

HTML TIPS

- Have one external stylesheet **style.css** for entire site
 - Saves you (a lot) of work!
 - Avoid *inline style* and *internal stylesheets* as much as possible
- HTML files must have character set if you intend to use special characters

Set character set to **utf-8**

Link to external stylesheet
style.css

```
<!doctype html>
<html>
<meta charset="utf-8">
<title>My Homepage</title>
<link rel="stylesheet" type="text/css" href="style.css">
<body>
  <!-- Content here -->
</body>
</html>
```

This is the absolute minimum code you must have

HTML TIPS

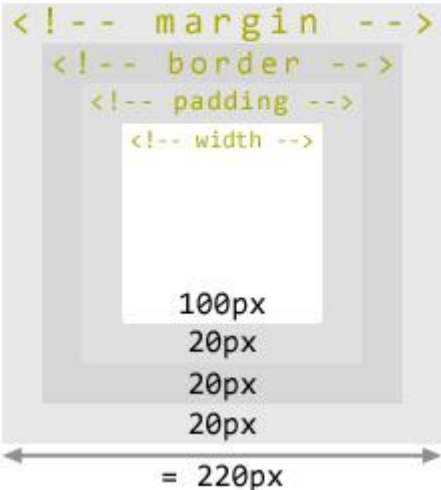


w3schools.com/css/css3_box-sizing

- The CSS box-sizing property allows us to include the padding and border in an element's total width and height

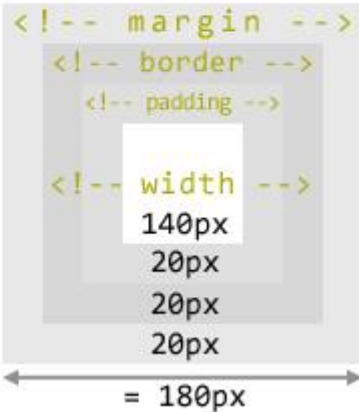
CSS Box Model

`box-sizing: content-box;`



`box-sizing: border-box;`

As opposed to the content-box model, the border-box model includes the border and padding inside of the width.



css-tricks.com/box-sizing

CSS reset:

Add this to the top of your stylesheet:

```
html {
  box-sizing: border-box;
}
*, *:before, *:after {
  box-sizing: inherit;
  margin:0; padding:0;
}
```



Embed Video

```
<iframe width="560" height="315" src="https://www.youtube.com/embed/Ggh_y-33Eso" frameborder="0" allow="accelerometer; autoplay; encrypted-media; gyroscope; picture-in-picture" allowfullscreen></iframe>
```

Start at 2:31

EMBED OPTIONS

Show player controls.

Enable privacy-enhanced mode. ⓘ

COPY

codepen.io/vanslooten/pen/KpMLwV

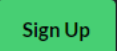
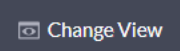
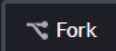
Learn HTML in 15 Minutes

6.8K 256 **SHARE** SAVE ...

Derek Banas

SUBSCRIBE

10/8/2021



```

HTML
1 <div class="content">
2
3 <h1>bold.</h1>
4
5 <h2>The quick brown fox jumps over the lazy dog</h2>
6
7 <p class="left">Lorem ipsum dolor sit amet, consectetur adipiscing elit.

```

```

CSS
1 @import url('https://fonts.googleapis.com/css?family=Open+Sans');
2
3 /* css reset: */
4 html { box-sizing: border-box; }
5 *, *:before, *:after { box-sizing: inherit; margin:0; padding:0; }
6
7 body { background: #e7b91b; }

```

```

JS
1

```

bold.

The quick brown fox jumps over the lazy dog

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vestibulum eu enim sem, ut vestibulum nulla. Donec quis neque lorem. Cras congue quam ut tellus lacinia sit amet cursus dui semper lectus molestie.

Ut facilisis, diam ut vehicula laoreet, libero justo commodo orci, et condimentum risus purus ac risus. Aenean semper lectus ed cursus pellentesque mollis.

w3schools: [css font](#), [bootstrap text/typography](#)
[codepen.io/vanslooten/pens/tags/?selected_tag=fonts](#)



Roboto

Designed by Christian Robertson

Download family

Select styles Glyphs About License Pairings

Styles

Type here to preview text
Almost before we knew it, we had left the ground.

