

INC281
2020



INC281-Lec-Lab-02

CSS and Bootstrap

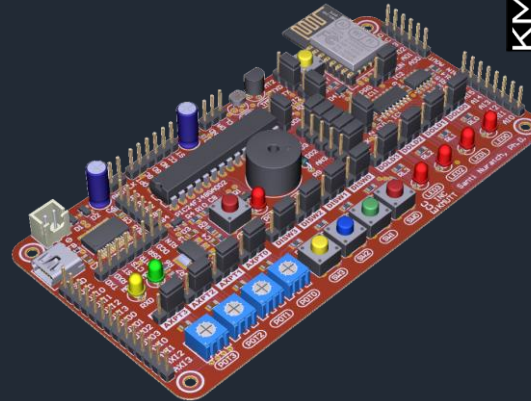
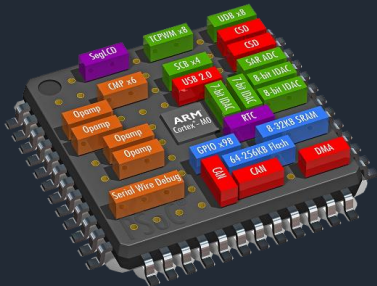


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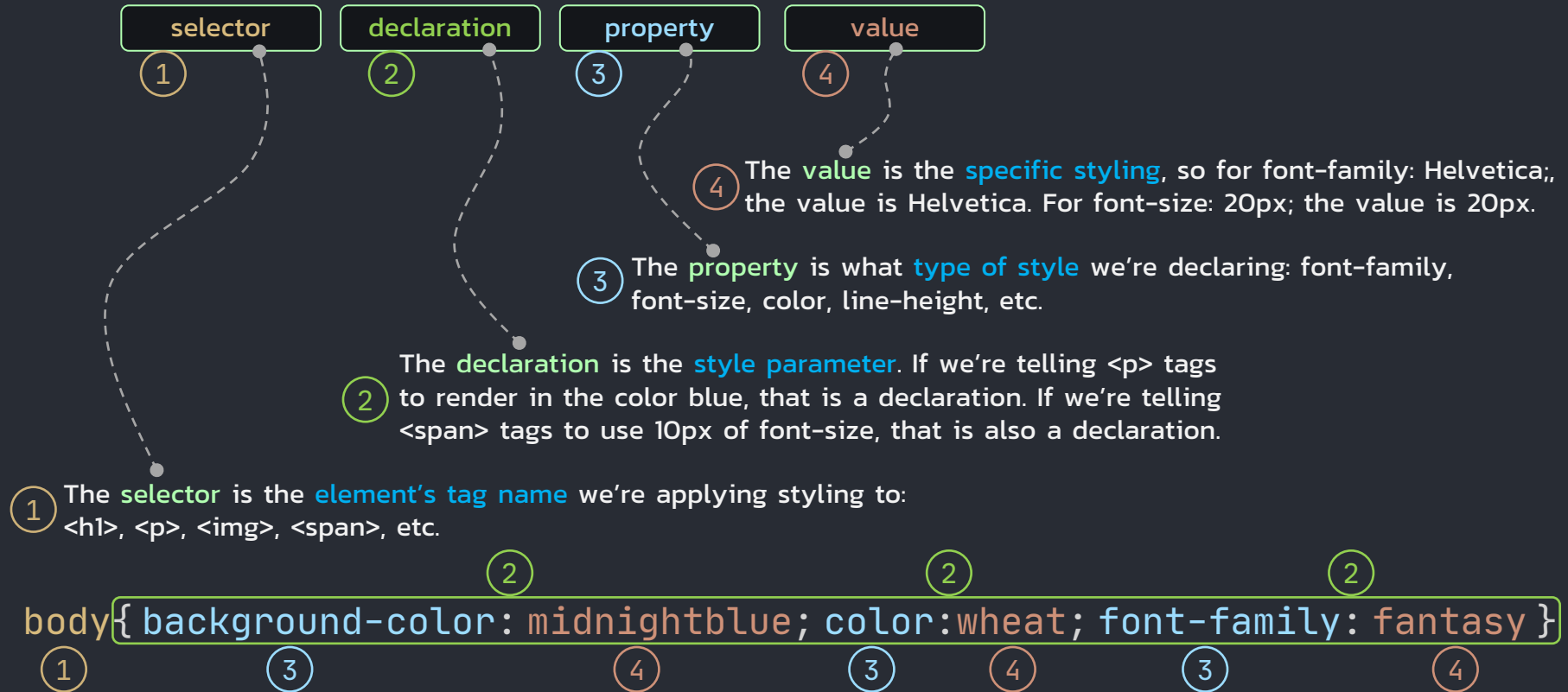
Department of Control System and Instrumentation Engineering,
King Mongkut's University of Technology Thonburi, **KMUTT**

