Date: 15-05-2020

Morning Session: 9 am – 12 PM

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Today Topics: CSS Concepts & CSS Properties

Lengths : The numeric type you will come across most frequently is <length>, for example 10px (pixels) or 30em. There are two types of lengths used in CSS — relative and absolute.

Absolute Units & Relative Units

1) **Absolute Units: which is respective to the screen size (depending on screen size) %, vh(viewport height), vw(viewpost width)**
2) **Relative Units : are fixed. Px, rem, em.**

Absolute Units:

% Unit : it's calculated from the parent elements dimension.

Vh & Vw Unit : vh (viewport height) vw (viewport width) are something which are able to measure concerning your screen dimensions.

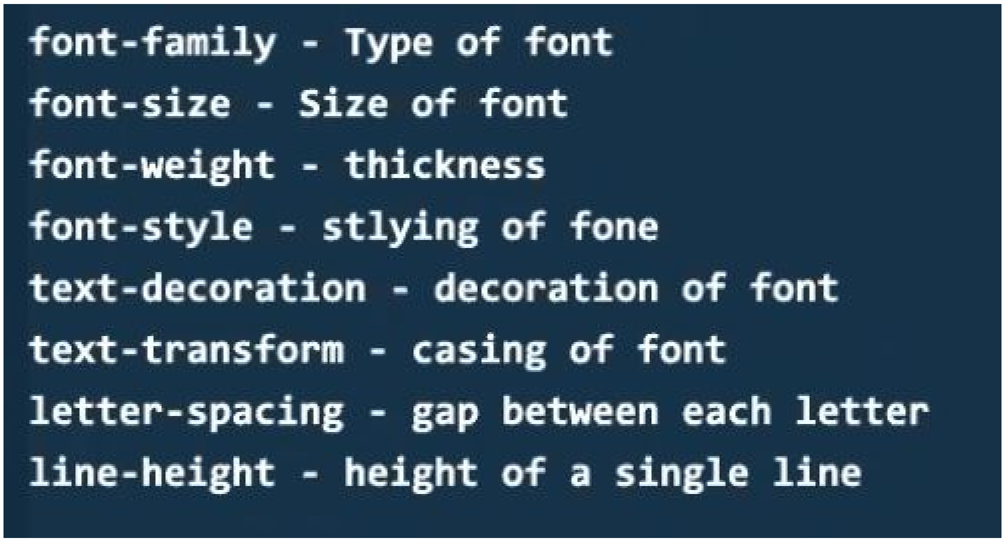
Relative Units:

Px: Pixels (px) are relative to the viewing device. For low-dpi devices, 1px is one device pixel (dot) of the display.

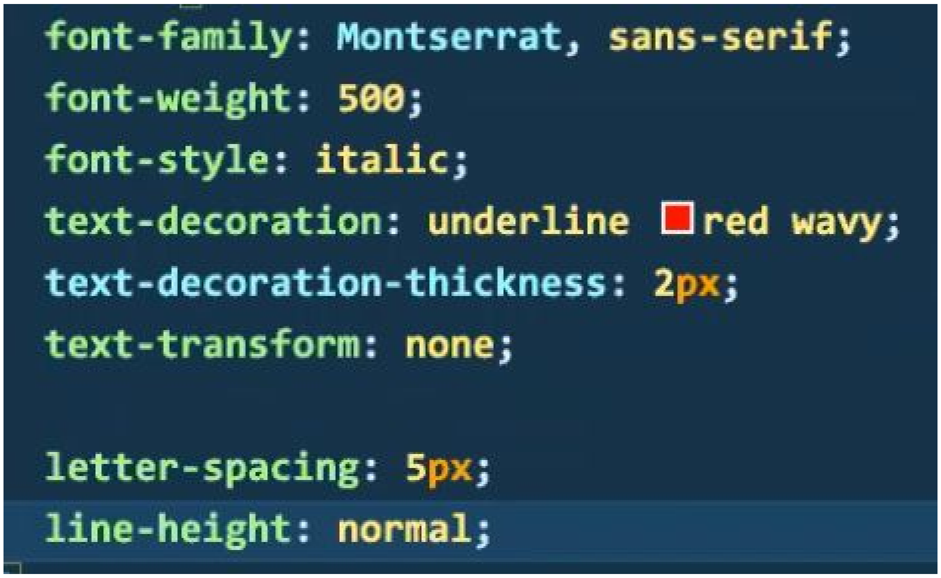
em: em it’s a unit that allows setting the font-size of an element relative to the font-size of its parent.

