

INTRO TO WEB DEVELOPMENT

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w3schools.com

THE WORLD'S LARGEST WEB DEVELOPER SITE

TUTORIALS ▾REFERENCES ▾EXAMPLES ▾EXERCISES ▾

HTML and CSS

Learn HTML

Learn CSS

Learn Bootstrap

Learn W3.CSS

Learn Colors

Learn Icons

Learn Graphics

Learn How To

Learn Sass

JavaScript

Learn JavaScript

Learn jQuery

Learn React

Learn AngularJS

Learn JSON

Learn AJAX

Learn W3.JS

Server Side

Learn SQL

Learn PHP

Learn ASP

Learn Node.js

Learn Raspberry Pi

Programming

Learn Python

Learn Java

Learn C++

Learn C#

Learn Machine Learning

Web Building

Web Templates

Web Statistics

Web Certificates

Web Editor

Web Development

XML Tutorials

Learn XML

Learn XML AJAX

Learn XML DOM

Learn XML DTD

Learn XML Schema

Learn XSLT

Learn XPath

Learn XQuery

References

HTML Reference

CSS Reference

JS Reference

SQL Reference

PHP Reference

jQuery Reference

Python Reference

HTML

The language for building web pages

LEARN HTMLHTML REFERENCE

HTML Example:

```
<!DOCTYPE html>
<html>
<title>HTML Tutorial</title>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

Try it Yourself »

CSS Example:

```
body {
  background-color: lightblue;
}

h1 {
  color: white;
  text-align: center;
}

p {
  font-family: verdana;
  font-size: 20px;
}
```

Try It Yourself »

CSS

The language for styling web pages

LEARN CSSCSS REFERENCE

JavaScript

The language for programming web pages

LEARN JAVASCRIPTJAVASCRIPT REFERENCE

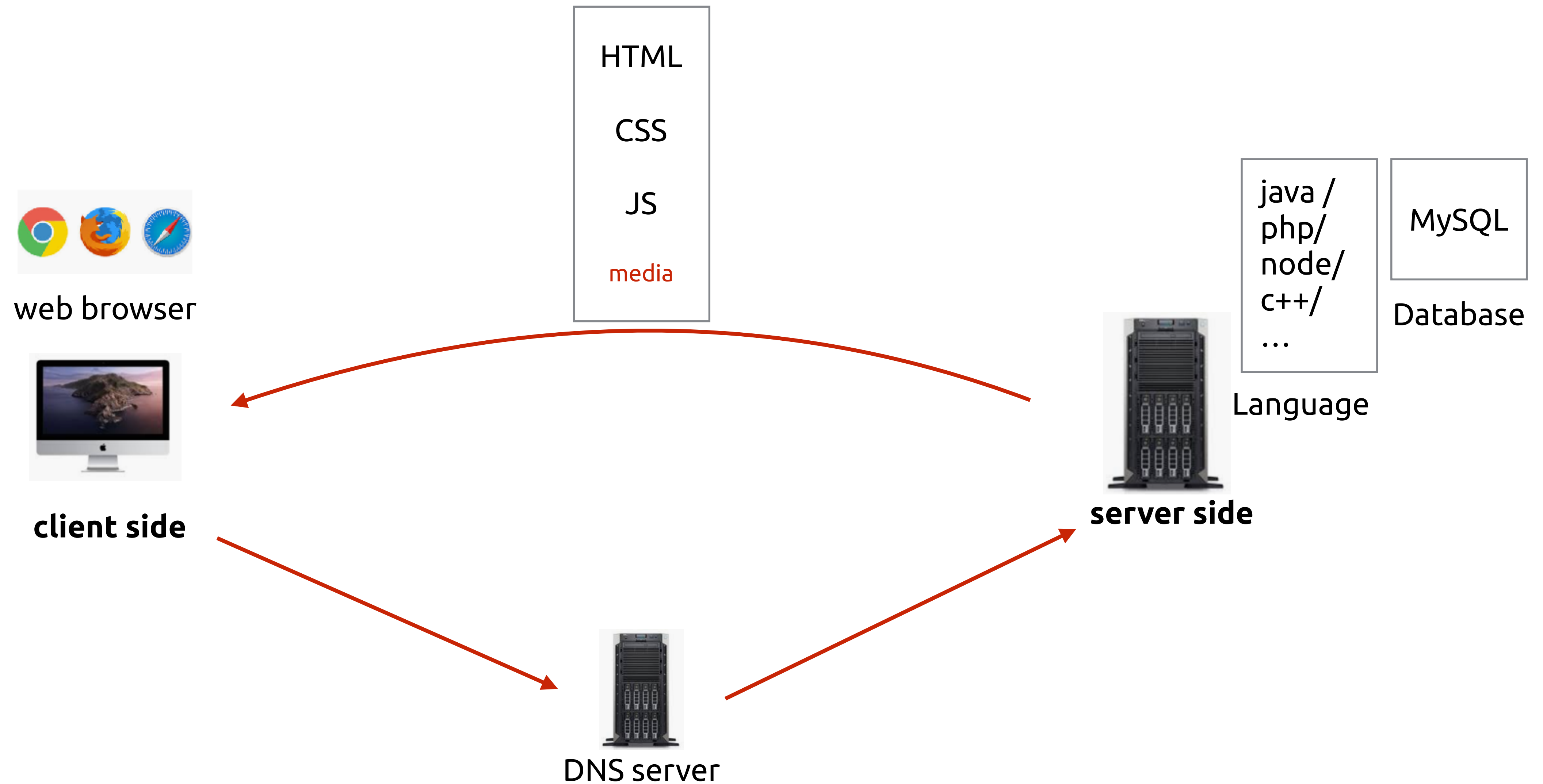
JavaScript Example:

