**Resources**

browser-sync --directory --files "\*"

git status

git add site/index.html

git commit

git push

jsfiddle

codepen.io

https://css-tricks.com/

caniuse.com -- check browser compatiblity for features/attributes

w3.org

validator.w3.org -- check if html content is valid

w3school.com -- check browser statistics

csszengarden

**CSS selectors** : ID , class, element

Class selectors == .blue{color:blue;}

Id selector == #idname

div, .blue == selects both element div and class blue

**Combining css selectors:**

p.big {} all paragraphs with class big

article>p ==direct child selector- -- target p element (direct child)of an article element

article p == target p element of any article element

.colored p //p.colored== all p elements within class colored

**Pseudo-class selectors**

Syntax

selector:pseudo-classname{}

:link

:visited

:hover

:active

:nth-child

a:link, a:visited

{

text-decoration:none;

background-color:green;

border: 1px solid blue;

display:block;

color:black;

margin-bottom:1px;

}

a:hover, a:active{

}

header li:nth-child(3){}

nth-child(odd/even)

**Conflict resolution**

-Origin

-Merge

-Inheritance

-Specificity

1)Origin - Last lines of program have precedence since a program is executed line by line.

3)Inheritance - DOM tree --

4)Specifity -- Depends on the score of the selectors.

style -- ID -- Class -- # of Elements

!important - override for conflict resolution

Box-sizing: border-box;

Margins for boxes placed next to each other(left-right) is cumulative.

Margins for boxes placed one under the other (top-down) is not cumulative and the greater margin is the difference between the two boxes(Margins collapse)

\* selector can be used to select all elements on the page.

box-sizing, margin and padding can be used with \* selector to override user agent style sheet.

-use overflow for content that spills out of the box.

-Background property:

background-color

background-image

background-repeat

background-position: top right

background: --to combine the above

**Floating Elements**

-Margin do not collapse for floating elements.

-Float takes element out of the document flow.

- Clear: left makes it resume regular flow and avoids float left.

- Use box-sizing and remove margins + border to have boxes float next to each other.

Without removing these properties, boxes float on seperate lines.

**Relative positioning**

-Position removes element from document flow.

-Postion:relative offsets the position from it's regular document flow

-top, right, left, bottom. Should be read as offset from top, right, left, bottom.

-Negative values are also valid.

-position:absolute -- the position is offset from nearest parent that has relative position.

If nothing is set it usually the HTML tag.

**Media Queries**

-Adapting layouts for different devices.

-syntax: @media (max-width: ) either resolves to true or false

- Common queries: min-width , max-width , orientation, screen , print

- Queries can be combined with logical opertors(and , or(,) )

**Responsive Design**

Adapting Grids, flexible images and media queries

Mobile device: some parts maybe hidden, some parts are made more prominent.

- 12- column grid responsive layout (twitter bootstrap)

Browser window=100% , therefore each column=100/12=8.33%

- Nested grids are possible

-Use media queries + 12 column grid to set width of columns as a %.

-Width of elements might be larger than the width of device becuase mobile phones zoom out to fit content by default.

-Indicate that the page is responsive by using the following meta tag:

<meta name="viewport" content="width=device-width , intial-scale=1">

**Bootstrap:**

-Framework developed by Twitter. Popular on mobile devices

-Depends on Jquery

- <meta http-equiv="X-UA-Compatible" content="IE=edge"> -- tag to latest IE compatibles

-Our style sheet must be placed after the bootstrap css sheet because we're going to make modifications to the bootstrap.

-Add the following JS libraries in the body tag:

<script src="js/jquery-3.5.0.min.js"></script>

<script src='js/bootstrap.bundle.min.js'></script>

<script src="js/script.js"></script> -- our own javascript

**Bootstrap grid**

<div class="container"> or container-fluid

<div class='row'>

<div class="col-md-4">Col 1</div>

</div>

</div>

Container fluid class stretches layout to the full width of the browser and provides padding around grid

Container class has predetermined width depending on browser width (changes according increase/decrease in width)similar to media queries for responsive design

Row class - horizontal groups of columns independent of other rows / Create negative margin to counteract padding of container class.(Pushes the boundary of

the row beyond that of the container so that the content of row is aligned with regular content below the row container.

Column class : col-Size-Span

Size:screen width identifier lg(>1200px)/md -- look at documentation

Span: no. of columns elements should span ///no. of divisions of the grid --values 1 to 12