



BOOTCAMP

HTML & CSS Fundamentals





HELLO!

I am Eduardo Flores

1.

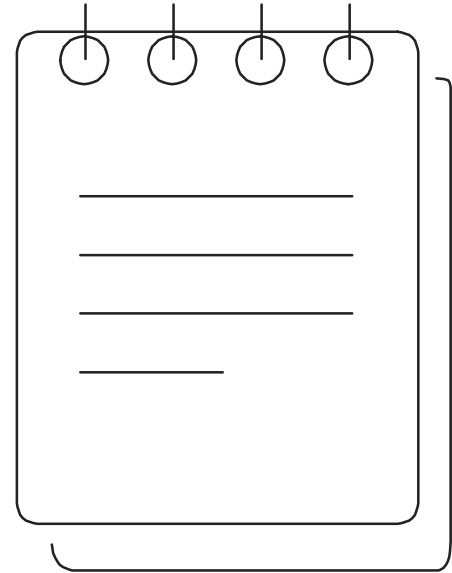
HTML

fundamentals

HTML

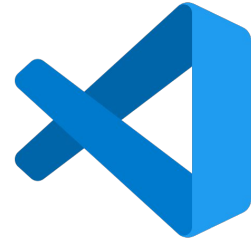
Definition of HTML

HTML stands for Hypertext Markup Language. HTML is the basis for all things Web and is a necessary skill for any Web Developer.



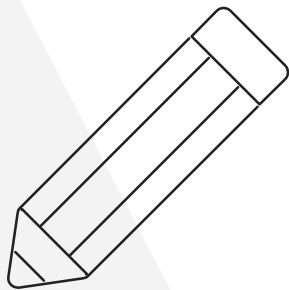
What do I need to start developing HTML

The excitement of learning and the right tools.



HTML5 moving forward

HTML5 has been developed with current and future browser development and past, present, and future web development work in mind. As a result, it's gained significant momentum. Driven by pragmatism, it has emerged as the W3C's choice for Accelerated Development.



- ▶ New semantic elements.
- ▶ New elements and APIs.
- ▶ New features to plug gaps in the functionality we traditionally had available in open standards.

HTML5 design principles

- ▶ Ensuring support for existing content.
- ▶ Degrading new features gracefully in older browsers.
- ▶ Not reinventing the wheel.
- ▶ Paving the cowpaths.
- ▶ Evolution, not revolution.



Document structure

<!DOCTYPE>

First of all we need to indicate the type of document we are creating.

<html>

The tree-like structure of this language is rooted in the <html> element. This element will wrap the rest of the code.

<head>

Inside the <head> tags we will define the title, character set, information about the document and we will incorporate the external files.

<body>

The body represents the visible part of every document and is specified between <body> tags.

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <title></title>
6  </head>
7  <body>
8
9  </body>
10 </html>
```


HTML Tags

HTML tags are like keywords which defines that how web browser will format and display the content. On this project the most commons tags that we are going to use are:

`<div>`, `<a>`, ``, ``

``, `<p>`,

`<h1>`, `<h2>`, `<h3>` etc

`<hr>`



More information about HTML Tags:

[HTML Reference \(w3schools.com\)](https://www.w3schools.com/html/)

Blog page HTML structure

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2. CSS

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CSS

Definition

CSS stands for Cascading Style Sheets and provides HTML with layout and design. Along with making things pretty and aesthetically pleasing, CSS also provides a general structure to HTML.

Properties

- ▶ Color
- ▶ Font-family
- ▶ Font-size
- ▶ Font-style
- ▶ Width
- ▶ Height
- ▶ Background
- ▶ Position
- ▶ Margin
- ▶ Display
- ▶ Padding



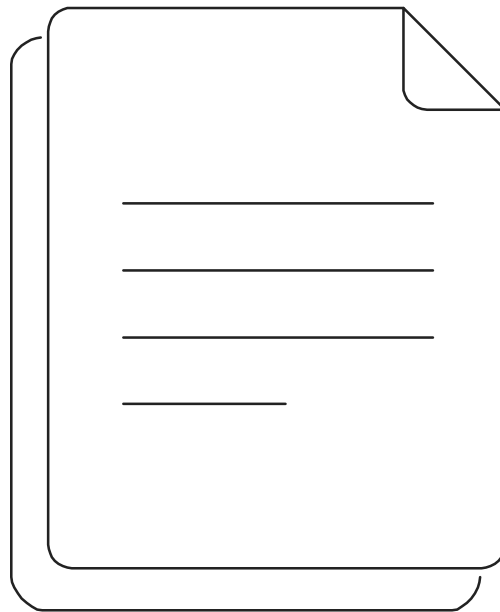
More information about CSS Properties:

[CSS Reference \(w3schools.com\)](https://www.w3schools.com/css/)

CSS conventions

CSS conventions can be broadly broken down into two key areas: **coding style** and **naming conventions**.

- ▶ Multi-line CSS
- ▶ Ordering declarations
- ▶ Naming conventions



CSS conventions

Multi-line CSS

