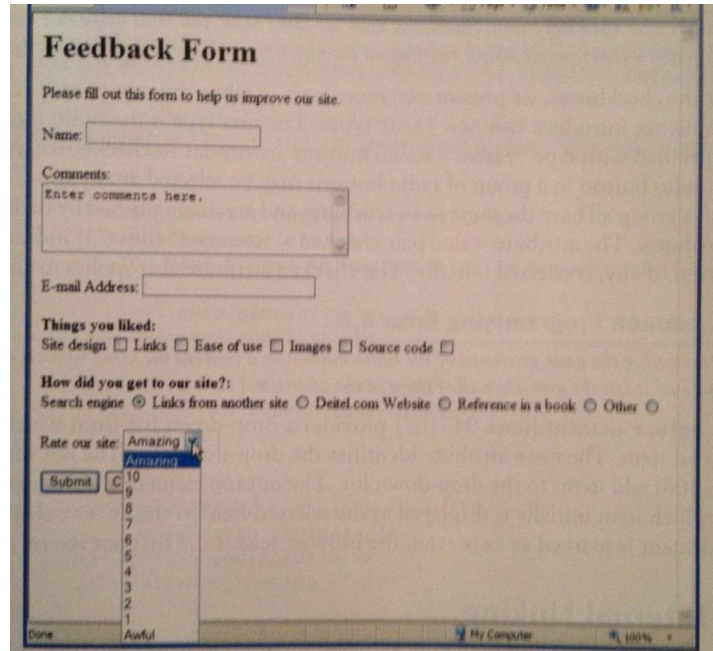


Assignment 7 – JavaScript, AJAX & CSS

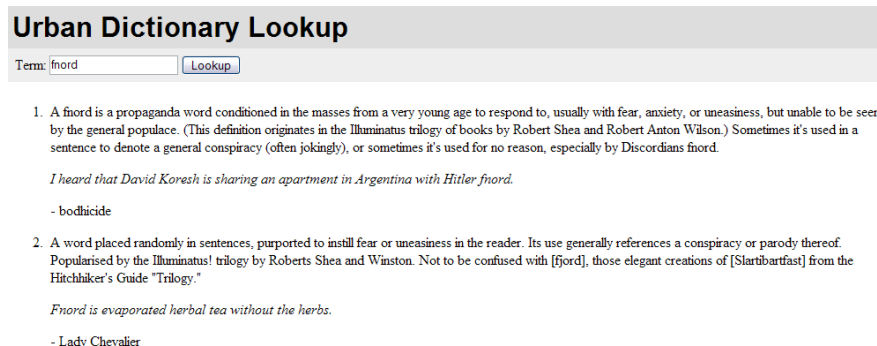
Due Wednesday, July 3, 2013

For this assignment, please note that NO jQuery may be used. You must write everything in core JavaScript

- 1) Create an AJAX enabled feedback form. The form will look like the following: As the user moves between the form fields, ensure that each field is non-empty. For the e-mail field, ensure that the e-mail address has a valid format. In addition, create an XML file that contains a list of email addresses that are not allowed to post feedback. Each time the user enters an e-mail address check whether it is on that list; if so, display the appropriate message.



- 2) Use the skills we learned in class to create a simple login form that asks a user to input their user and password. When the login button is clicked, have this username and password validated against the server (or a text file or some other file), and return a message if it is successful. On the other hand, return a message or graphic if the user is unsuccessful, using AJAX.
- 3) Many web sites like Google, Flickr, and Facebook allow you to access their data as text, XML, and/or JSON. For this question, we will use Ajax to access data from Urban Dictionary, a web list of slang and social terminology.



Urban Dictionary Lookup

Term:

1. A fnord is a propaganda word conditioned in the masses from a very young age to respond to, usually with fear, anxiety, or uneasiness, but unable to be seen by the general populace. (This definition originates in the Illuminatus trilogy of books by Robert Shea and Robert Anton Wilson.) Sometimes it's used in a sentence to denote a general conspiracy (often jokingly), or sometimes it's used for no reason, especially by Discordians fnord.

I heard that David Koresh is sharing an apartment in Argentina with Hitler fnord.

