Understanding Web Development

How the Web Works, Becoming a Web Developer, and My Journey

`<Name> Darlyn NDONG </Name>`

The Mechanics of the Web

How Does the Web Work?

1. Overview:
- The web is a global network of connected devices communicating over the Internet.

2. Key Components:
- Client: A browser sends requests.
- Server: Stores and serves web pages and data.
- HTTP/HTTPS: Protocols that manage data transfer.
- DNS: Converts domain names into IP addresses.

3. Process:
- User enters a URL.
- Browser sends a request to the server.
- Server responds with the requested page.
- Browser displays the page for the user.

Example: Accessing YouTube: Typing *"youtube.com"* triggers a request that retrieves and displays the site.

Tools and Skills for Web Development

What Do You Need to Be a Web Developer?

1. **Hard Skills:**
   - HTML, CSS, and JavaScript: The foundation of web development.
   - Frameworks: React, Angular, etc.
   - Backend Skills: Node.js, databases.
   - Version Control: Git/GitHub for collaboration.

1. **Soft Skills:**
   - Problem-solving.
   - Teamwork and communication.
   - Continuous learning and adaptability.

1. **Essential Tools:**
   - Code editors: Visual Studio Code, Sublime Text.
   - Browser DevTools for debugging.
   - Resources: MDN Web Docs, freeCodeCamp, Codecademy.

My Journey into Web Development

Why Did I Choose Web Development?

1. **Passion for Technology:** Fascination with how websites work.

2. **Career Opportunities**: High demand for web developers with global opportunities.

3. **Creative Freedom:** Ability to design and build visually appealing and functional websites.

4. **Problem-Solving:** Enjoy the challenge of solving real-world problems through coding.

5. **Future Goals:** Develop impactful projects and grow as an expert in the field.