

WIF2003 Web Programming

Lab 02: Implementing CSS for Software Engineering Club website

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 “**seclub2**” to contain your SE Club website files. Copy **all** the files from your Lab 1’s folder (seclub) into the seclub2 folder. Next, copy the **new image files** (background.gif, seday.png, selogo.jpg) into the seclub2 folder.

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

You will use a text editor to create a new external cascading style sheet, save it as **seclub.css**. Figure 1 shows a “*Single Column Wireframe*” for this website, with a top header section, body section, navigation section, and a footer section. You will configure the CSS to implement a CSS Single Column Page Layout. Style sheets are composed of “rules” that describe the styling to be applied:

```
selector {  
    property: value;  
    anotherProperty: value;  
}
```

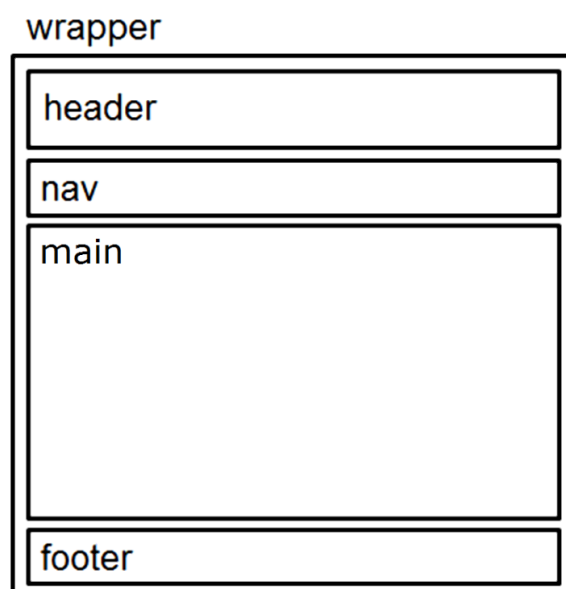


Figure 1: Single Column Wireframe of SE Club website

Code the seclub.css to configure the following:

1. Configure **global styles** for the document (use the **body** element selector) with background color #ADD8E6; text color #221811; Times New Roman, Georgia, Times font-family; and set a background image using background.gif.

```
body {  
  
}
```

2. Configure for the **header area** with the background color #6495ED, 160 pixels of height, background image (selogo.jpg) and no repeat for background-repeat property.

```
header {  
  
}
```

3. A **wrapper** is commonly used to center a layout on the page. The wrapper keeps a layout from looking too wide or too narrow depending on the device or viewport width. Configure a div with the given id '**wrapper**' for SE Club Website with background color # F0F8FF, 90% width, auto right margin, auto left margin, and set box-shadow effect using 3 pixels of offset-x, 3 pixels of offset-y, 3 pixels of blur-radius and color #191970.

```
#wrapper {  
  
}
```

4. Configure for the **navigation area** with center alignment (text-align: center), bold font-weight, 1.5em of font-size and 10 pixels of top padding.

```
nav {  
  
}
```

5. Configure the **navigation hyperlinks (nav a)**. Use a contextual selector to add a new style rule for the anchor tags within the `nav`. Configure this selector with 15 pixels of bottom padding and no underline on hyperlinks.

```
nav a {  
  
}
```

6. Configure the **main area** with 2em of left padding, 2em of right padding, 2em of bottom padding and **display** the element in main area as a **block** element (like <p>, it starts on a new line, and takes up the whole width).

```
main {  
  
}
```

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7. Configure the **footer area** with background color #D2B48C, small font size, italic font style, center text-align, 10 pixels of padding-bottom and 2 pixels of border-top with color #000080 and solid line.

```
footer {  
  
}
```

8. Configure the **h1** element selector with 45 pixels of top padding, 220 pixels of left padding and 3em of font-size.

```
h1 {  
  
}
```

