*CSS Quick Start*

**~~CSS Reset most popular:~~** [~~http:/cssreset.com~~](http://cssreset.com)

**CanIUse.com**

**Normalize.css:** use by bootstrap!

**Selector**: element, class, id  // e.g. div, .myClass, #myId

**Chain ‘BOTH need to be present on the SAME element’**: element**.**class, #id**.**class // <https://css-tricks.com/multiple-class-id-selectors>

* **class always AFTER** element or id

**Union ‘ , ’**: element1**,** element2**,** element3 { … } // all element1(s) & element2(s) & element3(s)

**Descendants ‘ space ’**: element1 **[space]** element2 // all element2 descendants of element1

**Child ‘ > ’**: element1  **>** element2 // all element2(s) that are immediate children of element1

**Adjacent Sibling ‘ + ’**: element1 **+** element2 // all element2(s) placed **immediately after** element1

**General Sibling ‘ ~ ’**: element1 **~** element2 // all elements(s) that are siblings of element1

**Attribute ‘ [] ’**: // <http://www.w3schools.com/css/css_attribute_selectors.asp>

* element**[attrib]** // all element **has ‘attrib’. NO SPACE between element & []**
* element**[attrib=”value”]** // all element with specified ‘attrib’ and ‘value’
* standalone without element: **[attrib] or [attrib=”value”]**
* **~=** / **|=** / **^=** / **$=** / **\*=** : contains value among *space delimited list* / begins with value *required whole word* / begins with value / ends with value / contains value
* **Useful for styling <input type=”xxx” />** based on attribute ‘type’ rather than class or Id

**Pseudo Class Selector**: Affect **'whole'** selector <https://css-tricks.com/pseudo-class-selectors/>

* **Link: -** a:link/visited/**hover**/active/**focus**/[target](https://css-tricks.com/almanac/selectors/t/target/)
* **div:-** div:hover/active
* **Input/textarea**
  + Input:**hover**/**focus**/enabled/disabled/checked/indeterminate/valid/[invalid](http://www.w3schools.com/cssref/sel_invalid.asp)/in-range/[out-of-range](http://www.w3schools.com/cssref/sel_out-of-range.asp)/optional/[required](http://www.w3schools.com/cssref/sel_required.asp)/read-write/[read-only](http://www.w3schools.com/cssref/sel_read-only.asp)/
* [**Position/Number**](https://css-tricks.com/pseudo-class-selectors) **:**- :root/first-child/last-child/nth-child(N)/nth-of-type(N)/first-of-type/last-of-type/only-of-type
* **Relational:-** :not(S)/empty

**Pseudo Element** **::**  // Affect **‘part’** of the selector which is typically the **‘content’** of the element.

* **Select Text:-**  ::[first-letter](https://css-tricks.com/almanac/selectors/f/first-letter)/[first-line](https://css-tricks.com/almanac/selectors/f/first-line)
* **Insert Content:-** ::[before/after](https://css-tricks.com/almanac/selectors/a/after-and-before)

div::after {

**content**: url(“xyz.gif”);

**// using Glyphicons, Fontawesome**

**font-family: 'Glyphicons Halflings' / ‘FontAwesome’;**

**content**: '\2601';

}

* [**Selection**](http://www.w3schools.com/cssref/sel_selection.asp) :- **::selection** { color: white; background: blue; }

**jQuery pseudo class selector** //[**https://css-tricks.com/pseudo-class-selectors/**](https://css-tricks.com/pseudo-class-selectors/)

* Besides support all CSS selector, it has its own pseudo class selector
* :first/eq(X)/contains(‘text’)/lt(X)/gt(X)/even/odd/has(S)

**Font size Unit** – recommendation:

* **body { font-size: 100%; }** // and then use relative size for descendant elements
  + **{ font-size: 1em }** // relative to parent font-size, 1em = 100% of parent size

**Google Font -** [**https://www.google.com/fonts**](https://www.google.com/fonts) **:- 1. Choose** (Add to Collection) **2. Review 3. Use** (cut & paste <link>, specify font-family)

**Width/Height viewport size**: vw/vh: e.g. width: 75vw (75% of browser width)

**block element**: takes up **full width** with line break before & after. Control width using **max-width:** x%; instead of ***width*:** bcos in small device, you will get scrollbar.

