

Web Design: HOWTO

UDACITY: Intro to HTML and CSS

<https://www.udacity.com/course/intro-to-html-and-css--ud304>

Intro to Course

- Lesson 1
HTML, CSS, and Boxes
- Lesson 2
CSS Framework. Responsive Layout
- Lesson 3
Bootstrap

Lesson 1. HTML, CSS, and Boxes

How to look a basic design mockup
and translate it to HTML and CSS to
create a basic web page

The First Step

<https://www.youtube.com/watch?v=xIOeccZZ-5g>

- **Objective**: image or PDF → website
- **Role**: Front-End developer
- **Technologies**:
 - HTML → structure
 - CSS → style
 - JS → interactive components

Exploring the Web


https://www.youtube.com/watch?v=_e-gGAM4noQ

- *Navigator* → *Menu* → *Developer Tools*
- Where is...
 - HTML code
 - CSS code
- How to select (rectangular) elements.
- How to navigate deeper and deeper (***Element window***)

Resource → https://en.wikipedia.org/wiki/Main_Page

Quiz solution → <https://www.youtube.com/watch?v=yeRiFE2sRyc>

Ejercicio 1

- *Indica cómo acceder a las herramientas de desarrollador en los navegadores Google Chrome y Firefox.*
- *Localiza el icono  y explica cuál es su utilidad.*
- *Resuelve la cuestión que se plantea al final de la sección... **Exploring the Web: observando la estructura de la web...***
 - ***¿Todos los elementos son visibles?***
 - ***¿Todos los elementos son rectángulos?***
 - ***¿Puedes leer el mismo texto que en la web?***
- *Voluntario: Explica las posibilidades (ventanas y opciones) de las herramientas de desarrollador.*

Page Structure

<https://www.youtube.com/watch?v=y5NbZSvn5N8>


Page structure → Tree structure

Resource →

<http://assignments.udacity-extras.appspot.com/courses/html-css/samples/explore.html>

Page Structure

Hello, *Udacity student!*



This is a very simple page for you to explore.

Elements

Network

Sources

Timeline

Profiles

»

```
<!DOCTYPE html>
<html>
  <head></head>
  <body>
    <h1>
      "Hello, "
      <em>Udacity student!</em>
    </h1>
    <div>
      
      <p>This is a very simple page for you to explore.</p>
    </div>
  </body>
</html>
```


Ejercicio 2

Utiliza las herramientas de desarrollador para resolver la cuestión que se plantea al final de la sección...

Page Structure: realizar una captura de todos los elementos desplegados.

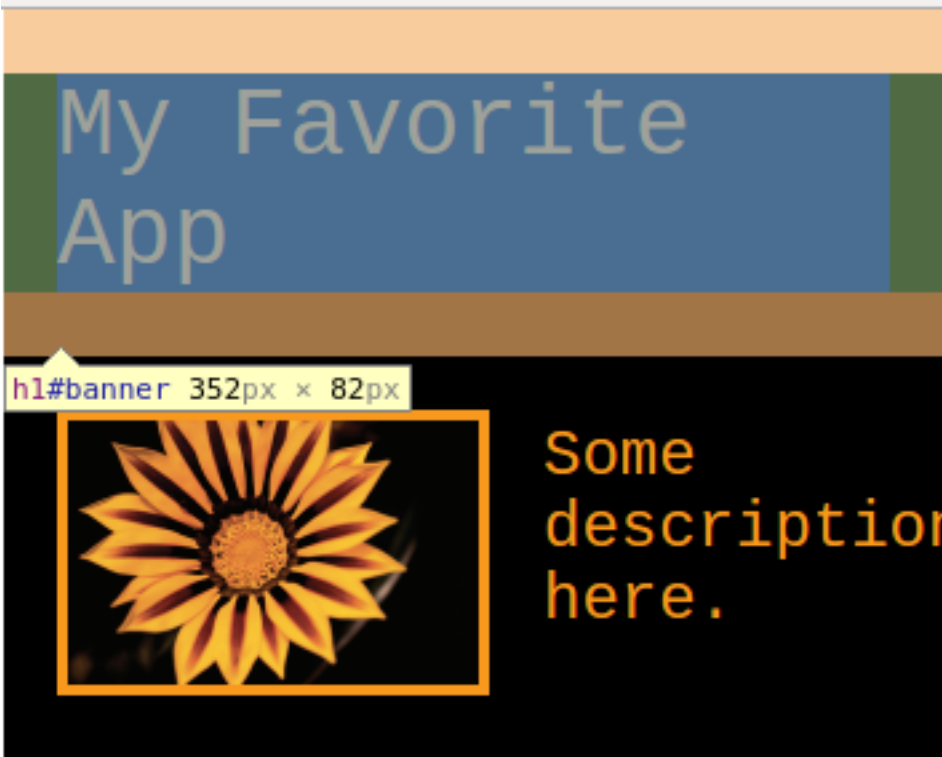
Visual Styling

<https://www.youtube.com/watch?v=DWebPI5kqvo>

- *Step 1: click icon → select an element*
- *Step 2: select an element*
- *Step 3: check style data*

<http://assignments.udacity-extras.appspot.com/courses/html-css/samples/style-2.html>

Visual Styling



h1#banner 352px × 82px

My Favorite App

Some description here.

