

Lab 03: Implementing CSS for Software Engineering Club website using Bootstrap

In this exercise, you have to do the following tasks:

Task 1: Create a folder

Create a folder on your hard drive or portable storage device (USB or SD card) called “**seclub4**” to contain your SE Club website files. Copy **all** the files from your Lab 2’s folder (seclub2) into the **seclub4** folder.

Task 2: Configure the Bootstrap External Cascading Style Sheet (CSS)

1. Launch a text editor, and open all the html files. Modify all the files to apply styles from the Bootstrap external style sheet and JavaScript as follows.

NOTE: Copy the CDN links from Bootstrap website
(<https://getbootstrap.com/docs/4.3/getting-started/introduction/>)

- a) Remove the <link> for seclub.css external style sheet file, include meta tags and Bootstrap CDN link (hosted online) using the <link> tag

```
<head>

<!-- Required meta tags -->
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1,
shrink-to-fit=no">

<!-- Bootstrap CSS -->
<link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstr
ap.min.css" integrity="sha384-
ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
crossorigin="anonymous">

<title>SE Club</title>

</head>
```

- b) To use Bootstrap’s compiled JavaScript, include jQuery and Popper.js CDN links before it. Add all the jQuery, Popper.js and Bootstrap JS’s CDN links **at the end** of <body> </body> division

```
<body>

<!-- JavaScript -->
<!-- jQuery first, then Popper.js, then Bootstrap JS -->
```

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```
<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js"
integrity="sha384-
q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"
crossorigin="anonymous"></script>
<script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/pop
per.min.js" integrity="sha384-
U02eT0CpHqdSJKQ6hJty5KVphtPhzWj9WO1clHTMGa3JDZwrnQq4sF86dIHNDz0W1"
crossorigin="anonymous"></script>
<script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap
.min.js" integrity="sha384-
JjSmVgyd0p3pXB1rRibZUAYoIIy6OrQ6VrjIEaFf/nJGzIxFDsf4x0xIM+B07jRM"
crossorigin="anonymous"></script>

</body>
```

2. Configure the layout of the page **body** area using the Bootstrap's basic layout element, **container** to replace the `div` with `id` named `wrapper`.

```
<body>
<div class="container">
    <!-- Content here -->

</div>

</body>
```

3. Modify the navigation menu using Bootstrap **navbar** component:

- a. Fix the position of the navbar at the top of the viewport using the Bootstrap position component class `"fixed-top"`

```
<nav class="navbar navbar-expand-lg navbar-light bg-light fixed-
top">
```

- a. Update the `.navbar-brand` with the **"Software Engineering Club"** name.
- b. Adding image, **selogothumb.jpg** to the `.navbar-brand` with custom styles or utilities to properly size, 30 pixels of width and 30 pixels of height.
- c. Replace the `#` in the `` with the navigation links
 - i. **"HOME"** links to `index.html`
 - ii. **"ABOUT"** links to `about.html`
 - iii. **"EVENTS"** links to `events.html`
 - iv. **"SIGN UP"** links to `signup.html`

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- d. Use Active state to indicate the **current page**. For example, index.html is set as the active link for Home page:

```
<li class="nav-item active">
  <a class="nav-link" href="index.html">Home
  <span class="sr-only">(current)</span>
</a>
</li>
```

4. Configure the page footer area using Bootstrap **container**. Add a **horizontal line** before the footer information. Explore the **Bootstrap Text utilities** to use the Bootstrap CSS classes **for italicize text** and **center aligned text** on all viewport sizes in the **<footer>** tag.

