

HTML & CSS Foundations

Quick Recap

- Website has frontend
- HTML and CSS are frontend
- Step by step process
- AI supports you

Outline

1.HTML

- HTML Tags
- Semantic & Non-Semantic HTML

2.CSS

- CSS Box Model
- ID & Class
- Specificity
- Linking CSS

3.Workflow

Learning Outcomes

- Understand HTML vs CSS
- Write clean HTML
- Use class and id
- Link external CSS

The Big Picture

- HTML builds structure
- CSS styles it
- AI speeds work
- You control decisions

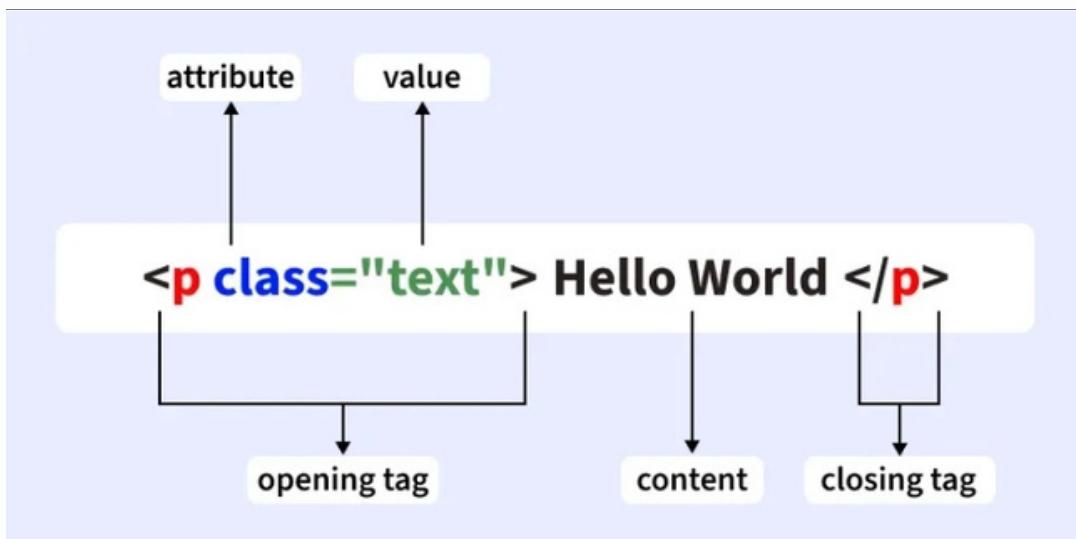
What Is HTML

HTML - Hyper text markup language is the structure of a webpage.

Everything is built from “tags,” which act like labeled containers.

- Defines page structure
- Built with tags
- Everything is a box
- No styling by default

