

Web development is also a rapidly expanding industry. Between now and 2028, the employment of web developers is expected to **grow by 13%**. That's much faster than most other technology careers.



HTML (Elements, Attributes and Global Attributes)

CM1_CU1: Week 2

Objectives:

1. Discuss web development.
2. Categorize HTML Elements, Attributes and Global Attributes.
3. Create a simple webpage or website using HTML.

HTML (Elements, Attributes and Global Attributes)

- **Web Development**
- **HTML**
- **HTML Elements**
- **HTML Attributes**
- **HTML Global Attributes**

What is Web Development?

Web Development

tasks associated with developing
websites for hosting via intranet or
internet

Web Development Basics

What is BACK-END?

BACK-END

the server side of an application and everything that communicates between the database.

What is BROWSER ?

BROWSER

a computer program with a graphical user interface for displaying and navigating between web pages.

What is CLIENT ?

CLIENT

a program, person or things that are capable of obtaining services provided by another program.

What is CODING ?

CODING

sometimes called computer programming, is how we communicate with computers.

*What is CONTENT
MANAGEMENT SYSTEM
(CMS) ?*

CONTENT MANAGEMENT SYSTEM (CMS)

is an application that is used to manage content, allowing multiple contributors to create, edit and publish.

What is CYBERSECURITY ?

CYBERSECURITY

the state of being protected against the criminal or unauthorized use of electronic data, or the measures taken to achieve this.

What is DOMAIN NAME?

DOMAIN NAME

refers to your website address. This is what users type in a browser's search bar to directly access your website.

What is FRAMEWORK?

FRAMEWORK

a layered structure indicating what kind of programs can or should be built and how they would interrelate.

What is FRONT-END?

FRONT-END

*refers to the user interface / client-side,
everything with which the user interacts.*

What is HYPERTEXT?

HYPERTEXT

a word, phrase or chunk of text that can be linked to another document or text.

What is HYPERTEXT TRANSFER PROTOCOL (HTTP)?

HYPertext TRAnSFER PROTOCOL (HTTP)

The communications protocol used to connect to Web servers on the Internet or on a local network (intranet).

What is INTERNET PROTOCOL ?

INTERNET PROTOCOL

a set of rules governing the format of data sent over the internet or other network.

*What is IP ADDRESS
(INTERNET PROTOCOL
ADDRESS)?*

IP ADDRESS (INTERNET PROTOCOL ADDRESS)

a series of numbers that identifies any device on a network.

What is SEARCH ENGINE?

SEARCH ENGINE

a program that searches for and identifies items in a database that correspond to keywords or characters specified by the user, used especially for finding particular sites on the World Wide Web.

What is SERVER?

SERVER

a computer or system that provides resources, data, services, or programs to other computers, known as clients, over a network.

What is WEB PAGES?

WEB PAGES

*a hypertext document on the World
Wide Web.*

What is WEBSITE?

WEBSITE

a set of related web pages located under a single domain name, typically produced by a single person or organization.

What is WIREFRAME?

WIREFRAME

a simplified visual guide that represents the skeletal framework of a website.

*What is WORLD
WIDE WEB ?*

WORLD WIDE WEB

an information system on the internet which allows documents to be connected to other documents by hypertext links, enabling the user to search for information by moving from one document to another.

Types of Web Development

Types of Web Development

1. Front-end Development
2. Back-end Development
3. Full Stack Development
4. Website Development
5. Desktop Development
6. Mobile Development
7. Game Development
8. Embedded Development
9. Security Development

FRONT END DEVELOPMENT



JAVASCRIPT
CSS HTML

FRONTEND



User Interface & Experience



Production & maintenance



Responsive Design



Real time programming



Software Workflow



**System
architecture**



Servers



Database



Data analysis



Security



Frameworks



APIs



Scalability



**Operating
system**



Business logic

BACKEND IS:

