

Web Technology 3

CSS

CSS

Adding CSS

- External Style Sheets
- Embedded Style Sheets
- Imported Style Sheets
- Inline Style Sheets

CSS and Page Layout

- Div and Span

Selectors

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CSS

- CSS (Cascading Style Sheet) is a style sheet language that specifies how to incorporate style information in a style sheet
- A style sheet is composed of a set of style rules written in a specified format
- The primary intention of CSS is to separate document presentation from document content written in markup language
- Separate style sheets are used for different presentations
- The same style sheet can also be applied on different documents
- CSS provides more style attributes for defining the look and feel of web pages than plain HTML

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Adding CSS

- Four ways to specify style information in a document:
 - External
 - Embedded or Internal
 - Imported
 - Inline
- Each one has its own set of advantages and disadvantages

External Style Sheets

- Here, style information is written in a separate file and is referenced from an HTML document
- This is useful when the same style is applied on different documents
- External style sheets are cached by most of the browsers
- External style sheets can be of three types:
 - **persistent**: it is one that is always applied
 - **alternate**: out of the set of alternate style sheets, one is selected by the user depending on their choice
 - **preferred**: it is applied when no style sheet is selected
- Several alternate style sheets may be grouped under a single *title*

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External Style Sheets

- Attribute *rel* specifies the type of style sheet used
 - its value is *stylesheet* for persistent and preferred style sheets
 - its value is *alternate stylesheet* for alternate style sheets
- Persistent style sheet is specified by the absence of title attribute, whereas preferred and alternate style sheets are specified by the presence of title attribute
- Any number of external style sheets can be specified for a document

```
<link rel = "stylesheet" type = "text/css" href = "mystyle.css"/>
```

```
<link rel = "alternate stylesheet" type = "text/css" href = "mystyle.css" title = "large" />
```

```
<link rel = "stylesheet" type = "text/css" href = "mystyle.css" title = "large" />
```

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Embedded Style Sheets

- Style information is placed under the `< style >` tag in the head section of an HTML page

```
<style>
p {
    color: green;
}
</style>
```

Imported Style Sheets

Imported Style Sheets

- It allows importing a style sheet from another style sheet. It is used within the style tag in HTML document

```
<style>  
@import url ("style.css");  
</style>
```

- The style element may include other internal style rules, but the import statement must be the first rule within a style tag. Internal rules override the conflicting rules in the imported style sheets
- A < style > tag may contain more than one *import* statements

```
<style>  
@import url ("style1.css");  
@import url ("style2.css");  
p {color: green;}  
</style>
```

Inline Style Sheets

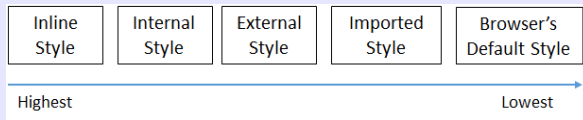
Inline Style Sheets

Style information is incorporated directly into the HTML tags

```
<p style="color: red">  
Hello World  
</p>
```

Cascading Rule

- More specific rules get preference over less specific rules
- For conflicting rules, latter rules get preference over the earlier rules



CSS and Page Layout

- A style rule has two parts: *selector* and *declaration*
- Selector specifies which HTML elements are affected by this style rule. The selector is a name of an HTML tag
- Declaration specifies what the effect will be. It is a semicolon-separated list of *property: value* pairs
- Selectors determine elements on which rules are to be applied
- Selectors having common declarations are grouped into a comma separated list
- CSS has a special selector *, which matches with every single element in the document

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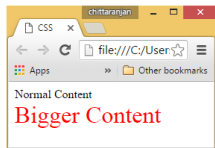
Selectors

Div and Span

Div and Span

- *Div* divides the content into individual sections. Each section can have its own formatting
- *Span* is similar to Div. It can go into a finer level. There is no line feed after this

```
<HTML>
<HEAD>
<TITLE>CSS</TITLE>
<STYLE>
.Large{color: RED;
FONT-FAMILY: Times;
FONT-SIZE: 2em;
}
</STYLE>
</HEAD>
<BODY>
Normal Content
<DIV class="Large">
Bigger Content
</DIV>
</BODY>
</HTML>
```



```
<HTML>
<HEAD>
<TITLE>CSS</TITLE>
<STYLE>
.Large{color: RED;
FONT-FAMILY: Times;
FONT-SIZE: 2em;
}
</STYLE>
</HEAD>
<BODY>
Normal Content
<SPAN class="Large">
Bigger Content
</SPAN>
</BODY>
</HTML>
```

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Selectors

- Basic building blocks of style rules are *selectors*. These are the names given to styles in internal & external sheets
- **Color:**
color: red; background-color: green;

<HTML>	<HTML>
<HEAD>	<HEAD>
<TITLE> CSS </TITLE>	<TITLE> CSS </TITLE>
</HEAD>	</HEAD>
<BODY>	<BODY>
<P>	<P STYLE="COLOR: RED; FONT-SIZE: 10;">
	Good Morning
Good Morning	</P>
	</BODY>
</P>	</HTML>
</BODY>	
</HTML>	

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Id and Class

Class: A class selector is a name preceded by a full stop (.)

Id: An Id selector is a name preceded by a hash (#)

An Id can be used to identify one element, whereas a class can be used to identify more than one

Selectors...

