# Table of Contents ─────────

# 1   Semantic HTML ─────────



Figure 1: Basic breakdown of semantic html (source: w3schools)

**Article:** Makes sense on it's own, the content should be understandable regardless of the rest of the site

**Aside:** Content placed to the side, related to surrounding content

**Details:** Additional details the user can show or hide on demand

**FigCaption:** Caption for an image

**Figure:** Defines an image, typically includes a `figcaption`

**Footer:** Footer of a document or section. Typically: Author, Copyright Information, Links to Terms of Use, Contact Information, etc

**Header:** Header of a document or section

**Main:** Main content of the document

**Mark:** Highlights part of the text

**Nav:** Block for major navigational links

**Section:** "A section is a thematic grouping of content, typically with a heading"

**Summary:** Defines a visible heading for the details tag
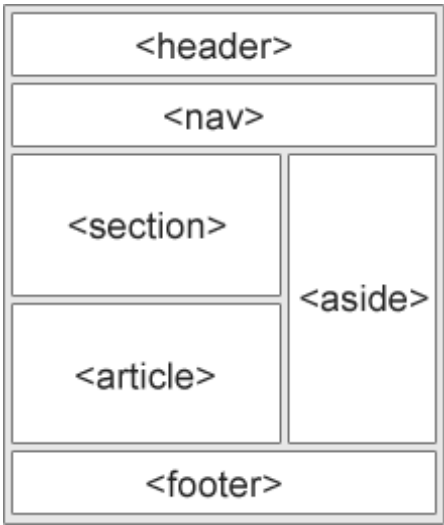
**Time:** Defines a human readable date/times

# 2   CSS Selectors ─────────

**.class** Selects all elements with class equal to "class"

**#id** Selects all elements with id equal to "id"

**\*** Selects all elements

**element** Selects all elements by tag name

**element,element** Multiple css selectors

**element element** Selects all elements inside an element

**element > element** Selects all direct children of an element

**element + element** Selects all elements directly after an element

**element element** Selects all elements preceded by an element

**[attribute]** Selects elements with the attribute

**[attribute=value]** Selects elements with attribute equal to value

**[attribute ~=value]** Selects elements with attribute containing value

**[attribute|=value]** Selects elements with attribute starting with value

**[attribute^=value]**

**[attribute$=value]** Selects elements with

attribute ending with value

**[attribute*=value]** Selects elements with attribute containing substring value

**:active** Selects the active link

**::after** Insert something after the content

**::before** Insert something before the content

**:checked** Selects every checked input

**:default** Selects the default input

**:disabled** Selects every disabled input

**:empty** Selects parents with no children

**:enabled** Selects every enabled input

**:first-child** Selects if first child of parent

**::first-letter** Selects the first letter

**::first-line** Selects the first line

**:first-of-type** Selects if first element of parent

**:focus** Selects input which has focus

**:hover** Selects if mouse is over

**:in-range** Selects input elements with a value specified within a range

**:indeterminate** Selects input elements that are indeterminate

**:invalid** Selects all input elements with an invalid value

**:lang(language)** Selects with lang attribute equal to language

**:last-child** Selects elements that are the last child of the parent

**:last-of-type** Selects elements that are the last child of the parent

**:link** Selects all unvisited links

**:not(selector)** Selects every element that is not the element

**:nth-child(n)** Selects every element that is the nth child of the parent

**:nth-last-child(n)** Selects every element that is the last nth child of the parent

**:nth-last-of-type(n)** Selects every element that is the last nth child of the parent

**:nth-of-type(n)** Selects every element that is the nth of type from the parent

**:only-of-type** Selects every element that is the only type from parent

**:only-child** Selects every element that is the only child of its parent

**:optional** Selects inputs with no required attributes

**:out-of-range** Selects input elements with a value outside the specified range

**::placeholder** Selects inputs with a placeholder text

**:read-only** Selects inputs with the readonly attribute

**:read-write** Selects inputs without the readonly attribute

**:required** Selects inputs with the required attribute

**:root** Selects the document's root element

**::selection** Selects the portion of an element that is selected by a user

**:target** Selects the current active element (clicked on a URL containing that anchor name)

**:valid** Selects all input elements with a valid value

**:visited** Selects all visited links

# 3  Background

**background-image:** selects the background image to use, accepted value takes the form `url("image.jpg")`

**background-color:** specifies the background color in hex

**background-position:** positions the image, accepted values:
- (left | right | center) (top | bottom | center)
- x% y%
- x y
  Position in px

**background-repeat:** enables the image to be repeated, possible values:
- repeat
- repeat-x
- repeat-y
- no-repeat
- space
  repeat without clipping and remaining space distributed evenly
- round
  repeat without clipping and centered

