



# [SpartaCodingClub] HTML&CSS 101 - Chap.1



You can download lecture notes in pdf below!

▼ PDF file

## [Learning Objective]

1. Understand the role of server and client.
2. Understand the basics of HTML and CSS.
3. Create a login page using HTML and CSS.

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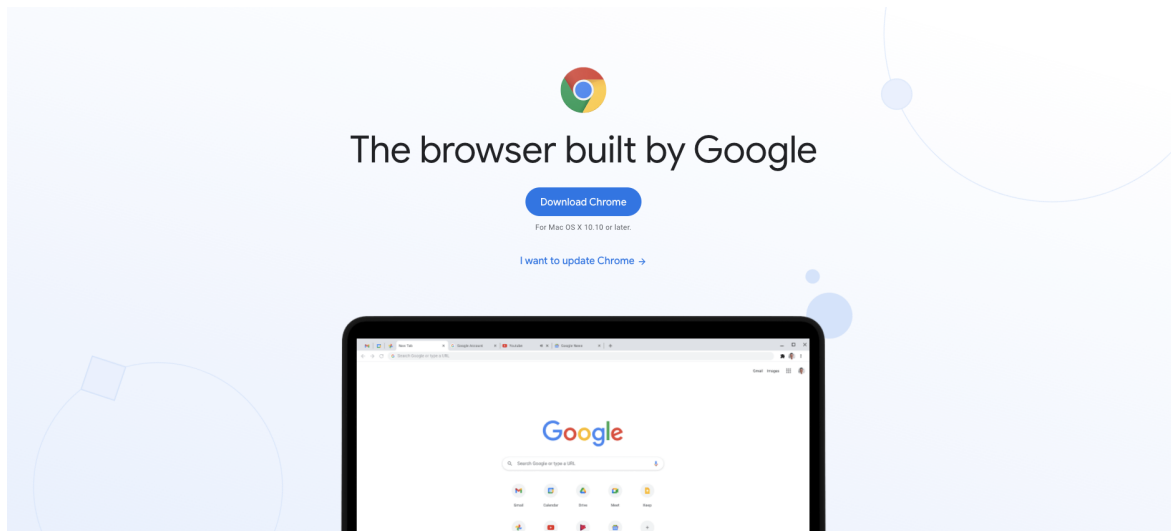
Shortcuts to expand/close all toggles

Windows : `Ctrl` + `alt` + `t`

Mac : `⌘` + `⌥` + `t`

## 00. Download Program


▼ Chrome : ([Download](#))



▼ **Visual Studio Code (VS Code) : ([Download](#))**

## Download Visual Studio Code

Free and built on open source. Integrated Git, debugging and extensions.




↓ **Windows**

Windows 7, 8, 10

User Installer 64 bit 32 bit ARM

System Installer 64 bit 32 bit ARM

.zip 64 bit 32 bit ARM



↓ **.deb**

Debian, Ubuntu

↓ **.rpm**


Red Hat, Fedora, SUSE

.deb 64 bit ARM ARM 64

.rpm 64 bit ARM ARM 64

.tar.gz 64 bit ARM ARM 64

[Snap Store](#)



↓ **Mac**

macOS 10.10+

## 01. Introduction to Web Development

▼ 1) What is Coding?



In the current era, many individuals have high demands for coding.  
But what exactly is coding? 🤖

Coding is a combination of 'code' and '~ing'.

Coding, also known as computer programming, is the process of how we communicate with computers.  
By learning how to code, you will be able to directly give instructions to computers.

ex) shutting down the computer after an hour, opening browsers, downloading files.

- 

To understand how it works, let us try a little bit of hacking! (what? 🤖)