Essential HTML Tags

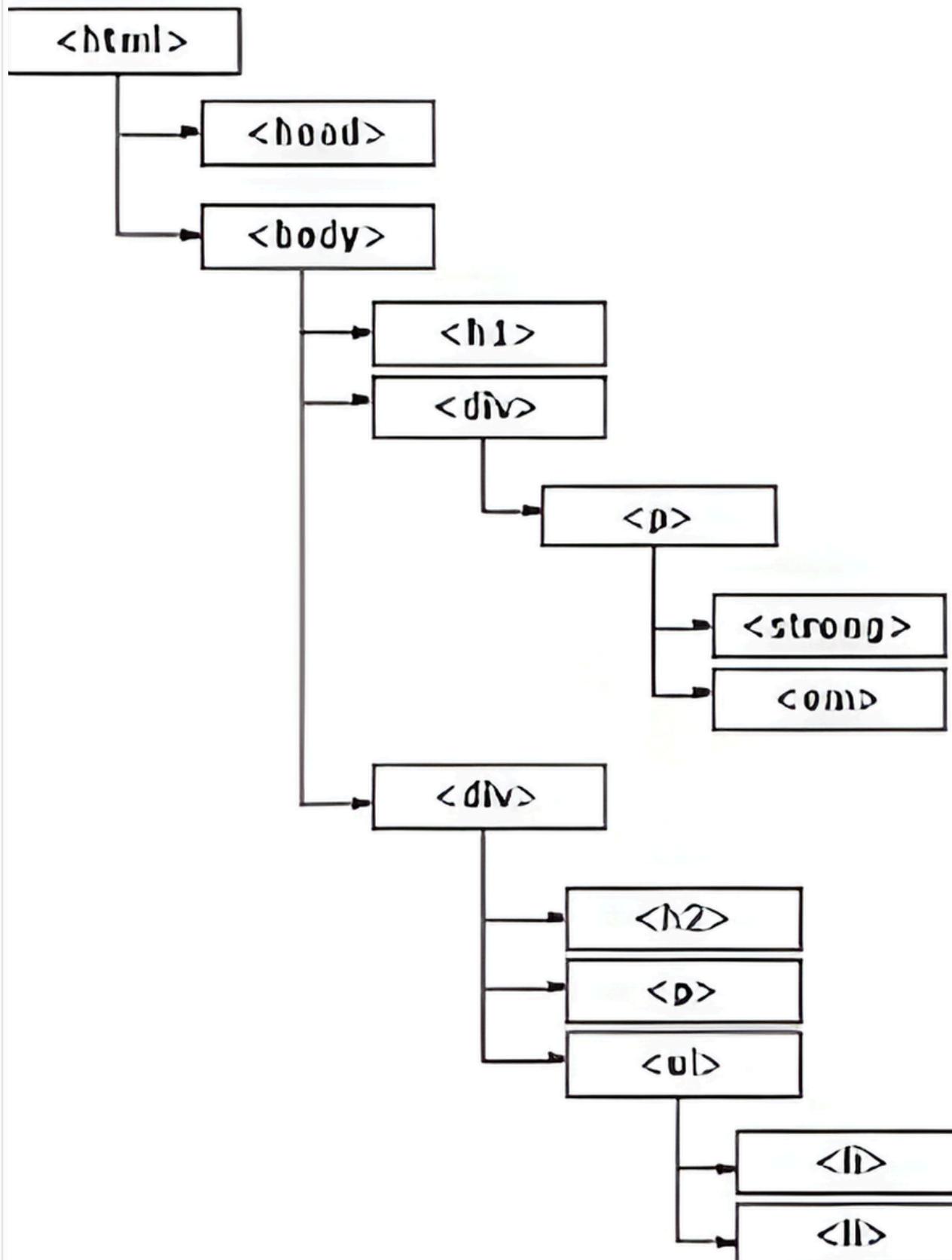


- Headings h1 to h6
- Paragraph `<p></p>`
- Images ``
- Links `<a>`

Visible vs Invisible Tags

- p and img are visible
 - We can view there content on the webpage
- div is invisible
 - div groups content
 - It is considered as a structure helper
 - Think of div tag as a box or container than holds related tags to form one whole component

Visible vs Invisible Tags



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Semantic HTML

Semantic tags are HTML tags that their name refer to their function in the webpage

Semantic tags help browsers, screen readers, and developers understand the page. They don't make any actual change on the content type or behavior

- Gives meaning to layout
- Improves readability
- Helps accessibility(screen readers)

Semantic Tags Analogy

- Like room names in a house
- Kitchen, bedroom, living room
- Names help navigation , but they don't change the furniture of a room

