Computational Cinema & Sound

- Image Formats
- Cascading Style Sheets – style

Image Formats

- JPG – millions of colors

- GIF – limited to 256 colors, transparency, and animation

- PNG – created for the web, gradation of transparency, no animation, millions of colors, yet does well with limited colors.

Hexidecimal Colors

Computers use a 16 based hexidecimal number to denote colors.

Hexidecimal numbers are made of the following: 0123456789ABCDEF

Red as a hexadecimal number   #ff0000

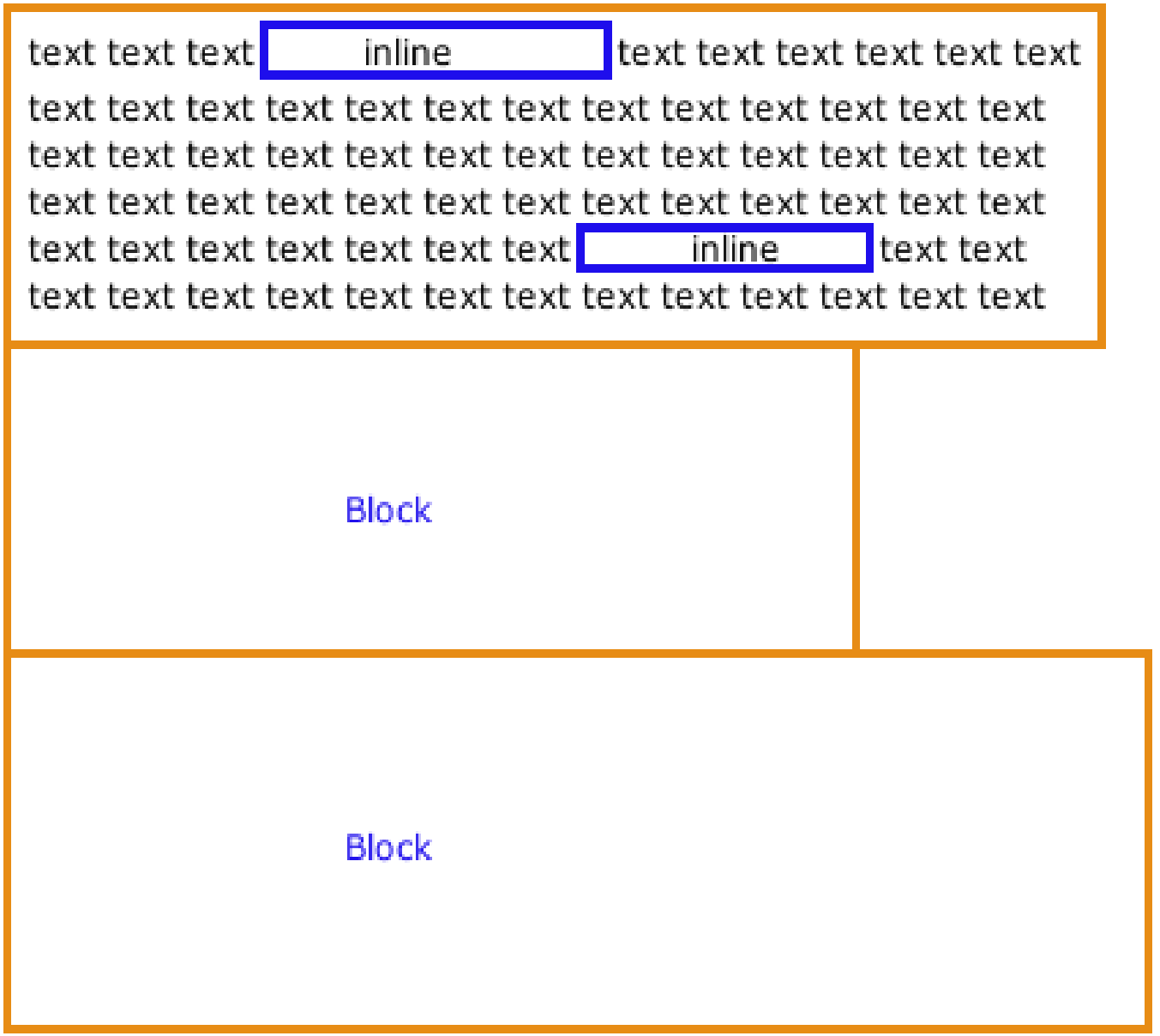
Div and Span Elements

- Div (division) tag is a block element
- Span is an inline element

 …

 …

Block & Inline – div & span tags



Cascading Style Sheets

- Cascading Style Sheets (CSS) allow us to add style information that is separate from the content of the page.

- We can then change the look and feel of a web page or web site, without having to change the HTML markup or page content.