rem: The rem unit, short for root em is a relative unit that’ll always be based upon the font-size value of the root element, which is the <html> element. And if the <html> element doesn’t have a specified font-size, the browser default of 16px is used.So that means that, by using the rem unit, the values of parent elements are ignored, and only the value of the root is taken into consideration.

Font : The CSS font properties define the font family, boldness, size, and the style of a text.



```
font-family - Type of font
font-size - Size of font
font-weight - thickness
font-style - stlying of fone
text-decoration - decoration of font
text-transform - casing of font
letter-spacing - gap between each letter
line-height - height of a single line
```



```
font-family: Montserrat, sans-serif;
font-weight: 500;
font-style: italic;
text-decoration: underline 🟥red wavy;
text-decoration-thickness: 2px;
text-transform: none;

letter-spacing: 5px;
line-height: normal;
```

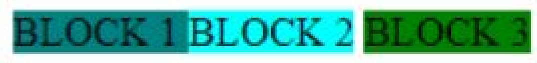
Other resources:

https://www.w3schools.com/css/css_font.asp

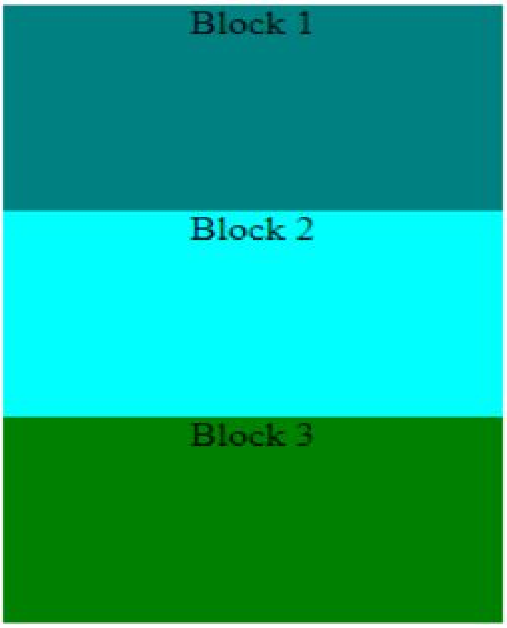
For fonts : https://fonts.google.com/

Display Property: which is allow you to define dimensions of elements itself

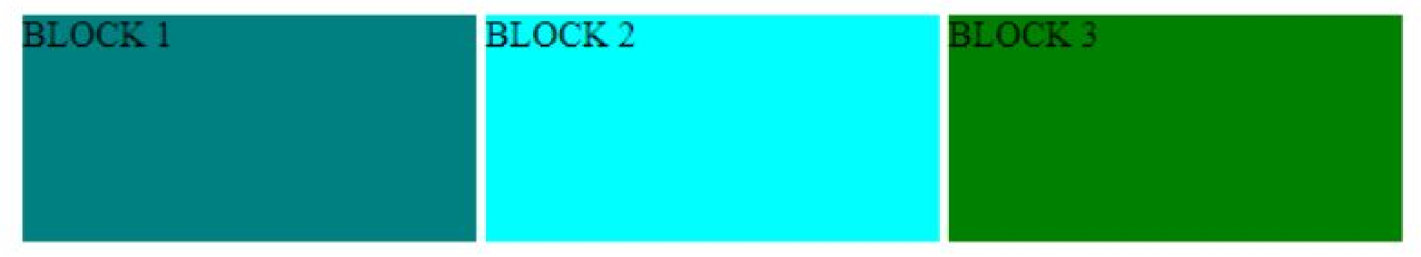
Inline : The element generates one or more inline element boxes that do not generate line breaks before or after themselves. In normal flow, the next element will be on the same line if there is space.. <span>, <a>, <img>, etc ....