**display**:  display: none/inline/block;  // <http://www.w3schools.com/css/css_display_visibility.asp>

* **none** - hide w/o taking space. Opposite is visibility: none;
* **inline** - turn block element to inline element
* **block** -  turn inline element to block element. Turn link to a block make the **WHOLE BLOCK CLICKABLE**, not just the text.
* **inline-block**: keep an element inline but **with height & width properties**
  + Vs float:left; & clear:left; <http://www.w3schools.com/css/css_inline-block.asp>

**position**:  position: static(default)/**relative**/fixed/**absolute;**  // **before setting properties top, bottom, left, right** you need to decide the position first.

* static (default)
* fixed - relative to the browser **window** e.g. used for toolbar that DON'T move with you as you scroll
* **relative** - relative to its **normal position** // <http://www.w3schools.com/css/css_positioning.asp>
* **absolute** - relative to the **first parent element** that has position:**relative** or **fixed**. **Default relative** element is **<body>**.

**float**:

* float:left/right; move **block** element to left or right AND if you have **1+ blocks**, they will be **right next to each other**.
* float:left can cause 1+ block elements to **fill the width** of browser & **wraps nicely** when browser resize. [Example here](http://www.w3schools.com/css/tryit.asp?filename=trycss_inline-block_old). Alternative using [display:inline-block;](http://www.w3schools.com/css/css_inline-block.asp)

**Media Queries** –

* <http://www.w3schools.com/css/css3_mediaqueries_ex.asp>
* Video:-   <http://video.ch9.ms/ch9/ea71/24cb8084-ebaa-40fb-9766-93dad75fea71/634AddingStyleWithCSSM04_mid.mp4>
* Media Features: Most frequently used
  + **@media all and (min-width**: 768px) // apply styles when width is **768px or larger.** Frequently used by **Mobile First.**
  + **max-width**: 767px; // apply styles when width is **767px or smaller**
  + min/max-device-width/height
  + orientation
* aspect-ratio Media Types: Most frequently used - screen/print
  + <http://www.w3schools.com/css/css3_mediaqueries.asp>
  + e.g. @media screen/print { }
* Media Logical Operators: applies to media types, features
  + and  / comma separated (equivalent to or)  / not
* Media Queries example: use min-width to hide text/element/image, resize image etc...
* Media Queries tool
  + https://github.com/scottjehl/picturefill
* @import: DON'T USE

**Transition** & **Transform** - can be used on element, class & media, but NOT on Id(#)

* **transition**
  + 1line: { ***transition***/**-moz|webkit|ms|o-*transition***: property 0.3s linear; }
  + Breakout: { **transition-property**: *width/left*; **transition-duration**: *1s*; **transition-timing-function**: *linear/ease-in*; **transition-delay**: *1s*; }
  + **Stop Transition on each Page Load**
  + **NO transition on ANY properties in the beginning of page load:**  **<body** class=”**notransition**”>
  + **Restore** transition after DOM Ready $(document)**.ready**(function() {
    - **$(‘body’).removeClass(‘notransition’);**
  + });

**.notransition** \* {

**transition: none !important;**

-webkit-transition: none !important;

-moz-transition: none !important;

-o-transition: none !important;

-ms-transition: none !important;

}

* transform:  e.g. @media (max-width: 500) { #resize-me { **transform**: scale(2, 2); }}