```
<button onclick="myFunction()">Click Me!
</button>

<script>
function myFunction() {
  var x = document.getElementById("demo");
  x.style.fontSize = "25px";
  x.style.color = "red";
}
</script>
```

Try it Yourself »

WEB TECHNOLOGY

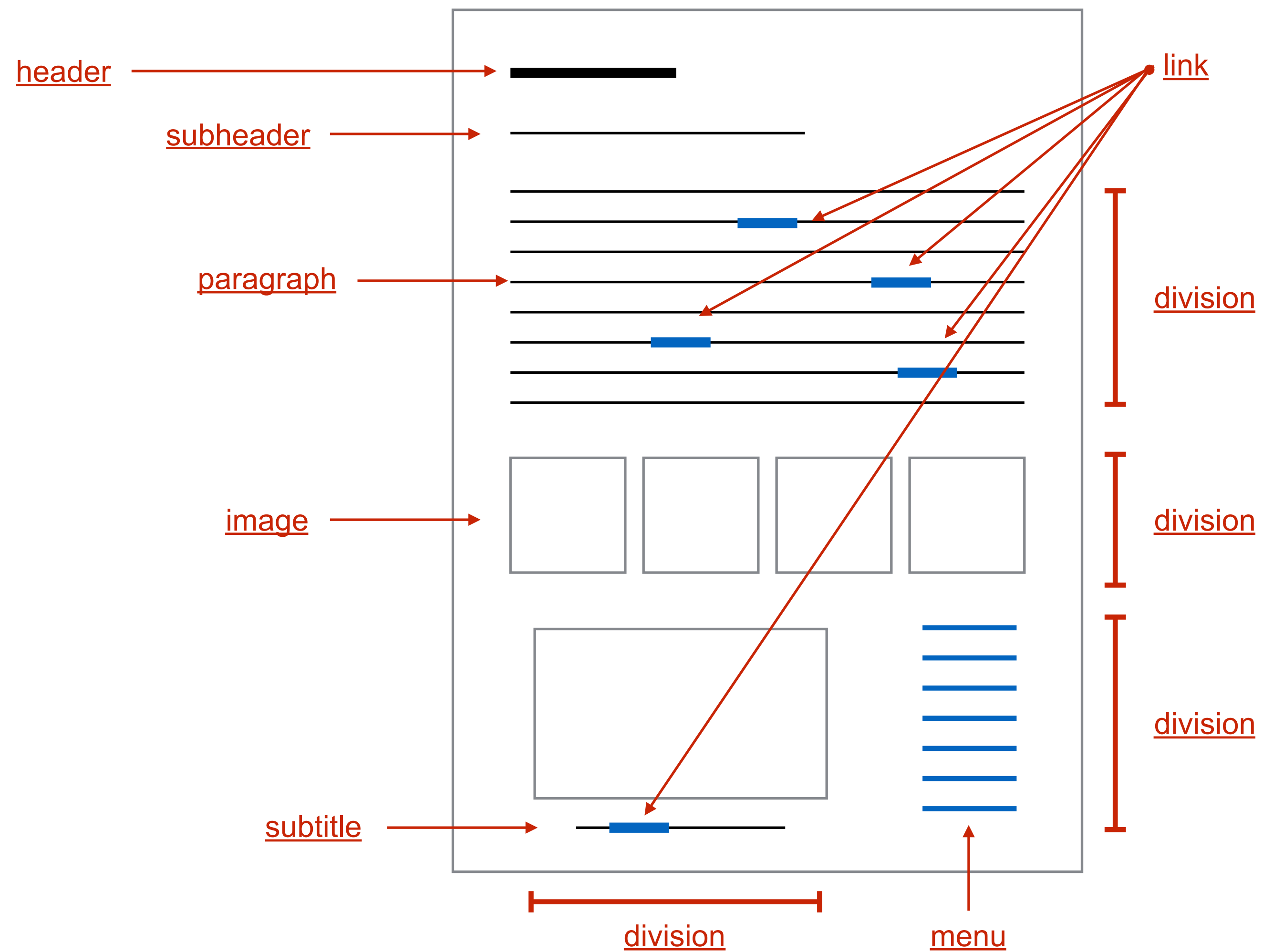


H YPER T EXT M ARKUP L ANGUAGE

HTML is a syntax that **MARKS UP** the content of the document

<https://en.wikipedia.org/wiki/HTML>

HYPER TEXT MARKUP LANGUAGE



H YPER T EXT M ARKUP L ANGUAGE

We need information **about** the content

in order to determine

how different things **look like**

and how they **behave**

HTML

CSS

JS

HYPER TEXT MARKUP LANGUAGE

