



School of Computer Science and Software Engineering

## CITS3403 Agile Web Development — Lab02

### Exercise 2: CSS, Bootstrap, and HTML Media

The aims of this lab are:

- ❖ Practise CSS and Bootstrap
- ❖ to use Google HTML/CSS style guide to sanitize your code
- ❖ to get to know the new media tags `<picture>`, `<audio>`, and `<video>`.
- ❖ to learn the various HTML5 form controls

### CSS Tutorial

Run through the basic CSS tutorial at [W3Schools](https://www.w3schools.com/css/), up to Pseudo-element.

### Bootstrap Tutorial

Run through the basic Bootstrap tutorial at [W3Schools](https://www.w3schools.com/bootstrap/).

### Google HTML/CSS Style Guide

Read the first three sections of [the Google HTML/CSS Style Guide](#). This is a local copy obtained from [the Github Google Style Repository](#).

While reading, correct your HTML code from last lab to conform with the Google style.

### Layout your website using the `<table>` element

Turn your single page website into a multi-page one. For example, create a page for *About me*, one for *Timetables*, one for *A collection of links/thoughts/hobbies* and one for *Contact me*. Create a navigation bar to allow for easy navigation across the site. Layout the site using the `<table>` element. In next lab, we will use CSS positioning together with HTML layout tags `<nav>`, `<header>`, `<footer>` `<article>` and `<section>` to do this properly.

### HTML Rich Media

Add media files such as images, audios and videos to your website in the HTML5 way, i.e. provide fall backs to ensure cross-browser and cross-platform rendering.

### Responsive Images

The `<picture>` element provides a container for the image source file, where the `<img src="">` is always the last element. It uses the `media` attribute to query and serve different images according to different devices.

For example, you can modify the following code to serve different images to different media. Load this into Gwiddle, and access using your phone and see if it is supported. For a comprehensive set of what element works on which browser, please refer to [CanIUse.com](https://caniuse.com).

```
<picture>
<source media="(min-width: 1024px)"
srcset="fullsize.jpg">
<source media="(min-width: 700px)"
srcset="midsize.jpg">

</picture>
```

Search on the web for more information about HTML5 responsive images to learn other new features such as the `srcset` and `size` attribute as shown in the example below.

#### UNIT COORDINATOR

[Dr Tim French](#)

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#### LAB FACILITATOR

Mr Michael Stewart, Mr Tom Smoker

#### CONSULTATION TIME

Where: CSSE rm 2.14

Time: Wednesday 11-12pm

No appointment needed.

#### NEWS:

- ❖ [27 Feb 2019] This unit currently has 105 CITS3403 students and 29 CITS5505 students enrolled.
- ❖ [27 Feb 2019] Labs start in week 2. As Monday marsch 4th is a public holiday the first lab will be in Wednesday. Students in the monday lab can do the labs the following week.

```
<picture>
  <source media="(min-width: 1024px)"
    srcset="fullsize-1x.jpg 1x, fullsize-2x.jpg 2x, fullsize-3x.jpg 3x">
  
</picture>
```