**Box-Sizing**: border-box  -  <http://www.w3schools.com/cssref/css3_pr_box-sizing.asp>

**Most Used Properties**:

* **Gray out background** <body>: .grayout-background { **background-color: lightgray; opacity: 0.5;** }
* property values for sides: **t r b l, tb rl**, tbrl
* **border-width**, **border-color**, **border-style**: **none/solid/thin**; // <http://www.w3schools.com/css/css_border.asp>
* **margin** / **padding**: outside border / inside border
* **outline**: none; // width style color e.g. outline: 5px dotted red;
* **width**: 100%;,
  + **min/max-width**: 80%; // 80% **relative** to the **containing** **container**
* **height**: 5em;
  + **min-height**: 15em; // **pre-allocate vertical space** for block element
* a { **text-decoration: none;** }
  + a:link/visited/hover/active
* ul { **list-style: none;** }
* **Text**
  + **text-transform**: uppercase/lowercase/capitalize;
  + **text-indent**: 3em;
  + **line-height**: 0.8;
  + **font-size**: 0.7em;
  + **font-weight**: bold;
  + **color**: blue;
* **Alignment – text, block element, relative > absolute with right & bottom XYZpx**
  + **text-align**: **center/left/right/justify**;
  + **Center a nested block**: e.g. { max-width: 50%; **margin: auto;** text-align: center; } // **center** a less than 100% **width** **block element** inside its container.
  + **Absolute Control Pos Non-Text: right/bottom when position: absolute**: allow **align element to right & bottom**. Default is left & top.
  + **Manually Center Non-Text position: fixed**
    - **.center {**

**position: fixed;**

top: 50%;

left: 50%;

height: 6em;

width: 20em;

margin-top: -3em;

margin-left: -10em;

**}**

* **opacity**: 1.0/0.0 // applies to an element and all its descendants
  + to override opacity property: **rgba**(0,0,0,0.5);
* **Gray out Background**
  + .background-grayout { **background-color: lightgray; opacity: 0.5;** }
* **Form** <http://www.w3schools.com/css/css_form.asp>
  + **Width**: **input** { width: 100%; }
  + **Padding**: **input[type=text]** { **padding**: 1em 1em; }
  + **Border**: input[type=text] { **border**: 2px solid red; **border-radius**: 4px; }
  + **Focused**: input[type=text]**:focus** { background-color: …; border: …; }
  + **Glowing Border – border / border-color / box-shadow / outline**: [Link](https://stackoverflow.com/questions/5670879/css-html-create-a-glowing-border-around-an-input-field/5670984#5670984)
  + **Animated Expand** Input:
    - input[type=text] { **width:** 10em**; transition: width** 0.4sease-in-out**;** }
    - input[type=text]**:focus** { **width:** 100%**;** }
  + **Disable Textarea Resize**: **textarea** { **resize:** none**;** }
  + **Icon Input**: input[type=text] { **background-image**: url(‘xyz.png’); **background-repeat**: no-repeat; **background-position**: 10px 10px; }
    - **Alterative**: div**::before** { **content**: url(“xyz.gif”) }

**Theme Design Pattern**

* .MyClass { **base styles …** }
* .MyClass**-primary** { add on styles e.g. background-color: #428bca; color: #fff } // refactor color out of base style
* .MyClass**-success** { add on styles e.g. background-color: #42ca8b; color: #fff }
* Usage: <div class=”**MyClass MyClass-primary**” >

**Bootstrap with jQuery**

* Visibility: Use **bootstrap** **.hidden** – ***don’t use .hide/.show***
  + Together with .**removeClass**(“hidden”);/ .**addClass**(“hidden”);/ .**toggleClass**(“hidden”); example [here](http://stackoverflow.com/questions/18568736/how-to-hide-element-using-twitter-bootstrap-3-and-show-it-using-jquery).
* Yield JS Thread to UI Thread: e.g. to allow the ‘Spinner’ to show on the UI. **WHEN** to use this
  + <i class=”**fa fa-2x fa-spinner fa-spin**”></i>

.on(“click”, function() {

**setTimeout**(function() {

// display popup with spinner by remove a .hidden class

$('…').removeClass('hidden');

}, **1**);

});

* **Toggle Hidden Sibling Element: on clicked** then **toggle the .hidden** class from the **following sibling** div
  + $(this)**.siblings()**.toggleClass("**hidden**");