```
<h1>Lior's Awesome 90's blog</h1>
```

An HTML **tag** is a wrapper for document content

HYPER TEXT MARKUP LANGUAGE

⚙ HTML

1

<html lang="en" dir="ltr">

2

<head>

3

<meta charset="utf-8">

4

<title>Lior's Awesome 90's Blog</title>

5

</head>

6

<body>

7

8

<h1>Welcome to my Awesome 90's blog</h1>

9

10

<p>

11

Let me tell you all about myself...

12

and also link to my friend

13

</p>

14

15

</body>

16

</html>

⚙ CSS

⚙ JS

Welcome to my Awesome 90's blog

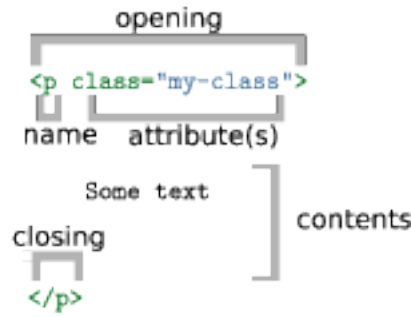
Let me tell you all about myself...
and also link to [my friend](http://myfriend.com)

HYPER TEXT MARKUP LANGUAGE

there are many many HTML tags.

we do not memorize them

just learn them as you make stuff

HTML & CSS		Week 1 Reference	2018-Spring
COMMON HTML TAGS	COMMON CSS STYLES	KEY TERMS	
Paragraph <code><p>Paragraph of text</p></code>	Text <code>P { font-size: 16pt; text-align: center; color: green; font-family: "Arial"; font-weight: bold; line-height: 20px; }</code>	Tech stack Set of technologies that a company uses. A "full stack" programmer works with all of them.	
Styling <code>Italic and bold</code>		HTML & CSS The computer languages that powers the appearance of the web. HTML controls <i>content</i> and <i>structure</i> , while CSS handles <i>styling</i> .	
Image <code></code>	Sizing <code>div { height: 30px; width: 100%; margin-left: 20px; padding-top: 10px; }</code>	Tag Special keywords that format and structure your webpage. An HTML element consists of an opening tag, contents (which can include other tags), and a closing tag.	
Link <code> Link to Google </code>	Block styling <code>span { background: yellow; border: 2px dotted green; border-radius: 10px; }</code>	CSS Rule Modifies the style of one or more HTML elements. Consists of a <i>selector</i> that matches elements in the HTML document, and a list of <i>declarations</i> , each consisting of a <i>property</i> and <i>value</i> .	
Headers <code><h1>Huge</h1> <h2>Big</h2> ... <h6>Small</h6></code>	Positioning & display tricks <code>/* Image floating in text */ img { float: left; } /* Display as wide block */ .a { display: block; } /* Wrap inline with text */ .b { display: inline; } /* Stack adjacently */ .c { display: inline-block; }</code>	BOILERPLATE Boilerplate is stuff you have to copy and paste into new projects to get going, and rarely change. A basic HTML boilerplate is as follows: <code><!DOCTYPE HTML> <html> <head> <meta charset="utf-8"> <title>My page</title> </head> <body> Hello world! </body> </html></code>	
Freeform <code><div></div></code> (block) and <code></code> (inline)			
Semantic <code><section></code> , <code><article></code> , and many more			
Comment Ignored by computer, but readable for humans. Useful for temporarily removing parts of your code. <code><!-- This will be ignored! --></code>	COMMON CSS SELECTORS Tag <code>div { color: blue; }</code> Class <code>.class-name { color: blue; }</code> ID <code>#id_name { color: blue; }</code> Containment <code>/* Match all divs in #a */ #a div { color: blue; } /* Divs immediately in #b */ #b > div { color: blue; } /* Wildcard: match all in #c */ #c > * { color: blue; }</code>	BOOTSTRAP 4 - GRID Use class <code>container</code> for a nice margin. Use class <code>row</code> for creating a new row in your grid. Use class <code>col-X</code> for different width columns. <code><div class="container"> <div class="row"> <div class="col-4"> 1/3rd row width </div> <div class="col-6"> Half row width </div> <div class="col-2"> 1/6th row width </div> </div> </div></code>	
ANATOMY OF A TAG 			

CASCADING STYLE SHEETS

CSS is a **sheet** that **styles** different elements in the document

https://en.wikipedia.org/wiki/Cascading_Style_Sheets

CASCADING STYLE SHEETS

we use css selectors to select tags for styling

by tag name

Lior's Awesome 90's blog

HTML