9. Configure **img** element selector with 5 pixels of left padding and 5 pixels of right padding.

```
img {  
  
}
```

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. Add a `<link>` element to associate the web page with the `seclub.css` external style sheet file. Save and test your `index.html` page in a browser and you will notice that the styles configured with the `body` and `h1` element selectors are already applied!

```
<head>
    <title> SE Club</title>
    <link rel="stylesheet" href="seclub.css">
</head>
```

2. Configure the page **body** area, add a `div` with `id` named `wrapper` to associate the web page's body area with the wrapper layout configured in the `seclub.css`.

```
<body>
<div id="wrapper">

</div>
</body>
```

3. Configure the page **footer** area. **Remove** the `<small>` and `<i>` elements, because the `font-size` and `font-style` are configured in `seclub.css`.
4. Update `seclub.css` file to configure a new **class** element named '**floatright**' that float on the right side, 1em of left margin, 250 pixels of width, and 300 pixels of height. This class element will be used in the `index.html` file to style a new image.

```
.floatright {
}
```

5. In `index.html` page, add a **new image (seday.png)** in the `<main>` area, within the `<div>` element, **before** the "Software Engineering (SE) Club is a committee that works" paragraph. Use the css **class "floatright"** in the `` tag of the new image (**seday.png**).
6. **Save** the `index.html` file, and **test** it in a browser. Your page should look similar to the one shown in Figure 2.

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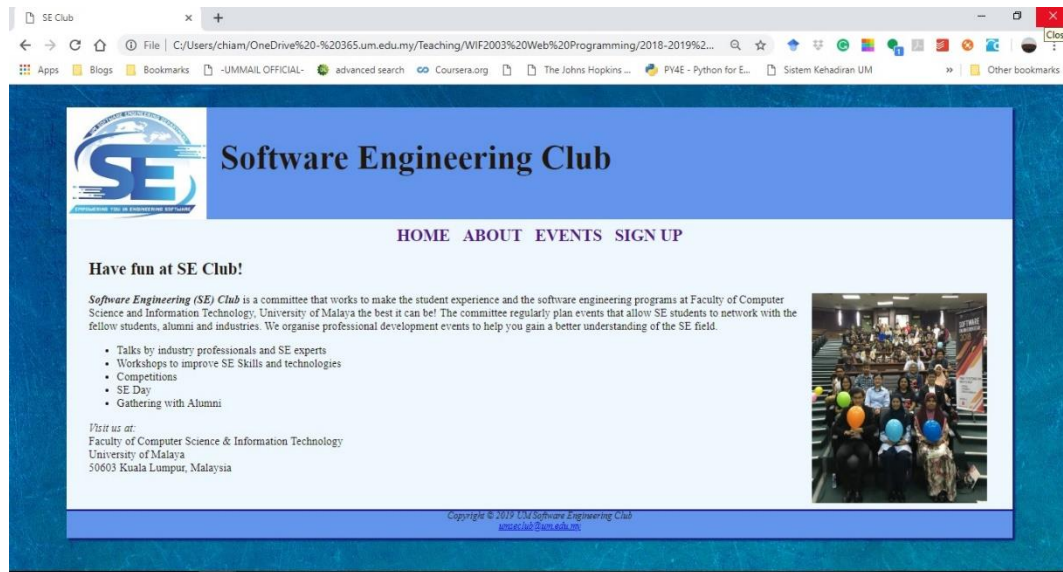


Figure 2: New SE Club's index.html

Task 4: The About Page

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

1. Add a `<link>` element to associate the web page with the **seclub.css** external style sheet file.

```
<head>
    <title>About SE Club</title>
    <link rel="stylesheet" href="seclub.css">
</head>
```

2. Configure the page **body** area, add a `div` with `id` named `wrapper` to associate the web page's body area with the wrapper layout configured in the **seclub.css**.

```
<body>
<div id="wrapper">

</div>
</body>
```

3. Configure the page **footer** area. **Remove** the `<small>` and `<i>` elements, because the `font-size` and `font-style` are configured in **seclub.css**.