Size: 30px

Include in stylesheet using @import

Use:

Selected family

Review **Embed**

To embed a font, copy the code into the <head> of your html

<link> @import

```
<style>
@import url('https://fonts.googleapis.com/css2?family=Roboto&display=swap');
</style>
```

CSS rules to specify families

```
font-family: 'Roboto', sans-serif;
```

```
@import url('https://fonts.googleapis.com/css2?family=Roboto&display=swap');

h1,h2,h3,h4,p { /* headings and paragraphs get Roboto font */
  font-family: 'Roboto', sans-serif;
}
```

- Thin 100
Almost before we knew it, we had left the ground.
- Thin 100 italic
Almost before we knew it, we had left the ground.
- Regular 400
Almost before we knew it, we had left the ground.
- Regular 400 italic
Almost before we knew it, we had left the ground.

ICONS

- Icons Tutorial
 - Icons HOME
 - Icons Reference
- Font Awesome 5
 - Font Awesome 5 Intro
 - Icons Accessibility
 - Icons Animals
 - Icons Arrows
 - Icons Audio & Video
 - Icons Automotive
 - Icons Autumn
 - Icons Brands
 - Icons Buildings
 - Icons Business
 - Icons Charity
 - Icons Chat
 - Icons Chess
 - Icons Code
 - Icons Communication
 - Icons Computers
 - Icons Currency
 - Icons Date & Time
 - Icons Design
 - Icons Editors
 - Icons Education
 - Icons Emoji
 - Icons Files
 - Icons Food
 - Icons Genders

Icons Tutorial

[Home](#)



How To Add Icons

To insert an icon, add the name of the icon class to any inline HTML element.

The `<i>` and `` elements are widely used to add icons.

All the icons in the icon libraries below, are scalable vector icons that can be resized without losing quality.

Font Awesome 5 Icons

To use the Free Font Awesome 5 icons, add the following line inside the `<head>` section of your HTML page:

Note: No downloading or installation is required!

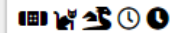
Example

```
<!DOCTYPE html>
<html>
<head>
<title>Font Awesome Icons</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.7.0/css/all.css"
integrity="sha384-1ZN37f5QGTy3VHgisS14W3ExzMWZxybE1SJSesQp9S+oqd12jhcu+A56Ebc1zFSJ"
crossorigin="anonymous">
</head>
<body>

<p>Some Font Awesome icons:</p>
<i class="fas fa-band-aid"></i>
<i class="fas fa-cat"></i>
<i class="fas fa-dragon"></i>
<i class="far fa-clock"></i>
<i class="fas fa-clock"></i>

<p>Styled Font Awesome icons (size, color, and shadow):</p>
<i class="fas fa-clock" style="font-size:24px;"></i>
<i class="fas fa-clock" style="font-size:36px;"></i>
<i class="fas fa-clock" style="font-size:48px;color:red;"></i>
<i class="fas fa-clock" style="font-size:60px;color:lightblue;text-shadow:2px 2px 4px
#000000;"></i>
```

Some Font Awesome icons:



Styled Font Awesome icons (size, color, and shadow):



BACKGROUNDS

```
background-color: #e1efbb
```

[w3schools: background](https://www.w3schools.com/css/css_background.asp)

```
background-color: rgba(200, 0, 200, 0.5);
```

```
background-image: url('img_flwr.png')
```

CSS background properties are used to define the background effects of an element.

CSS properties used for background effects:

- background-color
- background-image
- background-repeat
- background-attachment
- background-position



```
<div style="border:1px solid gray;padding:8px;
background:#e1efbb url('img_flwr.png') no-repeat bottom right">
  <p style="margin-right:150px;">CSS background properties are
    used to define the background effects of an element.</p>
</div>
```

CSS EFFECTS

```
#content {  
  background: #ed9017; /* default */  
  background: linear-gradient(to bottom, #ed9017 0%, #f6e6b4 100%);  
}
```

```
.rounded_border {  
  border: 8px outset red;  
  border-radius: 5px;  
}
```

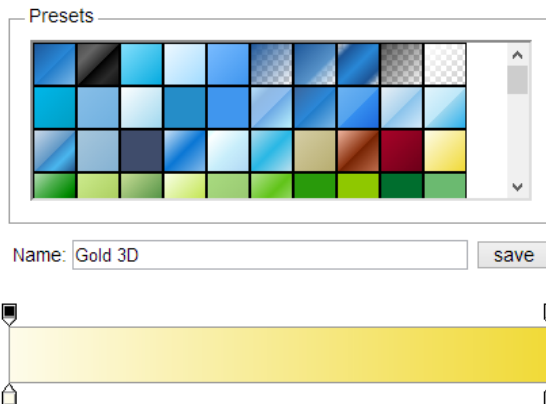
Demo of a paragraph with rounded corners and text with an online font 'Indie Flower'. The subtitle of this page also uses the type font, 'Meie Script', both fonts are available at the [Google Fonts](#).



