HOW DOES THE WEB WORK?

The World Wide Web, often referred to simply as the web, is a complex system that enables the sharing and accessing of information and resources over the internet. It's important to note that the web is just one part of the broader internet, which encompasses various technologies and services beyond web browsing, such as email, file sharing, and more.

in the next slides you will find a simplified overview of how the web works:

Web Servers:

Websites are hosted on web servers, which are powerful computers connected to the internet 24/7. These servers store the website's files, including HTML documents, images, videos, and other resources.

Domain Names:

To make it easier for people to access websites, domain names are used. These are human-readable addresses that correspond to the IP (Internet Protocol) addresses of web servers. For example, "www.example.com" is a domain name.

DNS (Domain Name System):

When you enter a domain name into your web browser, your computer needs to find the corresponding IP address. This is where the Domain Name System (DNS) comes in. It's a distributed system that translates human-readable domain names into IP addresses. Your computer queries a DNS server to get this translation.

HTTP/HTTPS Protocols:

Once your computer knows the IP address of the web server hosting the website you want to visit, it establishes a connection to that server using the HTTP (Hypertext Transfer Protocol) or HTTPS (HTTP Secure) protocol. HTTPS is a more secure version of HTTP, which uses encryption to protect data transmitted between your computer and the server.

Request-Response Model:

Your web browser sends a request to the web server, specifying the resource you want to access (e.g., a web page). The server processes this request and sends back a response. The response typically includes an HTML document that contains the structure and content of the web page.

HTML, CSS, and JavaScript:

The HTML (Hypertext Markup Language) document received by your browser provides the structure and content of the web page. CSS (Cascading Style Sheets) is used to control the presentation and layout of the page, while JavaScript enables dynamic behavior and interactivity on the page.

the web is a complex network of interconnected servers, protocols, and technologies that work together to enable the exchange of information and resources across the internet. When you enter a URL into your web browser, it initiates a series of requests and responses that ultimately result in the rendering of a web page on your device.

WHAT DO YOU NEED TO BE A WEB DEVELOPER?

To become a web developer, i'll need a combination of education, skills, and tools.
also web development is a diverse field, and i can specialize in areas like front-end development, back-end development, full-stack development, web design, or even focus on specific technologies like mobile web development or web application security.

WHY DID YOU CHOOSE TO LEARN WEB DEVELOPMENT?

Web development offers a wide range of career opportunities, from front-end and back-end development to full-stack development and web design. It's a field with a strong demand for skilled professionals.