```
<h1>Lior's Awesome 90's blog</h1>
```

CSS

```
h1{  
  color: #FF9933;  
  font-size: 40px;  
}
```

CASCADING STYLE SHEETS

we use css selectors to select tags for styling

by class

you all about myst
link to **my friend**

HTML

```
<a class="customLink" href="http://myfriend.com">  
  my friend  
</a>
```

CSS

```
.customLink{  
  background-color: #0000AA;  
  color: red;  
}
```

CASCADING STYLE SHEETS

we use css selectors to select tags for styling

by ID

Let me tell you all about myself...
and also link to [my friend](http://myfriend.com)

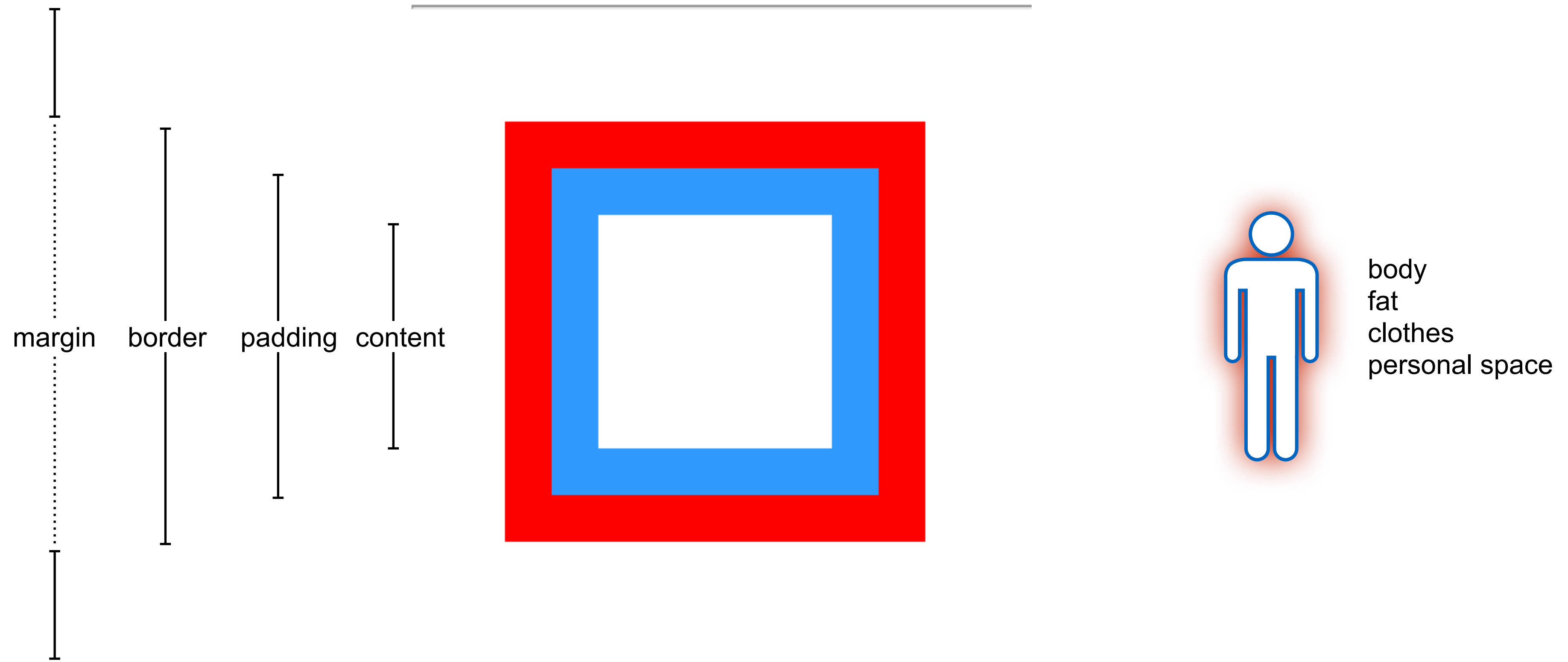
HTML

