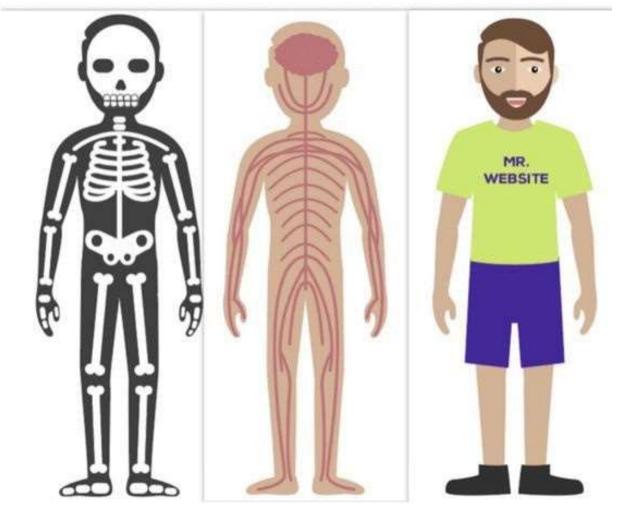




HTML

JS

CSS



#### What is CSS?

CSS stands for **Cascading Style Sheets**.

The main responsibilities of the CSS file are to:

- Describes how HTML elements should be styled and display on our browsers.
- Control the layout of multiple web pages all at once by using it we can save a lot of duplicated code.

**Note:** We can apply CSS styling directly on an HTML element or with external style sheets. Those style sheets are stored in CSS files.



#### How to write CSS code?

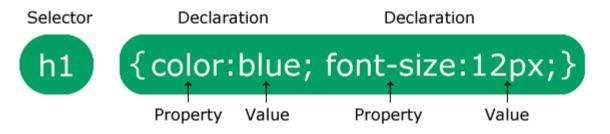
The CSS syntax is very simple:

Selector - points to the HTML element you want to style

**Declaration block -** contains one or more declarations separated by semicolons

**Property and value -** Each declaration includes a CSS property name and a value, separated by a colon

#### **CSS Syntax**



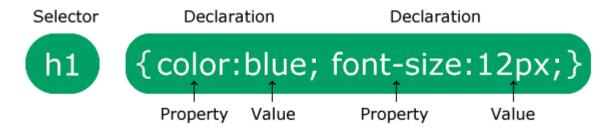


#### How to insert CSS

We have 3 ways to insert CSS style into our HTML pages:

- 1. External CSS file create a new css file and import it into our HTML file
- 2. Creating **internal CSS style** using the <style></style> tag inside the <head> section
- 3. Inline CSS apply css style on a single element by adding the "style" attribute

#### **CSS Syntax**





#### **CSS Selectors**



In CSS, selectors are patterns used to select the element(s) you want to style Most common selectors are:

- .class Selects all elements with class="class name"
- #id Selects the element with id="id name"
- element (p for example) Select all <element> elements in the example all elements
- element:hover (link:hover for example) Selects elements on mouse over in the example all <link> elements that our mouse is over them right now

For more details - <a href="https://www.w3schools.com/cssref/css\_selectors.asp">https://www.w3schools.com/cssref/css\_selectors.asp</a>

Note: CSS selector hierarchy determine that the most specific style will override the previous one







#### CSS fonts:

font property - Determine the font of the text inside the selector.

Choosing the right font has a huge impact on how the readers experience a website.

The right font can create a strong identity for your brand.

The most common and web safe fonts to use are:

- Arial (sans-serif)
- Verdana (sans-serif)
- Helvetica (sans-serif)
- Tahoma (sans-serif)
- Trebuchet MS (sans-serif)
- Times New Roman (serif)





#### **CSS** fonts:

We can choose from different types of fonts to use in our HTML file:

- Web safe fonts fonts that our web page is familiar with and we don't need to import them
- External fonts import new fonts by a link tag to our HTML file

Basic CSS properties that are relevant to fonts:

- font-family The font type that we want to use
- font-size The size of the font (units in px / em)
- **line-height -** Set the space between lines
- font-weight Set the boldness of the font (just like <strong> tag)
- font-style Set the style of the font (just like the <b> tag italics