4. Add a **new blockquote** after the "Mission and Vision of SE Club" with the following text:
Hiring people to write code to sell is not the same as hiring people to design and build durable, usable, dependable software.
--Larry Constantin

5. Update **seclub.css** file to configure a **blockquote** selector with background color `#E6E6FA`, italic font style, bold font-weight and center text-align. This class element will be used in the **about.html** file to style the blockquote.

```
blockquote{
    background-color: #E6E6FA;
    font-style: italic;
    font-weight: bold;
    text-align: center;
}
```

6. Update **seclub.css** file to configure a class element named **"ochartstyle"** with relative position, 200px from the left and 10px from the top, 450px width and 250px height. This class element will be used in the **about.html** files to style the **ochart.jpg** image.

```
.ochartstyle{
    position: relative;
    left: 200px;
    top: 10px;
    width: 450px;
    height: 250px;
}
```

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- Update the **about.html** page, use the css class **"ochartstyle"** in the **** tag of the organisation chart image (ochart.jpg). Remove the **<width>** and **<height>** properties, because they are configured in the **seclub.css**.
- Save** the **about.html** page, and **test** it in a browser and you will notice that the styles configured in **seclub.css** are already applied. Your page should look similar to the one shown in **Figure 3**.

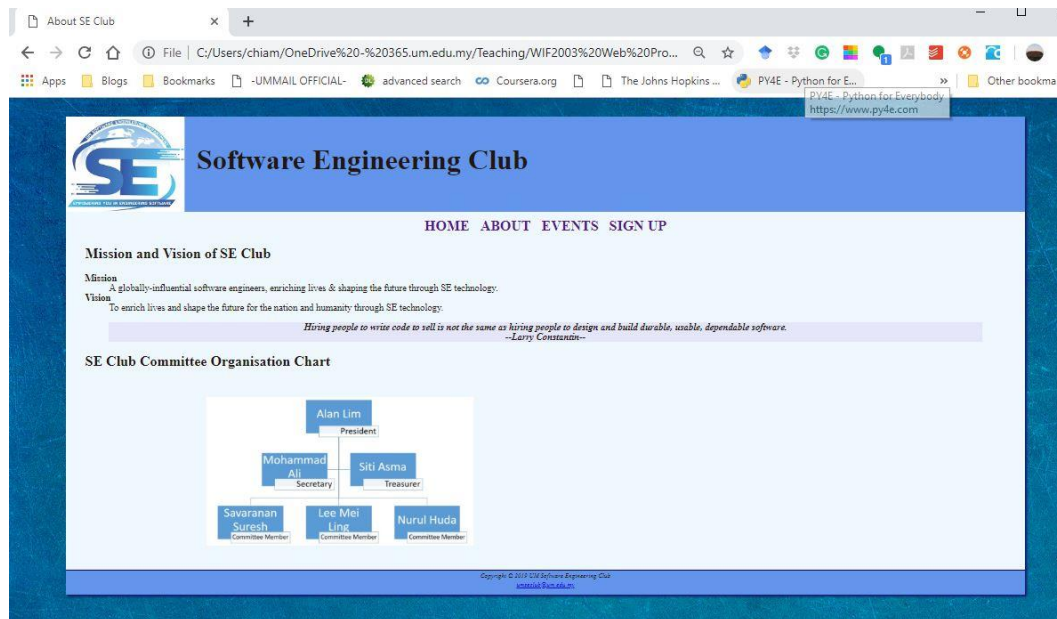


Figure 3: New SE Club's about.html

Task 5: The Events Page

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

1. Add a `<link>` element to associate the web page with the **seclub.css** external style sheet file.

```
<head>
    <title>SE Club Events</title>
    <link rel="stylesheet" href="seclub.css">
</head>
```

2. Configure the page **body** area, add a `div` with `id` named `wrapper` to associate the web page's body area with the wrapper layout configured in the **seclub.css**.

```
<body>
<div id="wrapper">

</div>
</body>
```