Elements Network Sources

```
<h1 id="banner">My Favorite App</h1>
</div>
<div class="row">
  <div class="image">
    
  </div>
  <div class="description">...</div>
</div>
</div>
```

html body div#content div h1#banner

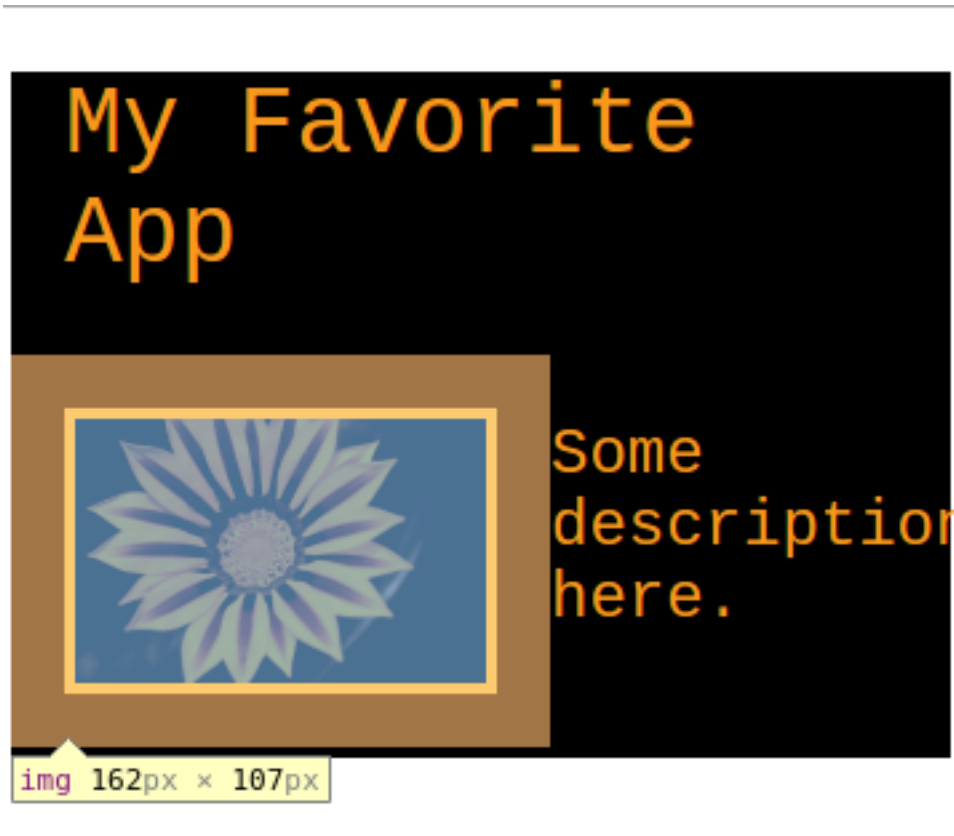
Styles Event Listeners DOM Breakpoints

Filter

```
element.style {
}

h1 {
  color: #f8981c;
  font-size: 36px;
  font-family: "Courier New";
  padding: 0px 20px;
  font-weight: normal;
```

Visual Styling



Elements Network Sou

```
<h1 id="banner">My FAVORITE App</h1>
</div>
<div class="row">
  <div class="image">
    
  </div>
  <div class="description">
    Some description here.
  </div>
</div>
```

html body div#content div.row div.

Styles Event Listeners DOM Breakpoi

Filter

```
element.style {
}

.image > img {
  border: 4px solid #f8981c;
  margin: 20px;
}
```

Ejercicio 3

Utiliza las herramientas de desarrollador para resolver la cuestión que se plantea al final de la sección...

Visual Styling:

- *¿Valor de “font-size” para “h1”?*
- *¿Valor de “border-width” para la imagen?*

Boxes Everywhere

https://www.youtube.com/watch?v=_optftESD0M

Every element is a box, even the non-rectangular images!!!

<http://assignments.udacity-extras.appspot.com/courses/html-css/samples/shapes.html>

Ejercicio 4

Utiliza las herramientas de desarrollador para resolver la cuestión que se plantea al final de la sección...

Boxes Everywhere: ¿Qué ocurre cuando desmarcamos la propiedad “border-radius”.

Boxifying Design

<https://www.youtube.com/watch?v=O3SuZAomNWk>



JANE DOETTE

FRONT-END NINJA



Featured Work



APPIFY

<https://github.com/udacity/Appify/>



SUNFLOWER

<https://github.com/udacity/Sunflower/>



BOKEH

<https://github.com/udacity/Bokeh/>

Ejercicio 5

Utiliza las herramientas de desarrollador para resolver la cuestión que se plantea al final de la sección...