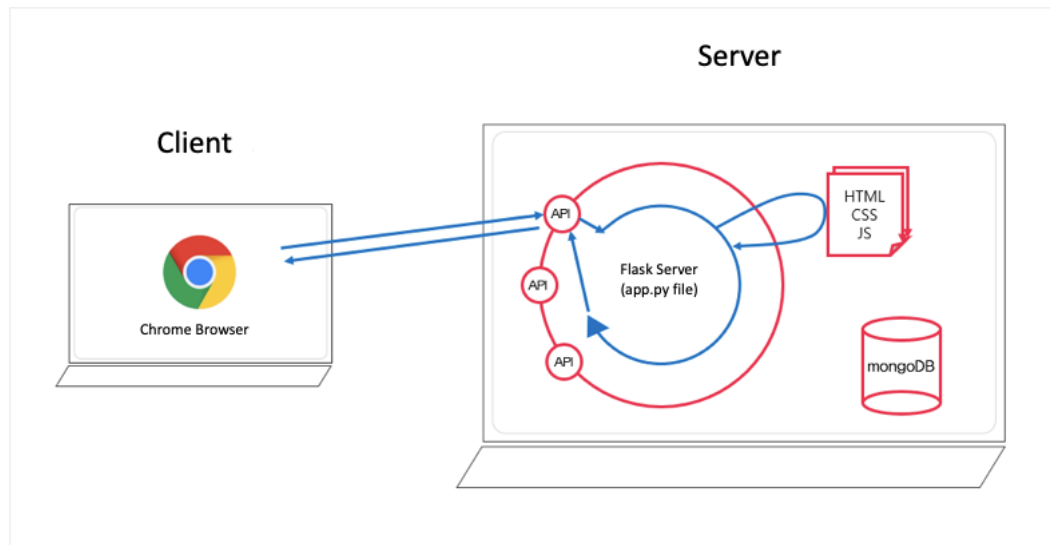
Google Search      Sparta!!!

Google offered in: [한국어](#)

It is sent to the place called "API" created by the server with a set of elements.

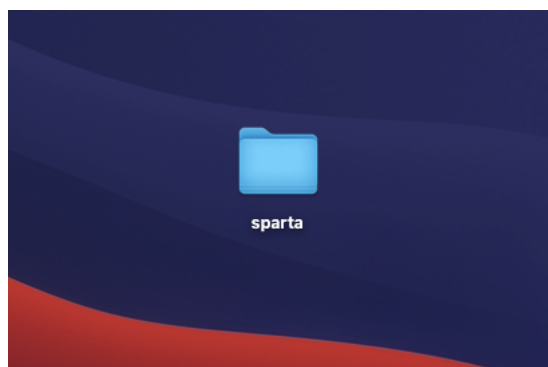
→ Your request to the source "/" where the domain name is "google.com"

- HTML = structure, CSS = style, Javascript = behavior



## 02. HTML&CSS Basics

### ▼ 3) Folder Setting



👉 Open Visual Studio Code.

- Open `sparta` folder and create a new file called `index.html`
- Type `html:5` to auto complete a basic HTML structure

### ▼ 4) Defining HTML and CSS

- HTML implements structure, CSS implements style!

👉 **HTML**(HyperText Markup Language) controls the layout and text of the content, while **CSS**(Cascading Style Sheets) applies style to the web page elements. You could stylize using style elements within HTML, but nowadays these style elements are separated into a CSS file. So, you apply CSS by importing CSS file within HTML code.

- There is a difference between being able to hold a brush and knowing how to paint well.
- Similarly, it is different to use CSS 'well' and displaying a web 'prettier'. Therefore, in numerous cases, many people depend on web designers or publishers.

## 03. HTML Basic

### ▼ 5) HTML Basic

- HTML consists of `<head>` and `<body>`.
- The `<head>` element is a container for metadata, which is about the HTML document.
  - ex) `<meta>`, `<script>`, `<link>`, `<title>`, etc.



Metadata typically defines the document title, scripts and other meta information. So, they are mostly invisible.

- The `<body>` element contains all the contents of an HTML document.
  - The following elements can go inside the `<body>` element:

### ▼ [Code Snippet] - HTML Basic

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>SpartaCodingClub | HTML Basic</title>
</head>

<body>
  <!-- tags for layout -->
  <div>This can group sections of document</div>
  <p>This is a paragraph.</p>
  <ul>
    <li>bullet point!1 </li>
    <li>bullet point!2 </li>
  </ul>

  <!-- tags for contents -->
  <h1>This is a heading.</h1>
  <h2>This is a subheading.</h2>
  <h3>h3-h6 are mini headings.</h3>
  <hr>
  This is a span tag: used to stylize a specific <span style="color:red">word</span>
  <hr>
  This is an a tag: <a href="http://google.com/"> hyperlink </a>
  <hr>
  This is an img tag: 
  <hr>
  This is an input tag: <input type="text" />
  <hr>
  This is a button tag: <button>Press me!</button>
  <hr>
  This is a textarea tag: <textarea>Who am I?</textarea>
</body>

