

CS 146: Intro to Web Programming and Project Development

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Introduction to CSS



CSS Text Styling

- color:
 - #FF0000
 - rgb(255,0,0)
 - red
- text-align: center, right, left, justify
- text-decoration: none, overline, line-through, underline
- text-transform: uppercase, lowercase, capitalize
- text-indent: 25px; (indents first line)
- letter-spacing: positive or negative value
 - -3px
- vertical-align:
 - length or percentage (negative OK)
 - baseline, sub, super, top, text-top, middle, bottom, text-bottom, inherit
- white-space: normal, nowrap, pre, pre-line, pre-wrap
- word-spacing: positive or negative value*



CSS3 Text Styling

- text-shadow:
 - horizontal, vertical, blur distance, color
 - text-shadow: 5px 5px 5px #FF0000;
- word-wrap:
 - normal or break-word



Styling Tables

- You can assign certain styles to more than one item
- ```
table {
 border-collapse: collapse;
 width: 100%;
}
table, th, td {
 border: 1px solid black;
}
td {
 height: 50px;
 padding: 15px;
}
```
- You can also set captions with the `<caption>` tag which can be style as `caption-side: bottom;` for example
- Additional useful properties: `text-align`, `vertical-align`, `padding`, `border-bottom`\*



# CSS Fonts

- Font can have two possible font family names
  - **generic family** – a group of fonts with similar look (Serif, Sans-serif, Monospace)
  - **font family** (a specific font family like Calibri, Times New Roman etc.)
  - You can use multiple types in order of preference. First one that could work is used
  - font-family: “Times New Roman”, Verdana, sans-serif;
  - Quotes are only needed for fonts with more than one word in it.
  - PLEASE NEVER USE COMIC SANS! No one will take you seriously!
- font-style: normal, italic, or oblique
- font-variant: normal or small-caps
- font-weight: normal, bold, bolder, lighter
  - You can also use a number 100 to 900 (400 is normal, 700 is bold)
- font-size
  - px: pixels
  - em: value based on the width of the uppercase M whatever typeface is used
  - rem: root “em”



# CSS Calibri Example

```
p.sansserif {
 font-family: Calibri, Candara, Segoe, "Segoe UI", Optima,
 Arial, sans-serif;
}
```

```
<h1>CSS font-family</h1>
<p class="sansserif">This is a paragraph, shown in Calibri font.
</p>
```

## CSS font-family

This is a paragraph, shown in Calibri font.



# CSS3 Web Fonts

- Web fonts allow Web designers to use fonts that are not installed on the user's computer
- When you have found/bought the font you wish to use, just include the font file on your web server, and it will be automatically downloaded to the user when needed
- Your "own" fonts are defined within the CSS3 @font-face rule

```
@font-face {
 font-family: myFirstFont;
 src: url(sansation_light.woff);
}

div {
 font-family: myFirstFont;
}
```





# Details about px

- The CSS px unit does not equal one physical display pixel; this has always been true – even in the 1996 CSS 1 spec
- CSS defines the reference pixel, which measures the size of a pixel on a 96 dpi display; on a display that has a dpi substantially different than 96dpi (like Retina displays), the user agent rescales the px unit so that its size matches that of a reference pixel; in other words, this rescaling is exactly why 1 CSS pixel equals 2 physical Retina display pixels
- That said, up until 2010 (and the mobile zoom situation notwithstanding), the px almost always did equal one physical pixel, because all widely available displays were around 96dpi



# Details about em

- 1 em is 16 pixels.
- Sizes specified in ems are relative to the parent element; this leads to the em's "compounding problem" where nested elements get progressively larger or smaller

For example:

```
body { font-size: 20px; }
div { font-size: 0.5em; }
```

Gives us:

```
<body> - 20px
 <div> - 10px
 <div> - 5px
 <div> - 2.5px
 <div> - 1.25px
```