```
<p id="description">  
  Let me tell you all about myself... <br>  
  and also link to <a class="customLink"  
href="http://myfriend.com">my friend</a>  
</p>
```

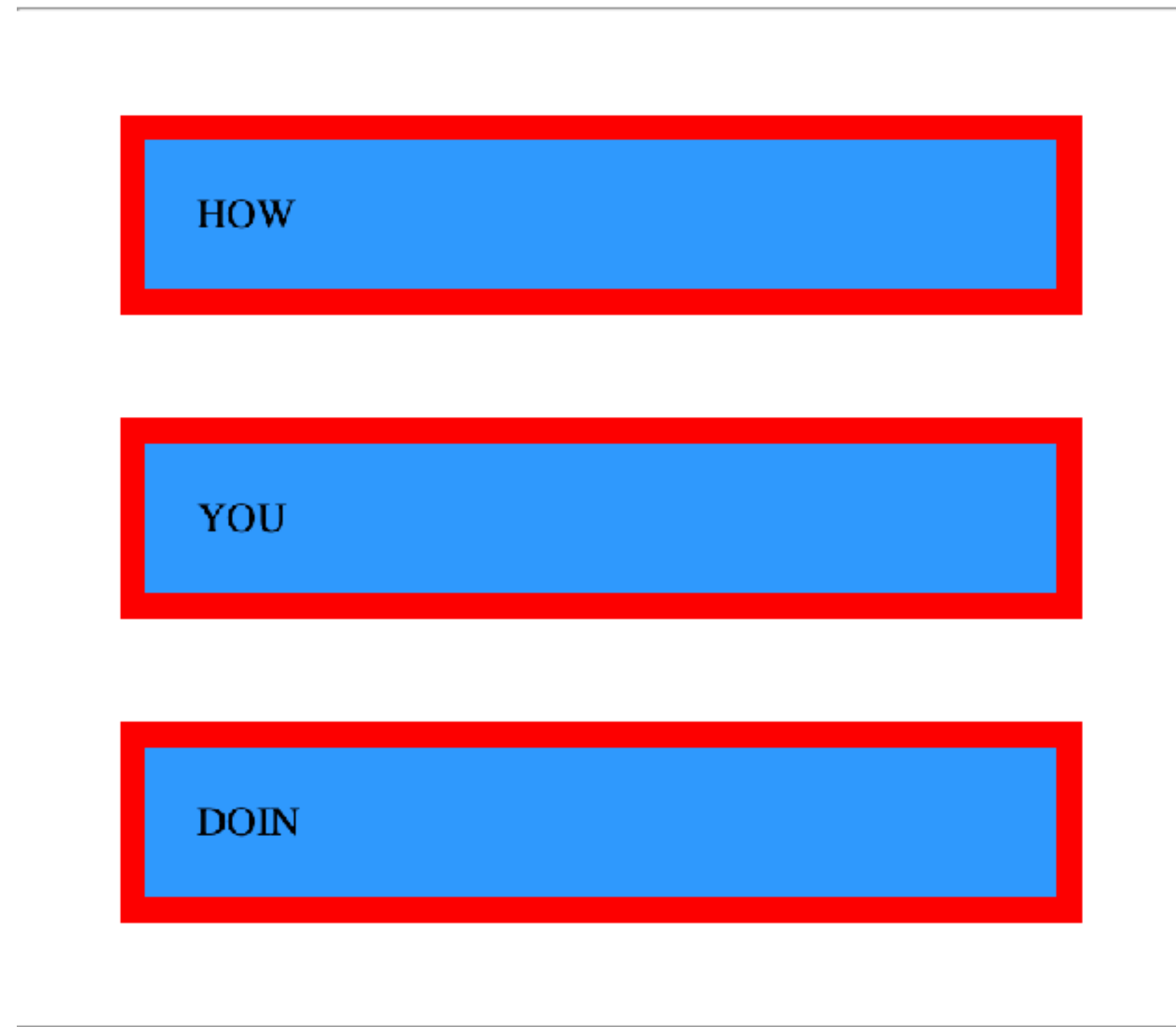
CSS

```
#description{  
  border: 1px solid #00FF00;  
  padding: 20px;  
}
```

CSS BOX MODEL



https://www.w3schools.com/css/css_boxmodel.asp



HTML

```
<hr>

<div>HOW</div>
<div>YOU</div>
<div>DOIN</div>

<hr>
```

CSS

```
div{
  background-color: #3399FF;
  padding: 20px;
  border: 10px solid red;
  margin: 40px;
}
```

CSS BOX MODEL

```
padding: 10px;
```

Same value for all sides

```
padding-top: 20px;  
padding-right: 20px;  
border-bottom: 20px;  
margin-left: 20px;
```

Set sides individually

```
margin: 0px 40px;
```

vertical and horizontal

```
margin: 0px 40px 20px 40px;
```

top right bottom left

DISPLAY PROPERTY

inline elements are in-line

<a>

block elements are blocks

<h1>
<p>
<div>

inline-block is a lovechild of both