```
h1 {  
  font-family: Georgia;  
  color: green;  
  line-height: 1.3;  
}
```

Ordering declarations

1. Position
2. Display and box model
3. Font and typography
4. Color
5. Background and borders

Naming conventions

Naming conventions in CSS, refers to class or ID names as opposed to the name of a file. Class names should be descriptive and semantic, they should describe your content and not the presentation.



```
.bigLeftCol { ...  
}  
.littleRightCol { ...  
}
```



```
.primary-content { ...  
}  
.secondary-content { ...  
}
```

CSS selectors

Using selectors, we can target elements at an even more granular level than we've been able to previously.

This means that the markup can be super slim, semantic, and flexible.

What's more, the element states pseudo-classes allow for additional highlighting of dynamic state changes.

```
/* Type */  
p { ...  
}  
/* ID */  
#content { ...  
}  
/* Class */  
.blog { ...  
}  
/* Link pseudo-class */  
a:hover { ...  
}  
/* Universal */  
* { ...  
}  
/* Child combinator */  
h2 > p { ...  
}
```

CSS Combinators

Descendant combinators allow you to target all instances of a single element type that lie within another.

Child combinators, in contrast, target only those elements that are immediate children of the parent.

Adjacent sibling combinators, targets elements that are next to each other in the document tree and have the same parent.

General sibling combinator. When using the general sibling combinator, the second selector doesn't have to immediately follow the first; however, both parts of the selector must still share the same parent.

```
p { ...  
}
```

```
article > p { ...  
}
```

```
h2 + p { ...  
}
```

```
h3 ~ ul { ...  
}
```


CSS At-rules

An at-rule is a CSS declaration that begins with the at symbol, '@', followed by an identifier, and includes all content up to the following semicolon, ';'

@charset: Defines the character set used by the style sheet.

@import: Tells the CSS engine that it includes an external style sheet

@media: A conditional rule that will apply if the device meets the criteria.

@keyframes: Describes step configuration in CSS animation.

CSS Variables

You assign a commonly used value to a variable in one place, then use the variable in your CSS in place of the value. If you need to change the value, you only need to change the variable definition.

Global scope

The `:root` selector matches the document root element.

```
:root {  
  --blue: #1e90ff;  
  --white: #ffffff;  
}
```

Syntax

The `var()` function is used to insert the value of a CSS variable.