Demo transition - move your mouse over this area

Anything with class `rotate45` will be rotated 45 degrees. This element is semi-transparent. Default point of rotation is the center of an element, but [you can change this.](#)

Gradients: easy to create with online editor:



colorzilla.com/gradient-editor

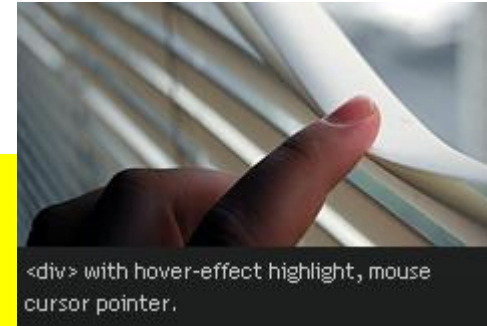
w3schools: [gradients](#), [border-styles](#), [2d transforms](#), [transitions](#), [animations](#)

codepen.io/vanslooten/pen/JYRYJE

HIGHLIGHT ON HOVER

```
.hovereffect {  
  cursor: pointer;  
  background-color: #1c1e1e;  
  background: linear-gradient(#262828,#1c1e1e);  
}
```

```
.hovereffect:hover {  
  opacity: 0.80;  
}
```



pseudo-class **:hover** represents a state of the element

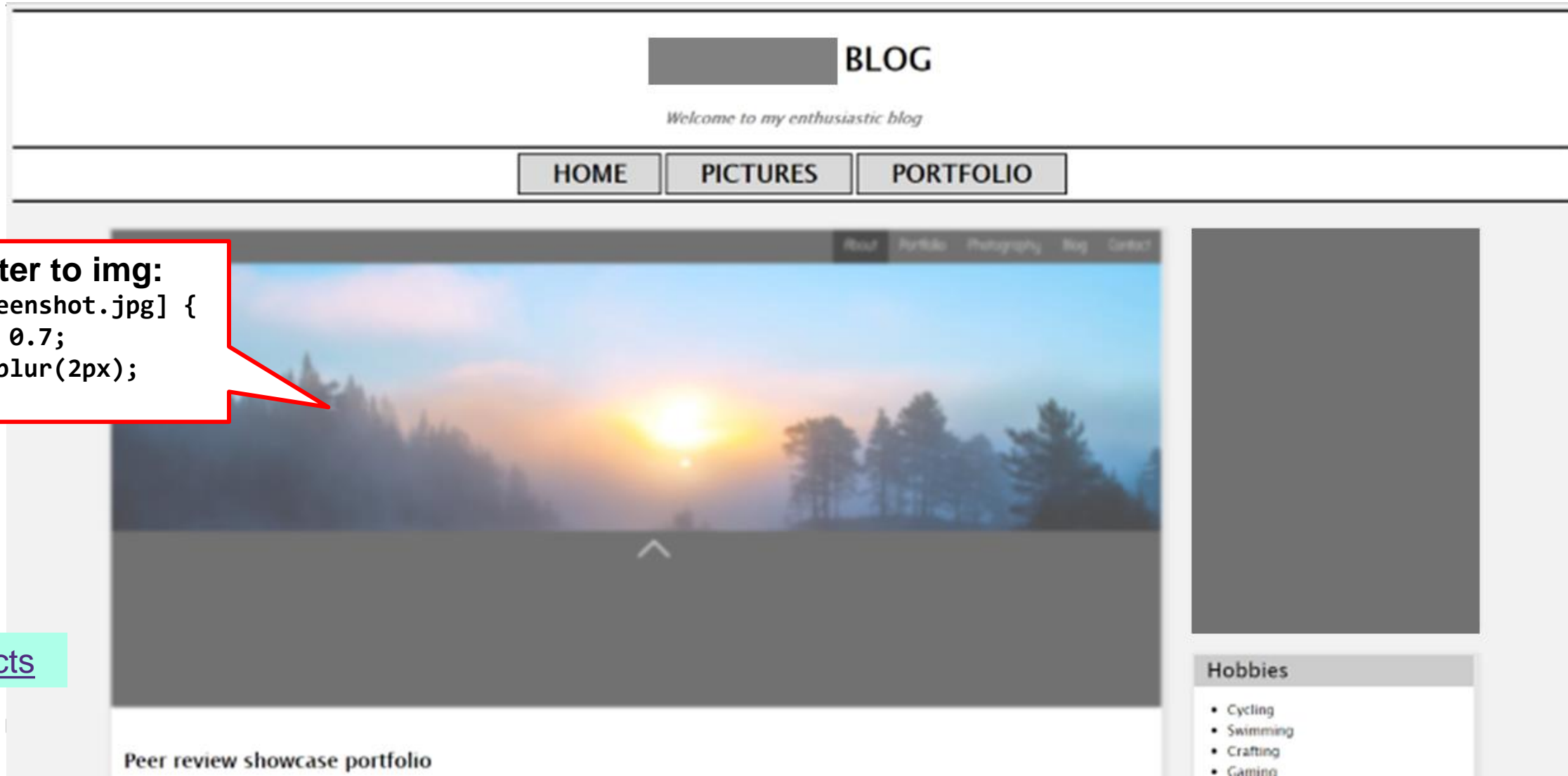
codepen.io/vanslooten/pen/JYRYJE

0: completely transparent
1: completely opaque

w3schools: [pseudo-class](#),
[cursor](#), [gradients](#), [opacity](#)

CSS FILTERING

In some occasions, e.g. when presenting a screenshot, you might want to apply some filtering to prevent looking like a screen-in-a-screen



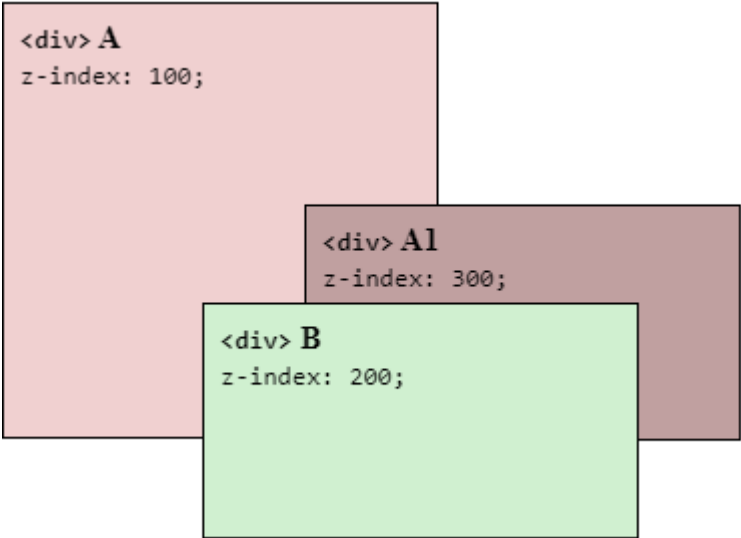
```
Applied filter to img:  
img[src=screenshot.jpg] {  
  opacity: 0.7;  
  filter: blur(2px);  
}
```

[image effects](#)

LAYOUT: LAYERS AND FIXED/STICKY ELEMENTS

- `<div>` element as container, base element for layouts
- Overlap: use **z-index**
- z-index only works on positioned elements (position: absolute, position: relative or position: fixed)

```
#A {  
  background-color: #f0d0d0;  
  border: solid 1px #000000;  
  position: absolute;  