#### Text transformation

The **text-transform** CSS property specifies how to capitalize an element's text. It can be used to make text appear in all-uppercase or all-lowercase, or with each word capitalized. Example of usage:

- text-transform: uppercase;
- text-transform: lowercase;

The **text-decoration** property specifies the decoration added to text, and is a shorthand property for:

- text-decoration-line (required) property that sets the kind of text decoration to use (like underline, overline, line-through)
- text-decoration-color property that specifies the color of the text-decoration.
- text-decoration-style property that sets the style of the text decoration (like solid, wavy, dotted, dashed, double).

#### CSS colors:



**Color property** - Set the color of the text inside the selector

We have 3 different ways to specify a color:

- Using specific color name red, green, blue...
- Using the rgb() configuration We need to pass 3 arguments for the rgb() function:
  - <u>First argument number between 0-255 that represent how much "red" i want in my color</u>
  - Second argument number between 0-255 for the "blue"
  - Third argument number between 0-255 for the "green"
- Using the hex color name hex color names are starting with # and a number or letters comes after that. For example - #ffffff = white color in hex.



## **Background Styling**

The CSS background properties are used to add background effects for elements

Basic CSS properties that are relevant to background:

- background-color Set colored background
- background-image Set image as background
- background-size Set the size of the background image (cover value will cover the entire element space)
- background-repeat Should the image repeat itself to match the full element size
- background-position Where the image should be positioned in the background
- background-attachment Should the image move with the mouse scroll (fixed = not moving)



## Background Styling Code Example

```
style>
body {
  background-image: url('w3css.gif');
  background-repeat: no-repeat;
  background-attachment: fixed;
  background-position: center;
}
</style>
```



## **Border Styling**

The CSS border properties allow you to specify the style, width, and color of an element's border.

Basic CSS properties that are relevant to border:

- border-width specifies the width of the four borders
- **border-color -** set the color of the border
- border-style sets the style of an element's four borders (solid, dotted, double, dashed)
- border-radius defines the radius of the element's corners



## Border Styling Code Example

```
<style>
p {
   border: 5px solid red;
}
</style>
This property is a shorthand property for border-width, border-style, and border-color.
```

```
<style>
p {
  border-bottom: 5px dotted blue;
}
</style>
```

This property is a shorthand property for border-width, border-style, and border-color.

## Background Styling Code Example

```
.button {
  background-color: #4CAF50;
                                          CSS Buttons
  border: 1px solid grey;
  color: white;
  padding: 15px 32px;
                                                        Button
                                          Default Button
  text-align: center;
  text-decoration: none;
  display: inline-block;
  font-size: 16px;
  margin: 4px 2px;
  cursor: pointer;
</style>
```

המכללה למקצועות הדיגיטל וההייטק

#### Box Model:

The CSS box model is essentially a box that wraps around every HTML element The box model consists of: margins, borders, padding, and the actual content

The image below illustrates the box model:

Margin
Border
Padding
Content

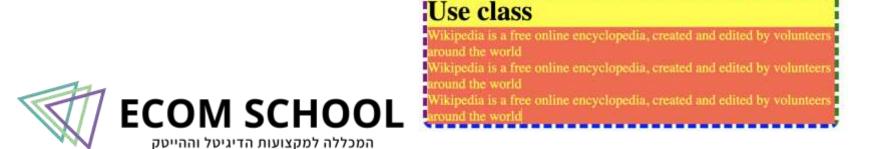
## Class Exercise - Text Styling

#### **Instructions:**

Create a new project with HTML and CSS files, your code should implement the following:

# Use class Wikipedia is a free online encyclopedia, created and edited by volunteers around the world Wikipedia is a free online encyclopedia, created and edited by volunteers around the world Wikipedia is a free online encyclopedia, created and edited by volunteers around the world

When hovering with the mouse on the "Use class" area:



## **Class Exercise Solution - Text Styling**



#### **CSS Units**

CSS has several different units for expressing a length.

