

EE4216 Tutorial 2 – CSS, HTML and XML

Objectives:

- Learn to use new HTML5 elements and features
- Learn to use simple script to manipulate HTML DOM
- Learn to use CSS selector to select different part of a web page
- Learn the syntax of CSS rules and the way to add styles
- Understand the CSS box model and positioning system
- Understand CSS Framework and Responsive Web Design (RWD)

In the following exercise, use W3C validator to make sure your markup code is HTML5-valid.

<http://validator.w3.org/>

1. Create a HTML5 webpage which displays a canvas and three sliders. The slides' range is from 0 to 255 and they are corresponding to the R, G and B channel of the canvas. The canvas color changes upon dragging the sliders.

Hints: you can set the fill color of the canvas context with a string value like `"rgb(129,255,0)"`.



R



G

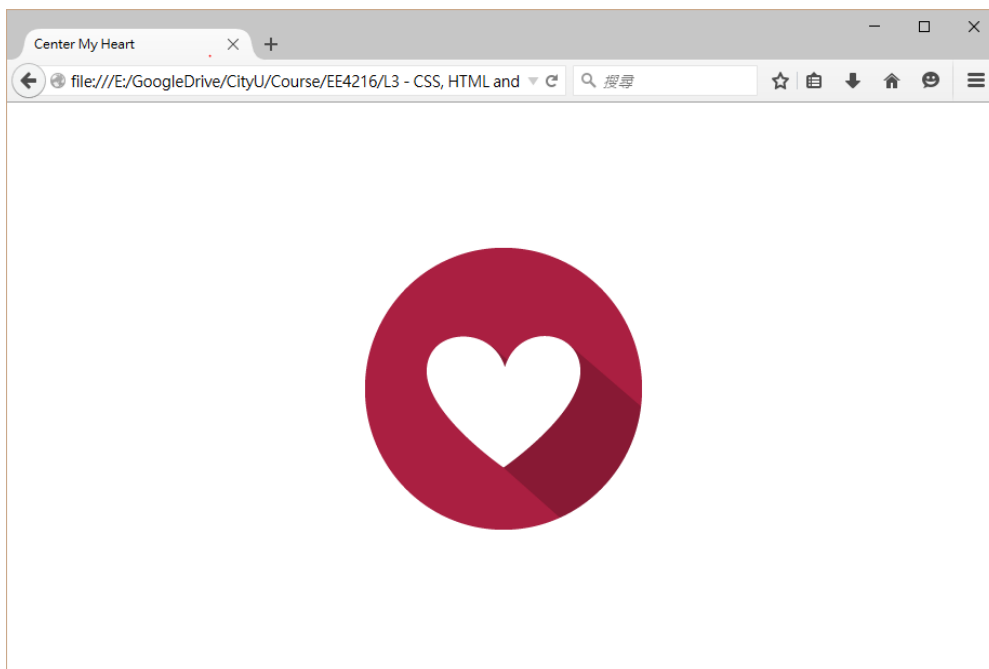


B



2. Given the following HTML page that contains an image of heart. Apply CSS as an **internal style sheet** to the HTML document to set the heart image to the center of the page, both vertically and horizontally, a.k.a. *Perfect Centering*.

```
<!DOCTYPE html>
<html>
  <head>
    <title>Center My Heart</title>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
  </head>
  <body>
    
  </body>
</html>
```



The result of perfect-centering the heart image.

3. Starting with the plain HTML web page ***selector.html***, create an **external style sheet** and add CSS rules so that the web page looks like the screenshot below. Do not modify the HTML except adding a tag to link with your external style sheet. You should figure out what changes are made and what selector you can use to select that part of the page. Then create the CSS rule with the selector and the color property (e.g. color: red). Useful color names are **blue**, **orange**, **green**, **darkviolet**, **red**, and **cyan**.

Note that there are often multiple ways to achieve the same result in CSS. Try to make it cleaner and use fewer selectors.

About

Women Developers and Programmers!

Want to learn how to code? Have a great idea? Don't be shy. Develop it.

It can be intimidating for women to learn and ask questions when they are in an extreme minority. While open and welcoming, today's budding developer community is up to 91% male. There isn't a comfortable place where women can learn at their own pace and not be afraid to ask "stupid questions."

We decided it was time to provide a place where all questions are OK and everyone can learn in a supportive environment. Our courses focus on coding, leveraging existing technology, and having something to show for it (aka building sweet websites).

Stay tuned to this meetup for upcoming scheduled classes.

Our Locations

- USA
 - [New York](#)
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- World
 - [Ottawa](#)
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Upcoming Classes

Location	Topic
New York	JavaScript & jQuery
San Francisco	HTML & CSS

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Name:

*Email:

*Location:

Gender: ☐ Female ☐ Male

Experience:

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4. A collection of CSS frameworks is listed in <http://cssframeworks.org/>. Among those, *Bootstrap* is one of the most popular frameworks. Check the websites and answer the following questions.
 - a. What is a CSS Framework?
 - b. What tools are commonly offered by a CSS Framework?
5. Responsive Web Design (RWD) has become more important as the amount of mobile traffic now accounts for more than half of total internet traffic.
 - a. What is responsive web design?
 - b. Write a CSS rule to change the *background-color* of a HTML document body to yellow if the viewport is 800 pixels wide or wider.

END