Stylesheet

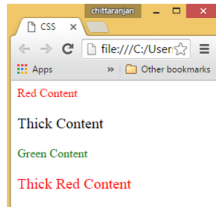
```
mystyle.css  
  
.RED {COLOR: RED;}  
.THICK {FONT-SIZE: 20;}  
.GREEN {COLOR: GREEN;}  

```

External Style Sheets Example

```
<HTML>  
<HEAD>  
<TITLE>CSS</TITLE>  
<LINK REL="stylesheet" type="text/css" href="mystyle.css">  
</HEAD>  
<BODY>  
<P CLASS="RED"> Red Content </P>  
<P CLASS="THICK"> Thick Content </P>  
<P CLASS="GREEN"> Green Content </P>  
<P CLASS="THICK RED"> Thick Red Content </P>  
</BODY>  
</HTML>  

```



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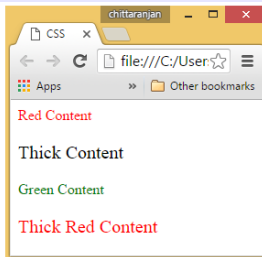
CSS and Page Layout

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Selectors

Embedded Style Sheets Example

```
<HTML>
<HEAD>
<TITLE>CSS</TITLE>
<STYLE TYPE="text/css">
.RED{COLOR:RED;}
.THICK{FONT-SIZE:20;}
.GREEN{COLOR:GREEN;}
</style>
</HEAD>
<BODY>
<P CLASS="RED"> Red Content </P>
<P CLASS="THICK"> Thick Content </P>
<P CLASS="GREEN"> Green Content </P>
<P CLASS="THICK RED"> Thick Red Content </P>
</BODY>
</HTML>
```



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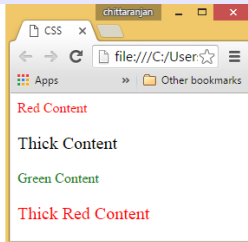
CSS and Page Layout

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Selectors

Imported Style Sheets Example

```
<HTML>
<HEAD>
<TITLE>CSS</TITLE>
<STYLE TYPE="text/css">
@IMPORT URL("mystyle.css");
</STYLE>
</HEAD>
<BODY>
<P CLASS="RED"> Red Content </P>
<P CLASS="THICK"> Thick Content </P>
<P CLASS="GREEN"> Green Content </P>
<P CLASS="THICK RED"> Thick Red Content </P>
</BODY>
</HTML>
```



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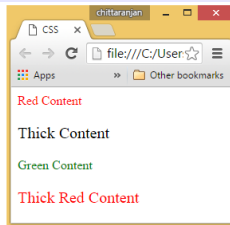
CSS and Page Layout

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Selectors

Inline Style Sheets Example

```
<HTML>
<HEAD>
<TITLE>CSS</TITLE>
</HEAD>
<BODY>
<P STYLE="COLOR:RED"> Red Content </P>
<P STYLE="FONT-SIZE:20;"> Thick Content </P>
<P STYLE="COLOR:GREEN;"> Green Content </P>
<P STYLE="COLOR:RED; FONT-SIZE:20;">
Thick Red Content </P>
</BODY>
</HTML>
```



Selectors

- **Background:**
background-color: RED;
background-image: url(images/sun.jpg);
- **Text:**
color: RED;
font-family: arial;
font-size: 15px;
font-size: 4em;
font-weight: bold;
font-style: italic;
text-decoration: underline;
text-transform: uppercase;
letter-spacing: 0.5em;
word-spacing: 2em;
line-height: 1.5;
text-align: center;
margin: 20px;
padding: 40px;

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Selectors

- **List:**

list-style-type: disc;

list-style-type: decimal;

list-style-image: url(images/smiley.gif);

- **Border:**

border-style: dashed;

border-width: 3px;

border-left-width: 10px;

border-right-width: 10px;

border-color: red;

margin: 50px 20px 20px 50px;

height: 200px;

width: 200px;

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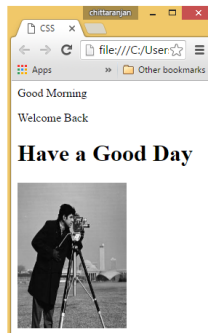
Div and Span

Selectors

CSS Example

CSS Example

```
<HTML>
<HEAD>
<TITLE>CSS</TITLE>
</HEAD>
<BODY>
Good Morning<BR>
<P> Welcome Back </P>
<H1> Have a Good Day </H1>
<IMG SRC="camera.bmp" HEIGHT="200" WIDTH="150">
</BODY>
</HTML>
```



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CSS Example

sty.css

```
body{font-family: arial, helvetica;  
font-size: 10px;  
color: blue;  
background-color: grey;  
margin: 15px;  
padding:0;  
}
```

```
p{line-height: 20px;}
```

```
h1{color: red;  
background-color: yellow;  
font-size: 2em;  
margin: 0;  
font-style: italic;  
text-align: center;  
border-bottom-style: solid;  
}
```

```
img{border-style: dashed;  
border-width: 2px;  
border-color: blue;  
}
```

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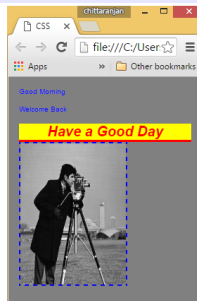
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Selectors

CSS Example...

CSS Example

```
<HTML>
<HEAD>
<TITLE>CSS</TITLE>
<LINK REL="stylesheet" TYPE="text/css" HREF="sty.css">
</HEAD>
<BODY>
Good Morning <BR>
<P> Welcome Back </P>
<H1> Have a Good Day </H1>
<IMG SRC="camera.bmp" HEIGHT="200" WIDTH="150">
</BODY>
</HTML>
```



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