

# COMP3322B Modern Technologies on World Wide Web

## LAB2: Cascading Style Sheets (CSS) II

### Overview

In this lab assignment, we will reformat the look of the web page that we created last week using features introduced in CSS3 and Responsive Web Design. After finishing this lab assignment, your page will appear as shown in the following screenshots:



Screenshot 1: when the screen width is larger than 580px

Let's

**Search**

in **cs.hku.hk**

### Upcoming events

- Jan 28, 2019  
[Journey of Hong Kong Towards a Smart City](#)
- Jan 29, 2019  
[Visual Perception and Control of Intelligent Vehicles and Robotics](#)
- Jan 30, 2019  
[Deep Learning for Visual Perception: Algorithms, Applications and Theory](#)



**HKUCS website - Feedback, Web accessibility**

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### Screenshot 2: when the screen width is no larger than 580px

**Note:** Due to the compatibility of difference browsers, the same CSS code may lead to quite different display; we will check the assignment in the Chrome browser. So you are recommended to use the Chrome browser to develop/test your page as well.

## Lab Exercise

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[Step1]: Download "**lab2\_materials.zip**" from HKU Moodle, and extract it to a folder named "**lab2**". In this folder, there are two files **index.html** and **style.css** as well as two image files. Your main task is to add more CSS code in **style.css**, which is the template CSS file for use today. You do not need to change **index.html**, but only add the <meta> viewport element as asked in Step 5.1 below.

[Step2 (Multi-column search area display)]: Instead of using a table to create the search area, in this lab, we use <div> elements and CSS3 to create a similar display. Style the division with id of "searchArea" as follows to create a multi-column division ([http://www.w3schools.com/css/css3\\_multiple\\_columns.asp](http://www.w3schools.com/css/css3_multiple_columns.asp)), which contains four child divisions in four columns (corresponding to the four table cells in Lab 1):

```
#searchArea {  
  -webkit-column-count: 4; /* Chrome, Safari, Opera */  
  -moz-column-count: 4; /* Firefox */  
  column-count: 4;  
}
```

[Step 3 (Text shadow & Gradient Background)]: Further style the search button as follows (i.e., add more styling rules to .searchButton):

- (1) the word "Search" should have a black text shadow, with 3px blur-radius, 1px h-shadow and 1px v-shadow (Hint: use text-shadow property at [http://www.w3schools.com/cssref/css3\\_pr\\_text-shadow.asp](http://www.w3schools.com/cssref/css3_pr_text-shadow.asp));
- (2) the submit button should have a gradient background: a linear gradient from right bottom to left top, where the color goes from "lightskyblue" to "lightpink"; (Hint: Use CSS3 Gradients [https://www.w3schools.com/css/css3\\_gradients.asp](https://www.w3schools.com/css/css3_gradients.asp)).

[Step 4 (Transition)]: We will add more styling rules to the hyperlinks in the event list. Set the background color of each hyperlink to "darkseagreen", and add a transition effect: when the cursor is moved over each link, the background color of the link changes from "darkseagreen" to "lightgreen" within a duration of 2 seconds. (Hint: Use CSS3 Transitions [https://www.w3schools.com/css/css3\\_transitions.asp](https://www.w3schools.com/css/css3_transitions.asp)).

[Step 5 (Responsive Web Design)]

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5.1 Add `<meta name="viewport" content="width=device-width, initial-scale=1.0">` into `<head>` element in **index.html**.

5.2 Add CSS code in **style.css** to achieve the following: when the screen width is no larger than 580px,

(1) the event list becomes more compact with smaller font:

```
li {  
    margin-right: 0;  
    font-size: 15px;  
    width: 60%;  
}
```

(2) the font size and margin in the footer division become smaller:

```
#footer h3 {  
    font-size: medium;  
    margin-top: 0px;  
}  
  
#footer p {  
    font-size: small;  
    margin-top: 0px;  
    margin-bottom: 0px;  
}
```

(3) The column count in the search area becomes 1, such that the divisions in the search area move to new lines when the screen is small (Screenshot 2).

(4) Width of the divisions in the search area becomes the same and changes with the change of the screen width:

```
.col-1 {  
    width: 90%;  
}
```

(5) The image declared-main-building.jpg scales with the change of the screen width:

```
.image{  
    width: 70%;
```

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```
height: auto;
```

```
}
```

### Submission:

Please finish this lab assignment before **23:55 Sunday Feb. 3, 2019**. Please upload all files (**style.css, index.html, logo.jpg and declared-main-building.jpg**) to **i.cs.hku.hk** web server under **"lab2"**, similar to what you did in lab 1. The URL to access your page should be [http://i.cs.hku.hk/~\[your\\_CSID\]/lab2/index.html](http://i.cs.hku.hk/~[your_CSID]/lab2/index.html). We will check the page for your lab 2 marking. If all styling requirements are fulfilled, you will get the "1" mark for this lab exercise. Be sure to check the page yourself after uploading it to the web server.