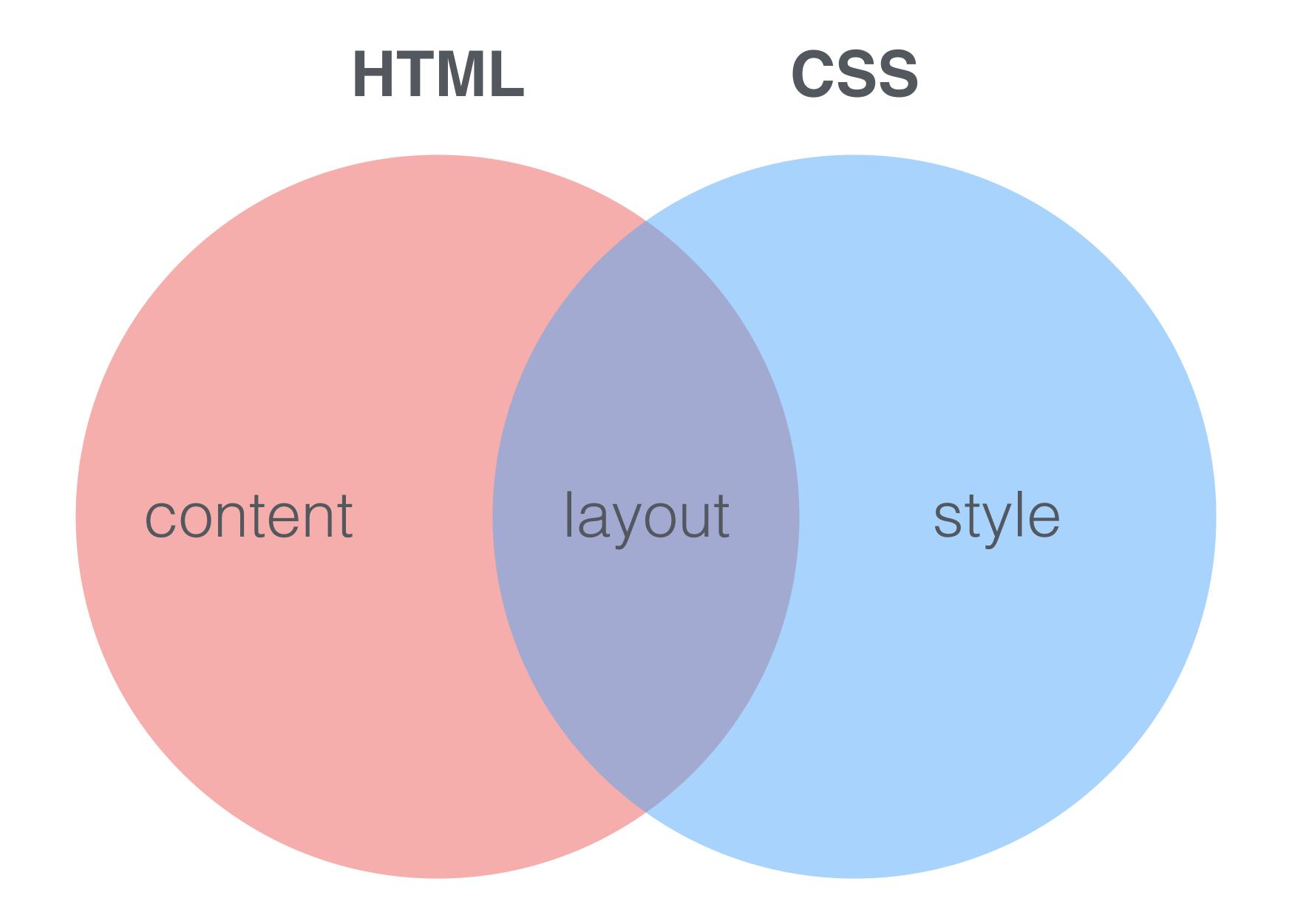