Block: This property is used as the default property of div. This property places the div one after another vertically. Height and width of the div can be changed using the block property if the width is not mentioned, then the div under block property will take up the width of the container. <div>, <h1> - <h6>, <p>, etc ....



Inline-block: This feature uses the both properties mentioned above, block and inline. So, this property aligns the div inline but the difference is it can edit the height and the width of the block. Basically, this will align the div both in block and inline fashion.



Resource:

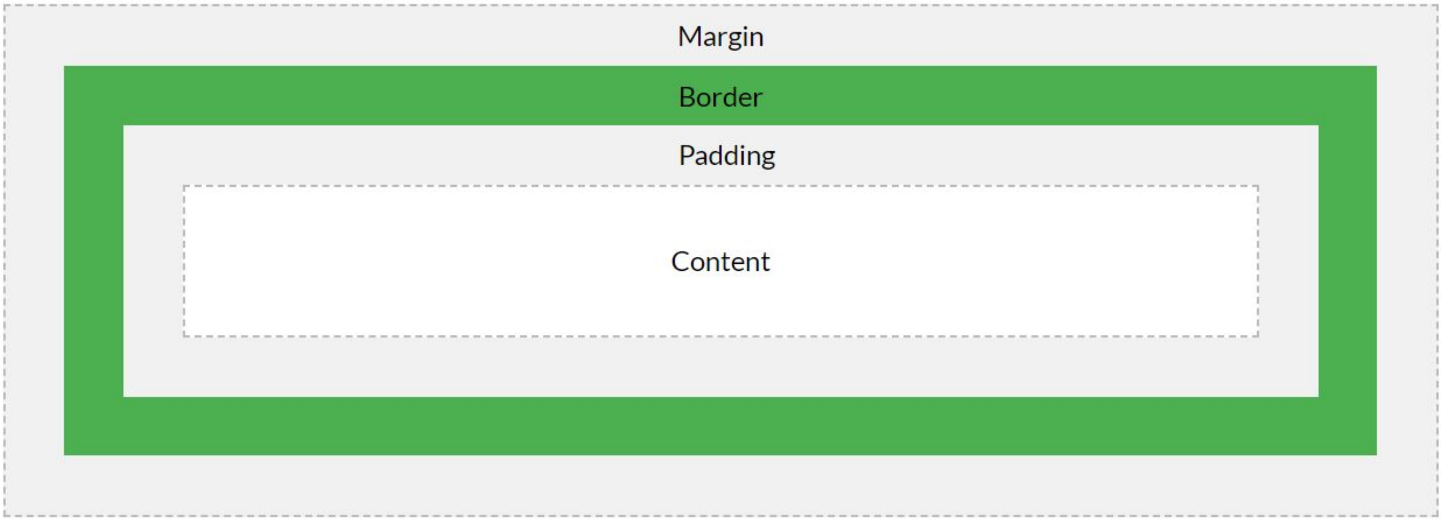
https://www.youtube.com/watch?v=Qf-wVa9y9V4

https://www.geeksforgeeks.org/css-display-property/

Box Model: CSS box model is a container which contains multiple properties including borders, margin, padding and the content itself. It is used to create the design and layout of web pages. It can be used as a toolkit for customizing the layout of different elements. The web browser renders every element as a rectangular box according to the CSS box model.

Box-Model has multiple properties in CSS.