3. Configure the page **footer** area. **Remove** the `<small>` and `<i>` elements, because the `font-size` and `font-style` are configured in **seclub.css**.
4. Update the **seclub.css** file to create a **new element selector id** named "**eventinfo**" to configure the table of **events.html** page with 80% width, border (2px, solid line, color #483D8B), 10% left margin, 10% right margin, center text-align.

```
#eventinfo{

}
```

5. Update the **seclub.css** file to configure the header cell in the table of **events.html** page, **#eventinfo th** with 12pixels top padding, 12 pixels bottom padding, background color #4682B4, white font color.

```
#eventinfo th {

}
```

6. Update the **seclub.css** file to configure the even row in the table of **events.html** page, **#eventinfo tr:nth-child(even)** with background color #B0E0E6.

```
#eventinfo tr:nth-child(even){

}
```


- Update the **events.html** page, use the css id **"eventinfo"** in the **<table>** tag of the event content table.
- Update the **seclub.css** file to configure the **h4** element selector with background color #87CEFA, 1.2em of font size, 5 pixels of top padding, 10 pixels of left padding, and 5 pixels of bottom padding.

```
h4 {  
  
}
```
- Save** the **events.html** page, and **test** it in a browser and you will notice that the styles configured in seclub.css are already applied. Your page should look similar to the one shown in **Figure 4**.

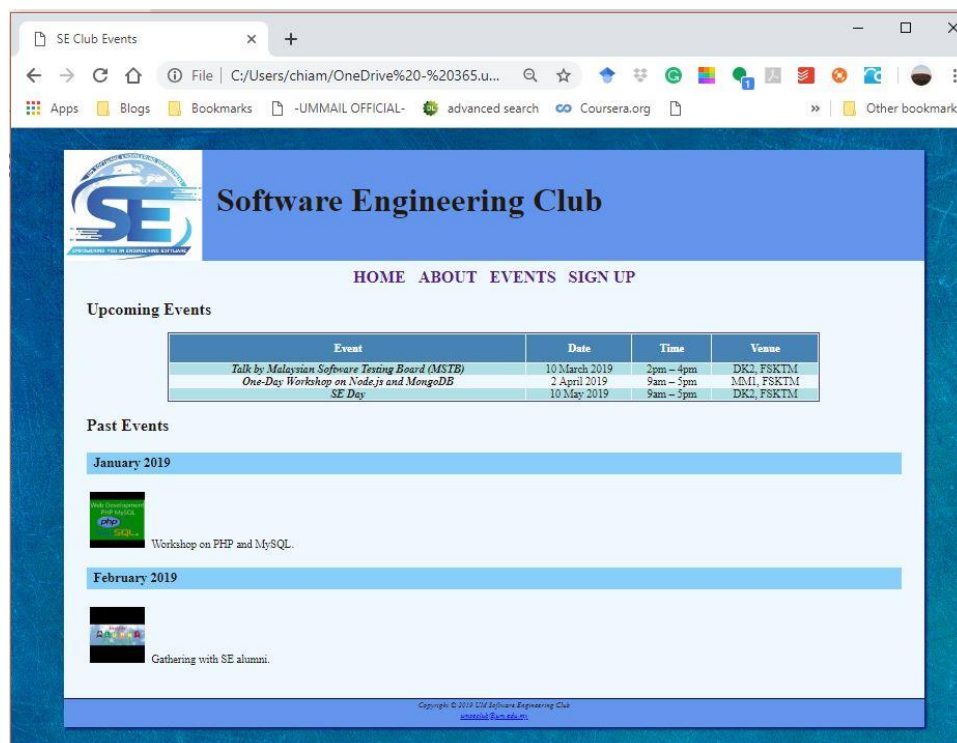


Figure 3: New SE Club's events.html

Task 6: The Sign Up Page

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

1. Add a `<link>` element to associate the web page with the **seclub.css** external style sheet file.

```
<head>
    <title>Sign Up</title>
    <link rel="stylesheet" href="seclub.css">
</head>
```

