

# Hello, World!

## HTML, CSS, AND JS 1

- How does the web work?
- Living Standards
- Your first HTML file!
- What is CSS?
- Your first JavaScript file!
- The browser console and developer tools

# GENERAL NOTES

- CS tends to use complex words for simple ideas
- Some words are widely used but not well-defined
- Best practices and popular frameworks change constantly as we learn better ways to do things
- A lot of tutorials on the Internet are incorrect or outdated

# CLIENT-SERVER ARCHITECTURE

- Both clients and servers are just computers on the Internet
- A **client** asks for and receives information
- A **server** serves out information to clients who request it

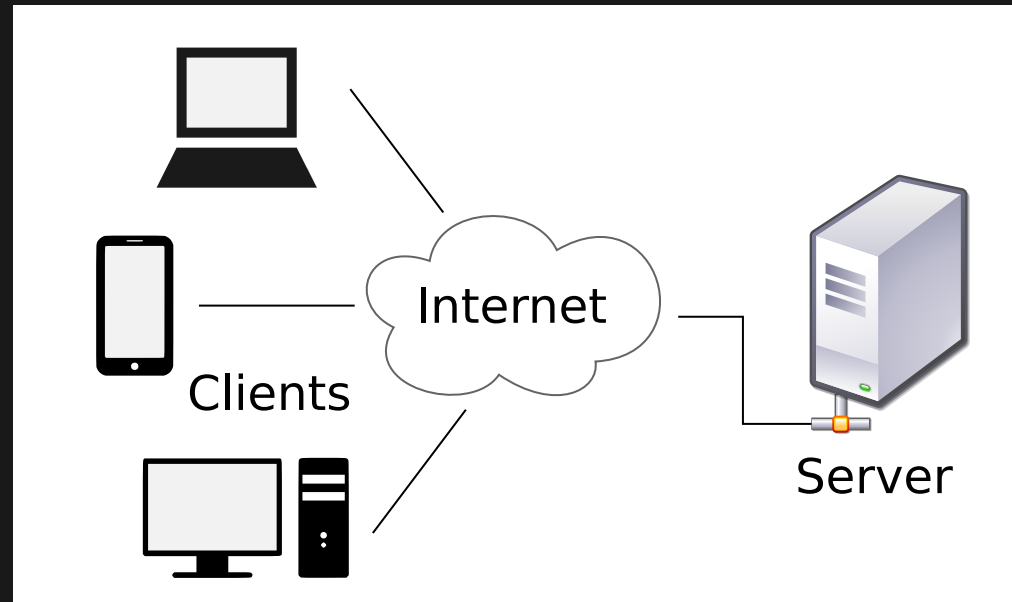


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# THE FRONTEND

- All the code that runs on the client
- In web development, controls the user interface (UI)
- Built primarily with HTML, CSS, and JavaScript
- Sometimes referred to as client-side

# THE BACKEND

- All the code that runs on the server
- Sometimes referred to as server-side
- Can be written in many different programming languages
- Necessary for applications that need to store data across visits

# WHAT IS HTML?

- HyperText Markup Language
- Describes the **structure** and **content** of a webpage.
- Pure HTML websites are useful for static content, but JavaScript is needed for significant interactivity
- This presentation is written in reveal.js, an HTML slides framework



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# WHAT IS CSS?

- Cascading Style Sheets
- Manages the presentation of HTML
- Formatting
- Design
- Animations



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# WHAT IS JAVASCRIPT?

- **Not** the same as Java
- Originally only for frontend web development
- Now runs on the backend with Node.js and on mobile and desktop through frameworks
- One of the fastest-changing languages
- Also known as ECMAScript, or JS for short

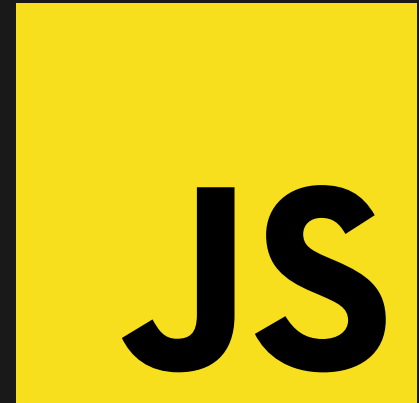


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# IT'S ALL TEXT!

- An HTML file is a text file with the .html extension
- A CSS file is a text file with the .css extension
- A JavaScript file is a text file with the .js extension

# LIVING STANDARDS

- HTML, CSS, and JS are all living standards
- A living standard is often referred to as "the standard" or "the specification" or "the spec"
- Committee members submit and vote on proposals
- Browser vendors then implement those changes in their engines
- No browser fully implements the standard, because it is highly difficult

**LET'S WRITE SOME CODE!**