Cascading Style Sheets (CSS)

CSS, short for "**Cascading Style Sheets**," is a style sheet language that tells a browser how to present an HTML document, or any other markup language.

CSS is used to modify your content's font, font size, colors, line height and spacing, images, element positioning, etc.

CSS composes of four main keywords



Three ways to incorporate CSS

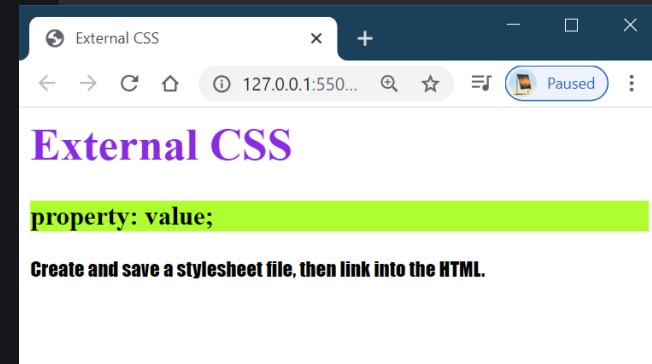
- 1 **Inline:** Add the **style** attribute inside an individual HTML element.

```
<body>
<h1 style="color:blueviolet;">Inline CSS</h1>
<h3 style="background-color:greenyellow;">property: value;</h3>
<p style="font-size: 14px; font-family: fantasy;">
  Add the style attribute inside an individual HTML element.</p>
</body>
```

- 2 **Internal:** Add the **<style>** tag inside the **<head>** tag

```
<head>
<style>
  h1{ color:blueviolet; }
  h3{ background-color:greenyellow; }
  p{ font-size: 14px; font-family: fantasy; }
</style>
</head>
<body>
  <h1>Internal CSS</h1>
  <h3>property: value;</h3>
  <p>Add the style attribute inside an individual HTML element.</p>
</body>
```

Three of them give us the same results



- 3 **External:** Create and save a stylesheet file, then link into the HTML

```
<head>
<link rel="stylesheet" href="ex03_style.css">
</head>
<body>
  <h1>External CSS</h1>
  <h3>property: value;</h3>
  <p>Add the style attribute inside an individual HTML element.</p>
</body>
```

```
ex03_style.css
h1{ color:blueviolet; }
h3{ background-color:greenyellow; }
p{ font-size: 14px; font-family: fantasy; }
```

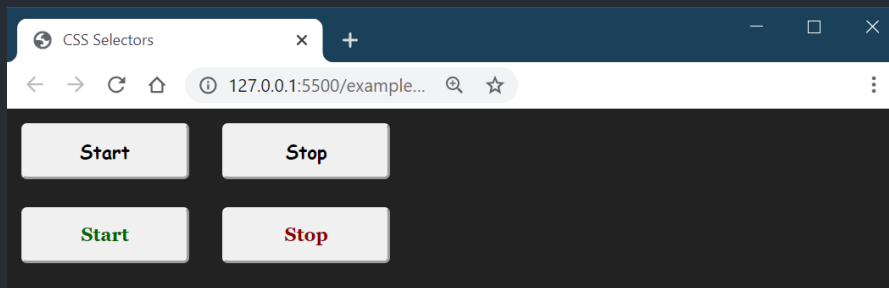
From now on, we will use the third method to make things easier to organize.

