**Notes:**

A div used to message between code and user (i.e. div id="message")

Generate data on start instead of keeping it all stored in single variable when possible

*Shuffle Array function*

function shuffleArray(array) {

for(var i = array.length-1; i > 0; i--) {

var holder = Math.floor(Math.random() \* (i+1));

var temp = array[i];

array[i] = array[holder];

array[holder] = temp;

}

return array;

}

- Using objects in an array is useful for more detail in data

Event Listeners in javascript

- document.getElementById('ID').addEventListener("change", function() {}

- can do different things if theres a change in the element

**Web Design Notes**

Web Design includes

Wireframing - wireframing is the rough draft design of a website. Placing pieces of the website for the client to view and approve.

UX/UI - User Interface(UI) is used for display of webpage and stuff for point and interaction. User Experience(UX) is how a person feels when they use a product.

Layout & Spacing

Navigation

Colors

Fonts

Icons

Imagery

Typography is the design and layout of text displayed on a webpage. Tool for typography measurements https://pearsonified.com/typography/.

5 Principles of Typography

1) Font(Serif and Sans Serif)

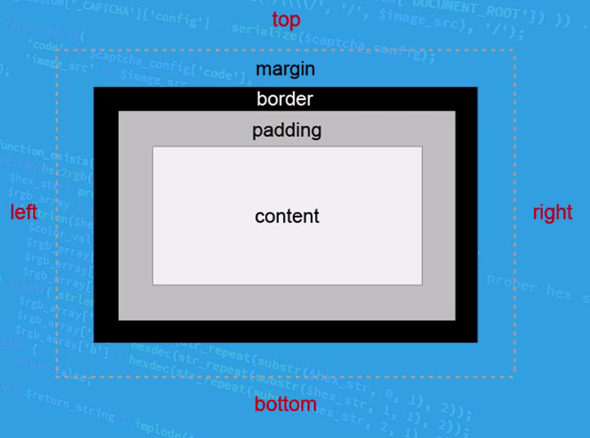
2) Size (14-16px)

3) Line Height (150% of text size)

4) Alignment

5) Readability

CSS Box Model design



Every single element has these 4 elements around it

content - all the information goes inside the content.

**Bootstrap Notes:**

Bootstrap is setup in 3 categories, containers, rows, columns where they're stored in each other in that order.

The columns can be split into 12 sections and are defined by *col-md-##* where ## is the number of sections it will take up in the containing row. The divs must add up to 12 to fit the entire row.

i.e. <div class = "row" >

<div class="col-md-8"></div>

<div class="col-md-4"></div>

</div>

*col-md-offset-#* will create a virtual column on the left of the tag

position attributes for css elements can be relative to its parent tag or absolute on the screen or absolute to the relative tag