Boxifying Design:

- *¿Cómo hacer el “boxifying”?*
- *¿Cuántas “boxes” hay en el diseño de la diapositiva anterior?*

Interview with Jacques

https://www.youtube.com/watch?v=Nj5RCaE_b00

Jacques (a front-end developer) advice's:

- *Start with the big boxes and split them going from BIG to SMALL*
- *If you have any problem... just go for a pencil*

Boxes To HTML

https://www.youtube.com/watch?v=JsH_eSZGhyg

MY FAVORITE APP

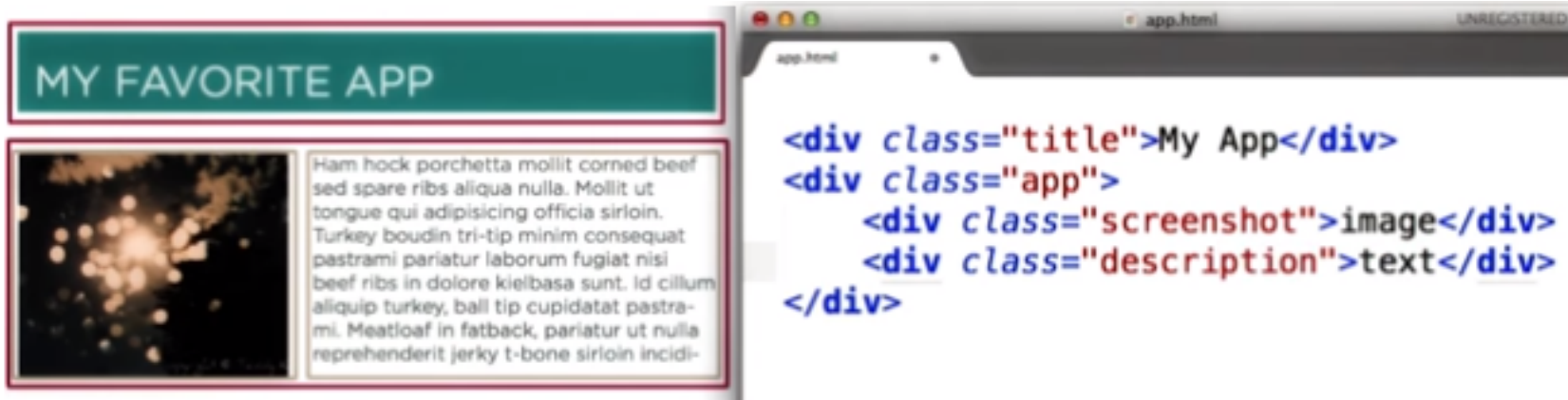


Ham hock porchetta mollit corned beef
sed spare ribs aliqua nulla. Mollit ut
tongue qui adipisicing officia sirloin.
Turkey boudin tri-tip minim consequat
pastrami pariatur laborum fugiat nisi
beef ribs in dolore kielbasa sunt. Id cillum
aliquip turkey, ball tip cupidatat pastra-
mi. Meatloaf in fatback, pariatur ut nulla
reprehenderit jerky t-bone sirloin incidi-

Boxes To HTML

Sublime Text is the recommended code editor -
it's free to use!

- *Step 1: boxifying*
- *Step 2: define each box with a <div> tag*
- *Step 3: define labels as class attributes*