Many CSS properties take "length" values, such as width, margin, padding, font-size, etc... Common CSS length units:

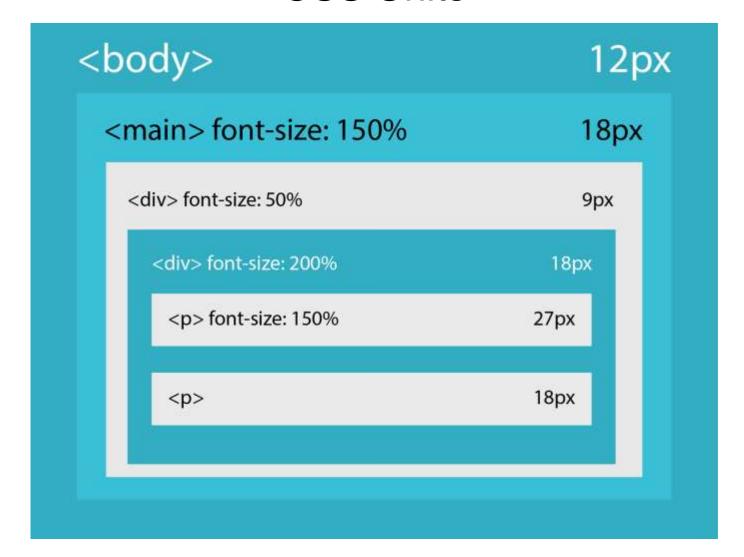
- **px** pixels (1px = 1/96th of 1in)
- em Relative to the font-size of the element (2em means 2 times the size of the current font)
- **rem -** Relative to font-size of the root element
- % Relative to the parent element



For more details - <a href="https://www.w3schools.com/cssref/css\_units.asp">https://www.w3schools.com/cssref/css\_units.asp</a>



### **CSS Units**





## Float & Alignment

The **float** property specifies whether an element should float to the left, right, or not at all. With the float property we can move our elements and determine where they should be located.

Float can be configured to:

- **left** The element floats to the left of its container
- **right** The element floats to the right of its container
- none The element does not float
   (will be displayed just where it occurs in the text) This is the default configuration
- inherit The element inherits the float value of its parent

**Note:** elements that doesn't have the float configuration will appear on top of the elements with the float configuration

## Float & Alignment

The **text-align** property specifies the horizontal alignment of text in an element. text-align can be configured to:

- **left** Aligns the text to the left
- **right** Aligns the text to the left
- center Centers the text
- justify Stretches the lines so that each line has equal width (like in newspapers and magazines)
- initial Sets this property to its default value
- inherit Inherits this property from its parent element



## Div Styling

```
<style>
 div{
   margin: 10px;
                                                                             Yellow
                                                  Blue
                                                            Red
  .div-1 {
   background-color: blue;
   height: 50px;
   width: 50px;
   float: left;
  .div-2 {
   background-color: red;
   height: 100px;
   width: 100px;
   float: left;
  .div-3 {
   background-color: yellow;
   height: 200px;
   width: 200px;
   float: left;
</style>
```

## Span styling

```
My mother has <span style="color:blue;font-weight:bold">blue</span> eyes and my father has <span style="color:darkolivegreen;font-weight:bold">dark green</span> eyes.
```

My mother has blue eyes and my father has dark green eyes.

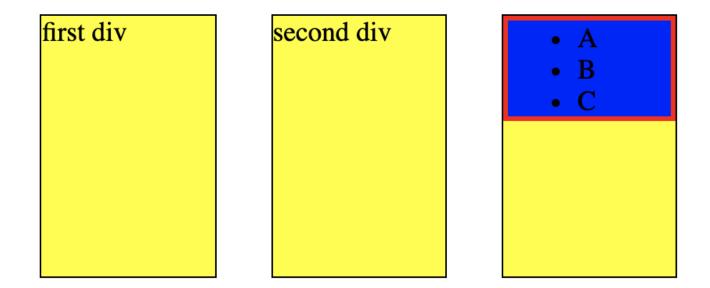


## Class Exercise - Div Styling

#### **Instructions:**

Create a new project with HTML and CSS files.

Your code should implement the following:





# **Class Exercise Solution - Div Styling**

