

Corso di Progettazione di Applicazioni Web e Mobile

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HTML AND CSS3

Let's start with some good documentation

<https://w3c.github.io/html/introduction.html#a-quick-introduction-to-html>

<https://html.spec.whatwg.org>

MODERN WEB PAGE ELEMENT

1. HTML
2. CSS
3. JAVASCRIPT

HTML defines the static structure of the page

CSS the design

JAVASCRIPT the dynamic and behaviour

MODERN WEB PAGE ELEMENT

```
<!DOCTYPE html>
<html>
  <head>
    <title>Sample page</title>
  </head>
  <body>
    <h1>Sample page</h1>
    <p>This is a <a href="demo.html">simple</a> sample.</p>
    <!-- this is a comment -->
  </body>
</html>
```

JAVASCRIPT

<https://developer.mozilla.org/en-US/docs/Web/JavaScript/Guide/Introduction>

JavaScript is a cross-platform, object-oriented scripting language used to make webpages interactive.

JavaScript	Java
Object-oriented. No distinction between types of objects. Inheritance is through the prototype mechanism, and properties and methods can be added to any object dynamically.	Class-based. Objects are divided into classes and instances with all inheritance through the class hierarchy. Classes and instances cannot have properties or methods added dynamically.
Variable data types are not declared (dynamic typing, loosely typed).	Variable data types must be declared (static typing, strongly typed).
Cannot automatically write to hard disk.	Can automatically write to hard disk.

JAVASCRIPT

Javascript API can manipulate the DOM (Document Object Model) adding dynamic behaviour to the page

```
<!DOCTYPE html>
<html>
<head> <title>Example</title>
  </head> <body>
<button id="hellobutton">Hello</button>
<script> document.getElementById('hellobutton').onclick =
function() { alert('Hello world!'); // Show a dialog var
myTextNode = document.createTextNode('Some new words. ');
document.body.appendChild(myTextNode); // Append "Some new
words" to the page };
</script>
</body>
</html>
```

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</script>
</body>
</html>
```


JAVASCRIPT FEATURE

JavaScript now supportes classes, introduced in ECMAScript 2015

```
class Rectangle {  
    constructor(height, width) {  
        this.height = height;  
        this.width = width;  
    }  
}
```

<https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Classes>

CSS

A language to control the page layout and style

```
body {  
  width: 600px;  
  margin: 0 auto;  
  background-color: #FF9500;  
  padding: 0 20px 20px 20px;  
  border: 5px solid black;  
}
```

https://developer.mozilla.org/en-US/docs/Learn/Getting_started_with_the_web/CSS_basics

CSS SELECTORS

Selector name	What does it select	Example
Element selector (sometimes called a tag or type selector)	All HTML element(s) of the specified type.	<code>p</code> Selects <code><p></code>
ID selector	The element on the page with the specified ID (on a given HTML page, you're only allowed one element per ID).	<code>#my-id</code> Selects <code><p id="my-id"></code> or <code></code>
Class selector	The element(s) on the page with the specified class (multiple class instances can appear on a page).	<code>.my-class</code> Selects <code><p class="my-class"></code> and <code></code>
Attribute selector	The element(s) on the page with the specified attribute.	<code>img[src]</code> Selects <code></code> but not <code></code>
Pseudo-class selector	The specified element(s), but only when in the specified state, e.g. being hovered over.	<code>a:hover</code> Selects <code><a></code> , but only when the mouse pointer is hovering over the link.

Getting started

Install Node JS

<http://blog.teamtreehouse.com/install-node-js-npm-windows>

<https://bower.io>

<https://italia.github.io/design-web-toolkit/docs/sviluppare>

<https://getbootstrap.com/docs/3.3/getting-started/>

BOOTSTRAP Template

<https://getbootstrap.com/docs/4.1/getting-started/introduction/>
<https://www.sitepoint.com/beginners-guide-node-package-manager/>

```
Copy
<!doctype html>
<html lang="en">
  <head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.1/css/bootstrap.min.css" integrity="sha384-SmupmStveLHNqdluG8Y76F4bcPGNYe0i171g2y288514c139871XXw112e16" crossorigin="anonymous">

    <title>Hello, world!</title>
  </head>
  <body>
    <h1>Hello, world!</h1>

    <!-- Optional JavaScript -->
    <!-- jQuery first, then Popper.js, then Bootstrap JS -->
    <script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-q8i/X+965Dz00" crossorigin="anonymous"></script>
    <script src="https://cdn.jsdelivr.net/npm/popper.js@1.14.3/dist/umd/popper.min.js" integrity="sha384-tA0yzy7ADfYch/yywFHozm5Ou4B/vIyy/2OMgytXGwCGzBY+IoGZOCgBy7Ez3N/so" crossorigin="anonymous"></script>
    <script src="https://stackpath.bootstrapcdn.com/bootstrap/4.1.1/js/bootstrap.min.js" integrity="sha384-Ch7cx/nqMZV1ysQQ4v6g+243cmjrg+0h1IepVjE80gOnvBtVnu164wq8zgU36D" crossorigin="anonymous"></script>
  </body>
</html>
```