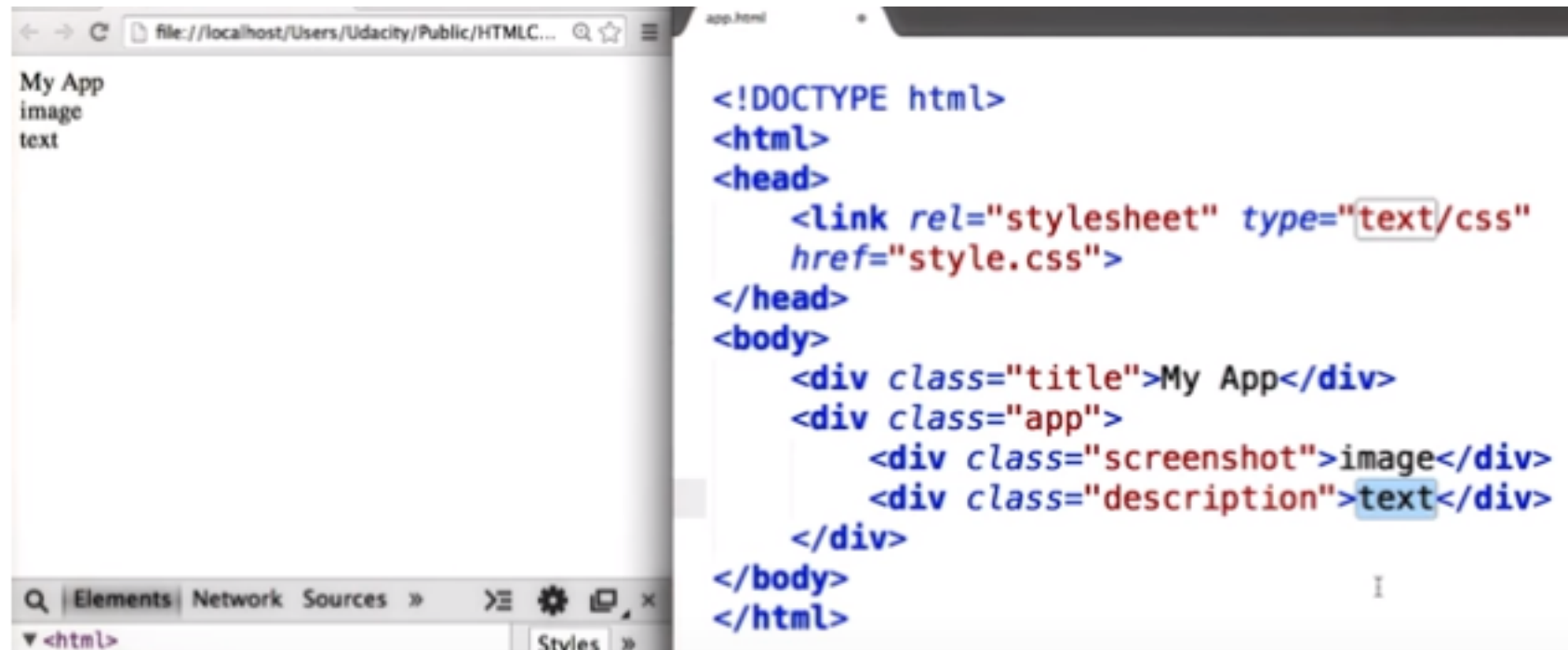
Creating the Files

Create Folder and File Structure

- Create a folder for all your future web projects somewhere convenient, for example on your Desktop or in your Documents folder and call the folder “portfolio”.
- Create another folder inside it for this first page, call it “toplist”.
- Create 2 files there - `index.html` and `style.css`.
- The structure should look like this:
 - Desktop
 - portfolio
 - toplist
 - index.html
 - style.css

Adding Style

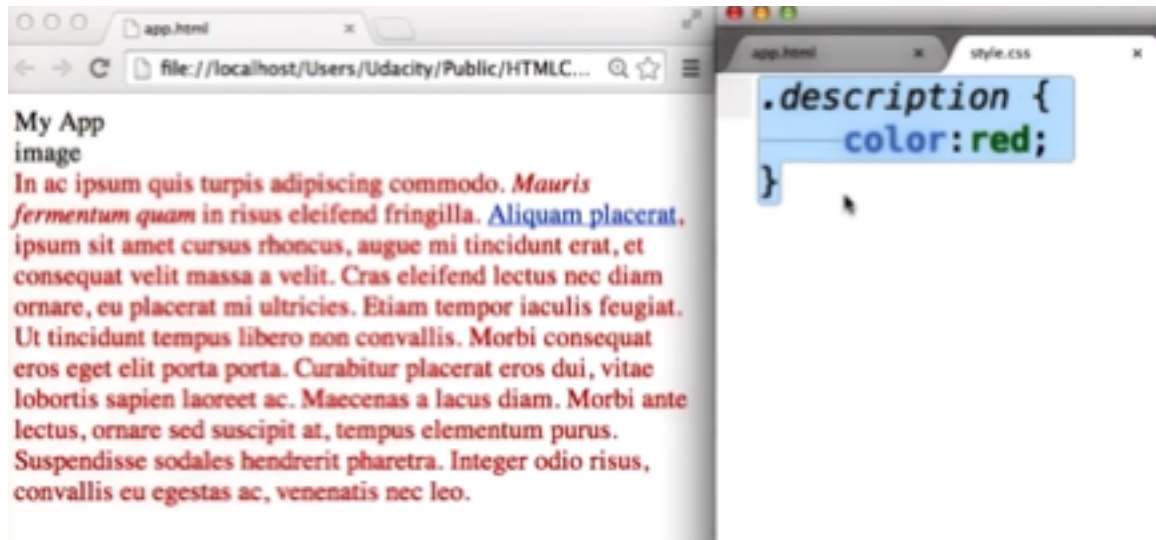
<https://www.youtube.com/watch?v=WkbHHwRgEM0>



