



Video 1.6

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Review

- You can use an HTML tag's **attributes** to give it properties
- The **style** attribute allows you to change the appearance of the text within that element
- The **class** attribute allows you to group elements so that they can easily have the same style applied

Plain HTML

Here are some memorable quotes from movies!

You can find more at the [Internet Movie Database \(IMDb\)](#).

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Stylish HTML

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What is CSS?

- **Cascading Style Sheets (CSS)** are a formatting language used to describe the appearance of content in an HTML file
- CSS has a standardized specification defined by the World Wide Web Consortium (W3C)

Why CSS?

- **HTML (“The Content”)**
 - What information does the page contain?
 - What is in the headings, body, etc.?
 - How is the information structured?
- **CSS (“The Presentation”)**
 - What does the page look like?
 - What *color, formatting, text size, etc.* should the various parts have?

How does CSS work?

- I. The Web Browser receives the HTML page from the server via HTTP

How does CSS work?

1. The Web Browser receives the HTML page from the server via HTTP
2. The HTML page can include CSS either in same file or with link to separate file
 - If it's a separate file, the web browser will request that file separately via HTTP

How does CSS work? (2)

3. When all HTML and CSS files are available, the browser will render the page
4. For each element in the HTML page, the web browser will display the content and use the CSS to style it
5. Ideally, exactly one set of CSS styles will apply to any given element
6. If there are conflicting styles defined, complex rules determine which gets applied

How do we use CSS?

1. **Inline:** use tag's “style” attribute to specify appearance
2. **Internal:** create `<style>` elements in HTML and assign to different tags, classes, etc.
3. **External:** specify styling in a separate CSS file

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- Include CSS within the element tag itself as a “style” attribute

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<h1 style="color:red">  
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    quotes from movies!  
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- Advantages
 - Easy to use
 - Good for quick, one-off situations
- Disadvantages
 - Mixing content and presentation: this should be avoided
 - Hard to manage for large, complex pages

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CSS Syntax

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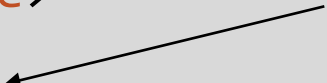
</style>
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CSS Syntax

- Selector (e.g., h1)

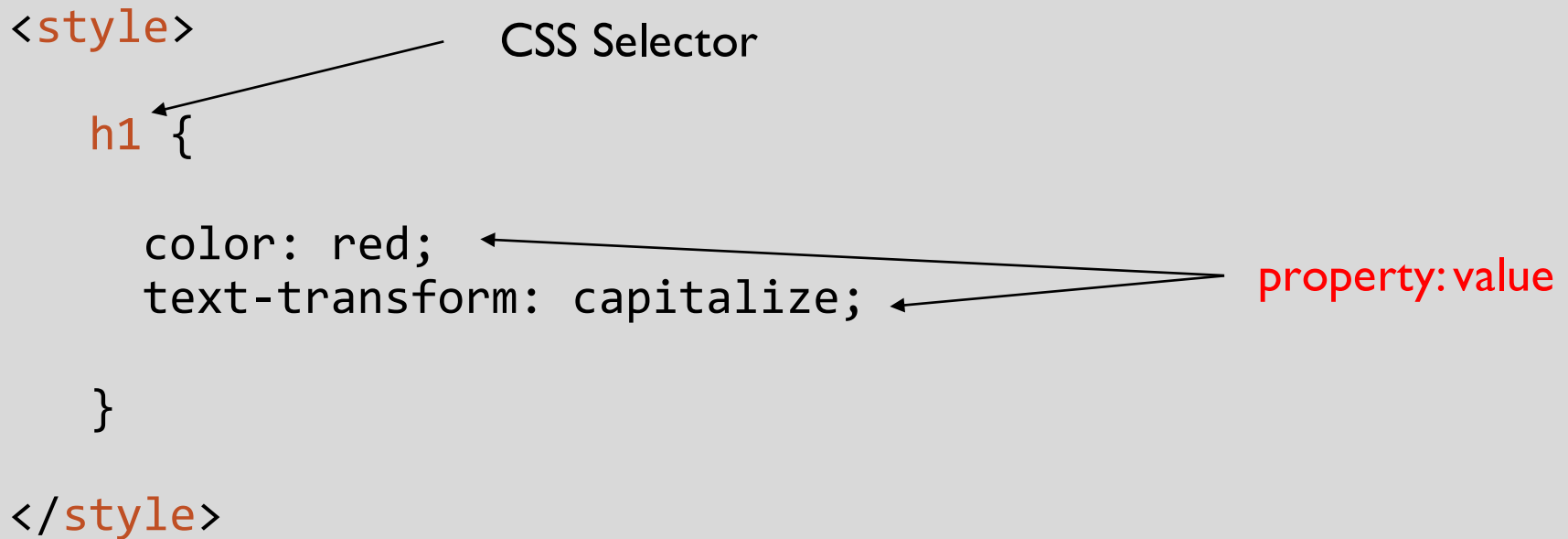
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CSS Selector



CSS Syntax

- Selector (e.g., h1)
- Properties and Values (e.g., color:red)



