Intro to HTML + CSS

School of Visual Concepts
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Week 3

- Review
- Week 2 projects
- Building Website Navigation
  - ID & Class
  - CSS Selectors
- Centered Content Layout
  - Structural HTML Elements

Review

HTML Tags

```
<p>Some content</p>

<p><em>Some</em> content</p>

<ul>
    <li>Item 1</li>
    <li>Item 2</li>
</ul>
```

HTML Tags

`<h1>`   `<strong>`   `<ul>`

`<h2>`   `<em>`   `<ol>`

`<h3>`   `<li>`

`<a href="">`

`<p>`   `<img src="">`

What CSS Does

Defines rules for the presentation of your website

- Typography
- Color
- Borders
- Backgrounds

- Alignment
- Positioning
- Spacing
- Transparency

CSS File

```html
<!DOCTYPE html>
<html>

<head>
  <title>My Page</title>
</head>

<body>
  <p>Hello World!</p>
</body>

</html>
```

HTML

```css
body {
  font-family: sans-serif;
  background-color: white;
}

p {
  color: gray;
  font-size: 18px;
}

a {
  color: red;
}
```

CSS

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

```css
h1 {
    font-size: 32px;
}

body {
    background-color: black;
    font-family: serif;
    color: white;
}
```

CSS Review

Typography

color
font-family
font-size
line-height
letter-spacing

font-style
font-weight

text-align
text-transform
text-decoration

Sizing

width
height

Spacing

margin
padding

Backgrounds

background-color
background-image
background-repeat
background-size

Borders

border
border-radius

Others

visibility
opacity
list-style-type
cursor

Building Website Navigation

What's the Goal?

– A well-structured menu of navigation links to the pages of your website

– The current page is highlighted

Our Approach

– Use an unordered list of links

– Style with CSS

– Give the link to the current page a unique style

We will need to learn

- IDs and Classes

- More CSS selectors

ID
& Class

What do they do?

- ID and Class let us select specific items on the page in CSS

How do we use them?

– We first add them as attributes to any HTML element:

```
<h1 id="example-id">

<p class="example-class">
```

How do we use them?

– We can then select them using CSS:

```
h1#example-id { }

p.example-class { }
```

How do we use them?

```html
<p id="example-id">
    Some content
</p>
```

```css
p#example-id {
    color: blue;
}
```

How do we use them?

```html
<p class="example-class">
    Some content
</p>
```

```css
p.example-class {
    color: blue;
}
```

What's the difference?

id

– name

– unique! no two elements can have the same id

class

– kind/type

– OK to use same class on many elements

```
<p id="intro">
    The only intro paragraph.
</p>


<p class="highlighted">
    One of many possible
    highlighted paragraphs.
</p>
```

CSS Selectors

Select HTML Element

Use the element (tag) name

<body>   `body { }`

<h1>   `h1 { }`

Select by ID

Use the # sign

```
<h1 id="top">
```

```
h1#top { }
#top { }
```

```
<ul id="nav">
```

```
ul#nav { }
#nav { }
```

Select by Class

Use a . (dot)

```
<a class="selected">      a.selected { }
                          .selected { }


<h1 class="special">      h1.special { }
                          .special { }
```

Select by Mouse State

Use a `:hover` for mouse-over state
and `:active` for mouse-down state

```
a:hover { }                    a:active { }
```

Select "descendent"

Use space between two selectors

```
<ul>
  <li>Item</li>
</ul>


<h1>
  <em>Hi</em> there!
</h1>
```

```
ul li { }



h1 em { }
```

Mix & Match

```
<ul id="nav">
  <li>
    <a href="#">Link</a>
    <a class="selected" href="#">Link</a>
    <a href="#">Link</a>
  </li>
</ul>
```

Mix & Match

```
ul#nav { }
```

```html
<ul id="nav">
  <li>
    <a href="#">Link</a>
    <a class="selected" href="#">Link</a>
    <a href="#">Link</a>
  </li>
</ul>
```

