Web Programming

Basic lab instructions

◦ You may want to *bring your slides* to labs to look up syntax and examples.

◦ Have a question? *Ask a TA* for help, or look at the lecture slides.

◦ We encourage you to *talk to your classmates*; it's okay to share code and ideas during lab.

◦ You don't have to finish all of the exercises. Just do as much as you can in the allotted time. You don't need to finish the rest after you leave the lab; there is no homework from lab.

Today's lab exercises

Today you'll style a "Victoria's Journal" page.

1. Arrange Your Page into Sections
2. Spacing With Padding and Margins, Backgrounds
3. Float, Alignment and Clear
4. Cosmetic Finishing Touches
5. 2nd column, Friend list
6. Yellow highlight
7. Rounded borders

Resources: google Chrome, lecture slides

Exercise 1:
Arrange Page into Sections (~25-30 min)

(The next 3 slides describe this exercise. Please read them all, then start.)

First download the following HTML file from the server...

Then open it in your text editor, and also open the HTML page on your hard drive in browser. Then move on to the next slide.

- journal.html
- basic.css
- images/

Exercise 1: details

(See example screenshot on next slide.)

Organize journal.html by adding ids, classes, spans and divs. Then, add borders around these sections by editing your layout.css.

- The **borders** are all 5px thick and solid.
- The **colors** are the intuitive 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, classes, divs, and spans.

Exercise 1: output
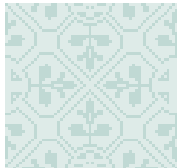
Your page should look like this when you are done:

Exercise 2:
Padding, Margins, Backgrounds (~15 min)

(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 #E8FBFB.
  - 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:
  - spatula city background image (download "background.gif" from server)

Exercise 2: example

This example is Victoria's page with padding/margins and backgrounds:

Exercise 3: Float, Align, Clear (~15 min)

(See example screenshot on next slide.)

Now we'll practice float, clear, and alignment. You may have to edit journal.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 journal entry should be widened so that each line fills the entire width of the section ("fully justified").

◦ The journal entry 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, search the "Making Floating Elements Fit" on web.)

Exercise 3: example

This example is Victoria's page with floating and alignment:

Exercise 4: Finishing Touches (~15 min)

(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 #C2E9E9, 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 #A8F0F0, and get rid of its border.

◦ Change the font size of the "So fresh and so clean" area to 14pt, and get rid of its border.

Exercise 4: example

This example is Victoria's beautified page:

Exercise 5: 2nd Column (~15 min)

(See example screenshot on next slide.)

If you manage to complete the first four exercises before lab time is up, work on adding a second column to the layout. You should copy and paste the following code into your journal.html:

```html
<h1>Friends</h1>
<ul>
    <li><a href="http://www.google.com/">154 Buddies</a></li>
    <li><a href="http://www.willsmith.net/">Big Will</a></li>
    <li><a href="http://youtube.com/watch?v=mZHoHaAYHq8" title="Conan
the Librarian">Conan the Librarian</a></li>
</ul>                                                          HTML
```
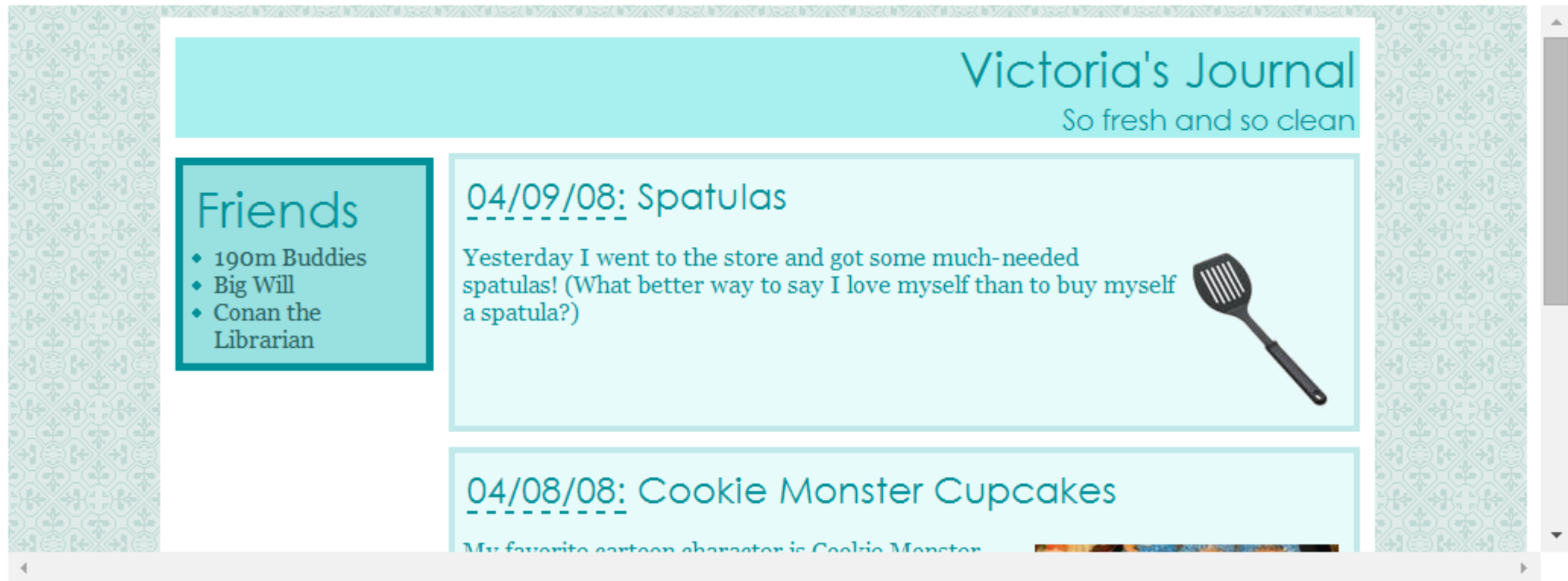
- Use the appropriate layout-related tags/attributes and CSS to make this list into a second, left-aligned column as shown below. The colors, borders, etc. of the list are not important; the focus is on the layout.
- **The layout with a second column must still be a "liquid" layout** -- that is, all parts of it should adjust in size accordingly when the browser size changes.
- Hint: When multiple elements float in the same direction, they arrange themselves into columns. Also check "The clear Property" for more information.

Exercise 5: example

This example is Victoria's page with the friends list:

Exercise 6 (challenge only): Yellow highlight

◦ Write your page so that if you hover over *any* element (i.e. any header, paragraph, image, etc), the element is highlighted in yellow.

◦ This must be a one-selector, one-property addition to your stylesheet -- no commas allowed! How can one rule apply to all elements? Google away! (Tricky.)

Exercise 7 (challenge only): Rounded borders

The new CSS version 3 introduces borders with rounded corners.

- If they don't have them already, place rounded corners on your journal borders.

- Try making each of the four corners have a different amount of roundedness.

- Google to find out how to make the roundedness be elliptical, that is, have different horizontal vs vertical size.

- If you finish that, consider exploring some other properties from CSS 3, such as text shadows or multiple text columns.

If you finish them all...

If you finish all the exercises, you can add any other content or styles you like to your page.

If the lab is over or almost over, check with a TA and you may be able to be dismissed.

Once the lab time is up, you may stop working. You don't need to complete the remaining exercises unless you want to for fun.

Great work!

Thank you for your attention!