2. Configure the page **body** area, add a `div` with `id` named `wrapper` to associate the web page's body area with the wrapper layout configured in the **seclub.css**.

```
<body>
<div id="wrapper">

</div>
</body>
```

3. Configure the page **footer** area. **Remove** the `<small>` and `<i>` elements, because the `font-size` and `font-style` are configured in **seclub.css**.
4. Update the **seclub.css** file to configure style the form's label, input, select element and form button:

- a. Configure the form element selector with 2em of padding. This element will be used in the **signup.html** file to style the form.

```
form {
```

- b. Configure the label element selector that float to left, with right text-align, bold font-weight, 15em of width, 1em of padding-right and display the element as a block.

```
label {
```

- c. Configure the input, select element selector with 2em of margin-bottom and display the element as a block.

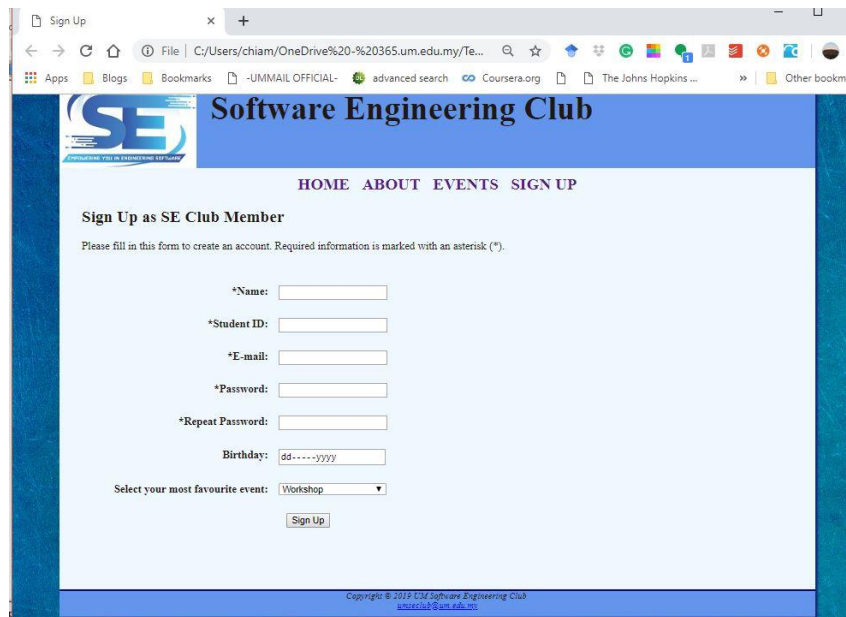
```
input, textarea, select {
```

- d. Configure a new element selector `id` named **"newSubmit"** with 20em of left margin. This `id` element will be used in the **signup.html** file to style the form button.

```
#newSubmit {
```

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5. Update the **signup.html** page, use the css id **“newSubmit”** in the submit button of the event content table. **Remove** the `
` elements within the `<form></form>`, because the form, label, input, select and form button elements are configured in `seclub.css`.
6. **Save** the **signup.html** page, and **test** it in a browser and you will notice that the styles configured in `seclub.css` are already applied. Your page should look similar to the one shown in **Figure 5**.



The screenshot shows a web browser window displaying the 'Sign Up' page for the Software Engineering Club. The page has a blue header with the club's logo and name. Below the header is a navigation menu with links to HOME, ABOUT, EVENTS, and SIGN UP. The main content area is titled 'Sign Up as SE Club Member' and includes a note: 'Please fill in this form to create an account. Required information is marked with an asterisk (*).' The form contains several input fields: *Name, *Student ID, *E-mail, *Password, *Repeat Password, and Birthday (with a date picker). There is also a dropdown menu for 'Select your most favourite event:' with 'Workshop' selected. A 'Sign Up' button is at the bottom of the form. The footer contains copyright information: 'Copyright © 2019 UTM Software Engineering Club' and a link to 'umsec@utms.edu.my'.