Basic CSS Selectors (*, tag, class, id)

```
<html>
<head>
  <title>CSS Selectors</title>
  <link rel="stylesheet" href="ex04_style.css">
</head>
<body>
  <div>
    <button class="btn motor">Start</button>
    <button class="btn motor">Stop</button>
  </div>
  <div>
    <button class="btn pump" id="btnS">Start</button>
    <button class="btn pump" id="btnP">Stop</button>
  </div>
</body>
</html>
```

Note:
tag can has many classes but only one id

index.html



id is prefixed by # (sharp), used to identify one element
class is prefixed by . (dot), used to identify group of elements

Not only the four selectors, please study others selectors at the following website: https://www.w3schools.com/cssref/css_selectors.asp

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

body{
  background-color: #222;
}

h1{
  color: bisque;
}

.btn{
  width: 120px;
  height: 40px;
  border-radius: 4px;
  font-weight: bold;
  margin: 10px;
}

.motor{
  font-family: cursive;
}

.pump{
  font-family: Georgia;
}

#btnS{
  color: darkgreen;
}

#btnP{
  color: darkred;
}
```

Selects all elements

Selects the <body> tag

Selects all <h1> tag

Selects all elements with class .btn

Selects all elements with class .motor

Selects all elements with class .pump

Selects an element with id #btnS

Selects an element with id #btnP

ex04_style.css

CSS Tutorial

CSS HOME

CSS Introduction

CSS Syntax

CSS Selectors

CSS How To

CSS Comments

CSS Colors

CSS Backgrounds

CSS Borders

CSS Margins

CSS Padding

CSS Height/Width

CSS Box Model

CSS Outline

CSS Text

CSS Fonts

CSS Icons

CSS Links

CSS Lists

CSS Tables

CSS Display

CSS Max-width

CSS Position

CSS Overflow

CSS Float

CSS Inline-block

CSS Align

CSS Combinators

CSS Pseudo-class

CSS Pseudo-element

CSS Opacity

CSS Navigation Bar

CSS Tutorial

[< Home](#)

[Next >](#)

CSS is a language that describes the style of an HTML document.

CSS describes how HTML elements should be displayed.

This tutorial will teach you CSS from basic to advanced.

Examples in Each Chapter

This CSS tutorial contains hundreds of CSS examples.

With our online editor, you can edit the CSS, and click on a button to view the result.

CSS Example

```
body {  
  background-color: lightblue;  
}  
  
h1 {  
  color: white;  
  text-align: center;  
}  
  
p {  
  font-family: verdana;  
  font-size: 20px;  
}
```

Bootstrap is the most popular CSS Framework for developing responsive and mobile-first websites.

Get started with Bootstrap 4.4

<https://getbootstrap.com/docs/4.4/getting-started/introduction/>

Download Bootstrap 4.4

<https://getbootstrap.com/docs/4.4/getting-started/download/>

Components of Bootstrap 4.4

<https://getbootstrap.com/docs/4.4/components/>

CSS file of Bootstrap 4.4

<https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css>

will be used in the next assignment

Try the Bootstrap 4.4

- 1) Create new files, `index.html`, `ex05_style.css` and save them in the `ex05_css_bootstrap` directory
- 2) Download the `bootstrap.min.css` and save the `ex05_css_bootstrap` directory
- 3) Edit the `index.html` and `ex05_style.css` as follows



