Checkpoint - Web Development Basics

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1. How does the web work?

The web works through communication between clients (web browsers) and servers using the Internet.

Here's the process step-by-step:

- 1. I type a URL (www.gomycode.com) into the browser.
- 2. The browser sends a request to a DNS server to find the IP address of that website.
- 3. Once it finds the IP, the browser sends an HTTP/HTTPS request to the web server.
- 4. The server processes the request (for example, accessing a database) and sends back a response usually HTML, CSS, and JavaScript files.
- 5. The browser interprets these files and displays the web page.

In conclusion:

Browser → Internet → Server → Response → Display Web Page

2. What do you need to be a web developer?

To become a web developer, you need both technical skills and tools.

Core Skills

- HTML → structure of web pages
- CSS \rightarrow design and layout
- JavaScript → interactivity and logic

Advanced Skills (for professional work)

- Frontend frameworks: React, Angular, or Vue.js
- Backend: Node.js, PHP, Python (Django/Flask), or Java (Spring)
- Databases: MySQL, MongoDB, PostgreSQL
- APIs: REST or GraphQL
- Version Control: Git & GitHub
- Deployment Tools: Docker, Cloud services (AWS, Azure, Google Cloud)

Tools

- A code editor (like VS Code / Notepad++)
- A browser (like Chrome) for testing
- Command line (Terminal) for running scripts
- Internet connection

3. Why did you choose to learn web development?

Here are common (and strong) reasons that I can adapt to my own motivation:

- **Career opportunities:** Web development offers high-demand jobs and freelancing options.
- It's everywhere: Every company needs a website or web app.
- **Creativity & logic:** I can create real products from simple pages to complex applications.
- **Constant learning:** The web evolves fast, so I always learn new tools and technologies.
- Freedom: I can work remotely, build personal projects, and start my own business.