

MODULE 4

Introduction to CSS Selectors and Layout Positioning



Simple HTML Document

```
<!DOCTYPE html>
<html>
<head>
  <title>Box Model</title>
  <link rel="stylesheet" href="box-model.css" />
</head>
<body>
  
  padding: 50px; margin: 0; border: 3px solid black;
  <div>
    
    padding: 0; margin: 50px; border: 3px solid black;
  </div>
</body>
</html>
```

CSS: Cascading Style Sheet

- CSS is the way we tell HTML how to format itself
- CSS can be included by:
 - inline on any element with a style attribute
 - within the document under a `<style>` element
 - external document reference with a `<link href=>` element

CSS in document

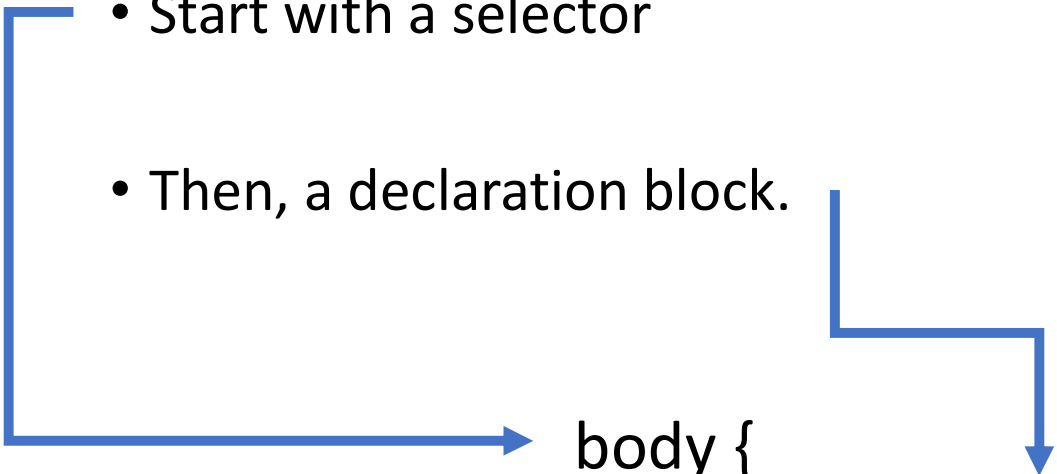
```
<body style="background-color:green;">
```

```
<style>  
  body {  
    background-color: green;  
  }  
</style>
```

```
<link rel="stylesheet" href="box-model.css" />
```

Well, that escalated quickly...

- Start with a selector
- Then, a declaration block.



```
body {  
    background-color: green;  
}
```

CSS Selectors

Type	Example
Universal	*
Element	<pre>body { background: green; }</pre>
Id	<pre>#slug_1</pre>
Class	<pre>.bigBorder{ border: double; }</pre>

Fancy CSS Selectors

- Descendant selector: [a space]
 - `ul li` `<=` applies to list elements inside an unordered list
 - `div .foo` `<=` applies to any element with the class `foo` inside a `div`
- Direct Child selector: `>`
 - `div > span` `<=` applies to any `span` that is a **direct child** of a `div`
- Adjacent Sibling selector: `+`
- General Sibling selector: `~`
- pseudo-class
 - `a: hover`