```
color: var(--blue);
```

Advantages

- ▶ makes the code easier to read (more understandable)
- ▶ makes it much easier to change the color values

CSS Flexbox

The CSS flex property is a summary property that indicates the ability of a flexible element to alter its dimensions and fill the available space.

Flex-direction

Column



Column-reverse



row

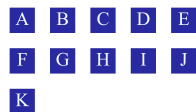


row-reverse



Flex-wrap

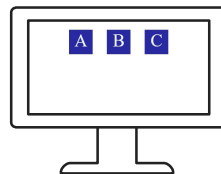
Wrap



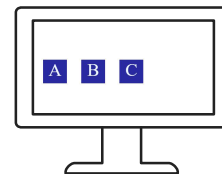
Wrap-reverse



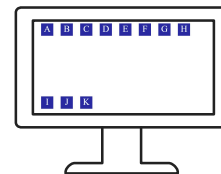
Justify-content



Align-items



Align-content



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Exercise

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Engineers have had a massive influence on economic prosperity and quality of life by inventing and developing new technologies, from pioneers of productivity improvements to the determination and logistics for implementing them.

Engineering is a remarkable and extraordinary profession that encompasses a wide range of disciplines, from the oldest, military and civil engineering feats, to mechanical, electrical, electronic, and chemical engineering, as well as more recently emerging fields like environmental engineering mechatronics (combining mechanical and electronics), biomedical, biochemical, and others yet to be named.

UNESCO has declared Thursday, March 4, 2021, as World Engineering Day for sustainable development. The day provides an opportunity to recognize engineers' and engineering's contributions to our modern world and increase public awareness of how engineering and technology are essential to everyday living and sustainable development. This day provides the opportunity to promote engineering as a vocation while emphasizing how engineering can improve the world. Engineers all across the globe have made significant progress in supporting the SDGs and improving engineering capacity for the SDGs, guided by the 2030 Agenda for Sustainable Development.

At ITJ, we are proud to equip the bright engineers in our company with the right tools to successfully develop plans that will enable our customers to build centers of excellence in the Cali Baja region. From developing boot camps with the mission of offering mentorship and career development to young men and women to hosting Hackathons and Tech Talks. So many young IT professionals and students from different states of Mexico and Latin America have been attending these immersive events and benefited themselves.

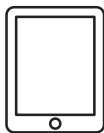
We want to continue to impulse the essential work engineers must do to secure a better future.

About ITJ

ITJ is devoted to serving fast-growing, high-value market sectors that contribute to the growth of the Cali Baja region. With a Nearshore model, working with the highest quality software engineers, data scientists, and creative designers from across Mexico and Latin America, ITJ enables companies to create world-class software engineering centers of excellence in Tijuana, MX.



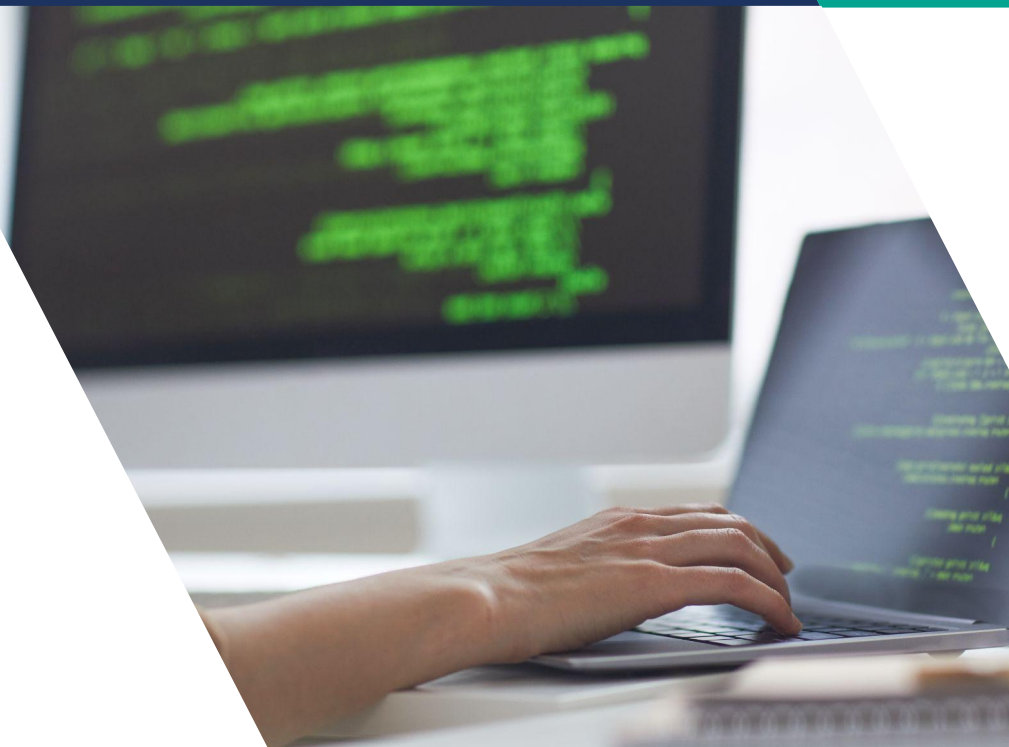
Responsive design



Responsive web design is an approach that allows design across various devices (mobile, desktop, tablet, etc.) and suggests design should respond to the user's behavior based on screen size, platform and orientation.

More information about responsive design:

[Responsive Web Design Certification | freeCodeCamp.org](https://www.freecodecamp.org/Responsive-Web-Design-Certification)





THANKS!

Any questions?

You can find me at eduardo.flores@itjuana.com

Credits

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Clark, R., Studholme, O., Murphy, C., & Manian, D. (2012). *Beginning HTML5 and CSS3* (1.^a ed., Vol. 1). Friends of.

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