Interactive Elements

Class Hierarchy

CSS Variables

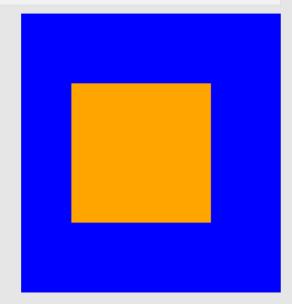
Basic Interactions: A CSS Approach

We define the following styles:

```
.parent {
    background: blue;
    width: 200px;
    height: 200px; }

.child {
    background: orange;
    display: inline-block;
    width: 100px;
    height: 100px;
    margin: 50px; }
```

What is the result when applying it to the following HTML?

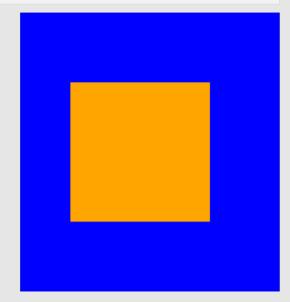


We define the following styles:

```
.parent {
    background: blue;
    width: 200px;
    height: 200px; }

.parent > .child {
    background: orange;
    display: inline-block;
    width: 100px;
    height: 100px;
    margin: 50px; }
```

What is the result when applying it to the following HTML?



We can assign the same properties to multiple classes & IDs.

```
.parent1, .parent2 {
    background: blue;
    width: 200px;
    height: 200px; }
```

'parent > child' allows us to reference a class or ID by the immediate parent.

```
.parent1 > .child {
    background: orange;
    display: inline-block;
    width: 100px;
    height: 100px;
    margin: 50px; }
.parent2 > .child {
    background: green;
    display: inline-block;
    width: 100px;
    height: 100px;
    margin: 50px; }
```

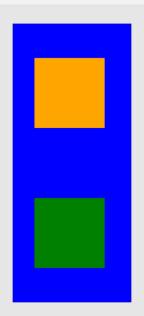
We define the following styles:

```
.parent1, .parent2 {
    background: blue;
    width: 200px;
    height: 200px; }
```

```
.parent1 > .child {
    background: orange;
    display: inline-block;
    width: 100px;
    height: 100px;
    margin: 50px; }
```

```
.parent2 > .child {
    background: green;
    display: inline-block;
    width: 100px;
    height: 100px;
    margin: 50px; }
```

What is the result when applying it to the following HTML?



Looks for class 'child' as an immediate descendant of 'parent'

```
.parent > .child
```

Looks for class 'child' as any descendant of 'parent'

```
.parent .child
```

Looks for any immediate descendant of 'parent'

```
.parent > *
```

Looks for **any** descendant of 'parent'

```
.parent *
```

Looks for class 'child' immediately after (not inside) class 'parent'

```
.parent + .child
```

Looks for class 'child' immediately before (not inside) class 'parent'

.parent ~ .child

Looks for **first child** of 'parent'

.parent:first-child

Looks for **last child** of 'parent'

.parent:last-child

How many different ways are there to select 'me'?

```
<div class=great-grandparent>
         <div class=grandparent>
                   <div class=parent>
                            <div class=me>
                                      <div class=child> </div>
                            </div>
                            <div class=sibling>
                                      <div class=niece> </div>
                                      <div class=nephew> </div>
                            </div>
                   </div>
         </div>
</div>
```

How many different ways are there to select 'me'?

```
<div class=great-grandparent>
         <div class=grandparent>
                   <div class=parent>
                            <div class=me>
                                     <div class=child> </div>
                            </div>
                            <div class=sibling>
                                      <div class=me> </div> <!--IMPOSTER-->
                                      <div class=nephew> </div>
                            </div>
                  </div>
         </div>
</div>
```

Class Hierarchy

CSS Variables

Basic Interactions: A CSS Approach

Declaring Variables

Declare variables in the :root class:

```
:root {
    --var-name: property;
}
```

Reference variables in main css:

```
.cool-variable-class {
    color: var(--var-name);
}
```

Variables Usage

When we declare a variable initially:

We can use it in multiple classes for multiple properties.

```
.cool-variable-class {
        color: var(--grey);
}
.cool-variable-class {
        background-color: var(--grey);
}
```

^{*}we will learn how to reassign variables later with JQuery

Class Hierarchy

CSS Variables

Basic Interactions: A CSS Approach

Building Personal Websites

Basic Interactions

Activated when cursor hovers over element.

.element:hover

Activated when cursor clicks (and holds) element.

.element:active

In both cases, properties will be reset when user un-hovers or releases click.

Building Personal Websites

Interactions By Class

We define the following styles:

```
.click-me {
    background: orange;
    color: white;
    text-align: center;
    line-height: 200px;
    width: 200px;
    height: 200px; }

.click-me:active {
    background: blue;
    }
    click-me:active::before {
    content: "I am clicked";
    }
```

What is the result when applying it to the following HTML?

```
<div class=click-me> Click me! </div>
```





Interactions By Tag

We define the following styles:

```
a {
    color: black; }
    color: yellow;
    text-style: underline; }
```

What is the result when applying it to the following HTML?

```
<a href='http://www.poptropica.com/' > Some Fun Games </a>
```

Affects every < a > tag

^{*}Notice how we don't use a . or #

Homework Ideas

☐ Reorganize HTML structure to encase similar content into the same parenting divs.

Add **hover** and **active** interactions to elements.

Live Demo

Lecture 06 | Interactive Elements