**USEFUL HTML|CSS RESOURCES**

* [**character refrences: https://html.spec.whatwg.org/multipage/named-characters.html**](character%20refrences:%20https://html.spec.whatwg.org/multipage/named-characters.html)
* **Check if a tag/element is valid:** 
  + [**https://caniuse.com/**](https://caniuse.com/)
* **Check if your html code is valid:**
  + [**https://validator.w3.org/#validate\_by\_input**](https://validator.w3.org/#validate_by_input)
* **Check if css code is valid:** 
  + [**https://jigsaw.w3.org/css-validator/#validate\_by\_input**](https://jigsaw.w3.org/css-validator/#validate_by_input)
* **Everything html:**
  + [**https://www.w3schools.com/html/default.asp**](https://www.w3schools.com/html/default.asp)
  + [**https://developer.mozilla.org/en-US/docs/Web/HTML**](https://developer.mozilla.org/en-US/docs/Web/HTML)
* **Everything css:**
  + [**https://css-tricks.com/almanac/**](https://css-tricks.com/almanac/)

**Basic HTML outline**

<!DOCTYPE html>  
<html>  
<head>

</head>

<body>  
  
  
</body>  
</html>

* <!-- --> COMMENT
* lang attribute inside the <html> tag, to declare the language of the Web page
  + example:

<html lang="en">

* HTML headings are defined with the <h1> to <h6> tags
  + Example:

<h1>Heading 1</h1>

* <div> tag is known as a block level element
* <span> tag is known as an inline element
* HTML paragraphs are defined with the <p> tag
  + <br> is used to break apart paragraphs, no need for end tag
  + style attribute is used to add styles to an element, such as color, font, size, and more
    - example:

<p style="color:red;">This is a red paragraph.</p>

<body style="background-color:powderblue;"> (changes background color of the entire webpage)

* + - * + color formatting: <https://www.w3schools.com/html/html_colors.asp>

<p style="font-family:courier;">This is a paragraph.</p>

<p style="font-size:160%;">This is a paragraph.</p>

<p style="text-align:center;">Centered paragraph.</p>

* + - Formatting tags: <https://www.w3schools.com/html/html_formatting.asp>
  + title attribute defines some extra information about an element when you mouse over a sentence
    - example:

<p title="I'm a tooltip">This is a paragraph.</p>

* HTML links are defined with the <a> tag
  + The href attribute specifies the URL of the page the link goes to
    - example:

<a href="https://www.w3schools.com">Visit W3Schools</a>

* HTML images are defined with the <img> tag,the source file (src), alternative text (alt), width, and height are provided as attributes:
  + example:

<img src="w3schools.jpg" alt="W3Schools.com" width="104" height="142">

Linking external CSS style sheet

<!DOCTYPE html>  
<html>  
<head>  
  <link rel="stylesheet" href="styles.css">  
</head>

* + rel = linking to a css stylesheet
  + href = name of css doc
* CSS
* Comments : /\* …… \*/
  + Selector{

Property:value;

}

* \*{} – universal selector
* p{} – type selector
* #id{} – ID selector
* .class{} – class selector
* Descendant selector- when theres 2 or more selectors within a selector
  + Id id{}
* Pseudo-classes: ( <https://developer.mozilla.org/en-US/docs/Web/CSS/:focus> )keyword added to a selector that specifies a special state of the selected element(s). For example, the pseudo-class [:hover](https://developer.mozilla.org/en-US/docs/Web/CSS/:hover) can be used to select a button when a user's pointer hovers over the button and this selected button can then be styled.
  + <https://css-tricks.com/almanac/selectors/a/after-and-before/>
    - <https://www.toptal.com/designers/htmlarrows/arrows/>
  + button:hover {

color: blue;