```
<html>
<head>
  <title>ex50_bootstrap</title>
  <link rel="stylesheet" href="bootstrap.min.css">
  <link rel="stylesheet" href="ex05_style.css">
</head>
<body>
  <div class="container">
    <button class="btn btn-primary">Primary</button>
    <button class="btn btn-secondary">Secondary</button>
    <button class="btn btn-success">Success</button>
    <button class="btn btn-info">Info</button>
    <button class="btn btn-warning">Warning</button>
    <button class="btn btn-danger">Danger</button>
    <button class="btn btn-dark">Dark</button>
  </div>
  <div class="container">
    <span class="badge badge-primary">Primary</span>
    <span class="badge badge-secondary">Secondary</span>
    <span class="badge badge-success">Success</span>
    <span class="badge badge-danger">Danger</span>
    <span class="badge badge-warning">Warning</span>
    <span class="badge badge-info">Info</span>
    <span class="badge badge-dark">Dark</span>
  </div>
</body>
</div>
</html>
```

index.html

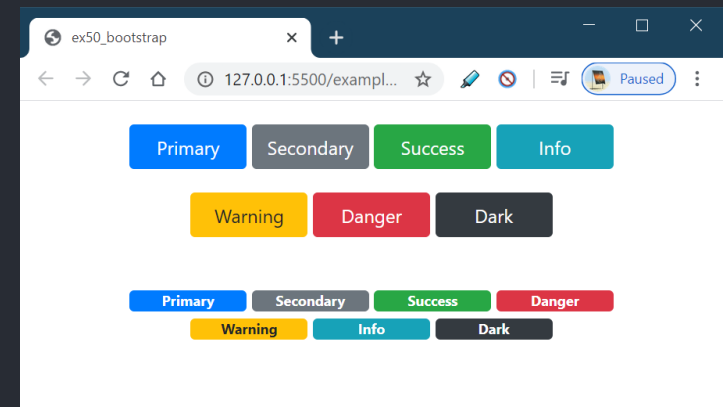
```
.container{
  margin-top: 20px;
  text-align: center;
}

.btn{
  width: 100px !important;
  margin-bottom: 20px;
}

.badge {
  width: 100px !important;
}
```

ex05_style.css

Run the application and check the power of our Bootstrap



Alerts · Bootstrap

getbootstrap.com/docs/4.4/components/alerts/

B

Home Documentation Examples Icons Themes Expo Blog

v4.4

Download

Search...

Getting started

Layout

Content

Components

Alerts

Badge

Breadcrumb

Buttons

Button group

Card

Carousel

Collapse

Dropdowns

Forms

Input group

Jumbotron

List group

Media object

Modal

Navs

Navbar

Pagination

Popovers

Progress

Scrollspy

Examples

Alerts are available for any length of text, as well as an optional dismiss button. For proper styling, use one of the eight **required** contextual classes (e.g., `.alert-success`). For inline dismissal, use the [alerts jQuery plugin](#).

A simple primary alert—check it out!

A simple secondary alert—check it out!

A simple success alert—check it out!

A simple danger alert—check it out!

A simple warning alert—check it out!

A simple info alert—check it out!

A simple light alert—check it out!

A simple dark alert—check it out!

```
<div class="alert alert-primary" role="alert">
  A simple primary alert—check it out!
</div>
<div class="alert alert-secondary" role="alert">
  A simple secondary alert—check it out!
</div>
```

Copy

Examples

Link color

Additional content

Dismissing

JavaScript behavior

Triggers

Methods

Events

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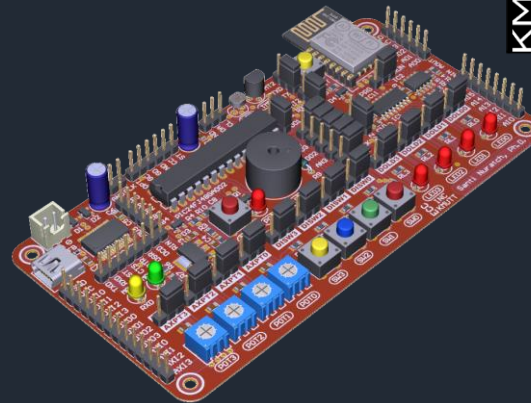
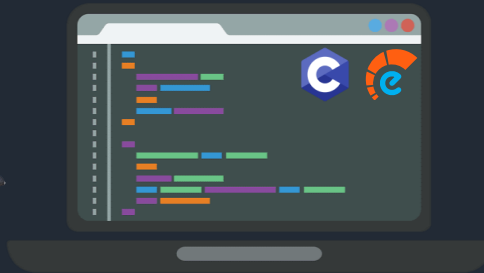
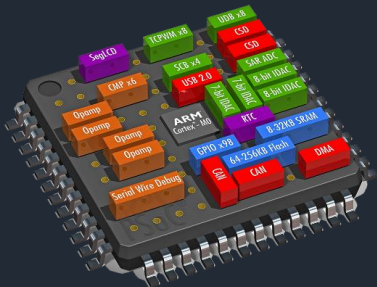
22 March 2020

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THANK YOU!



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