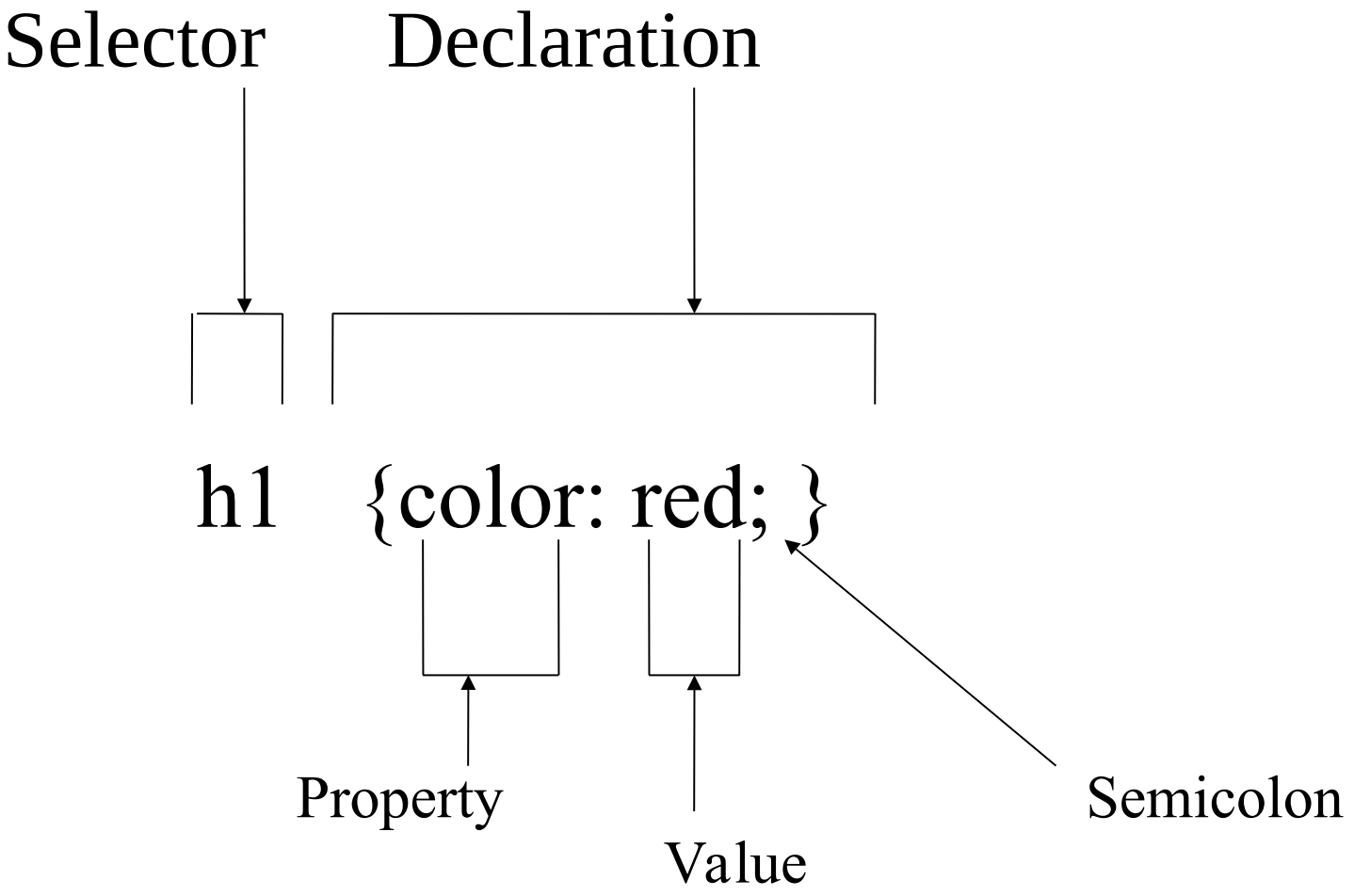
Constructing a Style Rule

Two parts to each style rule:

1) the "selector", which determines which elements are affected.

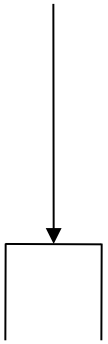
2) the "declaration", made up of one or more property/value pairs, which specifies just what should be done.

A Style Rule


Selector
Declaration
h1 {color: red; }
Property
Value
Semicolon

Selector: name of element

Name of the desired element



```
h1   {color: red; }
```

Internal Style Sheet Example

Placed in the head it becomes an internal style sheet.

```
<style type="text/css">

 h1  { color:#ff0000; }

</style>
```

External Style Sheets

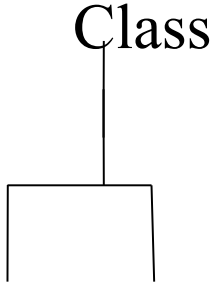
- File must be saved as plain text with the extension of .css
- Example: /* comments go here */
- Comments can span several lines, and be on their own line, or follow a rule.

