How does the web work?

1 The World Wide Web, or simply the web, is a way of accessing information through the medium of the Internet , The Web is a system of Internet servers that support specially formatted documents. This Documents are formatted in a markup language that supports links to other documents. You can jump from one document to another simply by clicking on hot spots (hyperlinks).

2 The web uses the HTTP protocol (HyperText Transfer Protocol) , one of the languages spoken over the Internet, to transmit data, Web servers and web browsers communicate via HTTP

3 The DNS (Domain Name System) translate (for example facebook.com) into an IP address

How does the web work?

Computers connected to the web are called clients and servers.:

Clients

are the typical web user's internet-connected devices (for example, your computer connected to your Wi-Fi, or your phone connected to your mobile network) and web-accessing software available on those devices (usually a web browser like Firefox or Chrome).

Servers

are computers that store webpages, sites, or apps. When a client device wants to access a webpage, a copy of the webpage is downloaded from the server onto the client machine to be displayed in the user's web browser.

requests

CLIENT   SERVER

responses

How does the web work?

When you type a web address into your browser (for example, www.Google.com) and you hit ENTER :
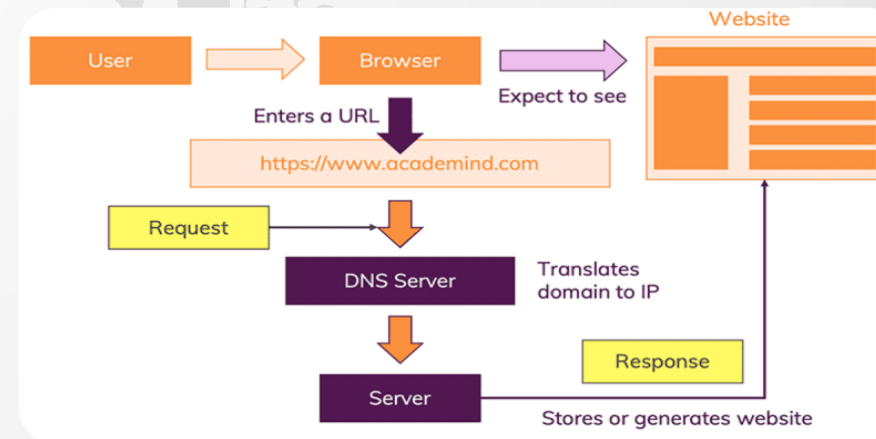
1

The browser goes to the DNS server ,and The domain name server returns an IP address for the server that hosts the Website (for example, 68.178.157.132).

2

The browser sends an HTTP request message to the server, asking it to send a copy of the website to the client. This message, and all other data sent between the client and the server, is sent across your internet connection using TCP/IP.

3

If the server approves the client's request, the server sends the client a message, which means "Of course you can look at that website! Here it is", and then starts sending the website's files to the browser as a series of small chunks called data packets , The page may also contain links to other files on the same server, such as images, which the browser will also request.

4

The browser assembles the small chunks into a complete web page and displays it to you .

What do you need to be a web developer?

1 **Front-end Developer:** focus on programming languages such as HTML, CSS and Javascript to create the visual and interactive parts of a website - essentially the parts you can see.

2 **Back-end Developer:** are responsible for creating the logic that runs on a server which typically involves communicating with a database and manipulating data, before passing it back to the browser and presenting to the user. Typical programming languages used are PHP, Ruby, NodeJS, ASP are SQL.

3 **Full stack Developer:** can develop both client and server software.

What do you need to be a web developer?

To be a web developer you need:

➢ Ability to write and edit technical documentation

➢ Coding languages and Knowledge of modern HTML/CSS ,JavaScript , jQuery, React, Angular, or Vue,PHP, ASP, Python, Node ,SQL, SQLite, or MongoDB

➢ User experience (UX)

➢ User interface (UI)

➢ Visual design

➢ Design software like Photoshop and Illustrator and Sketch

➢ An understanding of SEO

➢ Web servers and how they function

➢ Excellent problem-solving skills

➢ Strong organizational skills

➢ Ability to work and thrive in a fast-paced environment

➢ Hands-on experience with network diagnostics

➢ Computer literacy

➢ Strong numeracy skills

➢ Strong creative ability

➢ Attention to detail

➢ Strong communication skills

➢ A logical approach to work

➢ The ability to explain technical matters clearly

➢ A keen interest in technology

C++

JAVA

HTML

PHP

What is the role of a web developer.

What is the role of a web developer.

In our heavily digital world, nearly every company has a website. The web developer, also called a web designer or webmaster, is the person who builds, adjusts, and/or maintains it. Web developers may work for small companies, large corporations, or as freelancers, using technical and creative skills to create functional websites , his role is:

- Building websites and ensure they perform reliably and efficiently, Learn more about this critical role in the tech industry and how to get started Designing user interfaces and navigation menus.

- Writing and reviewing code for sites, typically HTML, CSS and JavaScript.

- Integrating multimedia content onto a site.

- Testing web applications.

- Troubleshooting problems or bugs with performance or user experience.

- Collaborating with designers, developers, and stakeholders.