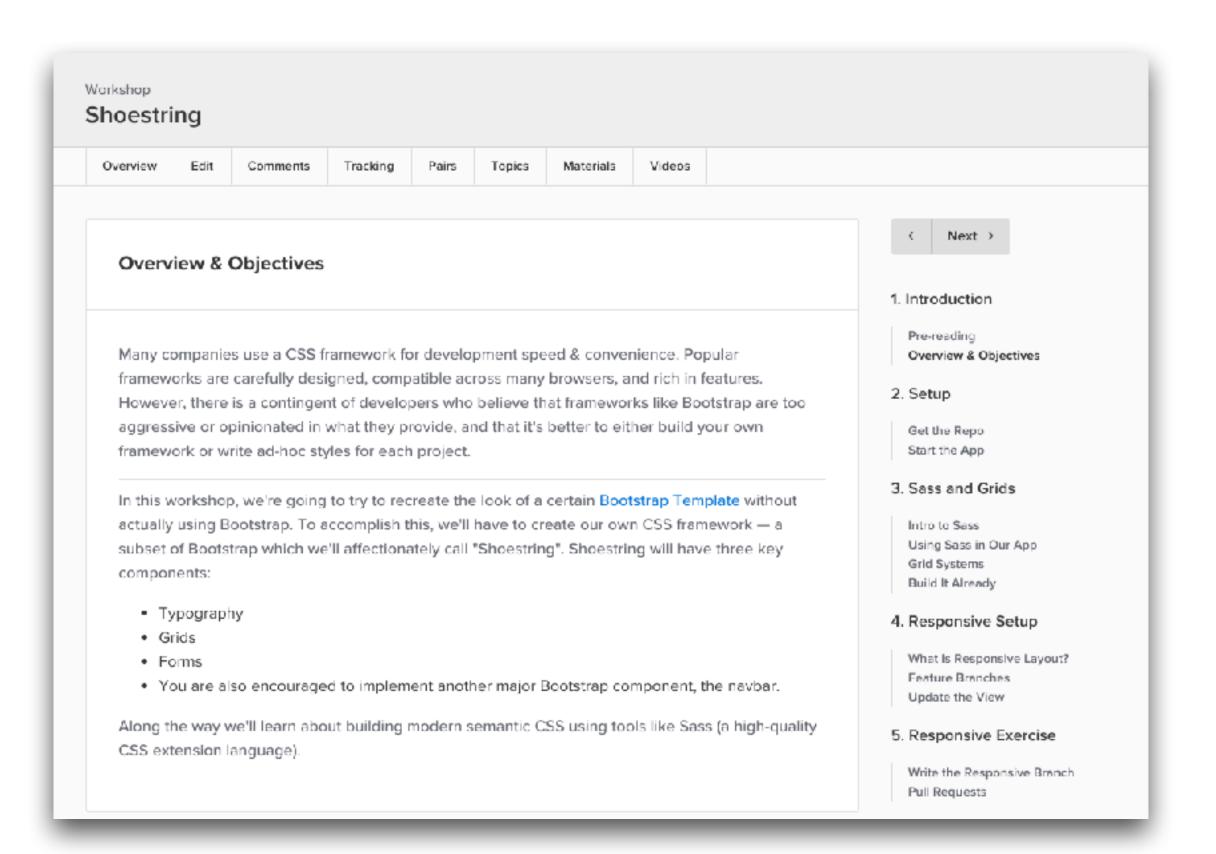
HTML & CSS