Semantic Tags Examples

- Header means top of page

semantic HTML tag for header is <header>

- Section grouped content

semantic HTML tag for section is <section>

- Article standalone

semantic HTML tag for section is <article>

- Footer is the bottom of the web page

semantic HTML tag for footer is <footer>

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HTML Tags



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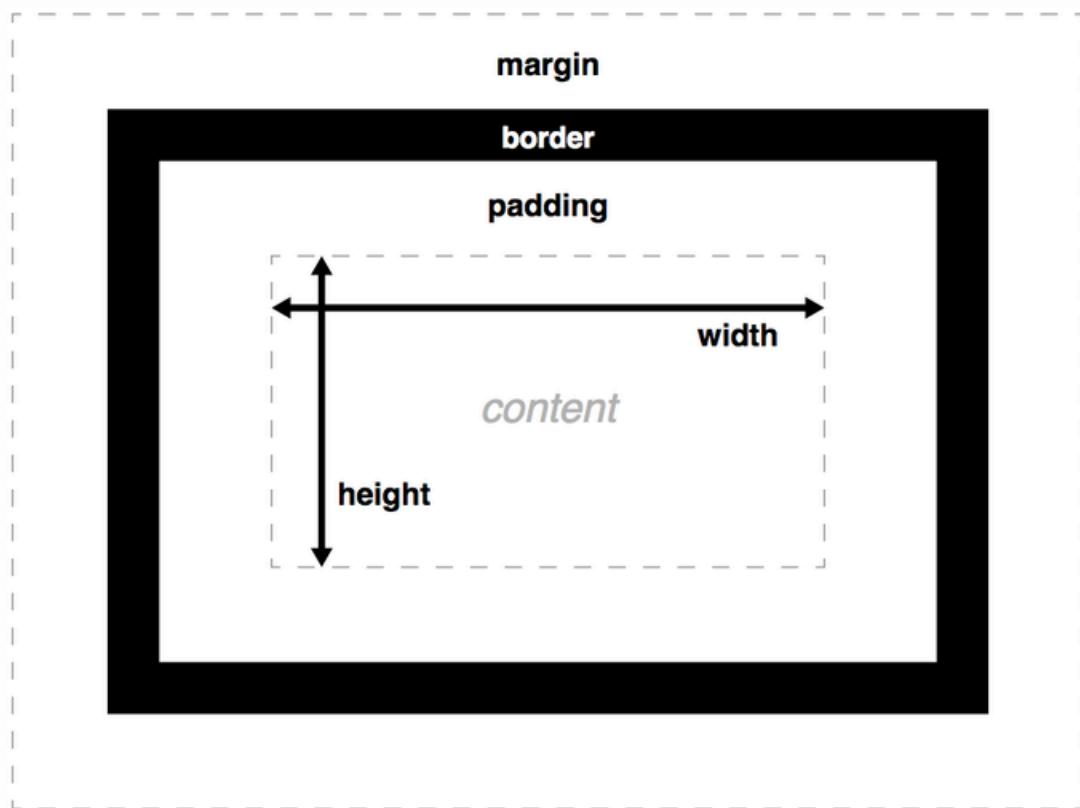
What Is CSS

CSS- Cascading Style Sheet , used to control the layout and design of a web page as it:

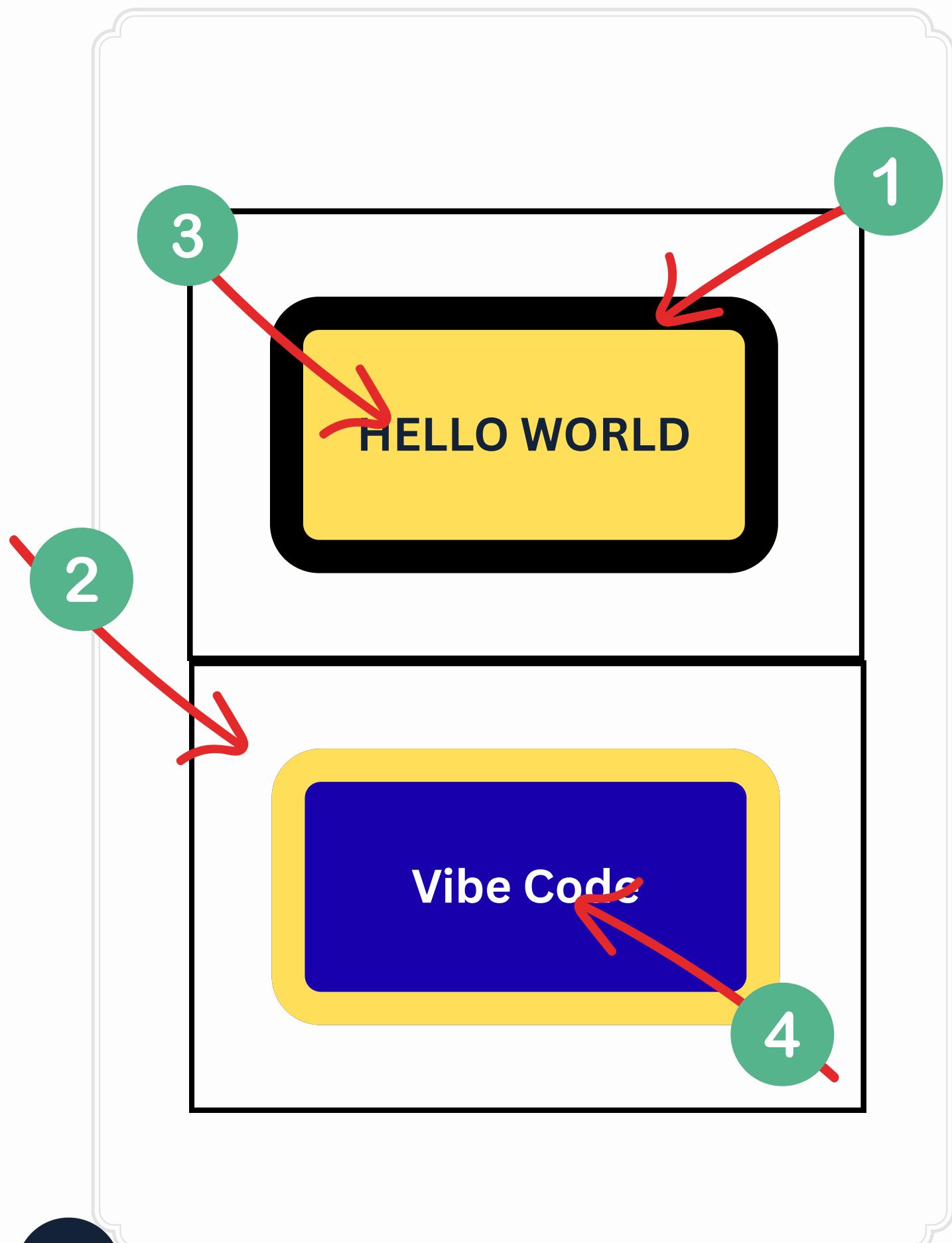
- Controls page layout
- Controls sizing and positioning of elements
- Controls spacing between components
- Adds colors and animations

