CSS Fundamentals – Styling the Web

CS 390 – Web Application Development

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August 28, 2023

Outline

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WIWYT – CSS

Recap from Monday:

- HTML is awesome but without CSS, the webpage is ugly and in most cases unusable.
- CSS defines a set of rules applied based on HTML tags and attributes, that style and animate the webpage.

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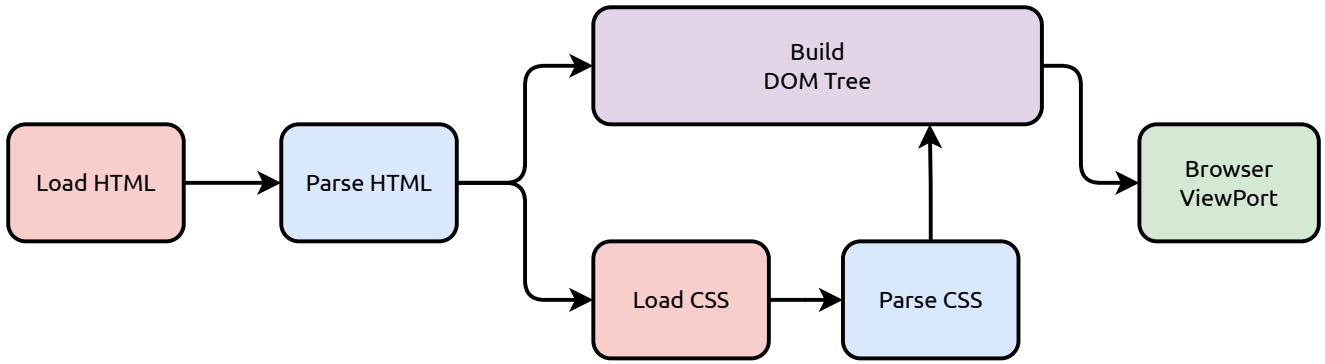
CSS works by supplementing a DOM, following the below flowchart:



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Example: A rule that makes the body's font color blue looks like:

```
body {
    font-color: blue;
}
```

Syntax (contd.)

Comments: `/* Comments in CSS look like this */`

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These are just a small subset of important ones!
Extensive List: `https://www.w3schools.com/cssref/`

Inline, Internal & External CSS

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2. **Internal:** Adding CSS to the `<head>` of an HTML file.
   Example:

```
<head>
...
    <style type="text/css">
    h1 {
      color: blue;
    }
    </style>
</head>
...
    <h1>Hello World!</h1>
...
```

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Inline, Internal & External CSS (contd.)

3. **External:** Severing the CSS to a new file.

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   Example:

style.css

```
h1 {
  color: blue;
}
```

index.html

```
<head>
...
   <link rel="stylesheet" \
       href="style.css">
</head>
...
   <h1>Hello World!</h1>
...
```

Rule Subsetting

Rules can be selected with varying levels of specificity:[2]

1. **Global:** Applies to everything.
   Syntax: `* { k: v; }`

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5. **ID-Level:** Applies to elements with a particular ID.
   Syntax: `#id { k: v; }`

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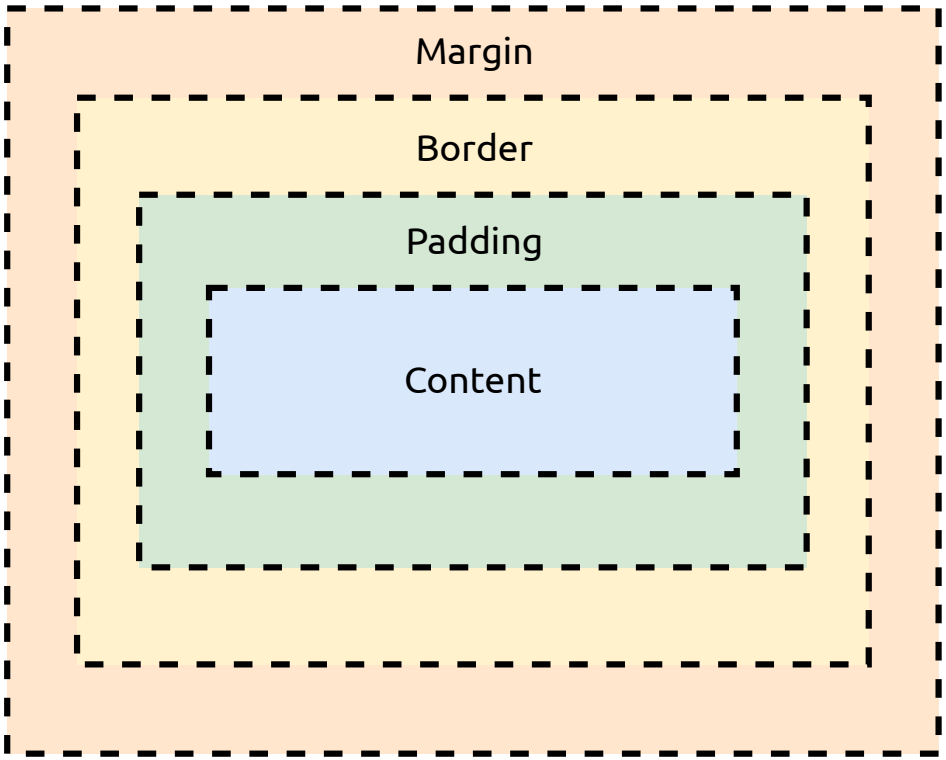
Box Model

