HTML/CSS - A CRASH COURSE

0 TO 60MPH GUIDE TO BASIC WEB DEV

Created by Lim Keng Kiat

WHAT IS THIS COURSE ABOUT?

- How HTML and CSS are used to create stunning web pages
- Introduction to various tools to hit the ground running
- Best practices and pitfalls

WHAT IS THIS COURSE *NOT* ABOUT?

- A comphrehensive guide to web development
- Going through the detailed syntaxes
- You should know how to google them yourself

WHAT ARE THEY?

HTML

- HyperText Markup Language
- Defines the structure/markup of your content
- Allows you to describe each item in the document
- Provides handles for manipulation

CSS Zen Garden

The Beauty of CSS Design

A demonstration of what can be accomplished through CSS-based design. Select any style sheet from the list to load it into this page.

Download the example html file and css file

The Road to Enlightenment

Littering a dark and dreary road lay the past relics of browser-specific tags, incompatible DOMs, broken CSS support, and abandoned browsers.

We must clear the mind of the past. Web enlightenment has been achieved thanks to the tireless efforts of folk like the W3C, WaSP, and the major browser creators.

The CSS Zen Garden invites you to relax and meditate on the important lessons of the masters. Begin to see with clarity. Learn to use the time-honored techniques in new and invigorating fashion. Become one with the web.

So What is This About?

There is a continuing need to show the power of CSS. The Zen Garden aims to excite, inspire, and encourage participation. To begin, view some of the existing designs in the list. Clicking on any one will load the style sheet into this very page. The HTML remains the same, the only thing that has changed is the external CSS file. Yes, really.

CSS allows complete and total control over the style of a hypertext document. The only way this can be illustrated in a way that gets people excited is by demonstrating what it can truly be, once the reins are placed in the hands of those able to create beauty from structure. Designers and coders alike have contributed to the beauty of the web; we can always push it further.

Participation

Strong visual design has always been our focus. You are modifying this page, so strong CSS skills are necessary too, but the example files are commented well enough that even CSS novices can use them as starting points. Please see the CSS Resource Guide for advanced tutorials and tips on working with CSS.

You may modify the style sheet in any way you wish, but not the HTML. This may seem daunting at first if you've never worked this way before, but follow the listed links to learn more, and use the sample files as a guide.

Download the sample HTML and CSS to work on a copy locally. Once you have completed your masterpiece (and please, don't submit half-finished work) upload your CSS file to a web server under your control. Send us a link to an archive of that file and all associated assets, and if we choose to use it we will download it and place it on our server.

Benefits

Why participate? For recognition, inspiration, and a resource we can all refer to showing people how amazing CSS really can be. This site serves as equal parts inspiration for those working on the web today, learning tool for those who will be tomorrow, and gallery of future techniques we can all look forward to.

WHAT ARE THEY?

CSS

- Cascading Style Sheets
- Makes your HTML look really pretty
- Can be embedded in HTML, or exist externally

CSS ZEN GARDEN

The Beauty of CSS Design

A demonstration of what can be accomplished through CSS-based design. Select any style sheet from the list to load it into this page.

Download the example ⬇ HTML FILE and ⬇ CSS FILE

THE ROAD TO ENLIGHTENMENT

Littering a dark and dreary road lay the past relics of browser-specific tags, incompatible DOMs, broken CSS support, and abandoned browsers.

We must clear the mind of the past. Web enlightenment has been achieved thanks to the tireless efforts of folk like the W3C, WASP, and the major browser creators.

The CSS Zen Garden invites you to relax and meditate on the important

UNDER THE SEA!
by Eric Stoltz

MAKE 'EM PROUD
by Michael McAghon and Scotty Reifsnyder

ORCHID BEAUTY
by Kevin Addison

OCEANSCAPE
by Justin Gray

HTML

GETTING STARTED

```html
<!DOCTYPE html>
<html>
  <head>
    <title>Example web page</title>
  </head>
  <body>
    <p>This is a demo web page for the CS3216 workshop</p>
  </body>
</html>
```

// Demo here

COMMONLY USED TAGS
BLOCK ELEMENTS

HTML Tag	Example
<h1>	On the Electodynamics of Moving Bodies
<p>	This is a paragraph
and	- Item 1 - Item 2
<div>	Generic wrapper element

COMMONLY USED TAGS
INLINE ELEMENTS

HTML Tag   Example

```
<a>      <a href="//google.com">Google</a>
<img>    <img src="image.jpg" />
<input>  <input type="email" name="email" />
<span>   Generic wrapper element
```

BLOCK VS INLINE

BLOCK ELEMENTS

- Typicallly starts in a new line
- Takes the width of its container (can be adjusted)
- Can have padding and margins
- Usually used to contain other block or inline elements

BLOCK VS INLINE

INLINE ELEMENTS

- Typically does not bedin in a new line
- Takes up the width of its contents

CSS

HOW TO USE CSS

EMBEDDED

```
<style>
  p {
    font-weight: bold;
    color: red;
  }
</style>
```

EXTERNALLY

```
<link rel="stylesheet" href="main.css" />
```

INLINE

```
<p style="font-weight: bold;">Hello, world!</p>
```

CSS SELECTORS

Type

```css
p {
   font-size: 14px;
}
```

Multiple items

```css
h1, h2 {
   font-family: Helvetica, Arial, sans-serif;
}
```

Classes

```css
.submit-btn {
    background-color: green;
}
```

CSS SELECTORS

IDs

```
#logo {
    background-image: url('logo.gif');
        width: 200px;
        height: 75px;
}
```

Children

```
nav > ul {
    list-style: none;
}
```

QUESTION: WHAT IS THE COLOUR OF THE TEXT?

HTML

```
<div id="test">
  <span>Text</span>
</div>
```

CSS

```
div#test span { color: green }
span { color: red }
div span { color: blue }
```

SPECIFICITY

In order of increasing specificity

- Universal
- Type
- Classes
- Attributes
- Pseudo-Classes
- IDs
- Inline Styles

BEST PRACTICES

RESET YOUR STYLESHEETS

```
* {
  margin: 0;
  padding: 0;
}
```

More resets

- Eric Meyer's Reset CSS
- YUI3 Reset CSS
- Normalize.css

SPRITE YOUR ICONS


```css
#icon-1 {
  display: inline-block;
  background: url('sprite.png') no-repeat;
  overflow: hidden;
  text-indent: -9999;
  text-align: left;
  background-position: 0px -20px;
  width: 20px;
  height: 20px;
}
```

YOU DONT HAVE TO START FROM SCRATCH

- HTML5 Boilerplate
- Bootstrap

THANK YOU!