- borders
- margins
- padding
- Content



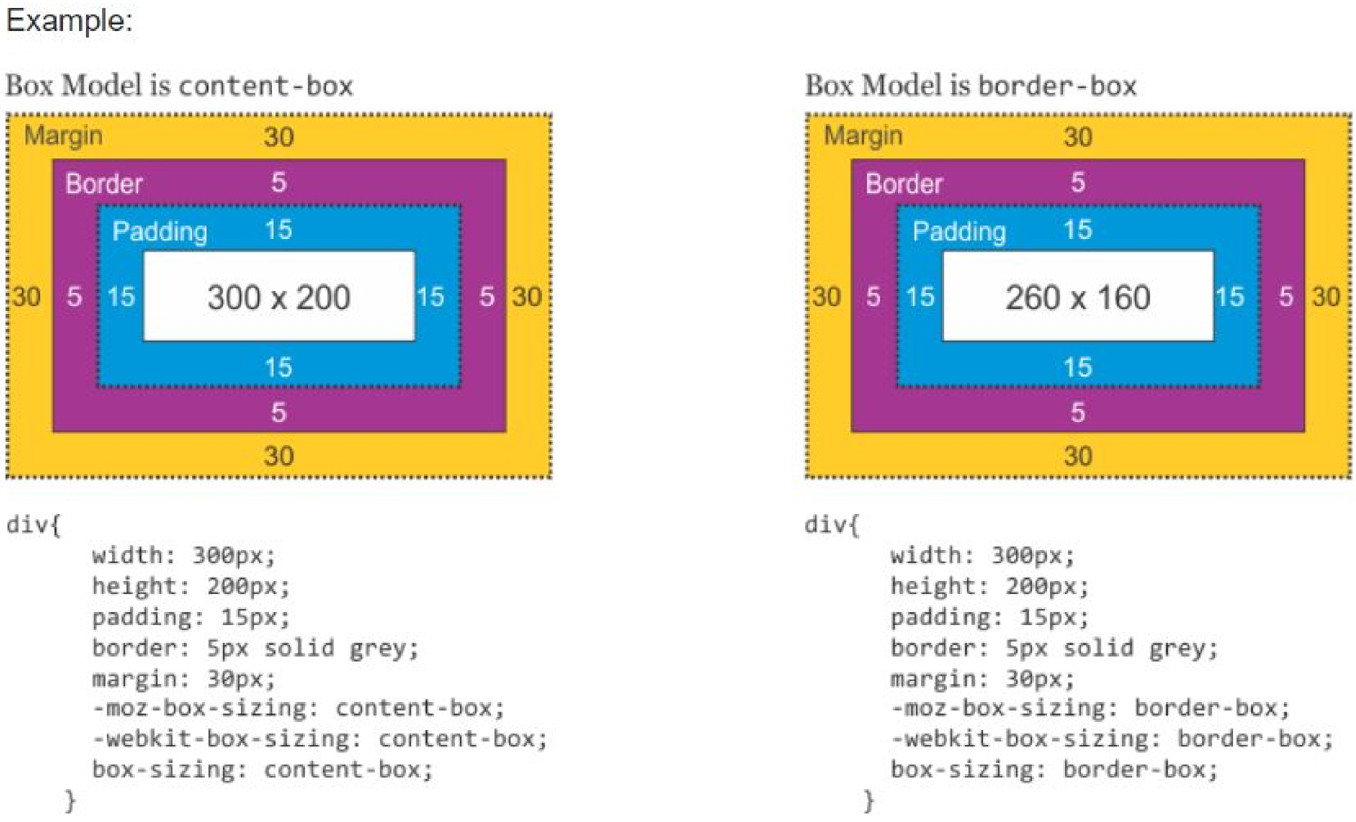
Content Area: This area consists of content like text, image, or other media content. It is bounded by the content edge and its dimensions are given by content box width and height.

Padding Area: It includes the element’s padding. This area is actually the space around the content area and within the border box. Its dimensions are given by the width of the padding-box and the height of the padding-box.

Border Area: It is the area between the box’s padding and margin. Its dimensions are given by the width and height of the border.

