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I want to code my own web server but I don't know what resources I need to read first. Can you help me ?



Of course! If you're interested in coding your own web server, there are a few key resources and topics you should consider studying. Here's a step-by-step guide to help you get started:

1. **Networking Basics:** Familiarize yourself with the fundamentals of networking, including the TCP/IP protocol suite, HTTP protocol, and how data is transmitted over the internet. Understanding concepts like IP addresses, ports, and sockets will be essential.
2. **Server Architecture:** Learn about the different server architectures and approaches, such as single-threaded, multi-threaded, and event-driven. Understanding the pros and cons of each will help you make informed decisions when designing your own server.
3. **Socket Programming:** Study socket programming in your chosen programming language. Sockets allow you to establish communication channels between the server and clients. Learn how to create, bind, listen, and accept connections on sockets.
4. **Concurrency and Parallelism:** As your web server will likely handle multiple client requests simultaneously, understanding concurrency and parallelism is crucial. Look into concepts like threads, processes, and synchronization mechanisms to handle concurrent connections effectively.
5. **HTTP Protocol:** Gain a thorough understanding of the HTTP protocol, as it's the foundation of the web. Learn about different request methods (GET, POST, etc.), headers, status codes, and how to parse and generate HTTP messages.
6. **Routing and URL Handling:** Explore techniques for routing requests based on the requested URLs. Learn about pattern matching, route handlers, and how to map URLs to appropriate resources or actions within your server.
7. **Static and Dynamic Content:** Learn how to serve static files like HTML, CSS, JavaScript, and images. Additionally, explore techniques for generating dynamic content using server-side programming languages like Python, Node.js, or Ruby.



Send a message.