FULL STACK DEVELOPER

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graph TD; A[FULL STACK DEVELOPER] --> B[Front end Dev]; A --> C[Back end Dev]; A --> D[Databases]; A --> E[DevOps]; A --> F[Mobile App Dev]; B --> B1["CSS<br/>JS<br/>SPA"]; B1 --> B1a["LESS<br/>SAAS<br/>GULP"]; B1 --> B1b["Angular 2<br/>React<br/>TypeScript"]; C --> C1["Python<br/>NodeJS<br/>PHP<br/>GO"]; C1 --> C1a["Django<br/>Express JS"]; C1 --> C1b["Design<br/>Caching<br/>Middleware"]; D --> D1["MySQL<br/>SQLite<br/>PostGres<br/>Mongo DB"]; D1 --> D1a["SQL<br/>Clusters<br/>Joins<br/>Sharding"]; E --> E1["CI<br/>CD<br/>AWS"]; E1 --> E1a["Nginx<br/>Ansible<br/>Lambda<br/>SQS"]; F --> F1["Hybrid Apps<br/>IOS/Android"]; F1 --> F1a["React Native<br/>Ionic"];
```

Front end
Dev

CSS
JS
SPA

LESS
SAAS
GULP

Angular 2
React
TypeScript

Back end
Dev

Python
NodeJS
PHP
GO

Django
Express JS

Design
Caching
Middleware

Databases

MySQL
SQLite
PostGres
Mongo DB

SQL
Clusters
Joins
Sharding

DevOps

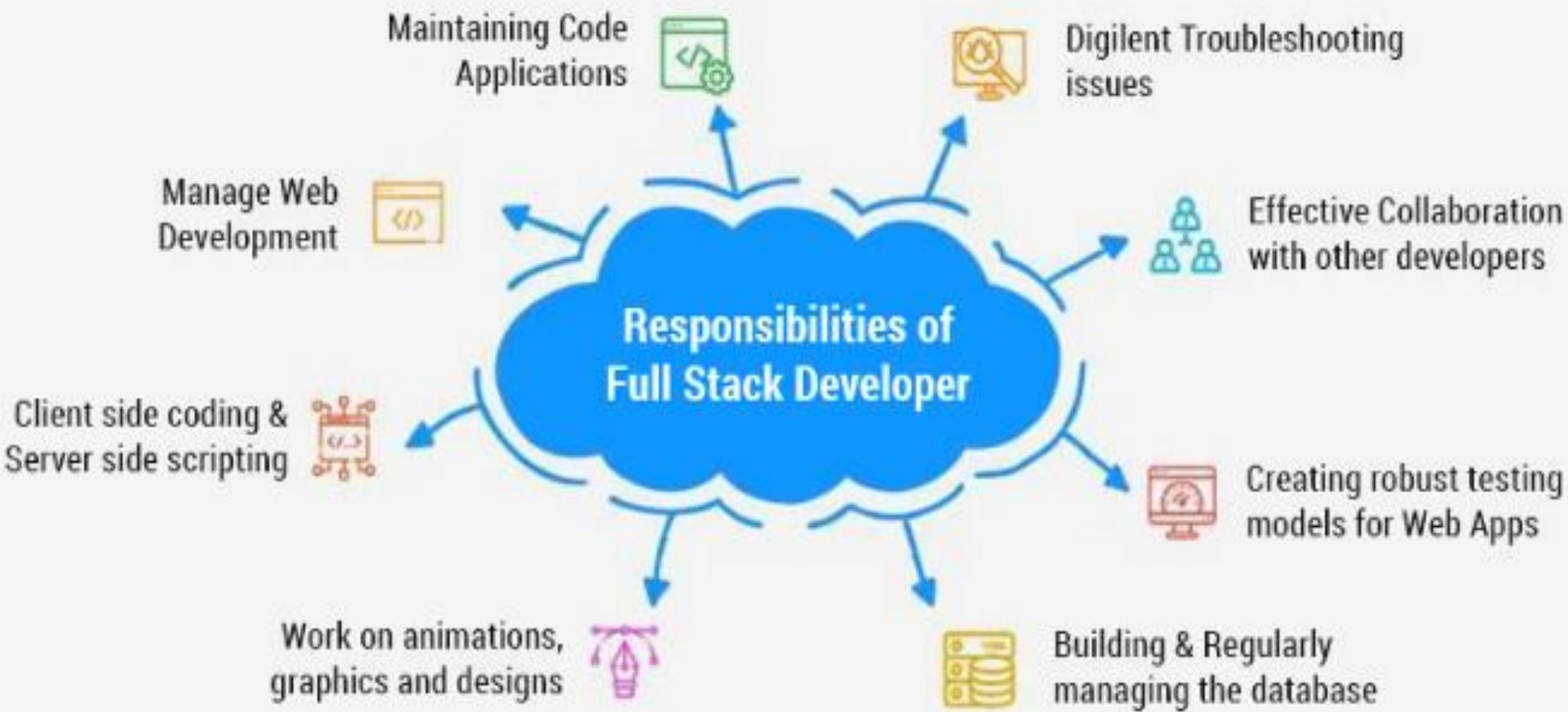
CI
CD
AWS

Nginx
Ansible
Lambda
SQS

Mobile App
Dev

Hybrid Apps
IOS/Android

React Native
Ionic



Website Development Process

Web Development

Website Development Process

1. Form a plan
2. Create a wireframe
3. Write your website code
4. Build the back-end of your website
5. Build the front-end of your website
6. (Optional) Work with a CMS
7. Acquire a domain name
8. Launch your site

Before laying pen to paper or hands to keyboard, it's vital to first connect with teams and personnel across your organization to develop a plan for your website.



All good websites start with a blueprint.

Developers call this a **wireframe** or **sitemap**. It doesn't have to be an official document; it's simply a vision for your site that'll give both you and your developer(s) direction and a place to start.



Developers will use different coding languages for the front-end and back-end of websites, as well as for different functionalities of the site (such as design, interactivity, etc.) These different languages work together to build and run your site.



Build the back-end of your website

It's made up of two key components:

- > **Databases**, which is responsible for storing, organizing, and processing data so that it's retrievable by server requests
- > **Servers**, which are the hardware and software that make up your computer. Servers are responsible for sending, processing, and receiving data requests. They're the intermediary between the database and the client/browser.

Build the back-end of your website

As for building your website, backend developers will establish three things.

- > **logic code**, which is essentially a set of rules for how your website will respond to certain requests and how objects of your website will interact.
- > **database management**, which is how your website will organize, manage, and retrieve its data.
- > **infrastructure**, which is how your site will be hosted.

Hosting your own site will give you greater control, but it's much more expensive and requires you to maintain your own server health and security.



Front-end (or client-side) development includes a combination of JavaScript, HTML, and CSS. It also controls components such as typography and fonts, navigation, positioning, and browser compatibility and responsiveness. This part will reflect more of your initial site vision and what you included in your wireframe.



A CMS is easier to use (you have to write less code), and it often has tools for hosting the site. On the other hand, it's less flexible and, therefore, gives you less control over your front-end.



Perhaps you've heard of sites like **GoDaddy** and **Hover**. These services help you purchase a domain name and register with **ICANN (Internet Corporation for Assigned Names and Numbers)**. Most domain registrations are good for a year before you're required to renew.

Website builders and hosting services, like **WordPress** and **Squarespace**, also allow you to purchase a domain name.

Any Questions?

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