

Web Technologies

Lecture Week Three

Getting Started with CSS 3



This week's agenda

- Introducing CSS 3
- Linking CSS and HTML together
- CSS Selectors and its types
- Vendor Prefixes
- Pseudo Classes
- Understanding Box Model
- CSS Properties for Layout Designing



This week's agenda

- Building layouts for the web
- Media Queries
- Understanding Mobile first approach
- Making your website responsive using media queries



Getting started with CSS3



```
body {  
  font: x-small;  
  background: #  
  color: black;  
  margin: 0;  
  padding: 0;
```

Getting started with CSS3...

- CSS stands for Cascading Style Sheets.
- It describes how HTML elements are to be displayed on screen or paper.
- CSS can control layouts of multiple pages all at once ultimately saving lots of time.
- It can be written in 3 different ways.
 - **External:** A CSS written in an external file and linked to HTML.
 - **Internal:** CSS written in the HTML file enclosed by a <style> tag.
 - **Inline:** CSS written as an attribute in the HTML element.



Getting started with CSS3

- CSS is used to define styles for pages, including the design, layouts and variations in display for different devices and screen sizes.
- CSS is also used to design layouts for mobile screens and tablets with the use of @media queries.
- CSS syntax can be divided in to 3 parts. Selector, property and value. This is the standard way of writing css.

```
selector{  
    property:  
value;  
}
```



How to **LINK A STYLESHEET (CSS) FILE TO YOUR HTML FILE**



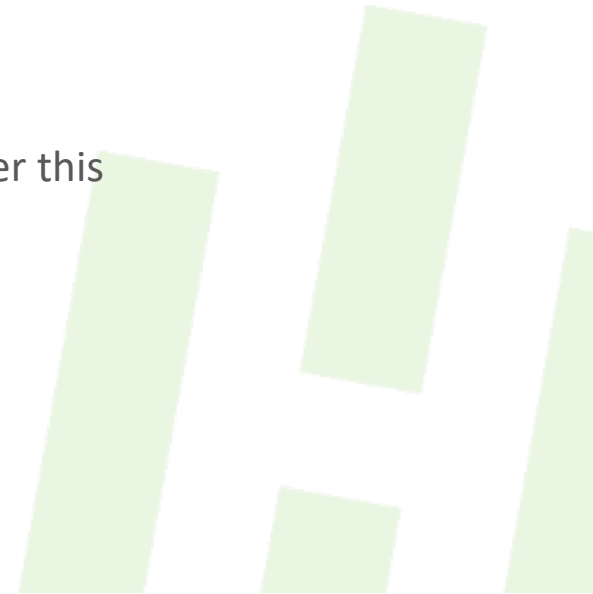
Linking CSS and HTML together...

- As said before, CSS can be written in 3 different ways.
- **Inline CSS:** Inline CSS is written directly into the html elements in a HTML document. This does not require you to import anything in the HTML document.

```
<div style="border: 1px solid #000">This has a border</div>
```

- **Internal CSS:** Internal CSS is also written in the HTML document itself. However this is written inside a <style> tag and should always be placed inside the <head> element.

```
<style> div{ border: 1px solid #000; }</style>
```



Linking CSS and HTML together

- **External CSS:** This is the standard way of writing CSS. Your every CSS codes should be written in a different file and needs to be saved with a “.css” extension. The saved CSS file is then linked to an HTML document using a <link> tag.

```
<link href="yourcssfile.css" rel="stylesheet">
```

- All three types of CSS has its own uses. The most correct way to write CSS is to create a new file (External CSS) and write all your styles in that file.



CSS Selectors and its types

CSS Attribute Selector

CSS Element Selector



CSS Id Selector

CSS Class Selector

CSS Universal Selector

CSS selectors and its types...

- CSS selectors are used to target HTML element that we want to style.
- A selector is a component of CSS declaration.
- There are five varieties of CSS selectors.
 - CSS Universal Selector
 - CSS Element Selector
 - CSS ID Selector
 - CSS Class Selector
 - CSS Attribute Selector



CSS selector: Universal Selector

- A universal selector selects all the elements in a web page.
- We can declare an universal selector with the help of an asterisk (*).
- Universal selectors can be used along with other selectors in combination but is highly discouraged to do it.

```
*{  
    color: blue;  
    font-size:  
    12px;  
}
```



CSS selector: Element Selector

- Element selector is also known as the type selector.
- The selector in CSS tries to match the element of the same name in HTML document it is linked to.
- The below example targets all the elements in a HTML document.

```
ul{  
    border: 1px solid  
    #ccc;  
    font-size: 12px;  
}
```



CSS selector: ID Selector

- ID selector helps to select a HTML element that has been given an ID name.
- The ID can be selected using a “#” symbol in the CSS.
- ID selector matches every HTML element having an ID attribute with the value the same as that of the selector, without the hash sign.

```
<header id="header"></header>
```

```
#header{  
    border: 1px solid  
#ccc;  
    font-size: 12px;  
}
```



CSS selector: Class Selector

- Class selector helps to select a HTML element that has been given a class name.
- The class can be selected using a “.” symbol in the CSS.
- Class selector matches every HTML element having a class attribute with the value the same as that of the selector, without the dot sign.

```
<div class="container"></div>
```

```
.container{  
    margin: 0  
    auto;  
    width:  
    1200px;  
}
```



CSS selector: Attribute Selector...

- Attribute selector styles content according to the attribute and the attribute value mentioned in the square bracket.
- No spaces can be present ahead of the opening square bracket.
- Attribute selectors have different ways to match the values with the attribute key.

```
<input type="text">
```

```
Input[type="text"] {  
    font-size:  
16px;  
    line-height:  
1.2;  
}
```



CSS selector: Attribute Selector...

Operator	Description
~=	Matches elements whose attribute contains <i>value</i> as a word
=	Matches elements whose attribute matches <i>value</i> or begins with <i>value</i> followed by a dash.
^=	Matches elements whose attribute begins with <i>value</i> .
\$=	Matches elements whose attribute ends with <i>value</i> .
*=	Matches elements whose attribute contains <i>value</i> .



Before you come for Lab, Research!!

- [Mozilla Developers Network: CSS](#)
- [CSS: W3C Schools](#)
- [CSS: Tutorial Points](#)
- [CSS3: Tutorial Points](#)
- [CSS Pseudo classes](#)



Before you come for Lab, Research!!

- [Mobile First Approach](#)
- [Responsive Web Design Breakpoints](#)
- [Media Queries](#)



Thank you!