CSS Box Model

- Everything is a box
 - Padding inside
 - Margin outside
 - Spacing control

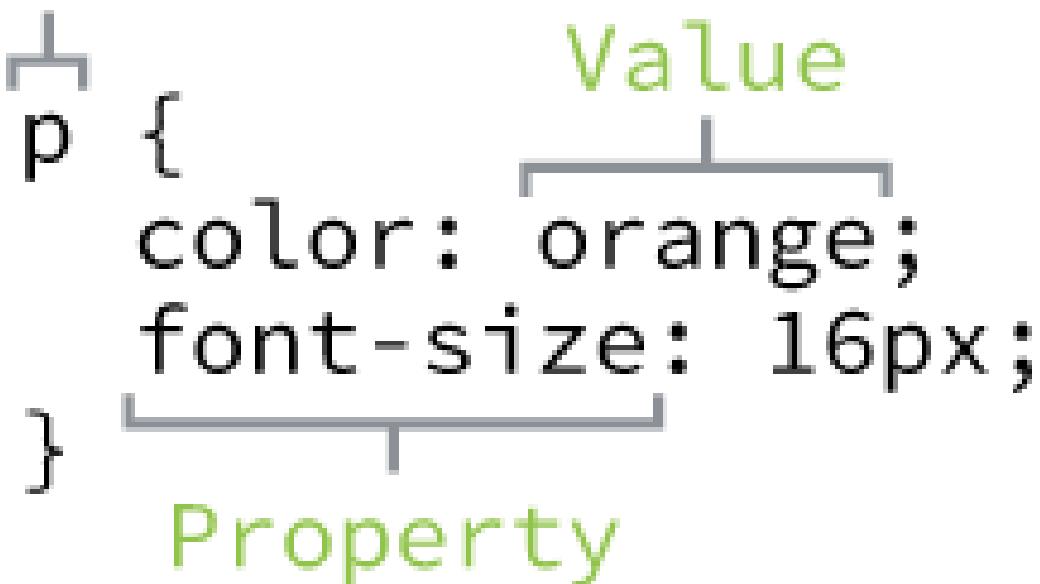


CSS Box Model



CSS Structure

Selector



- Selector chooses element
- Property defines change
- Value sets result

Common CSS Properties

- color : controls the font color
- background color : control the background color of an element
- margin: controls the distance between the element and the nearby elements
- padding : controls the distance between the border and the content of an element
- display: controls the layout of an element
ex: flex or grid