</html>
```



There are many more tags, but developers don't memorize them all. Try to Google it whenever needed!

## 04. Quiz\_Build a Login Page

### ▼ 6) Make a simple login page



1) Watch the instruction → 2) Pause the video and try doing it by yourself → 3) Watch the rest of the lesson

### ▼ Q. Quiz explanation

▼ How it looks 🧐

## Login Page

ID:

PW:

🧐 Hint: Try to copy and paste codes from HTML Basic!

▼ A. Answer (Final)



How was it? Even if you have done it in another way, please copy and paste the following code snippet for the next lesson!

▼ [Code Snippet] - Login HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Login to SCC</title>
</head>
<body>
  <h1>Login Page</h1>
  <p>ID: <input type="text"/></p>
  <p>PW: <input type="text"/></p>
  <button>Login</button>
</body>
</html>
```

## 05. CSS Fundamentals

▼ 7) CSS Basic

- How to use CSS



Internal CSS is defined inside the `<style>` element and the `<head>` section. We will practice how to use CSS by using codes below.

REMEMBER!

You have to write `.mytitle { ... }` in order to point to the class named `mytitle`.

- In fact, there is no need to memorize all CSS rules! It is good to know what you have learned today. You can google the rest! ☺

☞ **#related to backgrounds**

background-color  
background-image  
background-size

**#size**

width  
height

**#fonts**

font-size  
font-weight  
font-family  
color

**#space**

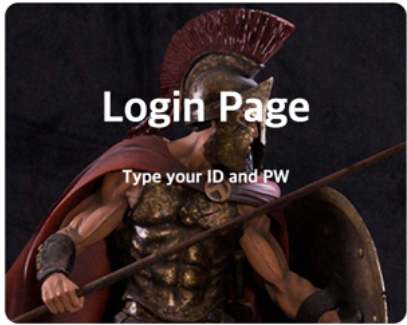
margin  
padding

## 06. Frequently Used CSS

### ▼ 8) Practice with frequently used CSS

☞ We are going to use following CSS properties :  
h1, h5, background-image, background-size, background-position  
color, width, height, border-radius, margin, padding

### ▼ (1) Let's develop the login page!



Login Page

Type your ID and PW

ID:

PW:

Login



**margin&padding**

- `margin` creates space outside, while `padding` creates space inside
- apply color inside `div` tag and see the difference!

### ▼ [Code Snippet] - Image URL

```
https://www.ancient-origins.net/sites/default/files/field/image/Agesilaus-II-cover.jpg
```

```

<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Login to SCC</title>
  <style>
    .mycontainer {
      color: white;
      width: 300px;
      height: 200px;
      background-image: url('https://www.ancient-origins.net/sites/default/files/field/image/Agesilaus-II-cover.j
      background-position: center;
      background-size: cover;

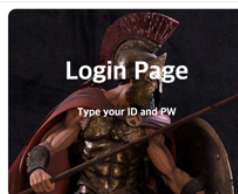
      border-radius: 10px;
      text-align: center;
      padding-top: 40px;
    }
  </style>
</head>

<body>
  <div class="mycontainer">
    <h1>Login Page</h1>
    <h5>Type your ID and PW</h5>
  </div>
  <div>
    <p>
      ID: <input type="text" />
    </p>
    <p>
      PW: <input type="text" />
    </p>
    <button>Login</button>
  </div>
</body>
</html>

```

## ▼ (2) How to bring the login page to the center

💡 Hint: Try to use `width` and `margin: auto`! If not, add `display: block`!



```

<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Login to SCC</title>
  <style>
    .mycontainer {
      color: white;
      width: 300px;
      height: 200px;

```



```

        background-image: url('https://www.ancient-origins.net/sites/default/files/field/image/Agesilaus-II-cover.jpg');
        background-position: center;
        background-size: cover;

        border-radius: 10px;
        text-align: center;
        padding-top: 40px;
    }
    .wrap {
        margin: 10px auto;
        width: 300px;
    }
</style>
</head>

<body>
<div class="wrap">
    <div class="mycontainer">
        <h1>Login Page</h1>
        <h5>Type your ID and PW</h5>
    </div>
    <div>
        <p>
            ID: <input type="text" />
        </p>
        <p>
            PW: <input type="text" />
        </p>
    </div>
    <button>Login</button>
</div>
</body>
</body>

</html>

```

## 07. Apply Fonts

### ▼ 9) Apply Google Web Font

- Google Web Font

#### ▼ [Code Snippet] - Google Fonts

```
https://fonts.google.com/
```

(1) Choose the font you like

(2) Click [ + Select this style ]



(3) View your selected families



(4) Copy the <link> code into <head> of your HTML and, copy CSS rules into <style> of your HTML.