```
<footer class="container text-center font-italic">
  <hr>
  Copyright &copy; 2019 UM Software Engineering Club<br>
  <a href="mailto:umseclub@um.edu.my">umseclub@um.edu.my</a>
</footer>
```

5. Save the index.html file, and test it in a browser. Figure 1 shows a new home page (index.html) after using Bootstrap css styles.
6. Repeat this to all html files.

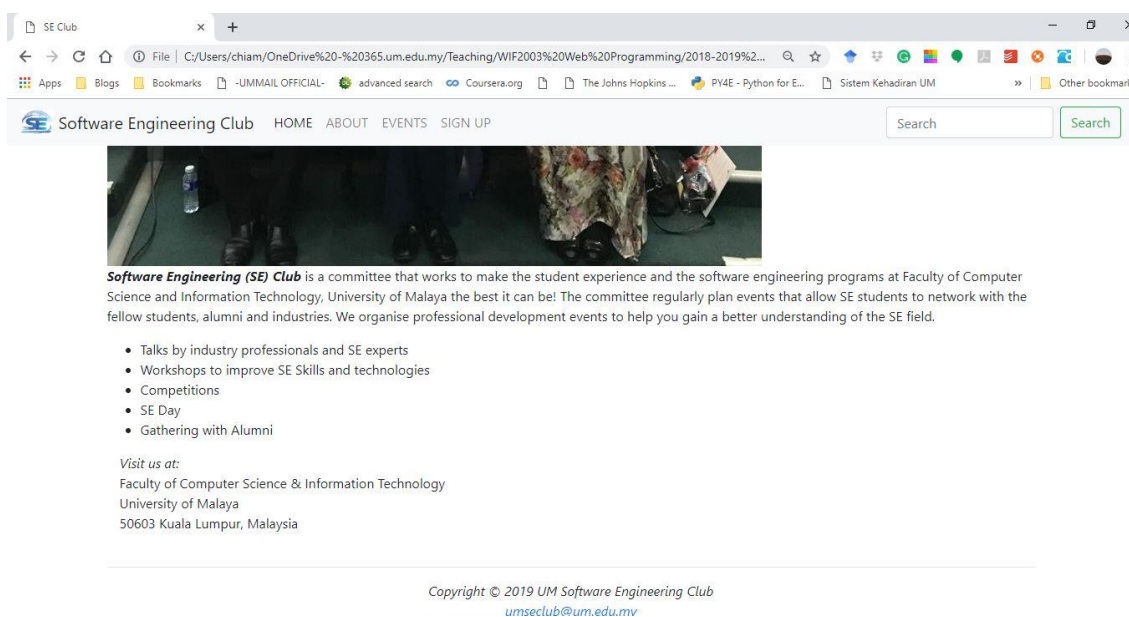


Figure 1: New SE Club's index.html after using Bootstrap CSS

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Task 3: The Home Page

Launch a text editor, and open the **index.html** file. You will **modify** this file to apply styles from the seclub.css external style sheet as follows:

1. Use the Bootstrap **jumbotron** component to create a larger container for the image and description of SE Club.
2. Configure the image (seday.png) in the **** tag to 250 pixels of width, and 300 pixels of height. Replace the css class **“floatright”** in the **** tag using Bootstrap **Float** component and **Spacing** utility classes **“float-right”** and **“ml-3”** (margin-left, size 3).