```
▼ div{  
  display:inline-block;  
}  
  
▼ .inlineDiv{  
  display: inline;  
}  
  
▼ .blockDiv{  
  display: block  
}
```

POSITION PROPERTY

there are 5 types of possible positioning approaches:

static (default)

relative

absolute

fixed

sticky

https://www.w3schools.com/css/css_positioning.asp


GOOGLE FONTS

Google Fonts

CATALOG FEATURED ARTICLES ABOUT

Sentence ▾

40px ▾

Categories ▾

Language ▾

Font Properties ▾

Viewing 977 of 977 font families

Sort by: Trending now ▾

<div>Roboto<div>Christian Robertson (12 styles)</div><div><div></div></div></div> <div>All their equipment and instruments are alive.</div>	<div>Rubik<div>Hubert and Fischer, Meir Sadan, Cyreal (10 styles)</div><div><div></div></div></div> <div>אז הגיע הלילה של כוכב השביט הראשון.</div>	<div>Gelasio<div>Eben Sorkin (8 styles)</div><div><div></div></div></div> <div>A red flare silhouetted the jagged edge of a wing.</div>
<div>Ibarra Real Nova<div>José María Ribagorda, Octavio Pardo (6 styles)</div><div><div></div></div></div> <div>I watched the storm, so beautiful yet terrific.</div>	<div>Open Sans<div>Steve Matteson (10 styles)</div><div><div></div></div></div> <div>Almost before we knew it, we had left the ground.</div>	<div>Lato<div>Łukasz Dziedzic (10 styles)</div><div><div></div></div></div> <div>A shining crescent far beneath the flying vessel.</div>

Roboto Mono

 DESELECT THIS FONT

Glyph

Rr

Characters

A B C Č Ć D Đ E F G H I J K L
Y Z Ž a b c č ć d đ e f g h i
v w x y z ž А Б В Г Г Д Ё Ё
Н Ъ О П Р С Т Ъ У Ў Ф Х Ц Ч Ц
д ђ е ё є ж з с и і ї ј к л
х ц ч џ ш щ њ ы ь э ю я А Б Г
Р С Т У Ф Х Ψ Ω α β γ δ ε ζ η
φ χ ψ ω á À é ' É é ' Ħ í ï ï ' Í ó
ă â ê ô σ υ 1 2 3 4 5 6 7 8 9 0
{ @ } / & \ < - + ÷ × = > ® ©

Styles

Type here to preview text

1 Family Selected

Your Selection [Clear All](#)Roboto Mono 

EMBED

CUSTOMIZE

Load Time: Fast

Embed Font

To embed your selected fonts into a webpage, copy this code into the <head> of your HTML document.

STANDARD

@IMPORT

```
<link href="https://fonts.googleapis.com/css?family=Roboto+Mono&display=swap" rel="stylesheet">
```



Specify in CSS





Use the following CSS rules to specify these families:

```
font-family: 'Roboto Mono', monospace;
```

For examples of how fonts can be added to webpages, see the [getting started guide](#).

STARTER TEMPLATE

 basicTemplate 
A PEN BY soogbet

 Save Fork Settings Change View   

HTML

```
1 <!DOCTYPE html>
2 <html lang="en" dir="ltr">
3   <head>
4     <meta charset="utf-8">
5
6     <link href="https://fonts.googleapis.com/css?
family=Press+Start+2P|Roboto+Mono&display=swap"
rel="stylesheet">
7
8     <title></title>
9   </head>
10  <body>
```

CSS