Box Model



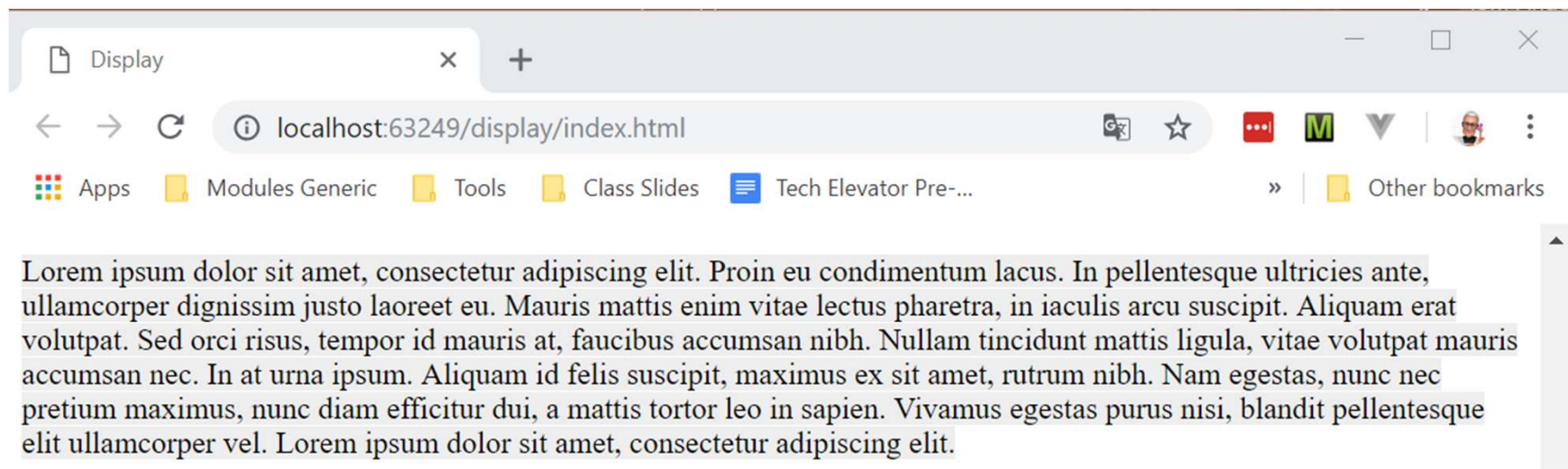
Box Model

- Every element in web design is a rectangular box.
- We use the content, padding, border, and margin to calculate the amount of space that an element takes up.
- Margin is the space **outside something**. It does not affect the size of the box but affects other content that interacts with the box.
- Padding is the space **inside something**.



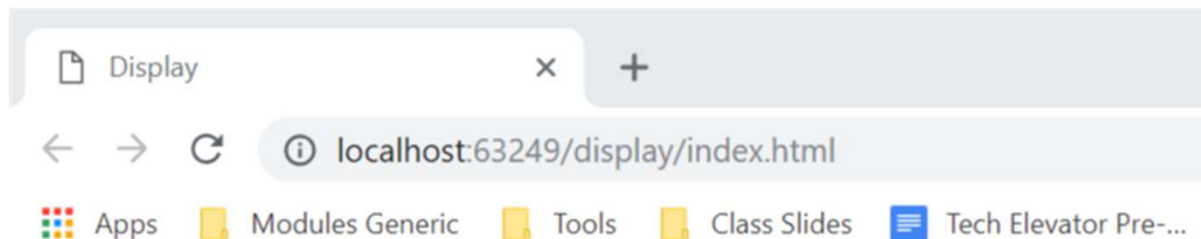
Block or Inline?

- Block elements (div, h1-h6, p, form, header, footer)
 - Always starts on a new line
 - Takes up full width available



Block or Inline?

- Inline elements (a, span, img)
 - Do not start on a new line
 - Takes up only as much width as necessary
 - It accepts margin & padding while ignoring height & width.



Links are displayed as inline by default,

[One](#)

[Two](#)

[Three](#)

inline-block is very similar to inline but **it allows you to set a width and height.**

Positioning elements on a page

- **Normal** flow of a page:
 - Left to right
 - Top to bottom
- **Relative** position means **relative to where it would otherwise be positioned in the normal flow**
 - Can set top, right, bottom, and left
- **Absolute** position will place the element relative to the parent ancestor (i.e. containing element) **exactly where you specify**.
 - These elements are removed from the flow of the page.
 - Setting both *top* and *bottom*, or both *left* and *right*, you can "stretch" an element's dimensions.
- **Fixed** position is **relative to the browser window** and does not scroll with the page.
 - setting the *top*, *right*, *bottom*, and *left*

Finally, float.

The float property specifies if the element should be taken from the normal flow and placed along the left or right-side of the container. Text and inline elements will wrap around it.

- **none** element does not float
- **left** element floats to left of its container
- **right** element floats to right of its container
- **inherit** element inherits float direction of its parent
- Floated elements automatically display as block

WHAT QUESTIONS DO
YOU HAVE?



Reading for tonight: **HTML and CSS Overview**