The diagram shows a CSS style block with annotations. The text is as follows:

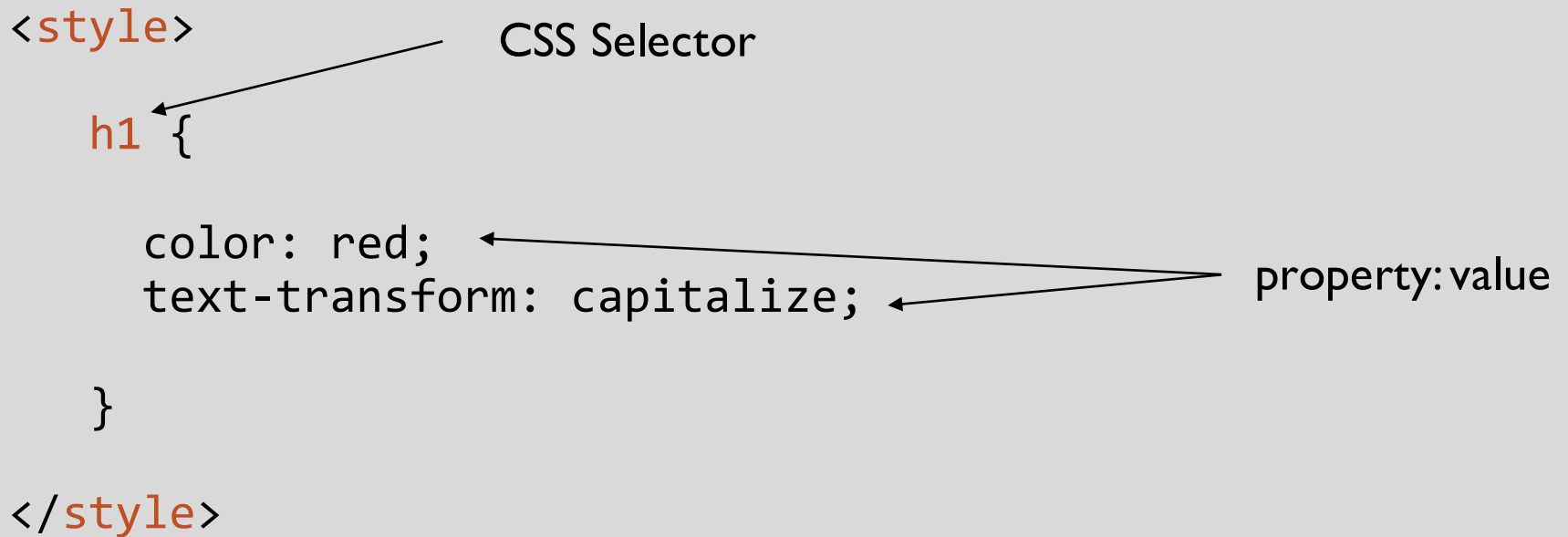
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Annotations:

- An arrow points from the text "CSS Selector" to the `h1` selector.
- Two arrows point from the text "property:value" to the `color: red;` and `text-transform: capitalize;` lines.

CSS Syntax

- Selector (e.g., h1)
- Properties and Values (e.g., color:red)



The diagram shows a CSS style block with annotations. The text is: `<style>`, `h1` {, `color: red;`, `text-transform: capitalize;`, `}`, and `</style>`. An arrow points from the text "CSS Selector" to the `h1` selector. Another arrow points from the text "property:value" to the `color: red;` line. A third arrow points from the same "property:value" text to the `text-transform: capitalize;` line.

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CSS Selector

property:value

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 - Separates content and presentation
 - Easy to use
 - In particular, if you want to apply the same style to all tags of a certain type (say `<p>`) it's easier to do it with internal CSS than inline CSS
 - Good if you only have a limited amount of CSS in the page

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 - Easy to use
 - In particular, if you want to apply the same style to all tags of a certain type (say `<p>`) it's easier to do it with internal CSS than inline CSS
 - Good if you only have a limited amount of CSS in the page
- Disadvantages
 - Hard to manage for large, complex pages
 - Cannot reuse across multiple pages

External CSS

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- Advantages
 - Separates content and presentation
 - Can include many different CSS pages with multiple `<link>` tags
- Disadvantages
 - Lots of different files to manage (which might be overkill for smaller pages)

CSS Selectors

Type of Selector	What's in the CSS File?	What does this selector apply to?	What does the HTML file contain?
Element Selector	<code>h1 { color:red; }</code>	All <code><h1></code> elements	<code><h1> ... </h1></code>

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Id Selector	<code>#section1 { ... }</code>	Unique element with ID "section1"	<code><p id="section1"> ... </p></code>

Summary

- **Cascading Style Sheets (CSS)** are a formatting language used to describe the appearance of content in an HTML file
- We can include CSS formatting in HTML in three ways:
 1. inline as style attributes
 2. internal using the `<style>` tag
 3. external in a separate file linked with the `<link>` tag
- A CSS element consists of a selector and property:value pairs