Figure 5: New SE Club's signup.html

Task 6: Implementing a CSS Two-Column Page Layout

Launch a text editor, and open the **seclub.css** file. You will **modify** this file to implement a new CSS two-column page layout for SE Club website. The steps are as follows:

1. Create a new folder called seclub3. Copy all the files from your seclub2 folder into the seclub3 folder.
2. Modify the index.html, about.html, events.html and signup.html: **Change the navigation menu to an unordered list **
3. **Modify the seclub.css file** to configure the a two-column page layout:

- a. Use the universal selector (*) to apply this to set a universal box-sizing

```
*{box-sizing: border-box;}
```

- b. Displays the header, nav, main and footer element as a block element:

```
header, nav, main, footer { display: block; }
```

- c. Update the css of **navigation selector (nav)** to add **200 pixels of width** and **floats to the left** of the container.

```
nav {  
  
}
```

- d. Update the css of **navigation hyperlinks selector (nav a)** to add **10% of left margin** and **10% of right margin**:

```
nav a {  
  
}
```

- a. Set the css of **unordered list in navigation menu (nav ul)** with 0 pixel of left padding and remove the list bullets of the unordered list.

```
nav ul {  
  
}
```

- b. Set the **<main>** area with background color #87CEEB, 200 pixels of left margin, 2em padding.

```
main {  
  
}
```

4. **Save the seclub.css and html files**, and **test** all the web pages (index.html, about.html, events.html and signup.html) in a browser and you will notice that the styles configured in seclub.css are already applied. Your page should look similar to the one shown in **Figure 6**.

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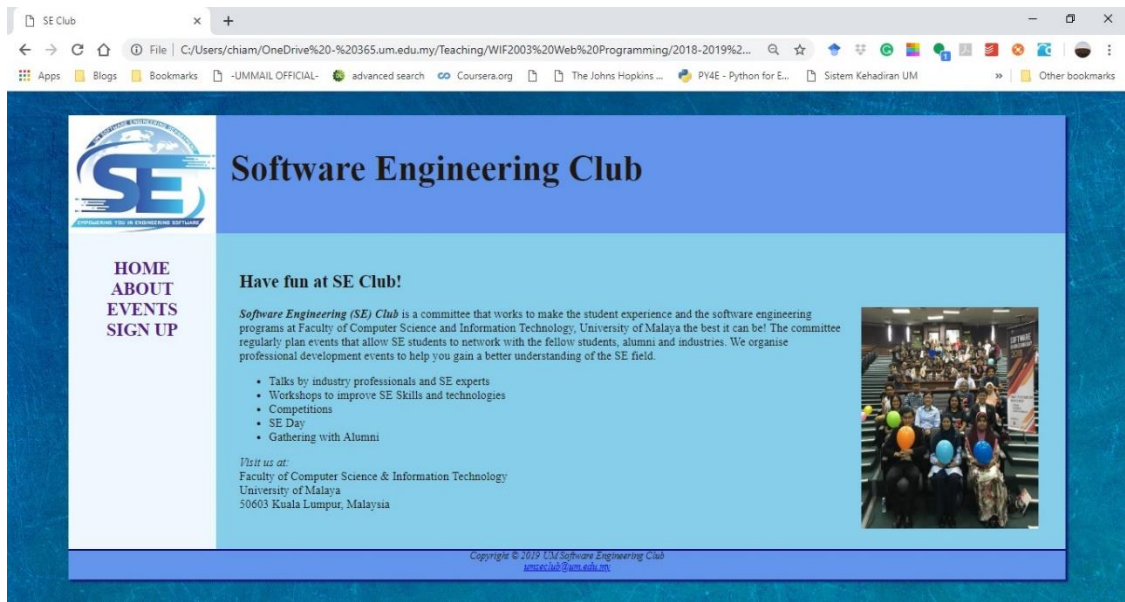


Figure 6: New SE Club's index.html with CSS Two-Column page layout