```
1 /* ----- */
2 /* -----  CSS RESET  ----- */
3 /* ----- */
4
5 /* Box sizing rules */
6 *,
7 *::before,
8 *::after {
9   box-sizing: border-box;
10 }
11
12 /* Remove default padding */
13 ul[class],
14 ol[class] {
```

Well hello there

welcome to my HTML template

Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.

END OF TERM SUBMISSION

Select **any two** previous assignments from the term:

self portrait / random walk / everyday activity / clock app / regular pattern.

defiant drawing app / digital kaleidoscope / in_white_rooms /

A forest / from another course / generative logo

END OF TERM SUBMISSION

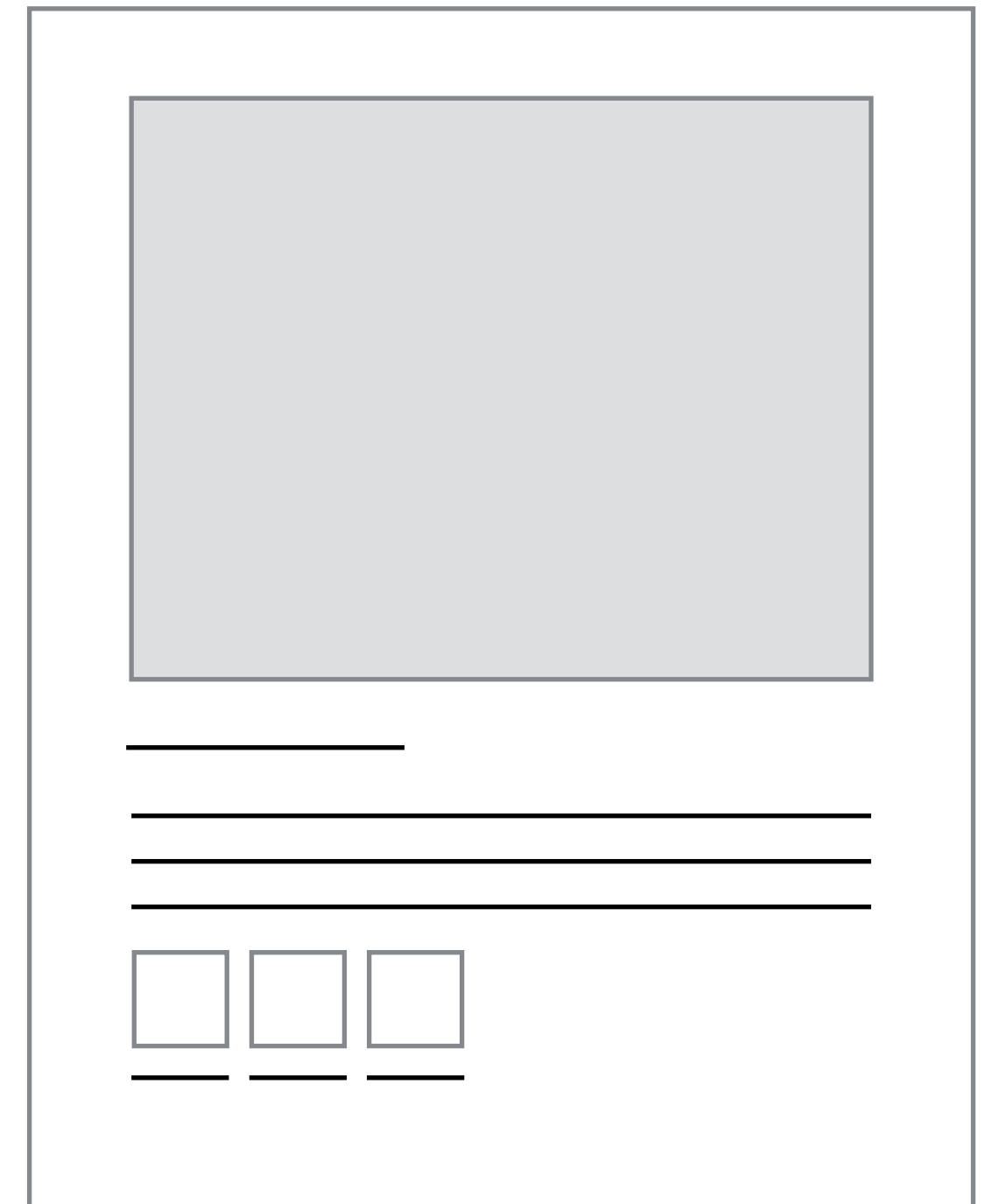
And create a new study that combines both tasks

For example:

Recreating a work from in_white_rooms as a digital clock app

END OF TERM SUBMISSION

The final submission will be embedded inside an html page.
it will provide an appropriate context for the study with
textual information, instructions, links, etc.



SUBMISSION MUST INCLUDE:

1. **A link** to the final study in full page view
2. **A screenshot** of your final submission (for the archive)
3. **A link** to a codepen collection containing 11 homework studies

MARKING CRITERIA

11 Homework studies: 55%

5 points per study:

1 - timely submission

1 - valid code

1 - appropriate use of code

1 - documentation

1 - visual communication

MARKING CRITERIA

Final term study: 45%

5 - valid code

20 - appropriate use of variables, conditions, functions and loops.

10 - documentation

5 - visual communication

5 - presentation