

CSS Cheat Sheet

1. What Is CSS?

CSS (Cascading Style Sheets) controls the appearance of HTML elements. It defines layout, colors, fonts, spacing, responsiveness, and more.

Benefits:

- Better formatting control
 - Easier site maintenance
 - Improved accessibility
 - Faster page loading
 - Responsive design support
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2. CSS Syntax

A CSS rule:

```
selector {  
  property: value;  
  property: value;  
}
```

- **Selector** — targets elements
- **Declarations** — property:value pairs
- **Declaration block** — all declarations inside `{ }`

Values & Units

- Lengths: `px`, `em`, `%`, `vw`, `vh`
 - Colors: named, hex, `rgb()`, `rgba()`, `hsl()`
 - URLs for images/fonts
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3. Location of Styles

Inline Styles

Inside an element: `<p style="color: red;">` *(Discouraged except for quick testing)*

Embedded Styles

Inside `<style>` in the `<head>`:

```
<style>
  p { color: blue; }
</style>
```

External Stylesheets

Most common, stored in `.css` file:

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

Three Types of Stylesheets

- Author styles (you)
 - User styles
 - Browser styles
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4. CSS Selectors

Element Selector

Targets all of a tag:

```
p { ... }
```

Class Selector

Targets elements sharing a class:

```
.first { ... }
```

Use in HTML: `<p class="first">`

ID Selector

Targets a unique element:

```
#latestComment { ... }
```

Attribute Selector

Targets based on attribute/value:

```
[title] { ... }  
[type="text"] { ... }
```

Contextual (Descendant) Selector

Targets elements inside other elements:

```
div p { ... }
```

Pseudo-Classes

Target element states:

- `a:link`
- `a:visited`
- `a:hover`
- `a:active`
- `:focus`
- `:checked`
- `:first-child`

Pseudo-Elements

Selects virtual parts of content:

- `::first-letter`
- `::first-line`
- `::before`
- `::after`

Universal Selector

```
* { margin: 0; padding: 0; }
```

5. The Cascade — How Styles Interact

Inheritance

Properties that are passed to descendants:

- Inheritable: font, color, text, list properties
- Not inheritable: layout, sizing, borders, backgrounds

Specificity

Determines which rule wins:

- Inline styles = strongest
- IDs > classes > elements
- More specific selector wins

Location (Override Order)

From weakest to strongest:

1. Browser styles
2. User styles
3. External styles
4. Embedded styles
5. Inline styles

Later rules override earlier when equal in specificity.

Reset Styles (reset.css)

Used to remove default browser styles.

6. CSS Positioning

Position Property

- `static` — *default*, normal flow
 - `relative` — offset from normal position
 - `absolute` — positioned relative to nearest positioned ancestor
 - `fixed` — locked to viewport
 - `sticky` — switches between relative and fixed
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7. The Box Model

Every element is a box consisting of:

1. **Content**
2. **Padding**
3. **Border**
4. **Margin**

Collapsing Margins

Top and bottom margins may merge into one.

CSS TRBL (Top, Right, Bottom, Left)

Used for margin, padding, border shorthand:

```
margin: 10px 5px 20px 5px;
```

Order: **T - R - B - L**

Background Properties

- background-color
- background-image
- background-repeat
- background-position
- background-size
- background-attachment

Borders

Individual sides:

```
border-top-color: red;  
border-right-color: green;
```

All sides:

```
border-color: red green orange blue;
```

8. Text Styling

Font Properties

- font-family
- font-size
- font-weight
- font-style
- font-face (via @font-face)

Paragraph/Text Properties

- letter-spacing
 - line-height
 - text-align
 - text-decoration
 - text-direction
 - text-shadow
-

9. Key Terms (from last slides)

- absolute units
- attribute selector
- box model
- cascade
- class selector
- collapsing margins
- combinators
- contextual selector
- declaration
- declaration block
- descendant selector
- embedded style sheets
- external style sheets
- id selector
- inheritance
- inline styles
- internal styles
- margin
- padding
- pseudo-class selector
- pseudo-element selector
- relative units
- selector
- specificity
- TRBL

- universal element selector
- user style sheets
- web font stack

End of CSS Cheat Sheet — Ready for study and midterm prep.