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HTML Tags



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ID and Class Attributes

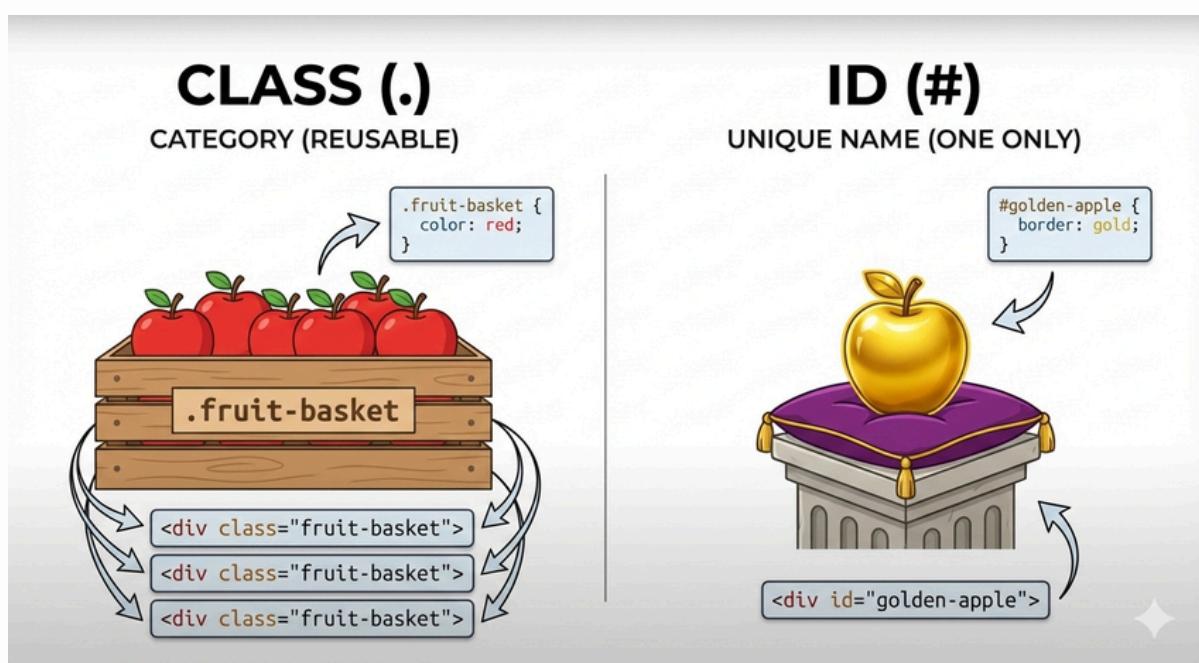
in HTML tags we use Id and Class attributes to :

- Target elements; easier to find when it has a unique name
- Style specific parts; can target a whole section or only part of it
- Control layout; help to place the element in it's correct spot
- Organize code; easier to find and edit and maintain