  z-index: 100;  
}
```



```
position: fixed;  
width: 40%;  
margin: 0 30%;  
padding: 15px;  
bottom: 0;
```

codepen.io/vanslooten/pen/gawPWV

w3schools: [CSS positioning](#), [sticky](#)

Content of this `<div>` element is always visible.

@MEDIA QUERIES

selector { style; rule; ... }



Separate piece
of style for
larger screens
(mobile first)

Comments in stylesheet: Java style

```
/* css for larger screens (mobile first!): */  
@media only screen and (min-width: 801px) {  
  nav ul {  
    width: 8em;  
    float: left;  
    margin-top: 1em;  
  }  
  div.content {  
    float: left;  
    margin: 1.8em 0 0 9em;  
    max-width: 70%;  
    clear: none;  
  }  
} /* /@media */
```

codepen.io/vanslooten/pen/gpMQbM

do not forget to add to <head>:

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

w3schools: [media queries](https://www.w3schools.com/css/css3-mediaqueries.php)

JAVASCRIPT

<script>

Declare a variable

Define a function

Change background color of document

```
<script>  
var count = 0;  
function changeBackground(newColor) {  
  document.bgColor = newColor;  
  count++;  
  document.getElementById("demo").innerHTML="We changed the color "+count+" times!";  
}  
</script>
```

Access an element and change its content (innerHTML)

<button> if clicked on, execute function *changeBackground*

```
<button onclick="changeBackground('green')">Green</button>
```



JAVASCRIPT: DRAWING ON A CANVAS

Using [p5.js \(processing\)](#) might be easier

- Canvas as a 'sheet' to draw on
- Drawing commands in Javascript
- Example: `strokeRect(left, top, width, height)`

