Web Programming

LAB3: PIMP MY TEXT

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 write a page where the user can type text into a box, and by clicking on UI controls, the user can "pimp out" the text by giving it funny styling.

The HTML page pimpmytext.html contains a basic HTML shell. This skeleton already links to a CSS file pimpmytext.css that defines all the styles you need. You do not have to write any CSS code today.

It also links to a JavaScript file pimpmytext.js that will be modified by you to manipulate the text.

Download pimpmytext.html, pimpmytext.css, pimpmytext.js, and pimpin.jpg to get started. (from Samba server, folder "lab3-solution")

Initial page

Your initial page should look like this

Exercise 1: JavaScript alert (~5 min)

Now we will add one line of code that pops up an alert box. This is just a test to make sure that your browser is running your JavaScript file, before we move on to tougher exercises.

Put the following line of code into the file:

alert("Hello, world!");

Refresh your page in the browser. Do you see the alert message?

If so, move on.

If not, double-check your script tag syntax or ask a TA for help.

Exercise 2: Hello World Button (~5 min)

Now let's set up a very basic JS event handler. Modify your JS code so that the "Hello, world!" alert message won't pop up until the user clicks the "Bigger Pimpin" button.

Modify your JS file to wrap the alert into a function.

Refresh your page in the browser. Click the button. Do you see the alert?

If so, move on.

If not, double-check your onclick tag syntax and function, or ask a TA for help.

Exercise 3:
Bigger Pimpin' Button (~15 min)

Modify your JS code so that when the user clicks "Bigger Pimpin'!", the text in the text area will get larger.

1. Make sure your text area has an id attribute so your JS code can talk to it.

2. Modify your JS function so that it now changes the text area's font size to 24pt .

3. Hint: The syntax for accessing an element by ID and changing a style is:
   ◦ document.getElementById("elementID").style.propertyName = "value";
   ◦ Use proper units, such as "4em", and proper capitalization, such as backgroundColor .

Exercise 3, output

The text should look like this after the button is clicked

Text

```
Don't hate the playa.
Hate the game.
```

Pimpification

[Bigger Pimpin!]

☐ Bling

Exercise 4: Bling Checkbox (~15 min)

Add an event handler so that when the user checks "Bling", the text area will receive some styles.

1. Add an onchange on the checkbox that calls a function that pops up an alert.

2. Modify your new function to set the text area's font weight to **bold**.
   - You can see if a checkbox is checked by examining its checked property. (Give it an id.)
   - When the box is unchecked, the font weight should go back to normal.

3. Once the bold part works, add the following styles to the text when the box is checked:
   - change its color to green
   - underline the text (this is the CSS text-decoration property)
   - strike-out the text (this is also the CSS text-decoration property)

Exercise 4, output

Your page should look like this when the box is checked:

Exercise 5: Snoopify (~10 min)

1. Add a new button to the HTML with the text "Snoopify" that, when clicked, uppercases the text in the text area.
   - Use the value property of the text area.

2. Modify your button so that it also adds a suffix of "-izzle" to the last word of each sentence.
   - Let's consider a sentence to be a string of text that ends with a period character, "." .
   - Use the String/array methods split and join. For example, to replace spaces with underscores:

   ```
   var str = "How are you?"

   var parts = str.split(" ");  // ["How", "are", "you?"]

   str = parts.join("_");      // "How_are_you?"
   ```

Exercise 5, output

Your text should look like this when the button is clicked:
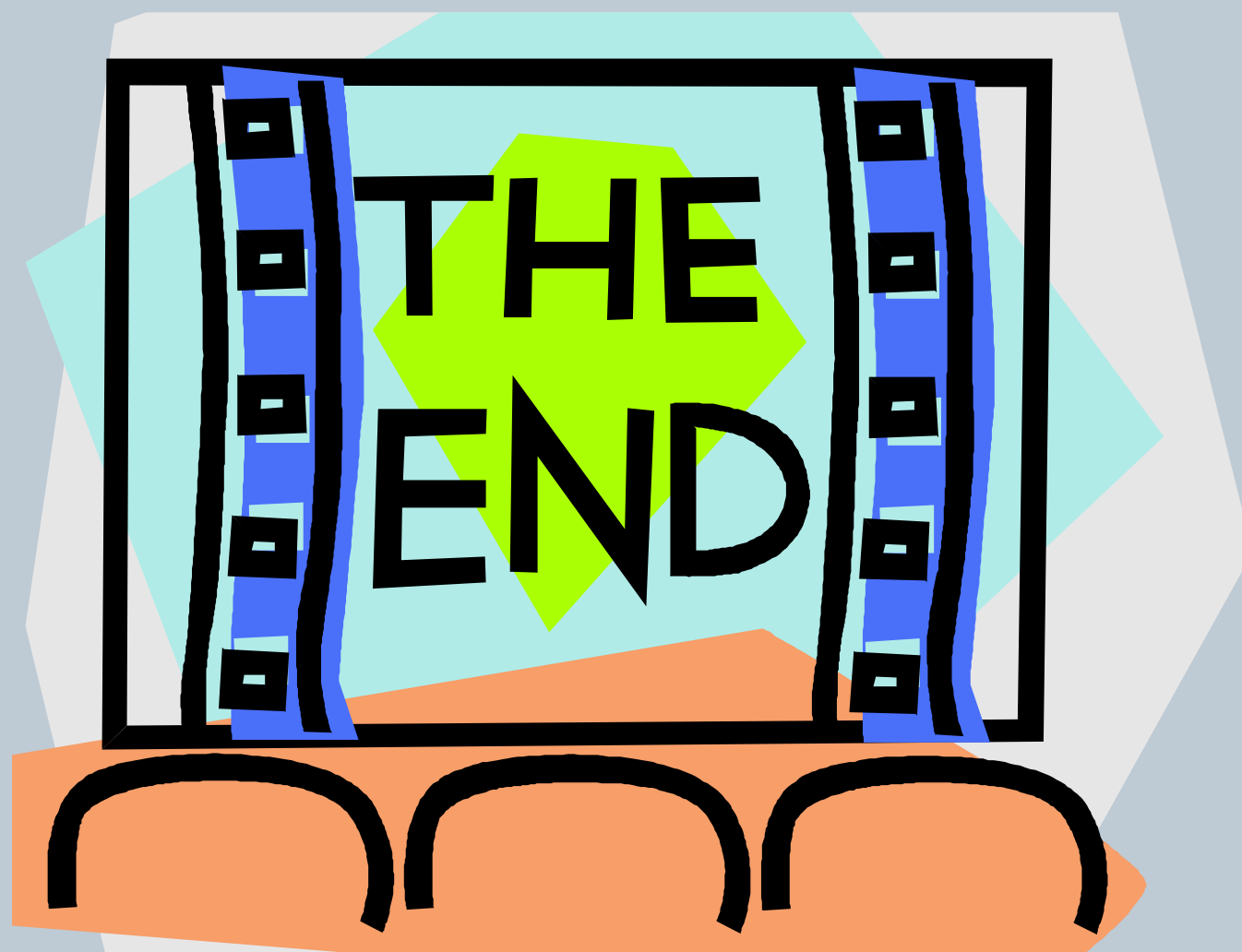
If you finish them all…

If you finish all the exercises, you can add any other content or code 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!