

# Web Fundamentals Checkpoint

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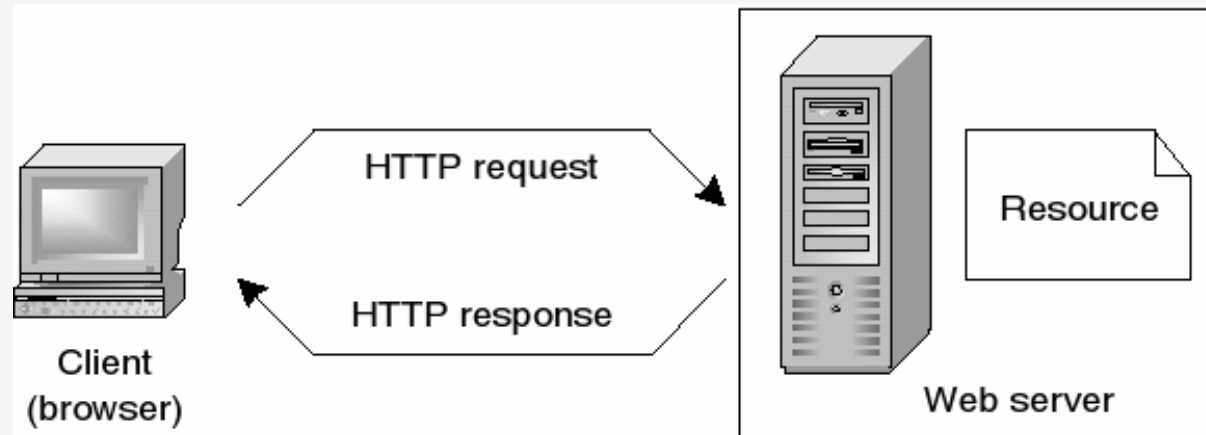
Program: MSc in Software Engineering

# How Does the Web Work?

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- The web works through a system where clients (like browsers) request data from servers over the internet using HTTP/HTTPS protocols.
- When you type a URL, it sends a request to a web server, which returns files like HTML, CSS, and JavaScript.
- These files are rendered by the browser to display a webpage.
- DNS (Domain Name System) translates human-readable URLs (like example.com) into IP addresses.

**Core Concepts:** Request/Response, Client/Server, DNS, HTTP.



# What Do You Need to Be a Web Developer?

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## Technical Skills:

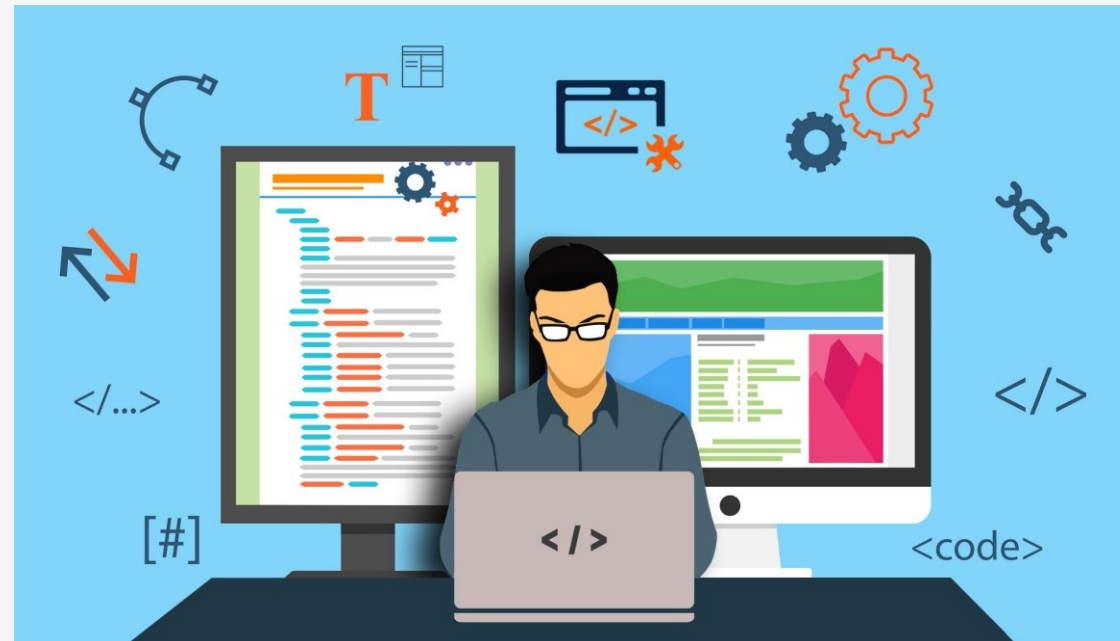
- Frontend: HTML, CSS, JavaScript
- Backend: Node.js, databases (e.g., MongoDB)
- Tools: Git, GitHub, VS Code, Chrome DevTools

## Problem-Solving & Curiosity:

- Debugging, reading documentation, researching errors

## Soft Skills:

- Communication, continuous learning, teamwork



# Why I Chose Web Development?

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- I started in development, moved into cybersecurity, and now I want to bridge both worlds.
- Web development allows me to build real applications and understand how they work from the inside.
- I aim to design, develop, and secure full-stack solutions with modern technologies.
- It also gives me the creative freedom to bring ideas to life and mentor others.

# How I Researched This Presentation?

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## **I didn't copy-paste, I searched with purpose:**

- "How does the web work?"
- "Skills for web developers"
- "Frontend vs Backend"
- "Why learn web development?"

## **I used trusted sources:**

- Mozilla Developer Network (MDN)
- freeCodeCamp
- Developer blogs and official documentation

# My Road Ahead

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- Deepen understanding of HTML/CSS
- Master JavaScript & logic building
- Learn React for frontend frameworks
- Use Node.js & Express for backend
- Combine all with cybersecurity practices