Link to an External Style Sheet

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

- This link should be placed in the head of the document.
- Making a change to the external style sheet, all pages that reference this sheet will be automatically updated.

Selector: class

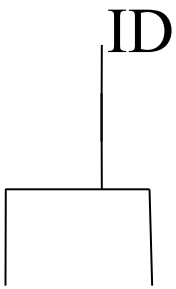



```
.title   {color: red; }
```

HTML Example
Class Attribute

<h1 class="title"> ... </h1>

Selector: id



#title {color: red; }

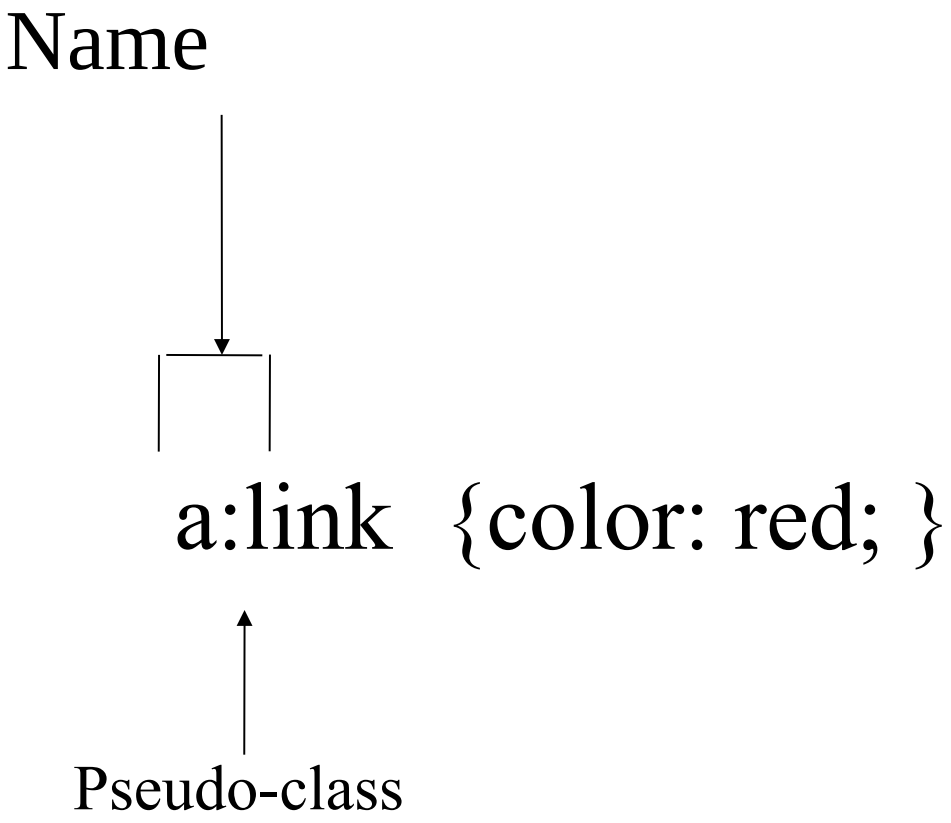
HTML Example
ID Attribute

<h1 id="title"> ... </h1>

Comments in CSS

/* comments go here */

Pseudo-class selector



Link Styles using CSS

examples of hexidecimal colors

```
a:link {color:#ff0000;}      /* unvisited */
a:visited {color:#00ff00;}  /* visited */
a:hover {color:#ff00ff;}  /* mouse over */
a:active {color:#0000ff;}  /* selected */
```

One Selector with many Properties and Values

```
body  {
margin: 0px;
background-color: white;
background-image:url('image.jpg');
font-size: 12px;
font-family: 'Verdana', 'Helvetica', 'Arial';
color: black;
line-height: 15px;
}
```

External Style Sheet Example

Please note there are NO style tags like the ones used in an internal style sheet..

```
body  {
margin: 0px;
background-color: #ffffff;
}

h1 {
color: #ff0000;
}
```

Style Attribute

Third way to apply stylesheet information. Unlike a stylesheet rule, this attribute will only affect the particular heading to which it is attached.

<h1 style="color:red;"> ... </h1>

The Cascade

Inheritance - Many CSS properties affect not only the elements defined by the selector but are also “inherited” by the descendants of the element.

Specificity – The more specific the selector, the stronger the rule.

Location – If two rules compete, the location of the rule breaks the tie: Rules that appear later have more weight.