- bodhicide

2. A word placed randomly in sentences, purported to instill fear or uneasiness in the reader. Its use generally references a conspiracy or parody thereof. Popularised by the Illuminatus! trilogy by Roberts Shea and Winston. Not to be confused with [fjord], those elegant creations of [Slartibartfast] from the Hitchhiker's Guide "Trilogy."

Fnord is evaporated herbal tea without the herbs.

- Lady Chevalier

Write JavaScript code so that when a user clicks "Search", the definition of "fnord" appears as an alert.

- Listen for clicks on the button with id of lookup. Relevant HTML:

```
<button id="lookup">Lookup</button>
```

- Fetch the data by creating an \$.ajax object to fetch data from your Urban Dictionary service for the appropriate term. Note that you don't have to write an API to access Urban Dictionary (although you can). Rather, you can just hand code the actual dictionary elements available within your library in a separate JSON or XML file. Then, you can use the AJAX call to retrieve those items as the user types the term within the box ... Be as creative as you like. You can also attach images, and links to your terms.

For your dictionary, you must use the following terms, and at least 25 others, for testing your program. Ensure that you have at least one word for each letter of the alphabet. Include the following words: API, bling, booyah, Ferengi, fnord, hoopty, Internet Explorer, JavaScript, kardash, The Neverending Story

Urban Dictionary Lookup

Term:

an exclamatory statement, often said when someone is extremely overjoyed. Often people do a hand movement simultaneously as they say 'Booyah'(clenching fist and thrusting their elbow downward vertically)

Now, do some additional work to make the page more robust:

- Make the page display a reasonable error message if the user asks for a definition of a word that is not found in your dictionary.
 - Make the page clear out any previous definitions if the user searches for a new word.
 - Add a "Loading" animation image that will temporarily occupy the result area while the data is being fetched via Ajax. You can create your own from the Ajax loading image site, ajaxload.info.
- 4) 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.

Your page should look like this:



Text

Pimpification

☐ Bling

To complete this assignment you will need to create a new HTML program called `pimpmytext.html`. You will also need to create a new CSS file called `pimpmytext.css` that defines all the styles you need. You will then need to write a JavaScript file `pimpmytext.js` that will manipulate the text. The first task is to create and 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:

- o A button labeled: Bigger Pimpin'!
- o A checkbox labeled "Bling"

Now, create a new file and save it as pimpmymtext.js.

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: \$("elementID").style.propertyName = "value";). Use proper units, such as "4em", and proper capitalization, such as backgroundColor . The text should look like this after the button is clicked:

Text

Don't hate the playa.
Hate the game.

Pimpification

Bigger Pimpin'!

☐ Bling

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:

- o change its color to green
- o underline the text (this is the CSS text-decoration property)
- o make the text blink (this is also the CSS text-decoration property)

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

Text

Don't hate the playa.
Hate the game.

Pimpification

Bigger Pimpin'!

☒ Bling

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?"`

Your text should look like this when the button is clicked:

Text

DON'T HATE THE PLAYA-izzle.
HATE THE GAME-izzle.

Pimpification

Bigger Pimpin!

☐ Bling

Snoopify

Make it so that when the "Bigger Pimpin'!" button is clicked, rather than setting the font size to 24pt, you'll make it 2pt larger than its current size. The first time the button is clicked, the text area's .style.fontSize property won't have a value, so just use a default of 12pt. For future clicks, read the font size such as "12pt" and change it to a larger one like "14pt". You may want to use the parseInt function to help you solve this. Once that works, make it use a timer. Now a single click should continually increase the font size by +2pt every 500 ms. Use the setInterval function. The timer should call the function you just wrote. Now, add each of the following:

- A bling button, so that, when "Bling" is checked, also set the page to have a background image!
- Add an "Igpay Atinlay" button that converts the text to Pig Latin.

The rules: 1) Words beginning in a consonant (or consonant cluster) have that consonant (or consonant cluster) moved to the end and -ay tacked on following. 2) Words beginning in a vowel simply have -ay tacked on the end.

Finally, add a "Malkovitch" button that causes words of ≥ 5 characters in length to be replaced with the word "Malkovich". Inspired by Malkovitch Mediator by Ka-Ping Yee, and film Being John Malkovitch)

