauges and modify the presentation of the User interface.
3. Most popular scripting language is JavaScript. W3C recommends to have JS as the default Scripting language for all browsers.
4. Tranditional JS can run in browsers only.
5. If U want to execute JS outside the browser, then we go for NODEJS.

Why Nodejs?

1. Within the browser, environment shall be limited to display and manipulations.
2. No storage of data for longer durations, consistancy issues.
3. I want a centralized data storage mechanism which is not possible in plain JS.
4. Developed by JOYANT Technologies by Ryan Dahl.
5. Nodejs helps in creating complex logic that can be executed on any device and expose the data using HTTP verbs.
6. Nodejs is light weight platform based on Chrome's v8 Engine that is JS Engine and can be installed on any kind of device with basic OS in it.
7. For storing large amount of data with high scalability, we go for databases. MONGODB is the no-sql database that allows data to be stored as JS objects and collections.
8. However, for large scale and amounts of data, still SQL based Databases are prefered.

CSS

1. CSS provides styles to your html content.
2. According to W3C, all styles shall be provided thru CSS only instead of old style attributes of HTML.