Adding Style

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>Favourite App</title>
5      <link rel="stylesheet" type="text/css" href="style.css">
6  </head>
7  <body>
8      <h1 class="title">My App</h1>
9      <div class="app">
10         <div class="screenshot">image</div>
11         <div class="description">
12             In ac ipsum quis turpis adipiscing commodo. <em>Mauris fermentum quam</em> in
13             risus eleifend fringilla. <a href="#">Aliquam placerat</a>, ipsum sit amet
14             cursus rhoncus, augue mi tincidunt erat, et consequat velit massa a velit.
15             Cras eleifend lectus nec diam ornare, eu placerat mi ultricies. Etiam tempor
16             iaculis feugiat. Ut tincidunt tempus libero non convallis. Morbi consequat
17             eros eget elit porta porta. Curabitur placerat eros dui, vitae lobortis
18             sapien laoreet ac. Maecenas a lacus diam. Morbi ante lectus, ornare sed
19             suscipit at, tempus elementum purus. Suspendisse sodales hendrerit pharetra.
20             Integer odio risus, convallis eu egestas ac, venenatis nec leo.
21         </div>
22     </div>
23 </body>
24 </html>
```

Adding Style



Understanding CSS

<https://www.youtube.com/watch?v=oaitg9nRqvc>

Cascading means that...

The MOST specific rule is applied to every element!!!

Styling Up

https://www.youtube.com/watch?v=EsBmDg_edGQ

- *Very nice **article** on CSS selectors*
- *CSS **Documentation***

Ejercicio 6

*Cuestión planteada al final de la sección **Styling Up** sobre CSS Documentation...*

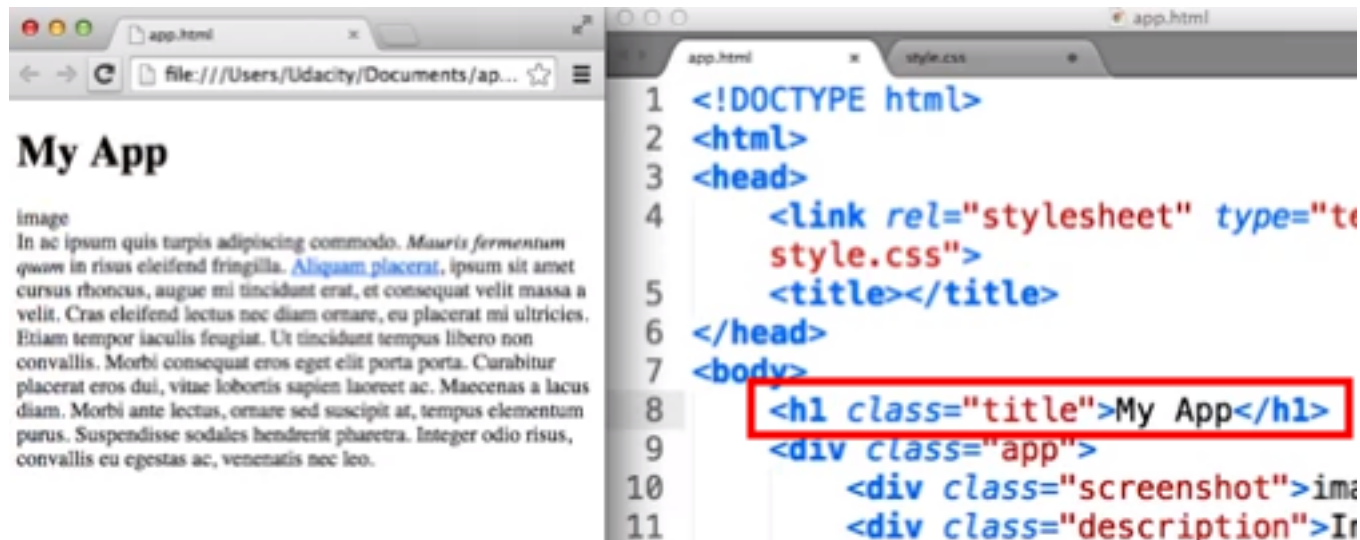
- *¿Cuál de los siguientes valores puede adoptar la propiedad font-style?