Margin Area: This area consists of space between border and margin. The dimensions of Margin area are the margin-box width and the margin-box height. It is useful to separate the element from its neighbors.

Border box vs Content box:



Example:

Box Model is content-box

```
div{
      width: 300px;
      height: 200px;
      padding: 15px;
      border: 5px solid grey;
      margin: 30px;
      -moz-box-sizing: content-box;
      -webkit-box-sizing: content-box;
      box-sizing: content-box;
    }
```

Box Model is border-box

```
div{
      width: 300px;
      height: 200px;
      padding: 15px;
      border: 5px solid grey;
      margin: 30px;
      -moz-box-sizing: border-box;
      -webkit-box-sizing: border-box;
      box-sizing: border-box;
    }
```

Positioning: The position property in CSS tells about the method of positioning for an element or an HTML entity. There are different types of position property available in CSS:

- Static
- Relative
- Absolute
- Fixed

Static: This method of positioning is set by default. If we don’t mention the method of positioning for any element, the element has the **position:static** method by default. By defining Static, the top, right, bottom and left will not have any control over the element. The element will be positioned with the normal flow of the page.

Relative: An element with **position: relative** is positioned relatively with the other elements which are sitting at top of it. If we set its top, right, bottom or left, other elements will not fill up the gap left by this element.

Absolute: An element with **position: absolute** will be positioned with respect to its parent. Positioning of this element does not depend upon its siblings or the elements which are at the same level.

Fixed: Any HTML element with **position: fixed** property will be positioned relative to the viewport. An element with fixed positioning allows it to remain at the same position even when we scroll the page. We can set the position of the element using the top, right, bottom, left.

Resources:

1) https://www.youtube.com/watch?v=jx5jmI0UlXU
2) https://www.freecodecamp.org/news/how-to-use-the-position-property-in-css-to-align-elements-d8f49c403a26/
3) https://www.w3schools.com/css/css_positioning.asp

Other Resources :

Learn Emmet In 15 Minutes - Double Your HTML Coding Speed

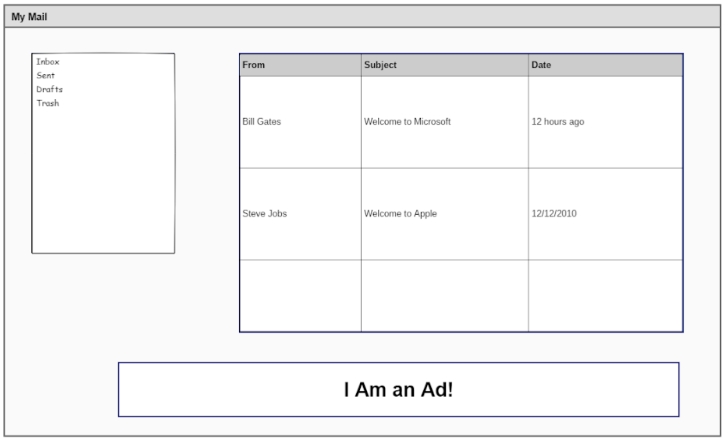
https://www.youtube.com/watch?v=V8vizNQKtx0

Assignment Week 2 Day 5

Your job is to recreate the webmail page listed below. It literally takes the fuel of all the topics whatever we have learnt. Margin, Positioning, background colors etc. Use your wildest imaginations for colors and fonts. Take a nice looking font from fonts.google.com and blast your way out. The rules for the webmail page in terms of layout are listed below.

1. Create a webmail page which has three sections:
   i. The left one is for navigation and contains links for Inbox, Sent, Drafts & Trash. You can use an unordered list to do that.
   ii. The right box is a table of emails with columns for From, Subject & Date.
   iii. The bottom one is for placing ads.

Your result should look completely different from that bland ugly looking HTML. Good luck :)



From	Subject	Date
Bill Gates	Welcome to Microsoft	12 hours ago
Steve Jobs	Welcome to Apple	12/12/2010

SESSION -END

THANK YOU