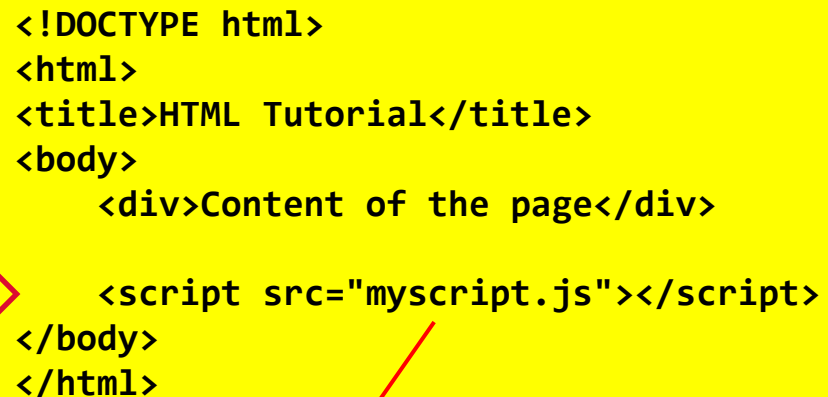
```
<canvas id="drawing" width="360" height="240"></canvas>
<script>
var canvas = document.getElementById('drawing');
var context = canvas.getContext('2d');

context.strokeStyle = '#990000';
context.strokeRect(20,30,100,50);
</script>
```

JAVASCRIPT: WHERE TO PUT IT?

- Always include a script after the html code, preferably at the end of the page
- Why? The script might interact with the html code, but that might not have been loaded yet, as the browser loads top to bottom
- [Another approach is to use `async` or `defer`](#)

```
<!DOCTYPE html>
<html>
<title>HTML Tutorial</title>
<body>
  <div>Content of the page</div>
  <script src="myscript.js"></script>
</body>
</html>
```



Placing scripts in *external files* has some advantages:

- It separates HTML and code
- It makes HTML and JavaScript easier to read and maintain
- Cached JavaScript files can speed up page loads

JQUERY



“A JavaScript library designed to simplify the client-side scripting of HTML”

To use jQuery, insert at bottom of HTML:

[jQuery.com](https://jquery.com)

```
<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.6.0/jquery.min.js"></script>
</body>
```

```
<button>Click me</button>
<div id="panel">Hello World!</div>

<script>
$(document).ready(function(){
  $("#panel").hide();
  $("button").click(function(){
    $("#panel").slideToggle();
  });
});
</script>
```

Wait for document to become ready

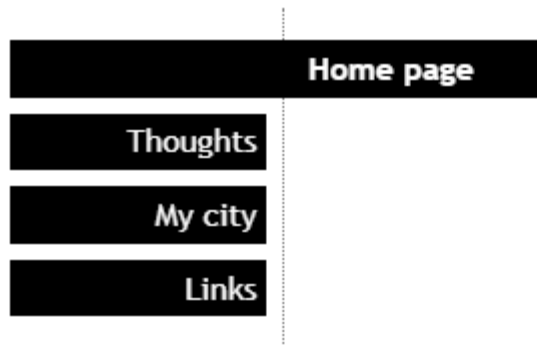
Click me

Hello World!

CSS selector

JQUERY: DYNAMIC MENU & PAGES

codepen.io/vanslooten/pen/gpMQbM



A first page with style

Welcome to this page.

It has no images, but it got style. And it has links, to bring you somewhere else...

On this page links are part of a navigation element: a menu. logic is realized with jQuery.

Only **one** of the pages will be visible

```
<nav>
<ul>
  <li><a href="#page1">Home page</a>
  <li><a href="#page2">Thoughts</a>
  <li><a href="#page3">My city</a>
  <li><a href="#page4">Links</a>
</ul>
</nav>
```

```
<div class="content">

  <div id="page1">
    <!-- Home page content -->
  </div>
  <div id="page2">
    <!-- Second page content -->
  </div>
```

JQUERY: DYNAMIC MENU & PAGES

codepen.io/vanslooten/pen/gpMQbM



A first page with style

Welcome to this page.

It has no images, but it got style. And it has links, to bring you somewhere else...

On this page links are part of a navigation element: a menu. The menu contains logic is realized with jQuery.

CSS selector

Click-function on list-elements in menu

```
$("#nav li").click(function() {
  $("#nav li").removeClass("current"); // Remove any active class
  $(this).addClass("current"); // Add "current" class to selected menu item

  $("#div.content div").hide(); // Hide all content pages

  // Find the href attribute value of the clicked menu item to identify the active page:
  var activePage = $(this).find("a").attr("href");
  $(activePage).fadeIn(); // Fade in the active page content
}); // end click method
```