Layout laid out



WITH CSS



WITHOUT CSS

Workshop Shoestring Overview Edit Comments Tracking Pairs Topics Materials Videos Overview & Objectives Many companies use a CSS framework for development speed & convenience. Popular frameworks are carefully designed, compatible across many browsers, and rich in features. However, there is a contingent of developers who believe that frameworks like Bootstrap are too aggressive or opinionated in what they provide, and that it's better to either build your own framework or write ad-hoc styles for each project. In this workshop, we're going to try to recreate the look of a certain Bootstrap Template without actually using Bootstrap. To accomplish this, we'll have to create our own CSS framework — a subset of Bootstrap which we'll affectionately call "Shoestring". Shoestring will have three key components: Typography Grids Forms • You are also encouraged to implement another major Bootstrap component, the navbar. Along the way we'll learn about building modern semantic CSS using tools like Sass (a high-quality CSS extension language). Select Cohort 1510FE 1511 1511JS 1511JS-MID 1601FE 1601 1601F 1601GH Next 1. Introduction Pre-reading Overview & Objectives



HTML & CSS

TERMS

```
declaration border: 1px solid red;
font-style: italic;
}
```

RULE EXAMPLE

```
apply these styles—

border: 1px solid red;

font-style: italic;

}

to any elements matching this selector

even for any future changes declarative!
```

SELECTORS

```
tag input
```

class .btn

id #upload

attribute [type="file"]

pseudo-element ::after

pseudo-class : hover

* *

BEWARE!

```
tag.class element with BOTH tag AND .class
tag .class element with .class whose ANCESTOR matches tag
tag, .class element with EITHER tag OR .class
```

CASCADING STYLE SHEETS

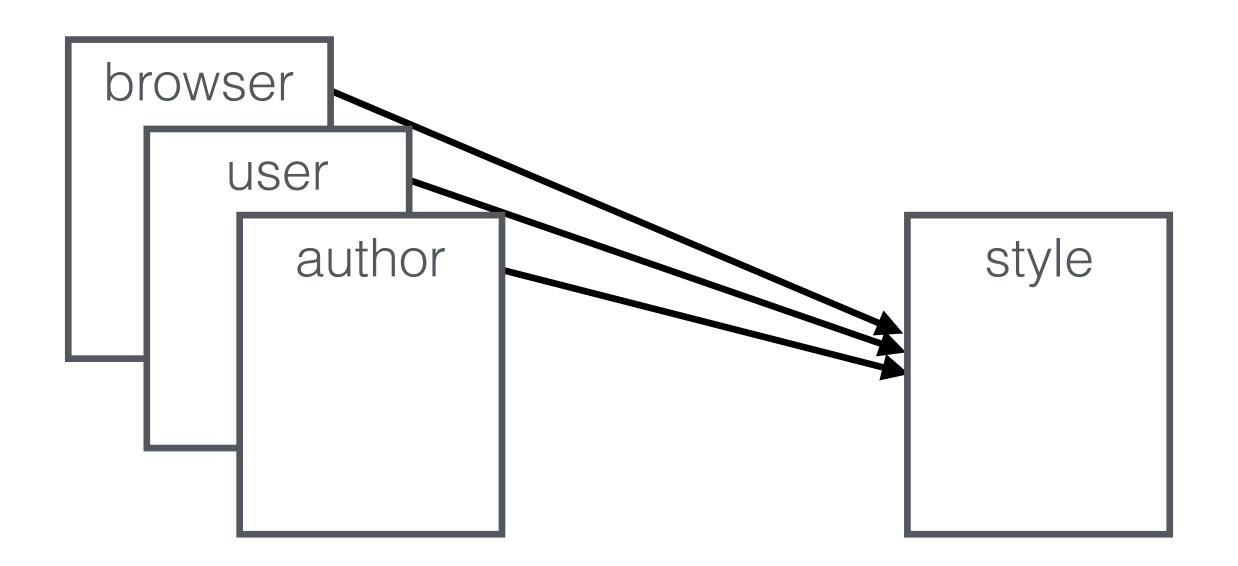
CASCADING

In ~1994... CSS had one feature that distinguished it from all the [competing style languages]: it took into account that on the Web the style of a document couldn't be designed by either the author or the reader on their own, but that their wishes had to be combined, or "cascaded," in some way.

CASCADING STYLE SHEETS, DESIGNING FOR THE WEB, BY HÅKON WIUM LIE AND BERT BOS (1999) - CHAPTER 20

CASCADING

An element's style is a merge of every rule whose selector matches



```
styles-A.css
                                                                           styles-B.css
                   index.html
<head>
                                                                        li {
                                                     li {
 <link rel="stylesheet" href="styles-B.css" />
                                                                          font-size: 40px;
                                                       color: red;
  <link rel="stylesheet" href="styles-A.css" />
</head>
<body>
 <u1>
    style="background-color:blue;">A
  </body>
                                                                     style
                                                     element.style {
                                                       styles-A.css:1
                                                       color:  red;
                     view
                                                                               styles-B.css:1
                                                       font-size: 40px;
                                                     li {
                                                                          user agent stylesheet
                                                       display: list-item;
                                                       text-align: -webkit-match-parent;
```

What happens when declarations conflict?