**background-size:** specifies the size of the background images, possible values:
- auto
  displayed at original size
- *height width*
  sets the image height and width in pixels, percentage is also

supported
- cover
    resize the image to cover the entire screen (stretches or cuts off the sides if needed)
- contain
    resize to make the entire image visible

## 4 Media Queries

- `@media screen` - executes only if viewed on a screen
- `@media print` - executes when about to print
- `@media all and (max-width: 699px) and (min-width: 520px)` - executes when the display has a width of 520 to 699px

## 5 Transitions

**transition:** <attribute> <duration>
**transition-delay:** delay before the effect starts (e.g. 2s)
**transition-duration:** duration of the transition
**transition-property:** attribute to transition on
**transition-timing-function:** possible values: ease, linear, ease-in, ease-out, ease-in-out, cubic-bezier(n, n, n, n)

### 5.1 Keyframes

```
1  @keyframes mymove {
2      0% {
3          top: 0px;
4      }
5      100% {
6          top: 200px;
7      }
8  }
9
10 div {
11     animation: mymove 2s infinite;
12 }
```

**animation:** <name> <duration> <iteration>
**animation-direction:** (reverse | alternate | alternate-reverse)
**animation-fill-mode:** (none | forwards | backwards|both)
Iteration can be a number or infinite

## 6 Gradients

```
linear-gradient(<position>, <color1>, <color2>)
radial-gradient(<color1>, <color2>)
```

### 6.1 Examples

```
background-image:  linear-gradient(-90deg, red, yellow);
background-image:  radial-gradient(circle, red, yellow);
```

## 7 Flexbox

### 7.1 Parent

```
display:  flex;
```
**flex-direction:** row | row-reverse | column | column-reverse
    *Sets flexbox direction*
**flex-wrap:** nowrap|wrap|wrap-reverse
    *Sets if the flexbox will wrap or not*
**justify-content:** flex-start | flex-end | center | space-between | space-around | space-evenly
    *Aligns the items across the wrap axis*
**align-items:** flex-start | flex-end | center | stretch|baseline
    *Aligns the items across the **cross** wrap line*
**align-content:** flex-start | flex-end | center | stretch|space-between|space-around
    *Aligns all wrapped rows inside the parent*

### 7.2 Client

**order:** <integer>
    *Position the individual flex item within the parent*
**flex-grow:** <number>
    *Specifies if the item should grow and*

*the rate it should grow*

**flex-shrink:** <number>
> *Specifies if the item should shrink and the rate it will shrink*

**flex-basis:** <length> | auto
> *Specify the default item width*

**align-self:** auto | flex-start | flex-end | center | baseline | stretch
> *Overrides the parent `align-items` for the individual item*

## 8   Borders

**border-style:** dotted | dashed | solid | double | groove | ridge | inset | outset | none | hidden
> *Supports specific edges as well:* `border-top-style`

**border-width:** <number>

**border-color:** <color>

**border-radius:** <size>
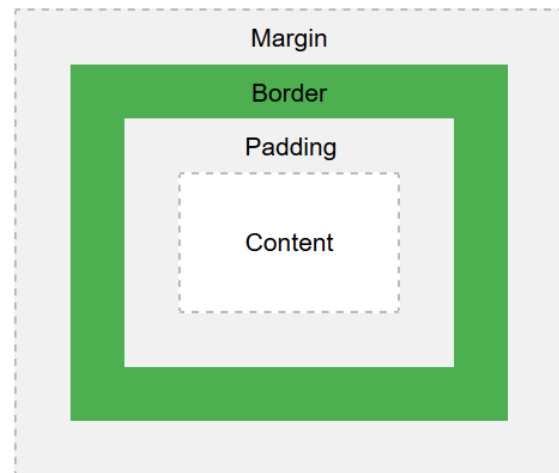> *Makes rounded corners*

## 9   Box Model

Figure 2: Layout of boxmodel (taken from w3schools)

### 9.1   box-sizing

**content-box:** Width and height only includes content (border and padding not included)

**border-box:** Width and height includes content, padding and border

## 10   Code Snippets

### 10.1   Example Page Layout

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4          <meta charset="utf-8" />
5          <title>Page Title</title>
6          <style>
7                  :root {
8                          --primary: #482f40;
9                  }
10         </style>
11         <link rel="stylesheet" href="styles.css" />
12 </head>
13 <body>
14         <img src="image.png" alt="Some Image" />
15
16         <header>
17                 <nav><a href="http://google.com">Google</a></nav>
18         </header>
19
20         <script type="text/javascript" src="scripts.js"></script>
21 </body>
```

### 10.2   Details

```
1  <details>
2          <summary>World's Tallest Mountain</summary>
3          <p>Here you would place some information about the worlds tallest moon</p>
4  </details>
```