}

* Percentages are great for flexible layouts
* Font size measurements:
  + Em: size is relative to the font-size of the parent size. When used on other properties, its relative to the font-size of the element itself
    - <http://pxtoem.com/>
    - Parent size: 20px
    - Em size: 1.5em = 20\*1.5\*2
  + Rem:  short for root em is a relative unit that’ll always be based upon the font-size value of the root element
    - <https://nekocalc.com/px-to-rem-converter>
    - Parent size: 20px
    - Rem size: 2rem = 20\*2
* Font colors: <https://developer.mozilla.org/en-US/docs/Web/CSS/named-color>
* How the css cascade settles conflict
  + Origin & importance
    - User agent style sheet: css a browser applies by default
    - User style sheet: styles set by a user
    - Author style sheet: css the author writes (most importance)
  + Selector specificity
    - How the style was written, over riding less specific styles by the more specific styles
      * Id selectors are more specific and will override a type and class selctors
  + Source Order
    - If there is one or more selector, the one that was written last will be applied
* Inherited properties in CSS means that an HTML element’s style values are copied from its parent (or containing) element.
  + <https://developer.mozilla.org/en-US/docs/Web/CSS/inheritance>
* CSS Box Model
  + Content
    - Padding: inside the box, space between content and border
    - Border
      * Short hand- width, style, color
    - Margin: outside the box, space around the border
  + Short hand
    - Tag 2: top bottom;
    - Tag 3: top left right bottom;
    - Tag 4: top right bottom left;
* CSS Layout
  + Display:none;
    - Hides something from the website so user can no longer see it
  + Display:block;
    - Occupy 100% of the parent container by default and are placed underneath one other
  + Display:inline;
    - Will be on the same line as other content, can’t change width or height using css
  + Display:inline-block;
    - Elements set to this layout will be on the same line but you can set the width and height using css
* Position property
  + Static: positioned according to the normal flow of the document
  + Relative: positioned according to the normal flow of the document, THEN offset relative to itself based on the values of top, right, bottom and left. Therefore, the space given for the element is the same position as if it were given static positioning until changed by the top, right, bottom and left values.
  + Absolute: removes an element from the normal document flow and allows you to place an element at the edge of the view port. The element will be positioned relative to its closet positioned ancestor.
  + Fixed: element is removed from the normal doc flow and no space is created for the element and the element scrolls with the screen and never moves.
  + Sticky: element is positioned according to the normal flow of the doc and then offset to its nearest scrolling ancestor and containing block, based on the top, right, bottom and left values. The offset does not affect the position of any other elements.
  + Float: places an element on the left or right side of its container, allowing text and inline elements to wrap around it.
* Media Queries
  + @media type{css styles}
  + @media screen and (min-width:px){}
    - <https://css-tricks.com/a-complete-guide-to-css-media-queries/>
  + allow you to apply CSS styles depending on a device's general type.
  + In the head of an html file, add a <meta> tag that lets the website know that it has been modified for mobile usage so it doesn’t automatically zoom out.
    - <meta charset=”UTF-8”>
    - <meta name =”viewport” content=”width=device-width, initial-scale=1”>
  + Oreientation: landscape or portrait
  + Breakpoints is where the current layout must adjust to properly display content
    - Threshold where the layout should change
* Typography
  + <https://developer.mozilla.org/en-US/docs/Web/CSS/font-family>
  + <https://www.cssfontstack.com/>
  + <https://fonts.google.com/>
  + Importing fonts

@font-face {

  font-family: "Inter";

  font-weight: normal;

  src: url("Inter-Regular.woff2") format("woff2");

}

* + Line height and letter-spacing
    - <https://css-tricks.com/almanac/properties/f/font/>
    - h2 {

font: 400 4rem/1.1 'Abolition Regular', Impact, Charcoal, sans-serif;

}

* + - * font: font weight size font/line height ‘type face’
    - letter-spacing: 1px;
  + text shadow
    - text-shadow: 1px 1px 1px #000;
      * horizontal, vertical, blur, and color
        + positive numbers move the shadow to the right, negative to the left
* box-shadow
  + <https://css-tricks.com/almanac/properties/b/box-shadow/>
  + box-shadow: 0 3px 10px rgb(0 0 0 / 0.2);
    - box-shadow: [horizontal] [vertical] [blur] [optional spread radius] [color];
* border-radius
  + <https://css-tricks.com/almanac/properties/b/border-radius/>
  + border-radius: 12px 12px 0 0;
    - top left, top right, bottom right, bottom left
* background images
  + background-image: url(“”);
    - <https://developer.mozilla.org/en-US/docs/Web/CSS/background-image>
  + Background-repeat
    - <https://developer.mozilla.org/en-US/docs/Web/CSS/background-repeat>
  + Background-position
    - <https://developer.mozilla.org/en-US/docs/Web/CSS/background-position>
  + Background-size
    - <https://developer.mozilla.org/en-US/docs/Web/CSS/background-size>
  + Background-blend-mode
    - <https://css-tricks.com/almanac/properties/b/background-blend-mode/>
  + Background shorthand:
    - <https://css-tricks.com/almanac/properties/b/background/>

body {

background:

url(sweettexture.jpg) */\* image \*/*

top center / 200px 200px */\* position / size \*/*

no-repeat */\* repeat \*/*

fixed */\* attachment \*/*

padding-box */\* origin \*/*

content-box */\* clip \*/*

red; */\* color \*/*

}

* Gradient transitions
  + <https://developer.mozilla.org/en-US/docs/Web/CSS/CSS_Images/Using_CSS_gradients>
  + background-image:linear-gradient(color1, color2);
* Adding a wrapper centers the body of a website, it can be common to have more than one wrapper
  + Width: 70%;
  + Margin: 0 auto;
* Vertical margins only collapse when there is no border, padding or content area to interrupt two touching margins
* A CSS reset removes all vrowswer inconsistencies to ensure that your layout displays as consistent as possible across all browsers.
* Responsive web design:
  + collection of techniques for building websites that work on multiple screen sizes. The scope of responsive design sometimes also includes websites that work at different pixel densities, such as traditional screens or high DPI screens.
  + Responsive design consists of fluid grids, fluid images and media queries
  + Maintaining multiple versions of the same website is not a sustainable strategy
  + Relative units: percentages or ems

**FLEX BOX**

display:flex;

flex-direction:row;

flex-direction:row-reverse;

justify-content:flex-end;

justify-content:flex-start;

justify-content:space-between;

align-items:center;

align-items: flex-start;

align-self: flex-start;

align-self: stretch;

align-self:center;

align-self: flex-end;