IICE

Inline

```
o Lorem ipsum...
```

```
• #bio { ... }
```

Class (or attributes and pseudo-classes)

```
.bio { ... }[type="radio"] { ... }:hover { ... }
```

Element (or pseudo-element)

```
div { ... }::before { ... }
```

<div id="thing"></div>

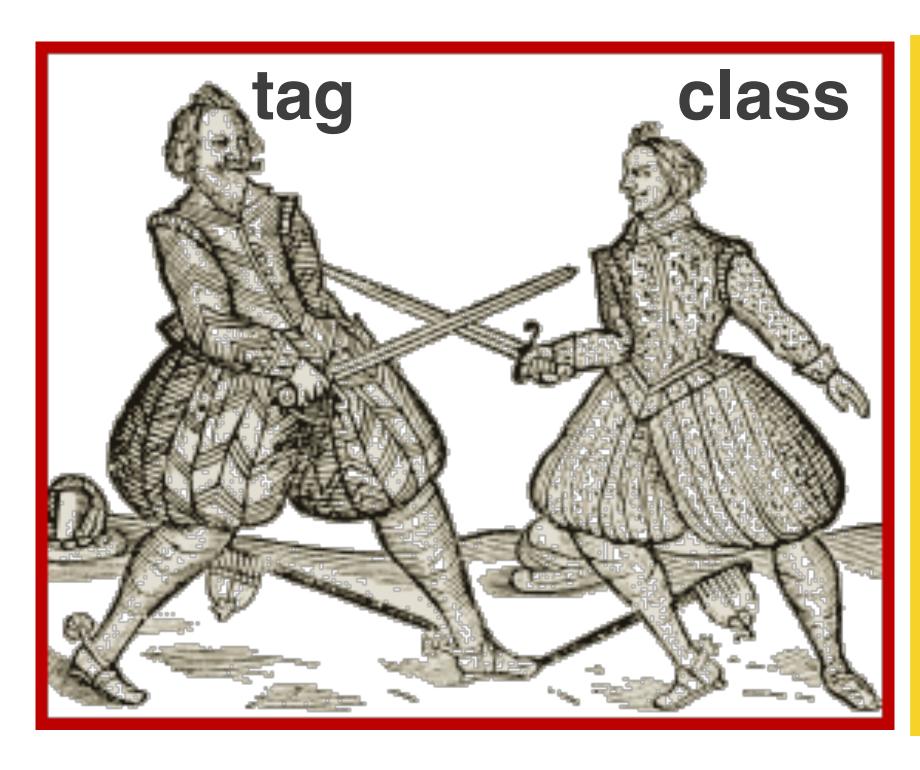
```
div {
  background: red;
}
```



```
#thing {
   background: blue;
}
```