 - *italic*
 - *normal*
 - *bold*
 - *standard**
- *¿Qué propiedad utilizarías para que el texto se muestre “bold”?*

Using Semantic Tags

<https://www.youtube.com/watch?v=QXKKWQXXYLo>

Change <div> tag for Semantic tags

Ex. : change <div> for <h1>

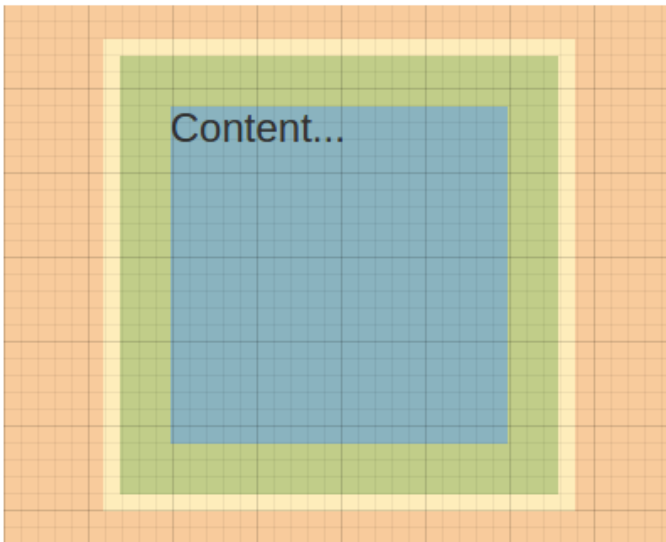


The Box Revisited

<https://www.youtube.com/watch?v=jlp8uLzt16E>

link to → box model demo

The Box Model



Colors:

- margin
- border
- padding
- content

Grid

The grid is displayed purely for visual reasons.

Light lines are every 10px, dark - 50px

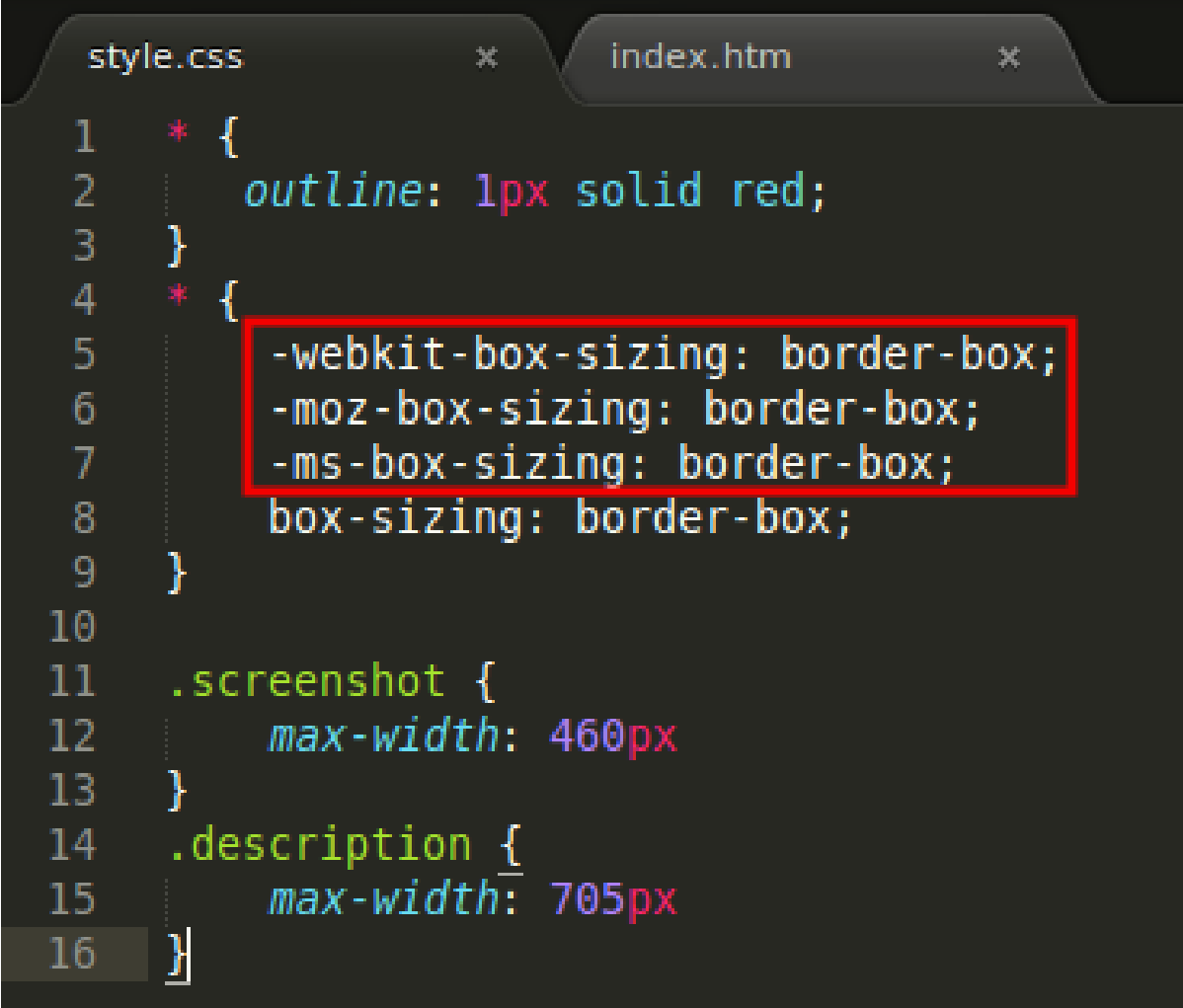
Dev Tools

- Right click inside the blue "Content" box and select "Inspect Element".
- Play with CSS for the #demo in "Styles" tab on the right side.
- Look at the "Computed" tab on the right side.

The Box Revisited

- *Element size = border + padding + content*
(Ex. model: element size = 10 + 30 + 200 + 30 + 10 = 280 pixels)
- *Element size property* → *box-sizing: border-box;*
- *Max size property* → *max-width* (px or %)
- *Browser specific prefixes*
 - webkit-box-sizing: border-box;
 - moz-box-sizing: border-box;
 - ms-box-sizing: border-box;

The Box Revisited



A screenshot of a code editor with two tabs: 'style.css' and 'index.htm'. The 'style.css' tab is active, showing CSS code. The code includes a universal selector '*' with an 'outline' property and two class selectors, '.screenshot' and '.description', with 'max-width' properties. A red rectangular box highlights the vendor-prefixed 'box-sizing' properties: '-webkit-box-sizing: border-box;', '-moz-box-sizing: border-box;', and '-ms-box-sizing: border-box;'. The standard 'box-sizing: border-box;' is listed below these.

