checkpoints

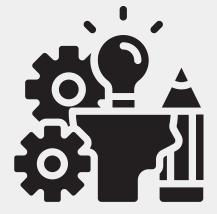
Objectives





How does the web work?

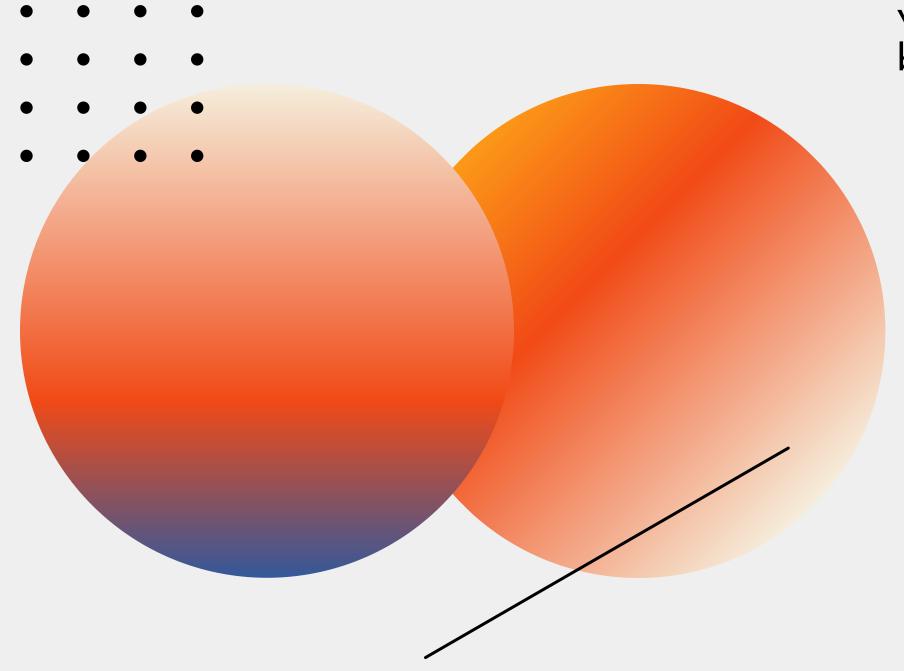
What do you need to be a web developer?



Why did you choose to learn web development?

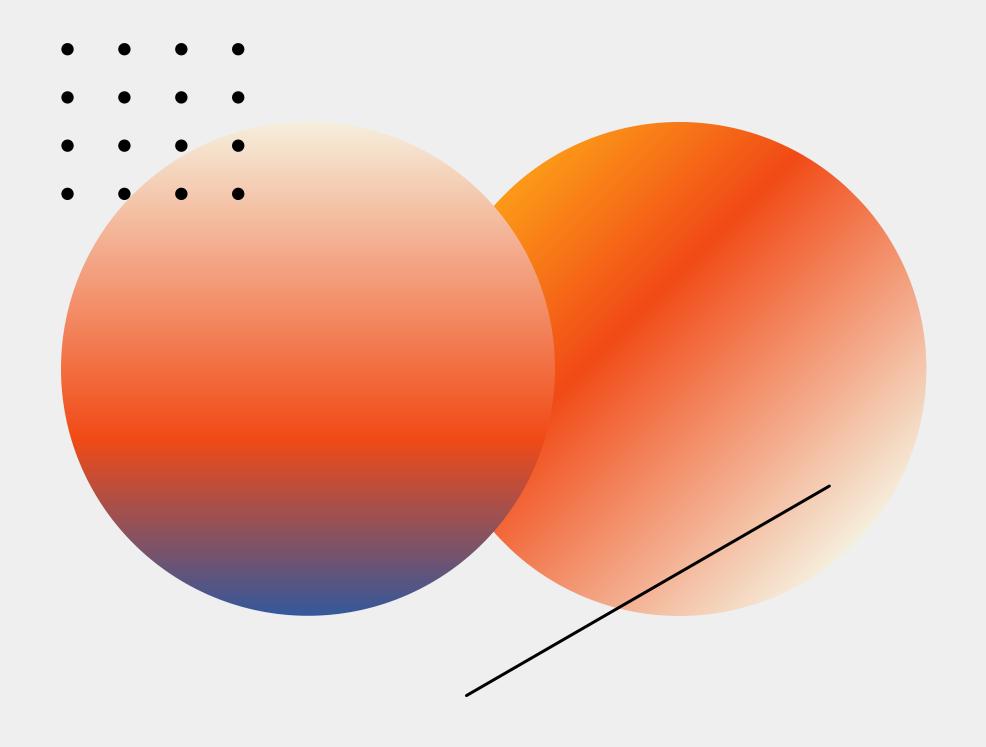
How does the web work?





The web, or World Wide Web, is a global system of interconnected documents and resources. It operates through client-server architecture, using the Hypertext Transfer Protocol (HTTP) or its secure version (HTTPS) for communication Here's a step-by-step breakdown:

- Client and Server: The web involves clients and servers that store and serve web content.
- URL: Uniform Resource Locators (URLs) identify web resources, containing the protocol (HTTP/HTTPS), domain name, and resource path.
- DNS: The Domain Name System translates domain names into IP addresses, allowing browsers to find the correct servers



- Request and Response: Clients send HTTP/HTTPS requests to servers, specifying the desired resource.
 Servers process the request and send back an HTTP response with the requested content and a status code.
 - HTML and CSS: HyperText Markup Language (HTML) structures web content, while Cascading Style Sheets (CSS) define its appearance
 - Rendering: Clients process received HTML, CSS, and additional resources to render and display web pages in browsers.

What do you need to be a web developer?

key components needed to become a web developer:

Programming Languages

Proficiency in HTML, CSS, and JavaScript.

Front-End Development

Familiarity with front-end tools and frameworks like Bootstrap, React, Angular, or Vue.js.

Back-End Development

Understanding of serverside programming languages (e.g., JavaScript, Python, Ruby, PHP), databases (e.g., MySQL, PostgreSQL, MongoDB), and API design and integration.

key components needed to become a web developer:

Problem-Solving and Debugging

Strong troubleshooting skills for resolving code issues.

Continuous Learning

Willingness to stay updated with new technologies and industry trends..

Communication and Collaboration

Effective communication and teamwork abilities.

Why did you choose to learn web development?

Learning web development offers a multitude of compelling reasons to embark on this exciting journey. The high demand for web developers in today's digital era provides ample opportunities for career growth and job prospects. With its versatility, you can apply your skills across various industries and sectors, from small personal projects to largescale enterprise applications. The fusion of technical proficiency and creative design allows you to create visually captivating and user-friendly interfaces. Moreover, the field's continuous evolution ensures that you will always be learning and adapting to new technologies and best practices. The flexibility of web development opens doors to remote work and entrepreneurial opportunities. By honing your problem-solving abilities, logical thinking, and collaborative spirit, you can contribute to the digital world, build personal projects, and make a positive impact through technology.

Thankyou