The key idea here is that every element in CSS is a box.



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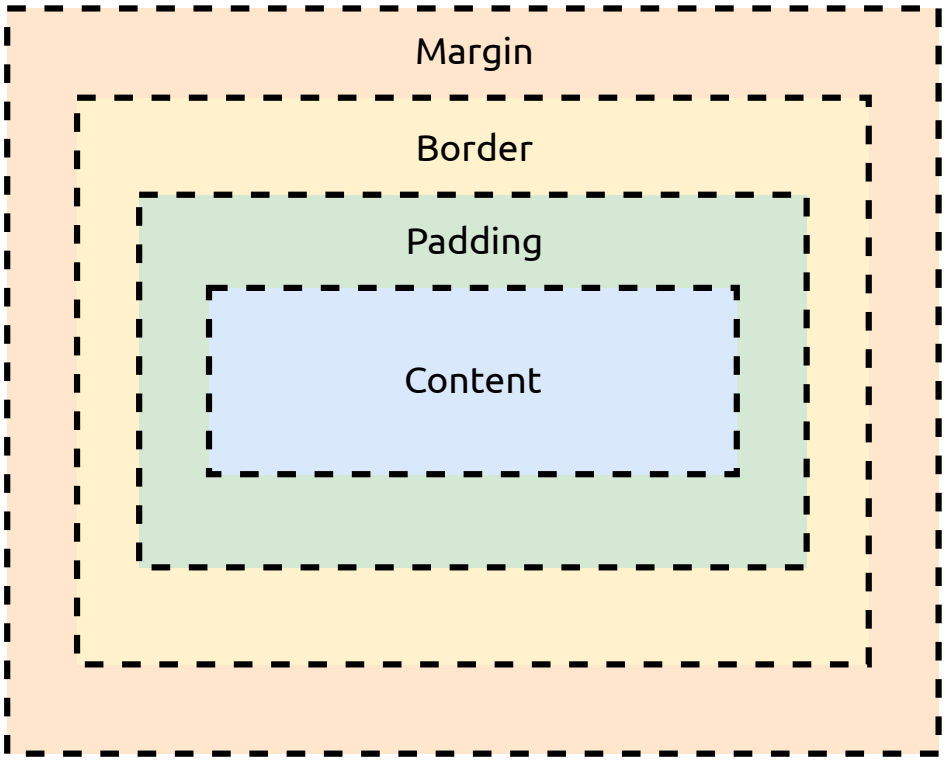

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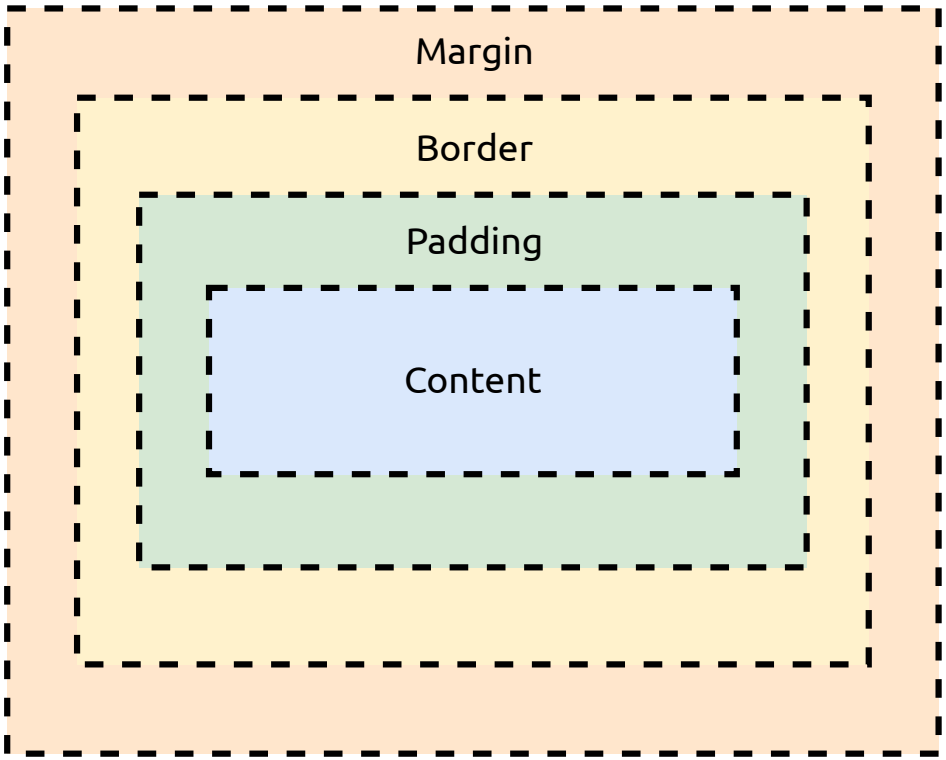