- For example, if you want to use the font called 'Ubuntu' :

```
<link rel="preconnect" href="https://fonts.gstatic.com">
<link href="https://fonts.googleapis.com/css2?family=Ubuntu:wght@300&display=swap" rel="stylesheet">
```

```
* {
  font-family: 'Ubuntu', sans-serif;
}
```

#### ▼ [Code Snippet] Final code

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Login to SCC</title>
  <link rel="preconnect" href="https://fonts.gstatic.com">
  <link href="https://fonts.googleapis.com/css2?family=Ubuntu:wght@300&display=swap" rel="stylesheet">
  <style>
    * {
      font-family: 'Ubuntu', sans-serif;
    }
    .mycontainer {
      color: white;
      width: 300px;
      height: 200px;
      background-image: url('https://www.ancient-origins.net/sites/default/files/field/image/Agesilaus-II-cover.jpg');
      background-position: center;
      background-size: cover;

      border-radius: 10px;
      text-align: center;
      padding-top: 40px;
    }
    .wrap {
      margin: 10px auto;
      width: 300px;
    }
  </style>
</head>

<body>
  <div class="mycontainer">
    <div class="wrap">
      <h1>Login to SCC</h1>
    </div>
  </div>
</body>
</html>
```

```

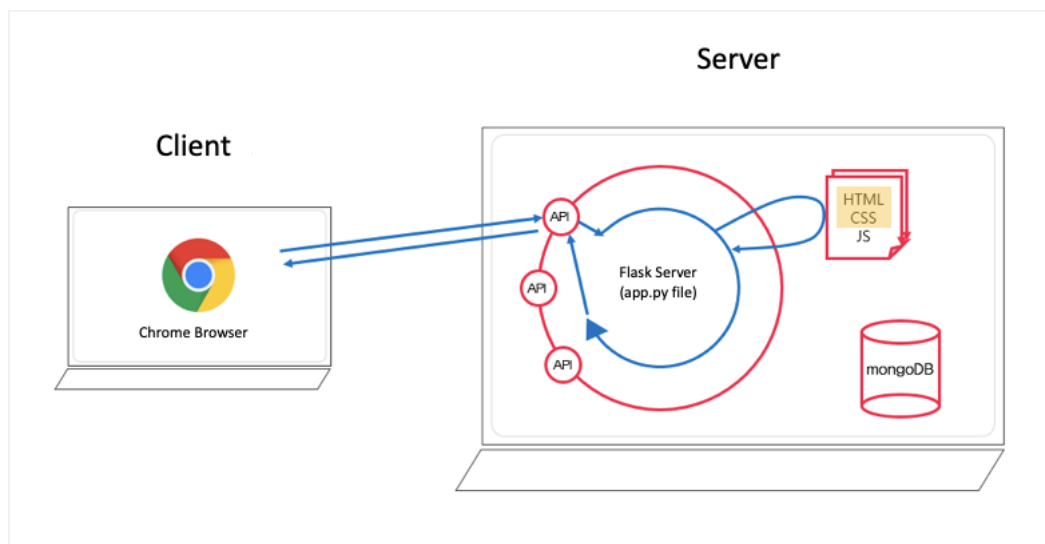
    }
  </style>
</head>

<body>
  <div class="wrap">
    <div class="mycontainer">
      <h1>Login Page</h1>
      <h5>Type your ID and PW</h5>
    </div>
    <div>
      <p>
        ID: <input type="text" />
      </p>
      <p>
        PW: <input type="text" />
      </p>
      <button>Login</button>
    </div>
  </div>
</body>
</html>

```

## 08. Wrap-up and HW

▼ What did we learn today



Let's develop our login page further! 🧐

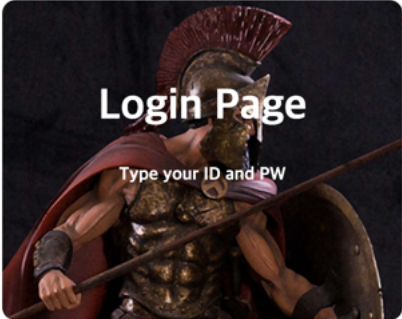
▼ Homework

👉 Declare class named `mybtn` on button and apply the following CSS properties!

(FYI - `width is 300px`, `height is 50px`, `background-color is brown`)

`border-radius`, `background-color`, `color`, `width`, `height`

▼ Sneak Peak of the answer 🧐



# Login Page

Type your ID and PW

ID:

PW:

Login

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