

Intro to Web Development



Programming Club, IIITG
Sun, 16th Jan 2022

What is Web Development?

Web development refers to the building, creating, and maintaining of websites.

Various Parts and technologies used in Web Development are:-

Frontend: HTML, CSS, JavaScript, Frameworks like Bootstrap, React etc.

Backend: Python (Django), Node.js, Ruby etc.

Database: MySQL, PostgreSQL, MongoDB...

Others: Git, GitHub

Let's Get Started...

HTML and CSS

Development Setup

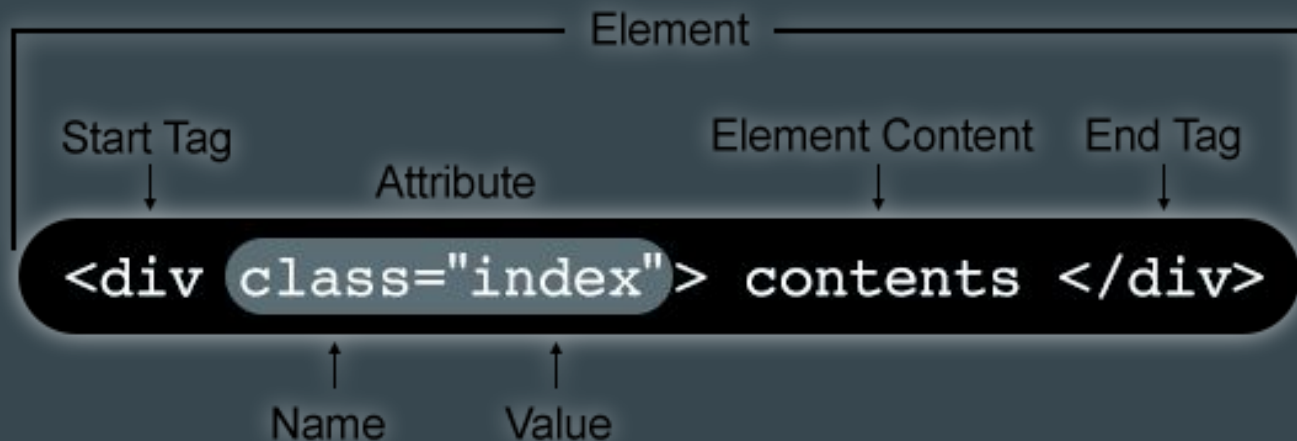
Things that you need to get started:-

- Any Code Editor
 - VS Code (Recommended)
 - Sublime Text
- A Browser
- Patience and Google to solve a lot of bugs!
 - Stackoverflow Supremacy

HyperText Markup Language

HTML is the most basic building block of the Web. It defines the meaning and **structure** of a web page.

HTML consists of **elements** which we use to enclose or mark-up different parts of the content.



Anatomy of HTML page,
Various Elements in HTML,
Attributes,
Block vs Inline elements,
...and much more

Let's Dive into Code!

Further Learning Resources:

MDN Docs: <https://developer.mozilla.org/en-US/docs/Learn/HTML>

W3Schools Docs: <https://www.w3schools.com/html/default.asp>

More HTML Elements: <https://www.w3schools.com/tags/default.asp>

Dive into your Browser Dev Tools

Advanced Topics:

HTTP, DNS

HTTP Methods, HTML Forms

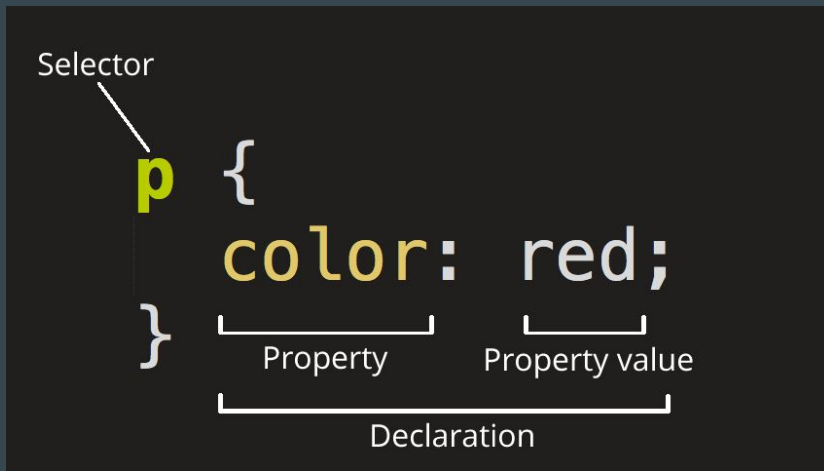
Semantic HTML

Cascading Style Sheets

CSS is a **style** sheet language used for describing the **presentation** of an HTML document. It describes the browser how HTML elements should be **displayed**.

Ways of writing CSS:

- Inline CSS
- Inside <style> tag
- In **external file** (preferred)



Linking CSS file,
CSS Selectors,
CSS Properties,
CSS Units,
...and much more

Let's Dive into Code!

Some useful basic CSS Properties:

color

background-color, background-image

font-size, font-family, font-weight

margin

padding

border: border-width, border-color, border-style, border-radius

width, height

align-content, align-items, text-align

box-shadow

Further Learning Resources:

MDN Docs: <https://developer.mozilla.org/en-US/docs/Web/CSS>

W3Schools Docs: <https://www.w3schools.com/css/>

All CSS Selectors: https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Selectors

All CSS Units: https://www.w3schools.com/cssref/css_units.asp

Advanced Topics:

Layouts - Flexbox and Grid

Positioning - Absolute, Relative

Responsive Design & Media Queries

Box Model

Pseudo classes (hover, active etc.)

CSS Animations

Thank You



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