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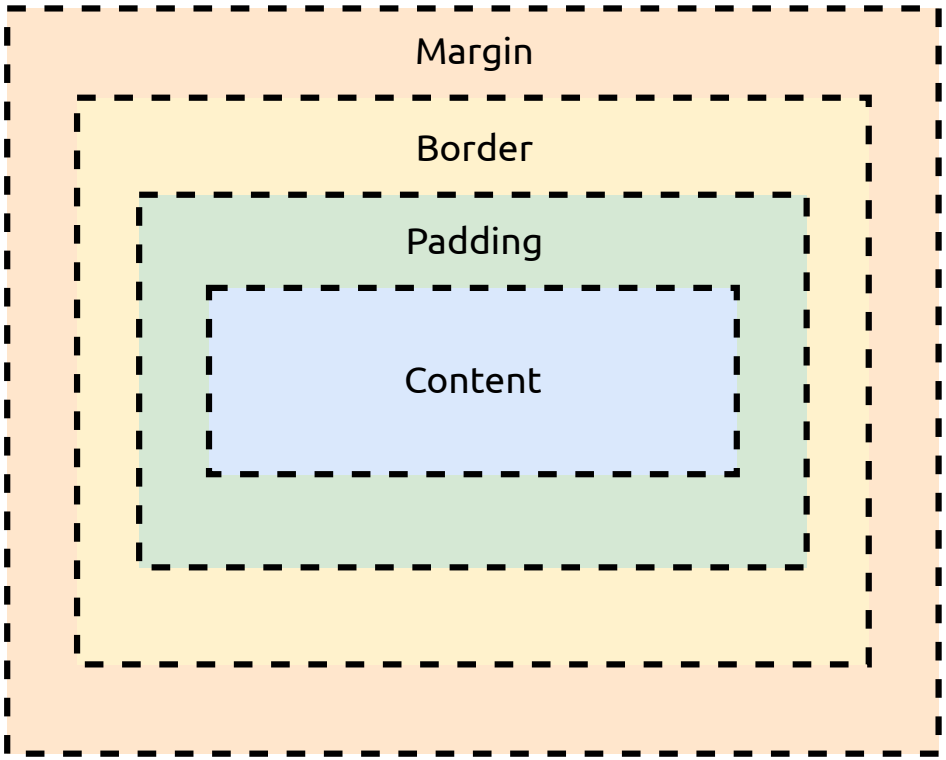

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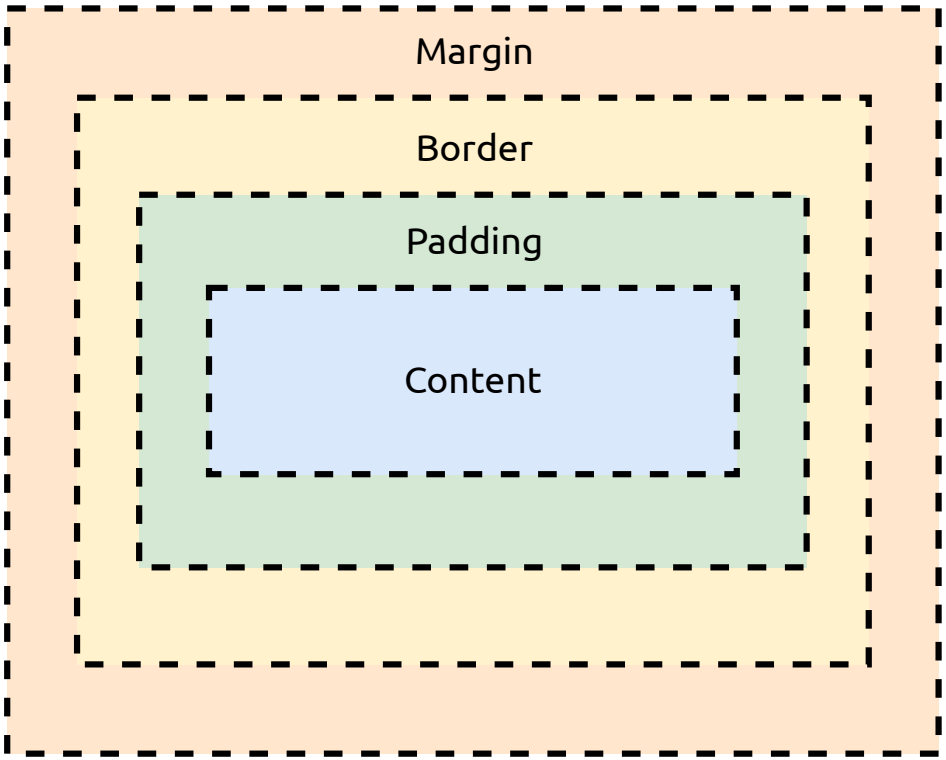