<div class="foo"></div>

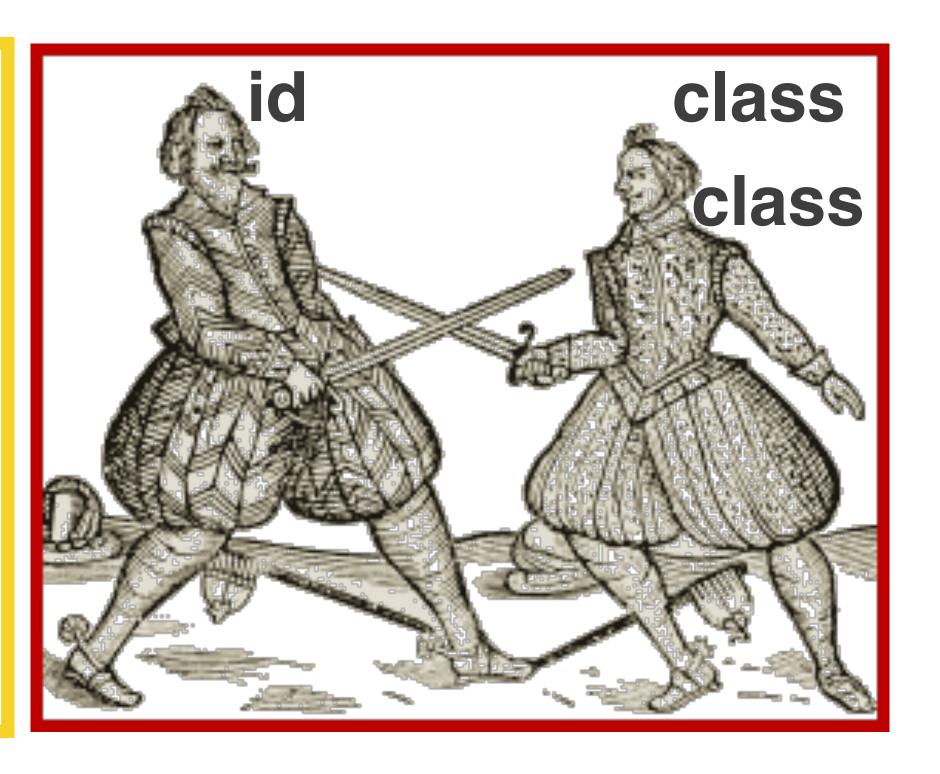
```
div {
  background: red;
}
```



```
•foo {
   background: green;
}
```

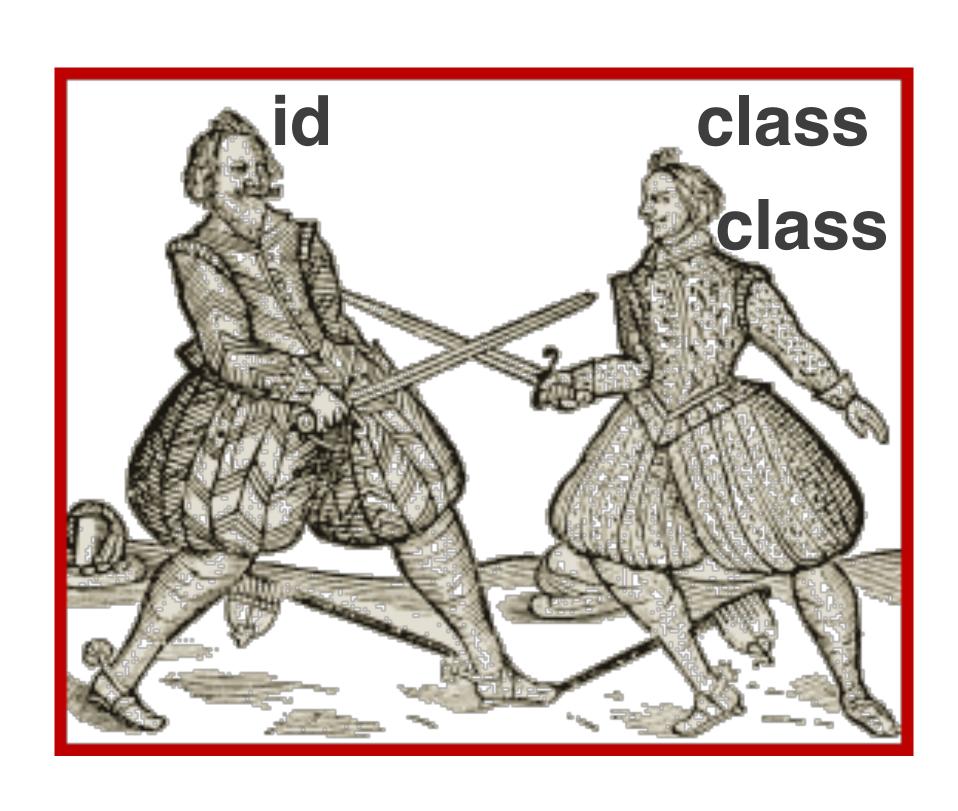
<div id="thing" class="foo bar"></div>

```
#thing {
   background: blue;
}
```



```
foo.bar {
  background: green;
}
```

```
<div class="outer">
     <div id="thing" class="foo" style="background:orange;"></div>
   </div>
#thing {
  background: blue;
```



```
•outer •foo {
  background: green;
```