3. Add a new “Sign up today” button using the Bootstrap **Primary Button** component, size larger button, **“btn btn-primary btn-lg”** to link the button to *Sign Up* page.
4. Configure the address information using the Bootstrap Layout’s Container class, **“container”** and Bootstrap Utilities, **Colours** class, **“bg-info”** within the **<div>** element.
5. Override the Bootstrap CSS style for **“jumbotron”** component class, change the **background color** to **#F0F8FF**.
6. Override the Bootstrap CSS style for **“body”** element, change the **background color** to **#ADD8E6**.
7. **Save** the **index.html** file, and **test** it in a browser. Your page should look similar to the one shown in Figure 2.

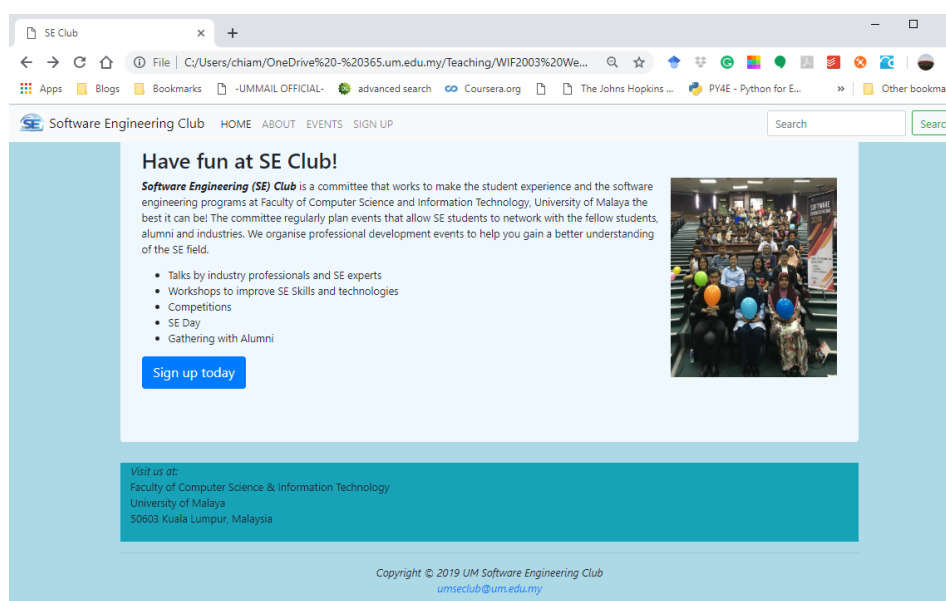


Figure 2: New SE Club's index.html

Task 4: The About Page, Events Page and Sign Up Page

1. Explore the Bootstrap CSS **Layout, Components, Utilities and Examples**. Use your creativity to apply suitable styles on the about.html, events.html and signup.html.