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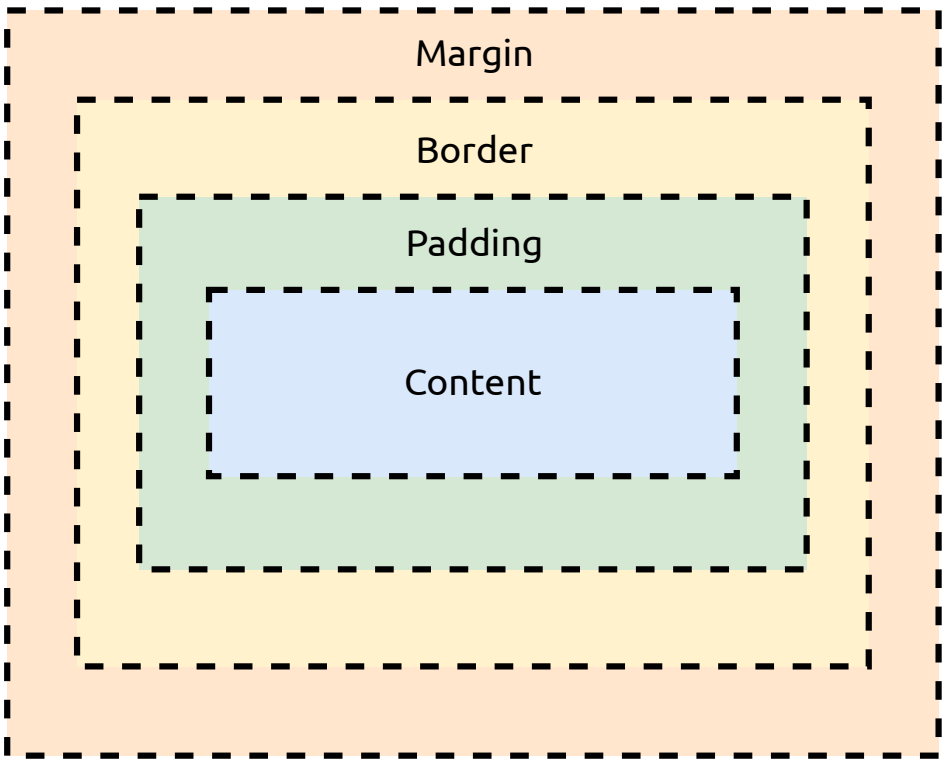

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Bonus Component

Outline: `border`, but floating; not part of the box model.

Sidenote: Pseudo-classes

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We'll cover this and pseudo-elements in more detail, for today's exercise you will need to know these targets:

1. `a:link` – unvisited link
2. `a:visited` – visited link

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2. **Normalization Libraries:** A CSS rule preset you can import. We'll cover this in more detail later, one great example is normalize.css.

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We can also modify text decorations, such as the emphasis, weight, or if it is struck through.

Syntax: `target { text-decoration: underline blue}`

Let's ~~Build~~ Design a Webpage!

Objective: Re-create the style present on `example.com`. I'll be coming around for help, if needed.

Rules & Specifics:

1. **DO NOT VIEW OR USE THE ORIGINAL CSS.** Play fair.
2. Dialog box color: `#fdfdff`, background color: `#f0f0f2`.
3. To create a shadow, use `box-shadow` (look it up!).
4. Hyperlink color is always: `#38488f`.
5. Use 'Arial' with 'sans-serif' as a fallback.
6. Use External CSS.
7. The HTML code is in the attached tarball on Brightspace.
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Winner (closest & fastest solution) gets a mini cheese pizza! (on Wednesday, after evaluation). This also doubles as the attendance survey.

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- So, the homework is also delayed to Wednesday.
- We'll have a **guided PSO on git tomorrow**. Optional and will be recorded.
- Mikail will begin teaching JavaScript on Wednesday!

Thank you!

Have an awesome rest of your day!

Slides: `https://cs.purdue.edu/homes/jsetpal/slides/css.pdf`

If anything's incorrect or unclear, please ping `jsetpal@purdue.edu`
I'll patch it ASAP.