

## CS 325 - Introduction to Web Programming

JanPlan 2018

### Lab 3: JavaScript (Start in class and finish by tonight midnight for full credit)

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 `lab3.html` contains a basic HTML shell and page header. 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.

You will write a JavaScript file `pimpmytext.js` that will manipulate the text.

**File:** `lab3.html`

#### Task 1 - Create UI Elements

The first task is to expand `pimpmytext.html` by adding UI controls. Add HTML code for the following:

- A field for users to enter large (multi-line) amounts of text.
  - It should be 4 rows by 30 columns in size.
  - Wrap it in a bordered field-set box with the label "Text".
- Add a second bordered field-set box labeled "Pimp It" that contains the following controls:
  - A button labeled: Bigger Pimpin'!
  - A checkbox labeled "Bling"

*NOTE: Controls are sometimes used in forms; but you must not use the `form` tag on your page.*

**Output:** `lab3output1.png`

#### Task 2 - JS Alert

Now you'll write a bit of JavaScript testing 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.

- Create a new file and save it as `pimpmytext.js`.
- Put the following line of code into the file:

```
alert("Hello, world!");
```

- Link your HTML page to your JavaScript file using a script tag.
- Refresh your page in the browser. Do you see the alert message?

Output: lab3output2.png

### Task 3 - Hello World Button

Now let's set up a very basic JS event handler. Modify your JS code and HTML 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.
- Add an onclick handler attribute to the "Bigger Pimpin" button that calls your new function.
- Refresh your page in the browser. Click the button. Do you see the alert?

Output: same as above

### Task 4 - Bigger Pimpin' Button

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

- Make sure your text area has an id attribute so your JS code can talk to it.
- Modify your JS function so that it now changes the text area's font size to **24pt**.
- *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.

Output: lab3output3.png

### Task 5 - Bling Checkbox

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

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

Output: lab3output4.png

### Task 6 – Snoopify

- 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.
- 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?"
```

Output: lab3output5.png

### Submission Process:

Upload your lab3.html and pimpmytext.js files to the appropriate dropbox on the course Moodle page.