ID vs Class

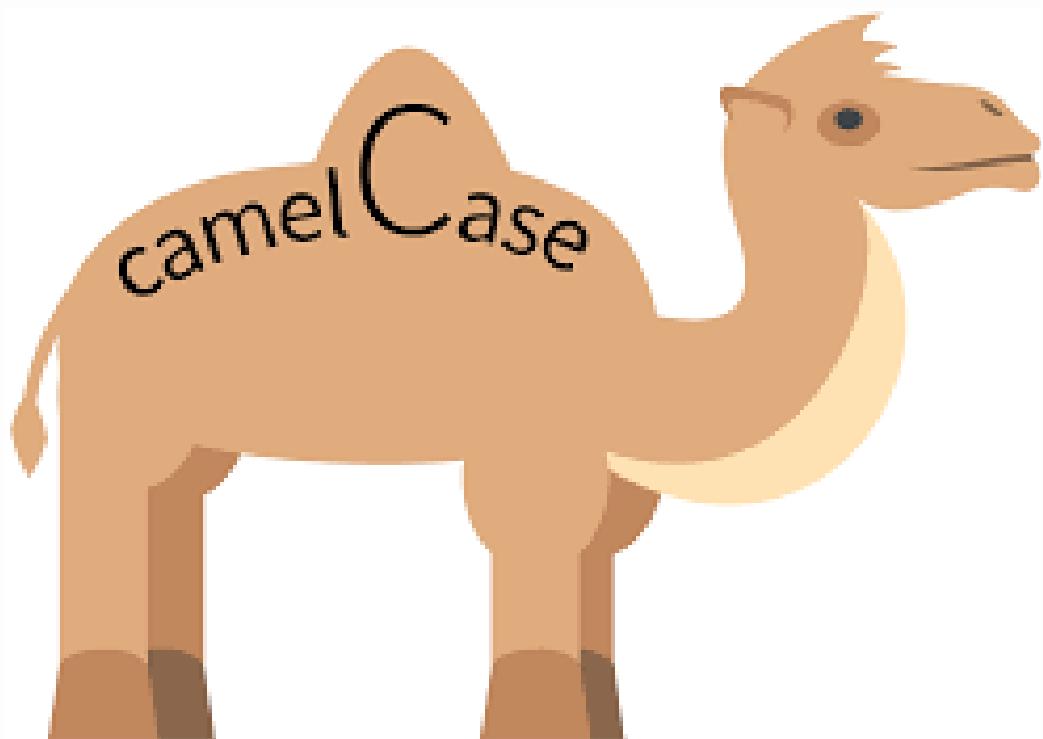
- ID is unique used only for one element
- Class is reusable group for related elements