Reference links:

- Bootstrap Layout: <https://getbootstrap.com/docs/4.3/layout/overview/>
- Bootstrap Components: <https://getbootstrap.com/docs/4.3/components/>
- Bootstrap Utilities: <https://getbootstrap.com/docs/4.3/utilities/>
- Bootstrap Examples: <https://getbootstrap.com/docs/4.3/examples/>

2. Save the html files after implementing Bootstrap css styles, and test it in a browser.
3. Figures 3 to 5 shows the new About page (about.html), Events page (events.html) and Sign up page (signup.html) after using Bootstrap css styles for your reference. Your design does not need be same as the sample About, Events and Sign Up pages.

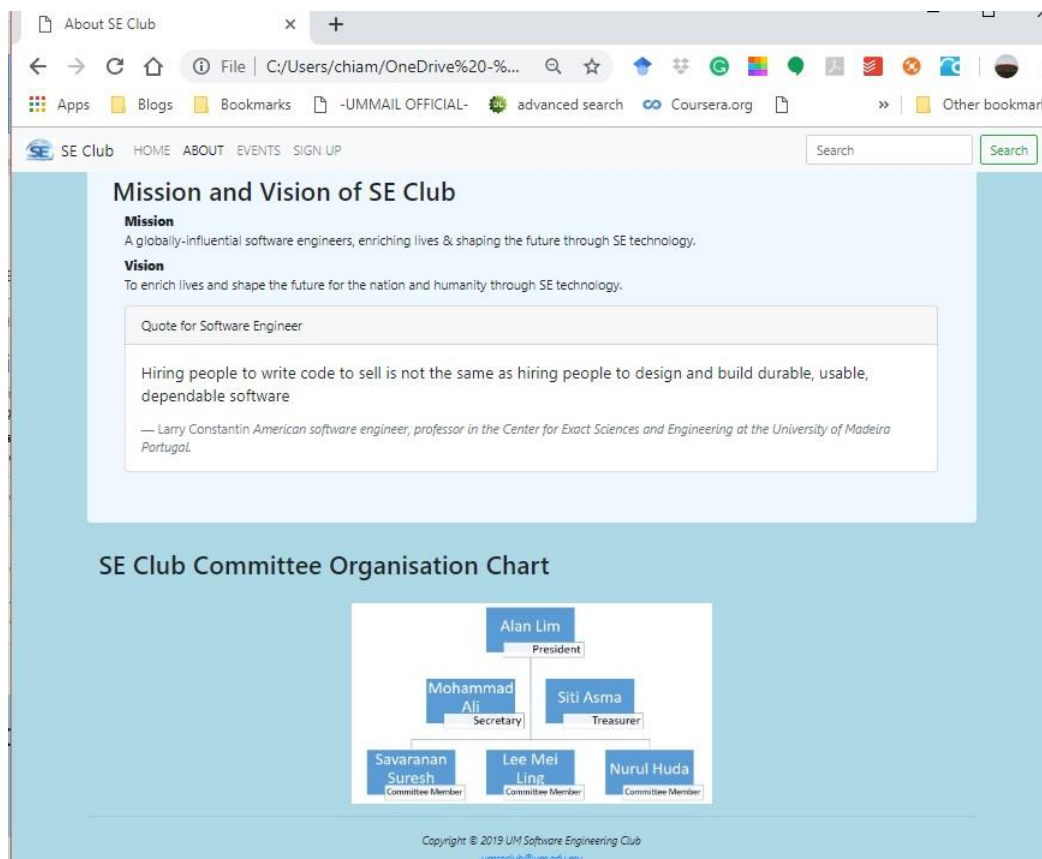


Figure 3: New SE Club's about.html

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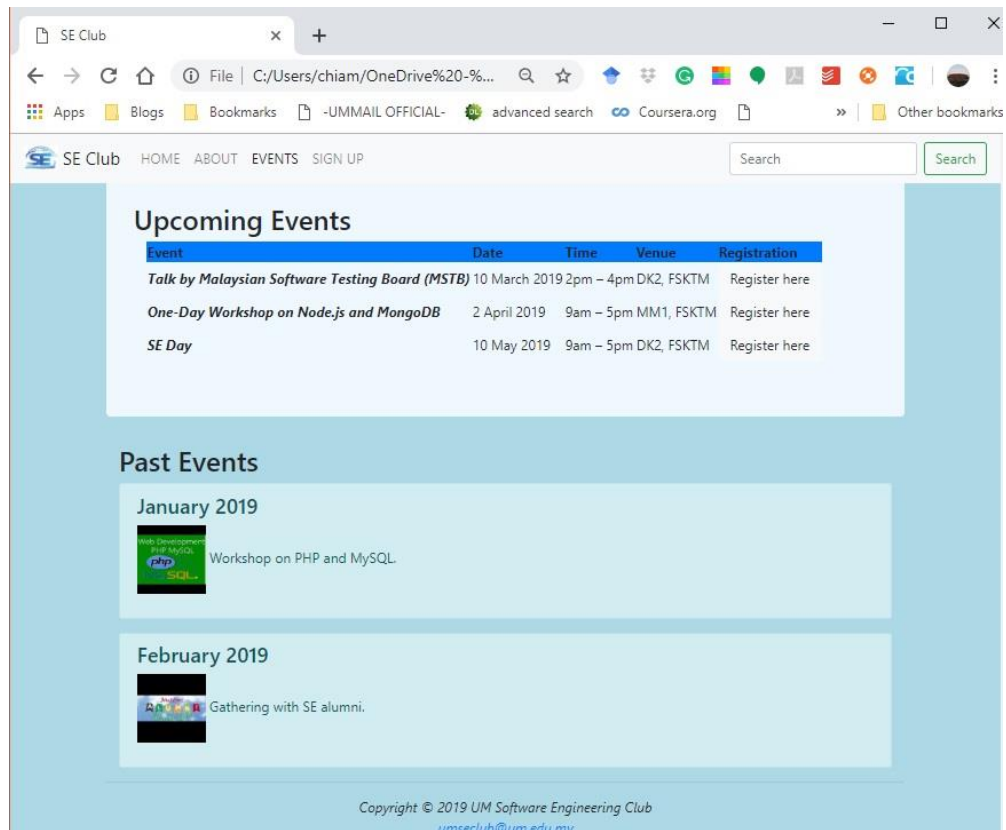


Figure 4: New SE Club's Events.html

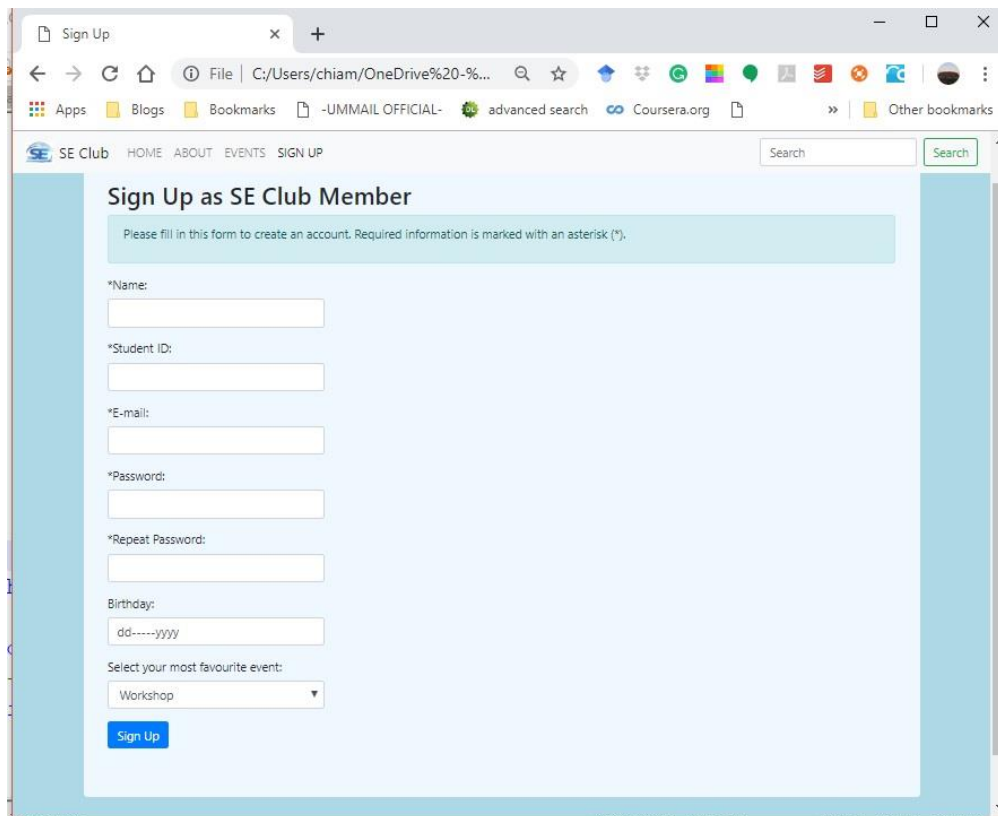


Figure 5: New SE Club's Sign Up.html