```
1  * {
2      outline: 1px solid red;
3  }
4  * {
5      -webkit-box-sizing: border-box;
6      -moz-box-sizing: border-box;
7      -ms-box-sizing: border-box;
8      box-sizing: border-box;
9  }
10
11  .screenshot {
12      max-width: 460px
13  }
14  .description {
15      max-width: 705px
16  }
```

Positioning Boxes

<https://www.youtube.com/watch?v=sv2rVjnYfGQ>

MY FAVORITE APP



Ham hock porchetta mollit corned beef sed spare ribs aliqua nulla. Mollit ut tongue qui adipiscing officia sirloin. Turkey boudin tri-tip minim consequat pastrami pariatur laborum fugiat nisi beef ribs in dolore kielbasa sunt. Id cillum aliquip turkey, ball tip cupidatat pastrami. Meatloaf in fatback, pariatur ut nulla reprehenderit jerky t-bone sirloin incidi-

My App

Image

In ac ipsum quis turpis adipiscing commodo. *Mauris fermentum quam* in risus eleifend fringilla. *Aliquam placerat*, ipsum sit amet cursus rhoncus, augue mi tincidunt erat, et consequat velit massa a velit. Cras eleifend lectus nec diam ornare, eu placerat mi ultricies. Etiam tempor iaculis feugiat. Ut tincidunt tempus libero non convallis. Morbi consequat eros eget elit porta porta. Curabitur placerat eros dui, vitae lobortis sapien laoreet ac. Maecenas a lacus diam. Morbi ante lectus, ornare sed suscipit at, tempus elementum purus. Suspendisse sodales hendrerit pharetra. Integer odio risus, convallis eu egestas ac, venenatis nec leo.

Positioning Boxes

*How to use **flex box layout**...*

*...if you want several elements to be next to each other (Ex.: snapshot and description) you can change the **display attribute** of the parent directory (Ex.: app) to **value flex***

This rule as-is works with Chrome 29+, IE 11+, and Mozilla 28+. In order to support Safari, the `-webkit-` prefix must be added:

