CSE3026: Web Application Development Lab 3: CSS Design & Layout

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Lad 3 exercises

Lab 3: CSS Design & Layout - style "Scott's Favorite Things" page.

1. Arrange Your Page into Sections
2. Spacing With Padding and Margins, Backgrounds
3. Float, Alignment and Overflow
4. Cosmetic Finishing Touches
5. 2nd Column, Related Links
6. Green Highlights
7. Semantically Meaningful Tags

- Resources: Firefox Page Inspector, Chrome Dev Tools

Ex 1: Arrange Page into Sections

(See example screenshot on next slide.)

First download the `ScottsFav.html` file. Then open it in your Textpad++ editor, and also open the HTML page on your hard drive in Firefox or Chrome.

Add `ids`, `class`es, `spans` and `divs` to organize the "Scott's Favorite Things" page. Then, add borders around these sections by creating and editing your `layout.css`.

- The **borders** are all `5px` thick and `solid`.
- The **colors** are the pre-defined HTML color names, e.g. the red border is the HTML color `red`.
- *Hint:* To reduce the needed `id` and `class` attributes, consider using CSS **context selectors**.

The only major changes to make to the HTML are adding `ids`, `class`es, `divs`, and `spans`.

Ex 1: output

Your page should look like this when you are done:

Scott's Favorite Things

Cars, Sports, and Music

Cars: 67 Shelby Mustang GT500 Convertible

1967 Shelby Mustang GT500 Convertible, also known as "Eleanor", is my favorite Shelby Mustang and my dream car. One day, I would really like to rebuild or restore this car!
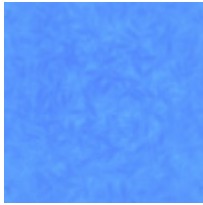
Sports: Snowboarding

Ex 2: Padding, Margins, Backgrounds

(See example screenshot on next slide.)

Add padding, margins, and backgrounds to the page. Change only your `layout.css` file.

- The box with the **green** border should have a background color of `white`.
- The boxes with the **blue** borders should have a background color of `#99CCFF`.
  - It should have a padding of `5px` (on all sides) and margin of `10px` only on the *top* of the box.
- The **overall page content** area should become centered on the page, should have left and right margins of `10%`, and the following background image:
  - (right-click and choose "Inspect Element" to find out its URL!)

Ex 2: output

This output is Scott's Favorite Things page with padding/margins and backgrounds:

Scott's Favorite Things

Cars, Sports, and Music

Cars: 67 Shelby Mustang GT500 Convertible

1967 Shelby Mustang GT500 Convertible, also known as "Eleanor", is my favorite Shelby Mustang and my dream car. One day, I would really like to rebuild or restore this car!

Sports: Snowboarding

Ex 3: Float, Align, Overflow

(See example screenshot on next slide.)

Now we'll practice `float`, `overflow`, and alignment. You may have to edit `ScottsFav.html` code as well as `layout.css`.

- The heading text in the **red** box should appear on the **right** side of that section of the page.
- The text of each favorite thing should be widened so that each line fills the entire width of the section ("fully justified").
- The favorite thing images should hover on the **right** side next to the surrounding text. The image should stay within the bounds of the blue box; that is, it should not "bleed" into the other content below it.
  - (*Hint:* If your boxes are not tall enough to fit the floating elements inside them, see the page 39 - 40 of the Page Layout Lecture Slide.)

Ex 3: output

This output is Scott's Favorite Things page with floating and alignment:

Scott's Favorite Things

Cars, Sports, and Music

Cars: 67 Shelby Mustang GT500 Convertible

1967 Shelby Mustang GT500 Convertible, also known as "Eleanor", is my favorite Shelby Mustang and my dream car. One day, I would really like to rebuild or restore this car!

Sports: Snowboarding

I am into extreme sports and motor racing (partly because I suck at

Ex 4: Finishing Touches

(See example screenshot on next slide.)

- Change the box with the **green** border to have a solid, white, 10px-thick border.
- Change the boxes with the **blue** border to have a solid, 4px-thick border, in color #1D2475, with a 15px rounded **border radius**.
- Change the box with the **purple** border to have *only* a bottom border: blue, dashed, and 2px-thick.
- Change the box with the **red** border to have a background color of #1D2475, change font color to white, and get rid of its border.
- Change the font size of the "Cars, Sports, and Music" area to 14pt, font color to #CCCCCC, and get rid of its border.

Ex 4: output

This output is Scott's beautified page:

Ex 5: 2nd Column, Related Links

(See example screenshot on next slide.)

Add a second column to the layout. Copy and paste the following code into `ScottsFav.html`:

```
<h1>Links</h1>
<ul>
    <li><a href="http://selab.hanyang.ac.kr/">SE Lab.</a></li>
    <li><a href="http://cse.hanyang.ac.kr/">CSE @ HYU</a></li>
    <li><a href="http://www.w3schools.com/">W3Schools</a></li>
    <li><a href="http://www.csszengarden.com/">CSS Zen Garden</a></li>
</ul>
```

- Use the appropriate layout-related tags/attributes and CSS to make this list into a second, left-aligned column as shown in the screenshot on next slide. The colors, borders, etc. of the list are not important; the focus is on the layout.
- **The layout with a second column must still be a "liquid" layout** -- that is, all parts of it should adjust in size accordingly when the browser size changes.
- *Hint:* The second column should be `150px` wide with `#3366CC` background color. In addiiton, there should be `10px` space between two columns.

Ex 5: output

This output is Scott's Favorite Things page with the related links list:

Ex 6: Green highlight

Style your CSS so that if you hover over *any* element (i.e. any header, paragraph, image, etc), the element is highlighted in `#A6CE39` color.

Complete this exercise by adding one-selector with one-property to your stylesheet (no commas in selector are allowed!). Search Google to find out "How can one rule apply to all elements?" !

Ex 6: output

This output is Scott's Favorite Things page with green highlight:

Ex 7: Semantically Meaningful Tags

The new HTML5 introduces more semantic (and descriptive) tags than div and id/class.

- Change `div` and `id/class` tags in your `ScottsFav.html` to HTML5 semantic tags where possible. Then save the html as `semanticScottsFav.html`.
- Make necessary changes to `layout.css` and save it as `semanticLayout.css`. Then, link `semanticLayout.css` to `semanticScottsFav.html` instead of old `layout.css`.
- Compare `ScottsFav.html` and `semanticScottsFav.html` in your browser and check whether they have the same style and layout.

If you finish them all…

If you finish all the exercises:

1. practice the "sizing and positiong" part of the page layout on your page (do this at home if you do not have enough time)
2. **check in** with a TA to get credit for your work
3. submit your `html` & `css` files at `Online Lecture` site
4. you may be able to be dismissed

Great work!