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Structure of Web-Development Technologies

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ABSTRACT
This century that we are living right now and It's 21st century, most common usable thing that we use all day to read the news, see what's going on all around the world Is Internet and in the middle of that, there Is something that called web or known as world wide web. To be clear web Is basically a system of Internet servers that support some unique formatted documents.

Keywords: Web-Development, Technologies, Structure, Programming Languages

1. INTRODUCTION
By that time Microsoft adopted JS and called It JScript and in 1997 It was In every browser and website, then after that specification was then standardized by ECMA International, to keep up because Netscape Is not owned the name "" JavaScript
Microsoft and Netscape had an agreement and called It ECMAScript so they are the same and actually we hear them use Interchangeable, further In 1999 they released ECMAScript 3 with new features such as regular expressions plus exception handling and so on, then In late 2009 ECMAScript 5 Introduced huge things this version made JSON(JavaScript Object Notation) It was enormous move for programmers because they were able to make their sites more and more Interactive with JS plus It not only use to make sites better but also games and desktop applications.

2. PHP AND BACK-END SIDE
The next one Is PHP that stands for Personal Home Pages this technology Is one of the most popular in web development that can bring life to the pages so what's that mean? It means that with pure HTML we can only display contents in a static way but here PHP has been built to solve this problem
3. Other languages
Of course, there are other technologies like Python, MVC, Node JS, etc. but let's stick to PHP for now, anyway we know and it's obvious PHP is able to make a site dynamic but we need something else too, and it is MYSQL, you see PHP and MYSQL were used to come together so why MYSQL? Well to be clear SQL and MYSQL are similar but the differences between them are just syntax plus they say MYSQL is better than SQL for PHP oh and SQL stands for Sequence Query Language the good thing is that it's an open-source relational database management.

I want to talk about the structure of web development technologies, fundamental one is SGML that stands for Standard Generalized Markup Language. To be clear XML or Extensible Markup Language is a subset of SGML, and it became an ISO standard in 1986 as a way of conveying data in the text-processing application. HTML (Hyper Text Markup Language) and XML, both of them are obtained and derived as document formats from SGML.

4. PRINCIPLES OF WEB
It is said HTML5 is the best format to build a structure for websites, to go further and for designing sites CSS (cascade style sheet) is a must and to describe how HTML elements are displayed on the screen, media, or even paper.
There are a lot more, SASS, LESS, etc… with CSS we can make that appearance we want for our sites. CSS released in 1996 by W3C (World Wide Web Consortium) this was a huge change in entire web generation and they still developing it and the version of CSS is 3 so they call it CSS3 or level 3.

5. JS OR JAVASCRIPT

programmers
Another Technology is JS (JavaScript) some people make a mistake that java is JavaScript but they're totally different, anyway in 1995 when Microsoft and Netscape had competition for their browsers and adding extra features JavaScript just developed in 10 days by Brendan Eich In Netscape to light the way and guide the...
All we learned so far is that websites created with HTML and CSS for sure but adding content management system (CMS) blogging system add more technologies to the mix.

6. HOW THE WEB WORKS

This is what we can do with HTML, constructing and give structure to a page.

MySQL

MySQL history name

It is named after co-founder Michael Widenius's daughter My.
7. DIFFERENT TERMINOLOGIES
That's good we’ve met a lot of things, now it's the time to dive into the main thing and that is code, but first let's see how people access the web? Well, they use web via, browsers, web servers, screen readers, devices let me explain and say something in a short sentence about each of them.

5-1 Browsers
People access websites by using a software that called web browsers; most popular are chrome, Firefox and etc.

5-2 Web Servers
Web servers: to be clear when user ask a browser for a web page the request is sent to a special computer system known as a web server which hosts the website. Screen readers: are some programs that read out data or content of computer to a user. Devices: as the name shows the meaning "devices" are on the increase such as desktop, laptops, tablets and etc.

6-2 Code in action
Looks phenomenal right? Hence, we see what happen if we mix things together let's dive into codes.

HTML page are text documents and it uses tags characters that sit inside angled brackets or between them, exactly like this:

```html
<p> This is Danial! </p>
```

To memorize it better HTML work with elements on the page and that `<p>` is paragraph element although we can add an attribute to it, to tell us more about element

```html
<p lang="en-us"> This is Danial! </p>
```
6-3 Specificity rules in CSS
Now the time has become for CSS
It allows us to create rules that specify how elements should appear. For instance, p tag If we want to change the
text color or even background color all we have to do Is add CSS to a page like this

```
<link rel="stylesheet" href="css/style.css" />
```

Even though we can add It to the page simultaneously with an opening tag

```
<style>
P{
Background-color: red;
}
</style>
```

Link to a file

Summary for CSS: It treats each HTML element
as If It appears inside Its own box…

8. INTERACTIONS TO THE WEBSITES
As we learned so far about designing and building websites, don't you think Its the time to add behaviors to them?
Well, JavaScript has been created for this because these days, there is no need for the page to just sit there.

9. FIRST RELEASE OF JQUERY
The first release was In January 2006 at BarCamp NYC(New York City).
Today there Is a group of developers that work on jQuery and It led by the head of the company Dave Methvin.

10. REVOLUTION OF AJAX
By the time In 1999 and 2009 that they added more features like AJAX and JSON to JS, websites got better
behavior but first of all, let's introduce them.
JSON or JavaScript Object Notation: JavaScript provides a structure to store data that we can store and access each one with key values in fact because objects provide a great way to store and It gives us one location to store data In, they become one of the models for one of the most popular data for exchange formats on the web. And It Is commonly used with a technology called AJAX to exchange data between the server and web browser.

AJAX stands for Asynchronous JavaScript And XML or extensible markup language. AJAX used to load HTML pages without refreshing the page again, Microsoft introduced AJAX In 1999 with internet explorer 5 back then the name wasn't officially AJAX, technically It’s called XMLHttpRequest Object It sometimes shorten as XHR, put simply AJAX is the process of using JS to sending request from the browser to a web server and receive the response back and do something with that response what we send with Figure. 7 All together!

With this magnificent technology, we can go beyond we are able to make our sites more and more interactive than before.

Good news Is that there Is another thing and It's called jQuery, Its one of the JavaScript libraries. The prominent reason that why they made jQuery was to let programmers write less do more so It means that It’s much easier than pure JS. For example, with pure JS we have to write 10 lines code to change an element but since jQuery is there, we can write It with 4 lines code.

As the matter of the fact, jQuery was invented by John Resig.

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AJAX Is a web page, text file, images, or even a form with accomplish information.
11. CONCLUSION
We've seen a lot of technologies so far. However, the programmer should be up to date, otherwise they will be behind and that is one of the genuine matters in Computer science no matter which part you are. Even though, some people think that is too hard to be like this, I suppose it depends on their perspective view.

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