



# Interface Design and Development

## Pass Task 2.1: Getting Bootstrap Up and Running

### Overview

Create the classic “Hello World” web page using the Bootstrap framework. This will help ensure that you have the framework installed correctly, and are ready to move on with creating web applications.

**Purpose:** Install and test the framework needed to get started.

**Task:** Create your own Hello World web page with Bootstrap.

**Time:** This task should be completed in your lab class and submitted for feedback before the start of week 4.

**Resources:**

- Bootstrap <http://getbootstrap.com/>
- Getting started <http://getbootstrap.com/getting-started/>

### Submission Details

- Hello World source code (helloworld2.html).
- Screenshot of the code in brackets displaying code and the green check, or in other methods to show the code is valid.
- Answers to the questions provided (Refer to Item 6).

Make sure that your task has the following in your submission:

- The Hello World is HTML5 compliant.
- Demonstrate understanding of using the Bootstrap framework.

## Instructions

The first task includes the steps needed for you to install the framework you will need in this unit. You will then use the Bootstrap framework to create the 'Hello World' web page.

### 1. Use Bootstrap:

#### Method 1:

Installed Bootstrap (<https://getbootstrap.com/docs/5.1/getting-started/download/> )

Download the "Compiled CSS and JS". You should have the following files stored in appropriate folders.

```
framework/
├── css/
│   ├── bootstrap.css           (can choose to use only the
│   ├── bootstrap.css.map       minified version)
│   ├── bootstrap.min.css
│   ├── bootstrap.min.css.map
│   └── ... ..
└── js/
    ├── bootstrap.bundle.js
    ├── bootstrap.bundle.min.js
    └── ... ..
```

You can use the following template to create your web pages.

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Template that uses Bootstrap</title>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <!-- Bootstrap -->
    <link href="framework/css/bootstrap.min.css" rel="stylesheet" />
  </head>
  <body>
    <h1>Hello world!</h1>
    Your content here.
    <!-- Bootstrap javascript plug-ins -->
    <script src="framework/js/bootstrap.bundle.min.js"></script>
  </body>
</html>
```

Relative path depends on where you put the downloaded files

**Method 2:** You can also use direct link to specific versions of Bootstrap in your HTML file.

```
<!-- Bootstrap CSS -->
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css"
      rel="stylesheet"
      integrity="sha384-1BmE4kWBq78iYhFIdvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3"
      crossorigin="anonymous">

<!-- Optional JavaScript -->
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"
        integrity="sha384-ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IIRH9sENBOOLRn5q+8nbTov4+1p"
        crossorigin="anonymous"></script>
```

You can use the following template to create your web pages.

```
<!doctype html>
<html lang="en">
  <head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">

    <!-- Bootstrap CSS -->
    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-beta2/dist/css/bootstrap.min.css"
          rel="stylesheet"
          integrity="sha384-BmbxuPwQa2lc/FVzBcNJ7UAyJxM6wugIj61tLrc4wSX0szH/Ev+nYRRuWlolflfl"
          crossorigin="anonymous">

    <title>Bootstrap CDN Template</title>
  </head>
  <body>
    Your content here.

    <!-- Optional JavaScript -->
    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-beta2/dist/js/bootstrap.bundle.min.js" integrity=
    "sha384-b5kHyXgcpbZJO/tY9U17kGkfls0CWuKcCD3818YkeH8z8QjE0GmWlgYU5S9FOnJO"
    crossorigin="anonymous"></script>

  </body>
</html>
```

- If you don't already have one, make a directory (i.e., a 'folder') to store your framework (e.g. Documents/cos30043/lab02). On a Swinburne computer you may wish to use a directory on your student drive or a USB storage device.

**Note:** You will be using the framework in your subsequent lab tasks. You can either keep a single copy for the framework files for all you lab tasks, or replicate a copy of the framework files for each lab.

3. Create a new file and enter the code for the Hello World program. It should appear shown here. For this task, it is preferred that you type the code rather than copy and paste.

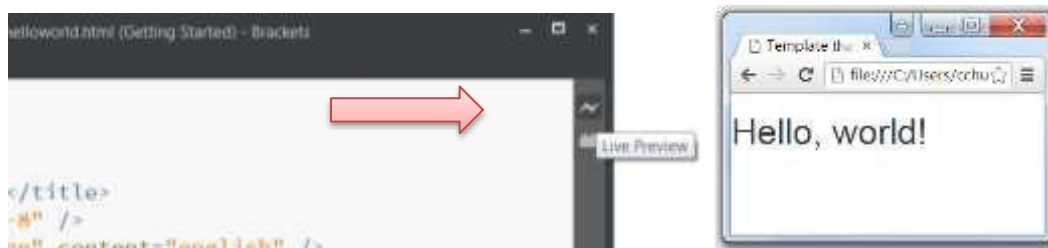
```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Template that uses Bootstrap</title>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <!-- Bootstrap -->
    <link href="framework/css/bootstrap.min.css" rel="stylesheet" />
  </head>

  <body>
    <div class="container">
      <div class="row">
        <div class="col-12">
          <h1>Hello world!</h1>
        </div>
      </div>
    </div>
    <!-- Bootstrap javascript plug-ins -->
    <script src="framework/js/bootstrap.bundle.min.js"></script>
  </body>
</html>
```

4. Save the file as helloworld2.html in your lab02 directory.

**Note:** The html file will be interpreted and rendered into a webpage when open by a browser.

5. View the web page.



6. Answer the following questions in the answer sheet provided in the **resources** for this task.
  1. Is the font type in helloworld2.html similar to helloworld.html (you created in the first week)?
  2. What happens if you remove `<div class="container"></div>`?
  3. What is the purpose of `<div class="container"></div>`?

Now that the task is complete you can submit it for assessment, which will help prepare it for your portfolio.