Mix & Match

```
ul#nav li { }
```

```
<ul id="nav">
  <li>
    <a href="#">Link</a>
    <a class="selected" href="#">Link</a>
    <a href="#">Link</a>
  </li>
</ul>
```

Mix & Match

```
ul#nav li a { }
```

```
<ul id="nav">
  <li>
    <a href="#">Link</a>
    <a class="selected" href="#">Link</a>
    <a href="#">Link</a>
  </li>
</ul>
```

Mix & Match

```
ul#nav li a.selected { }
```

```
<ul id="nav">
  <li>
    <a href="#">Link</a>
    <a class="selected" href="#">Link</a>
    <a href="#">Link</a>
  </li>
</ul>
```

Centered Content Layout

Why center?

– Most websites have a maximum fixed width, which makes text content more readable

– Centering your content gives it some breathing room

How to center?

– Group our website's content inside an HTML container element

– Center the container using CSS

Block
vs Inline Elements

Block vs Inline elements

Block

Inline

- Moves to a new line

- Fills the browser width
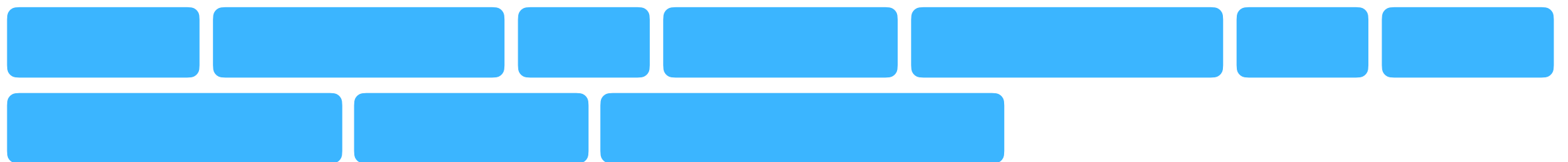
- Pushes everything after it to a new line

- Flows within the text on the page

Block vs Inline elements

Block

Inline

Block vs Inline elements

Block

<h1><h2>

<p>

**
**
<li>

Inline

<strong> <em>

<a>

<img>

Text content

Structural
HTML Elements

Structural HTML Elements

New tags

`<main>`

`<header>`

`<footer>`

`<section>`

`<article>`

`<nav>`

New tags

– Use them to group content into containers

– They all function the same, so use the ones that make most sense for your content

New tags

`<main>`

`<section>`

`<article>`

`<header>`

`<footer>`

`<nav>`

Generic tags

`<div>`

Generic **block** element (fills the width of the browser by default)

`<span>`

Generic **inline** element (flows within text like `<em>` & `<strong>`)

Generic tags

– Use them in conjunction with **id** and **class** to describe your content

✘ `<p>It's <span>Monday</span>!</p>`

✔ `<p>It's <span class="day">Monday</span>!</p>`

How to center?

Group website's content inside `<main>`

```
<body>
  <main>
    <p>All website content</p>
    ...
  </main>
</body>
```

Centering in CSS

– Give `<main>` element a `width`

– Add `auto` margins on the left and right

Centered Content Layout

HTML

```
<body>
  <main>
    <p>Content</p>
    ...
  </main>
</body>
```

CSS

```
main {
  width: 900px;
  margin-left: auto;
  margin-right: auto;
}
```

Week 3
Project

Expand Your Website

– Add/split content to at least 3 pages

– Consistent navigation between pages

– Centered column layout

Navigation

– Add navigation to your website, using links to your pages within an unordered list (`<ul>`)

– Use `class="selected"` on the `<li>` for the selected page

Navigation

– Style your navigation with the help of new CSS selectors:

  – ID/Class selector
  – Descendent selector

Center Your Website

– Put your website content inside a `<main>` element

– Center the element by adding a `width` and setting the margin to `auto` on the left and right

Keep it structured

– Use the new HTML elements (**<header>**, **<section>**, **<nav>**, etc) to give structure & meaning to your pages

– Go back through your HTML and indent, check your opening/closing tags, etc

Questions? Comments?

– Visit http://movingobjects.io/svc for class slides, code samples, resources

– Email me: scott@movingobjects.io