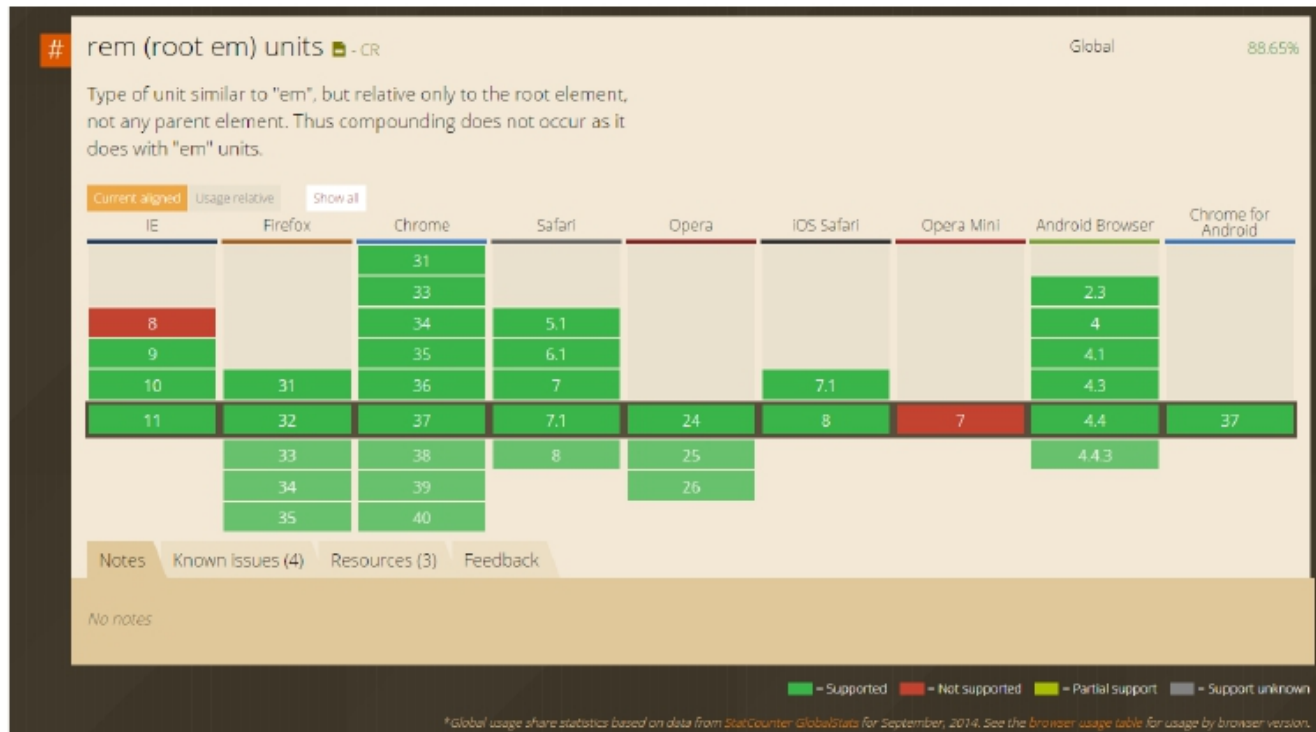
# Details about rem

- The rem unit is relative to the root—or the html—element
- That means that we can define a single font size on the html element and define all rem units to be a percentage of that

```
html { font-size: 62.5%; }
body { font-size: 1.4rem; } /* =14px */
h1 { font-size: 2.4rem; } /* =24px */
```

# Can I use rem?

- Check it out!
  - [caniuse.com/#feat=rem](http://caniuse.com/#feat=rem)





# CSS Icons

- The simplest way to add an icon to your HTML page, is with an icon library, such as Google Icons
  - <https://design.google.com/icons/>
- Add the name of the specified icon class to any inline HTML element (like `<i>` or `<span>`)
- All the icons in the icon libraries below, are scalable vectors that can be customized with CSS (size, color, shadow, etc.)

# CSS Icons Example

```
<!DOCTYPE html>
<html>
<head>
<title>Google Icons</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="https://fonts.googleapis.com/icon?
family=Material+Icons">
</head>
<body>

<p>Some Google icons:</p>
<i class="material-icons">cloud</i>
<i class="material-icons">favorite</i>
<i class="material-icons">attachment</i>
<i class="material-icons">computer</i>
<i class="material-icons">traffic</i>

<p>Styled Google icons (size and color):</p>
<i class="material-icons" style="font-size:24px;">cloud</i>
<i class="material-icons" style="font-size:36px;">cloud</i>
<i class="material-icons" style="font-size:48px;color:red;">cloud</i>
<i class="material-icons" style="font-size:60px;color:lightblue;">cloud</i>

</body>
</html>
```



# CSS Links

- With CSS Links can be styled in different ways
- In addition, links can be styled differently depending on what **state** they are in
- The four links states are:
  - a:link - a normal, unvisited link
  - a:visited - a link the user has visited
  - a:hover - a link when the user mouses over it
  - a:active - a link the moment it is clicked
- If you are defining these, keep them in that order! That's the rule!

```
/* unvisited link */
a:link {
 color: red;
}
```

```
/* visited link */
a:visited {
 color: green;
}
```

```
/* mouse over link */
a:hover {
 color: hotpink;
}
```

```
/* selected link */
a:active {
 color: blue;
}
```



# CSS Links Example

```
<!DOCTYPE html>
<html>
<head>
<style>
a:link, a:visited {
 background-color: #f44336;
 color: white;
 padding: 14px 25px;
 text-align: center;
 text-decoration: none;
 display: inline-block;
}

a:hover, a:active {
 background-color: red;
}
</style>
</head>
<body>

This is a link

</body>
</html>
```