NOTE : A single HTML element can have both a class and an ID



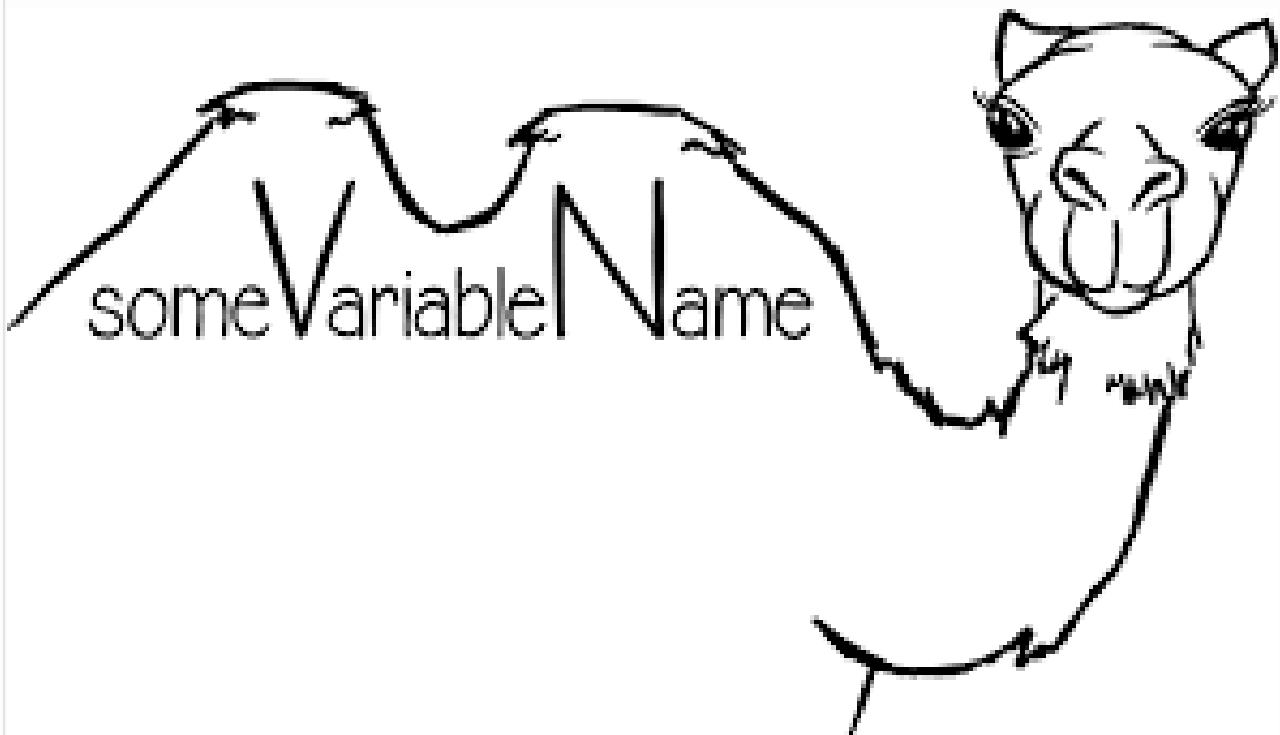
ID-Class Naming Rules

- Short and clear
- Describe purpose
- No spaces
- camelCase



ID-Class Naming Rules

For naming a multi-sectional name , use also camel case



- XXX OR Subtitle
- home page OR homePage
- theimagebelowthetitle OR firstImage
- heroSectiontitle OR heroSectionTitle

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CSS Box Model



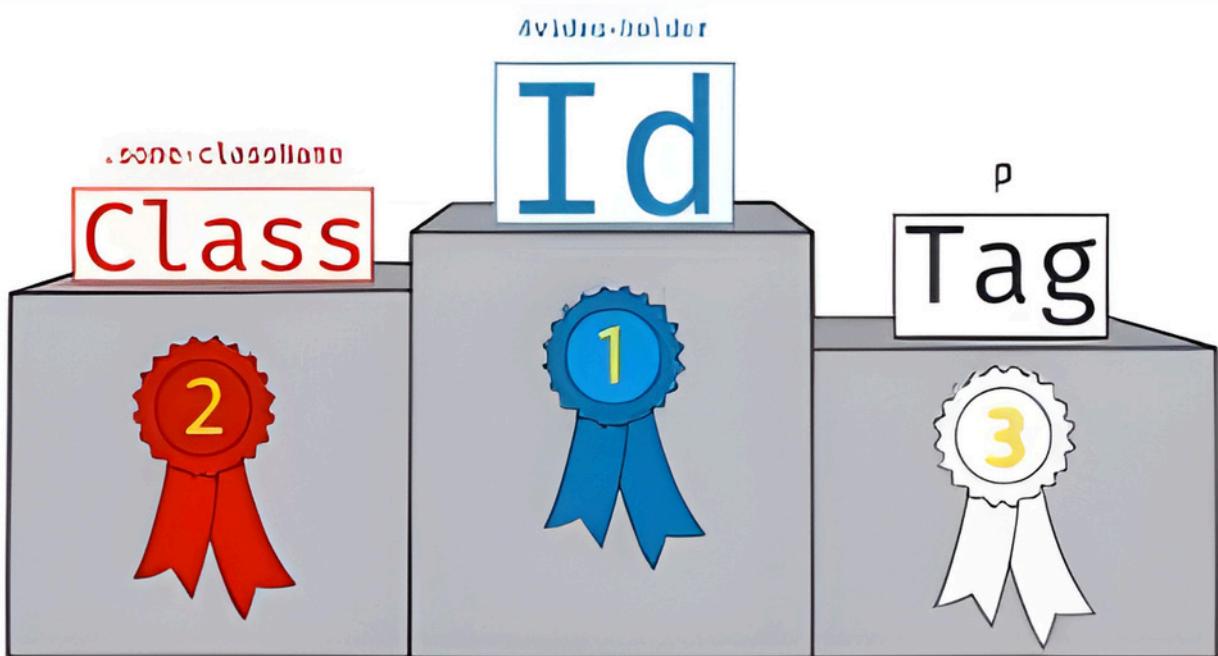
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CSS Specificity

- Tag weakest : calls everyone
- Class stronger : calls group
- ID stronger 2 : calls person
- Inline stronger 3: The nearest
- ! important keyword STRONGEST : VIP



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CSS Box Model



ID & Class



Specificity

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Linking CSS to HTML

- Inline css (Not recommended) : Written inside the opening tag of an element
- Internal css : Written inside a `<style>` tag in the `<head>` of an html code
- External css : Written in a separate style sheet and links through the `<link>` tag in the head of an html page

```
<link rel="stylesheet" href="style.css">
```

Why External CSS

External linking is the best way of linking because it provides better readability, easier to read, reuse style codes and easier to update

So it provides:

- Cleaner code
- Easier updates
- Reusable styles
- Professional code

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CSS Summary

Concept	What It Means	Example / Notes
CSS	Styles the webpage	Colors, layout, spacing
Selector	What element to style	p, .card, #header
Property	What you change	color, margin, padding
Value	How it changes	red, 20px, flex
CSS Rule	Selector + property + value	p { color: blue; }

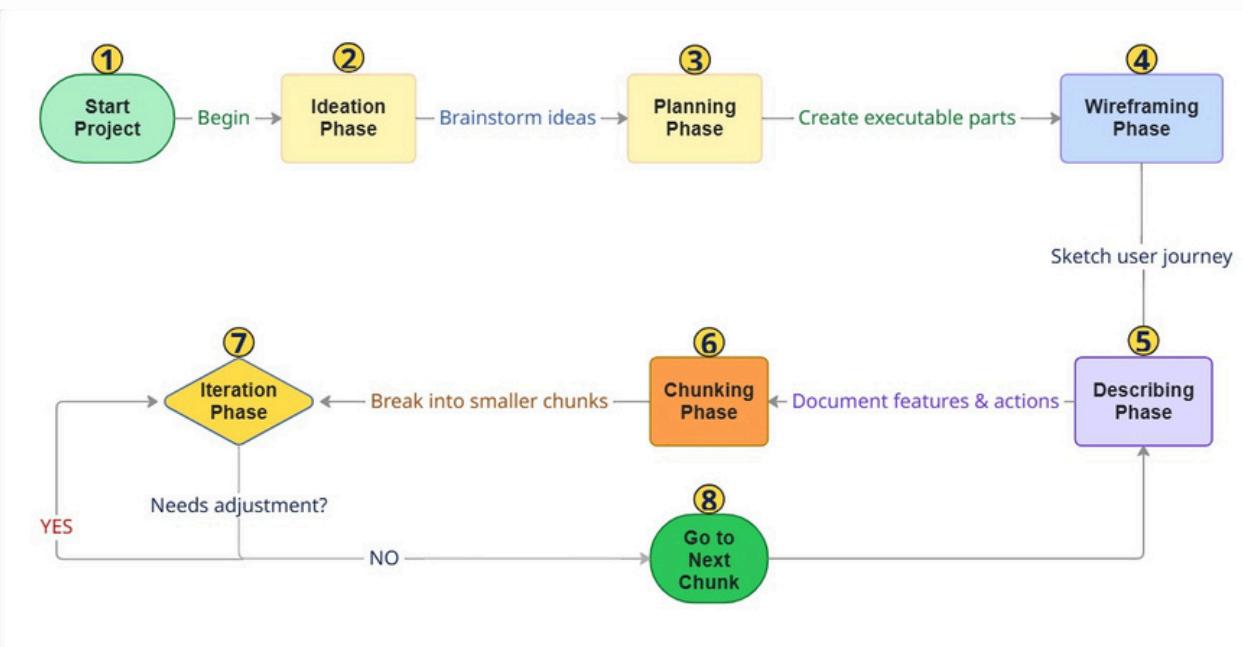
Selector Type	Used For	Strength
Tag	All elements of same type	Weak
Class (.)	Group of elements	Medium
ID (#)	One unique element	Strong
Inline	Inside HTML tag	Very strong
!important	Force rule	Strongest

Your Role vs AI Role

- You design decisions
- You define structure
- AI assists coding
- AI follows rules

Vibe Coding Thinking

- Plan the idea
- Draw the layout
- Describe output
- Chunk and iterate



What Is a Wireframe

Simple layout sketch that prevents us from failing to complete the project structure and design we aimed for

Wireframe acts as a reference guide for a programmer , it is the easiest way to get the exact idea that he plotted the first time .

- Done before coding
- Shows structure
- Saves time

Why Wireframe First

- Clarifies idea
- Preserves details
- Reduces mistakes
- Guides the building process

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Live Practice Exercise

- Draw one component
- Convert to HTML
- Use semantic tags
- Add classes

Extra Learning Resources

Click on each recourse to view it

- [MDN Web Docs](#)
- [W3Schools](#)
- [CSS Tricks](#)

**For any questions please ask on
Discord server technical questions channel**

**For urgent cases you can send WA on
+962787875915**