```
.app {  
  display: -webkit-flex;  
  display: flex;  
}
```

Positioning Boxes

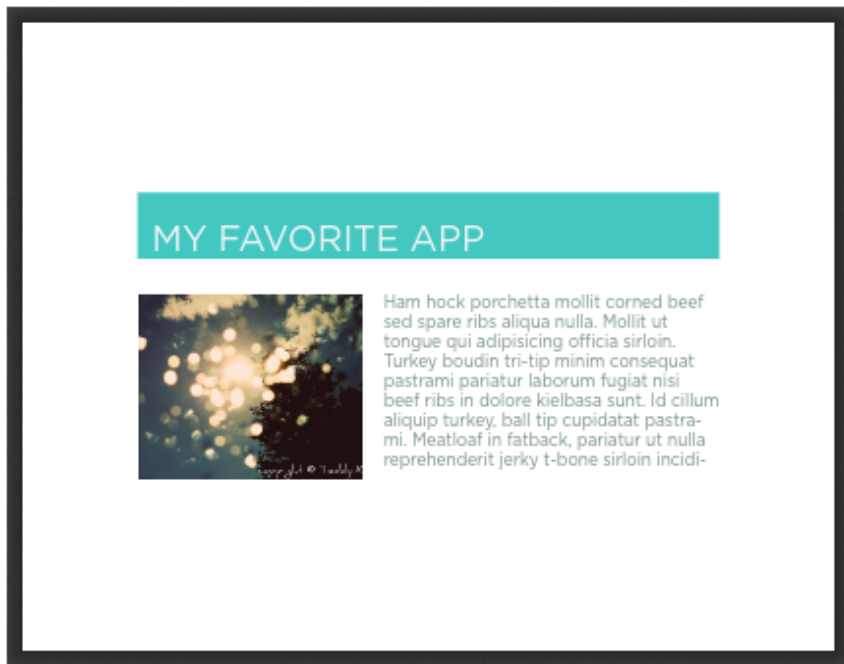
My App

imageIn ac ipsum quis turpis adipiscing commodo. *Mauris fermentum quam* in risus eleifend fringilla. *Aliquam placerat*, ipsum sit amet cursus rhoncus, augue mi tincidunt erat, et consequat velit massa a velit. Cras eleifend lectus nec diam ornare, eu placerat mi ultricies. Etiam tempor iaculis feugiat. Ut tincidunt tempus libero non convallis. Morbi consequat eros eget elit porta porta. Curabitur placerat eros dui, vitae lobortis sapien laoreet ac. Maecenas a lacus diam. Morbi ante lectus, ornare sed suscipit at, tempus elementum purus. Suspendisse sodales hendrerit pharetra. Integer odio risus, convallis eu egestas ac, venenatis nec leo.

Adding Image

<https://www.youtube.com/watch?v=qifSYo3AUu8>

How to add an image... (visto en diapositivas de HTML5)



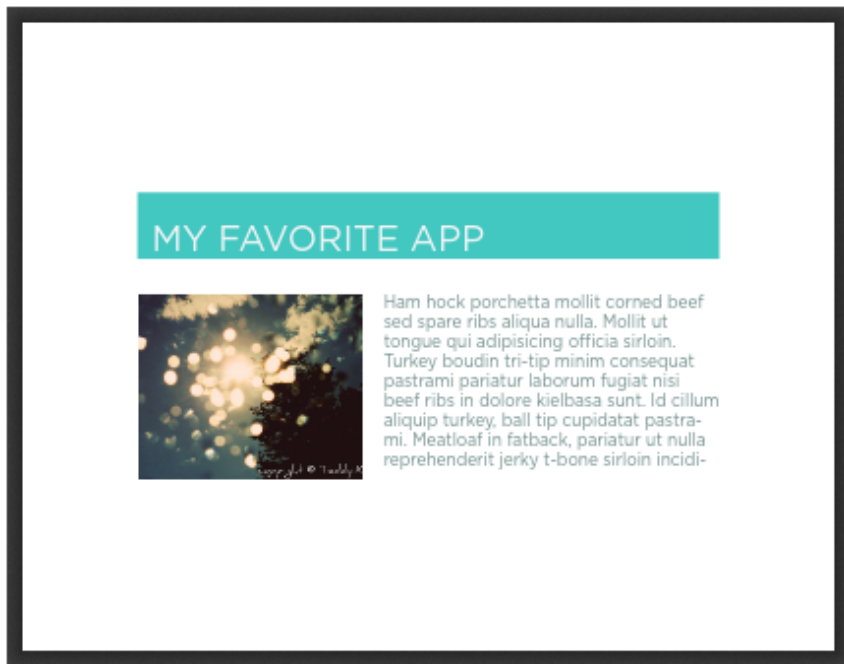
My App



In ac ipsum quis turpis adipiscing con Mauris fermentum quam in risus eleif fringilla. Aliquam placerat ipsum sit cursus rhoncus, augue mi tincidunt er consequat velit massa a velit. Cras ele lectus nec diam ornare, eu placerat m Etiam tempor iaculis feugiat. Ut tincic tempus libero non convallis. Morbi co eros eget elit porta porta. Curabitur p eros dui, vitae lobortis sapien laoreet Maecenas a lacus diam. Morbi ante le ornare sed suscipit at, tempus elemen Suspendisse sodales hendrerit phareti odio risus, convallis eu egestas ac, ve nec leo.

Adding Image

How to add an image... (visto en diapositivas de HTML5)



My App



In ac ipsum quis turpis adipiscing con Mauris fermentum quam in risus eleif fringilla. Aliquam placerat ipsum sit cursus rhoncus, augue mi tincidunt er consequat velit massa a velit. Cras ele lectus nec diam ornare, eu placerat m Etiam tempor iaculis feugiat. Ut tincic tempus libero non convallis. Morbi co eros eget elit porta porta. Curabitur p eros dui, vitae lobortis sapien laoreet Maecenas a lacus diam. Morbi ante le ornare sed suscipit at, tempus elemen Suspendisse sodales hendrerit phareti odio risus, convallis eu egestas ac, ve nec leo.

Code, Test, Refine

https://www.youtube.com/watch?v=k_wmXN5V1_c

Pattern:

code (Sublime Text) → **test** (Navigator) → **refine** (Start coding again)

- Step 1: **Boxifying** (divide and conquer)
- Step 2: **Semantic elements** (headers, content, footers...)
- Step 3: Write **HTML** code
- Step 4: Write **CSS** styles (from site-wide elements to widgets)
- Step 5: **fix** things (repeat steps 3, 4, and 5 until you think it's OK)

More on DevTools & Compating with the Design

<https://www.youtube.com/watch?v=gPL4vywt8XM>

https://www.youtube.com/watch?v=Rxs_X2AUILg

Ejercicio 7

Realiza los últimos ajustes (márgenes y colores) para que tu web sea idéntica al resultado esperado.

MY FAVORITE APP



33BEBE
7C8B88



Ham hock porchetta mollit corned beef
sed spare ribs aliqua nulla. Mollit ut
tongue qui adipisicing officia sirloin.
Turkey boudin tri-tip minim consequat
pastrami pariatum laborum fugiat nisi
beef ribs in dolore kielbasa sunt. Id cillum
aliquip turkey, ball tip cupidatat pastra-
mi. Meatloaf in fatback, pariatum ut nulla
reprehenderit jerky t-bone sirloin incidi-

Verifying HTML and CSS

<https://www.youtube.com/watch?v=f4h2PYfAEB0>

To verify HTML:

http://validator.w3.org/#validate_by_input

To verify CSS

http://jigsaw.w3.org/css-validator/#validate_by_input

Ejercicio 8



E8E8E7
8BCC98



HEADING1

Ham hock porchetta mollit corned beef sed spare ribs aliqua nulla. Mollit ut tongue qui adipisicing officia sirloin.

Turkey boudin tri-tip minim consequat pastrami pariatur laborum fugiat nisi beef ribs in dolore kielbasa sunt. Id cillum aliquip turkey, ball tip cupidatat pastrami. Meatloaf in fatback, pariatur ut nulla reprehenderit jerky t-bone sirloin incididunt shank pork belly ut. Porchetta aliquip corned beef qui eiusmod eu andouille laboris elit mollit id. Ea consectetur ad eiusmod ex eu jowl ut pork belly enim.v

HEADING1

Ham hock porchetta mollit corned beef sed spare ribs aliqua nulla. Mollit ut tongue qui adipisicing officia sirloin.

Turkey boudin tri-tip minim consequat pastrami pariatur laborum fugiat nisi beef ribs in dolore kielbasa sunt. Id cillum aliquip turkey, ball tip cupidatat pastrami. Meatloaf in fatback, pariatur ut nulla reprehenderit jerky t-bone sirloin incididunt shank pork belly ut. Porchetta aliquip co

Ejercicio 9



JANE DOETTE

FRONT-END NINJA



F8981C
BCBBBB
747704



Featured Work



APPIFY

<https://github.com/udacity/Appify/>



SUNFLOWER

<https://github.com/udacity/Sunflower/>



BOKEH

<https://github.com/udacity/Bokeh/>

Ejercicio 10



JANE DOETTE

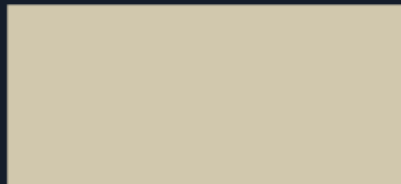
FRONT-END NINJA



D5245B
131A2D
D0C4AB



Featured Work



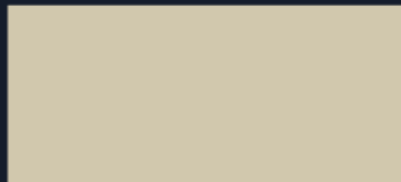
APPIFY

<https://github.com/udacity/Appify/>



SUNFLOWER

<https://github.com/udacity/Sunflower/>



BOKEH

<https://github.com/udacity/Bokeh/>