Assignment 02 - Developer Tools/JavaScript

Read this entire homework description once through before proceeding.

Required Reading

Chrome Developer Tools

- https://developer.chrome.com/devtools
  - The DevTools window
  - Inspecting the DOM and styles
  - Debugging JavaScript
  - Working with the Console
  - Browse any interesting things from Further reading and Further resources+

JavaScript

- Complete the JavaScript Tutorial
  - https://www.codecademy.com/en/tracks/javascript

jQuery

- Complete the jQuery Tutorial
  - https://www.codecademy.com/en/tracks/jquery

Task

Create a simple webpage demonstrating use of simple HTML, CSS, and JavaScript. Then use that page to create a screencast video tutorial of how to use web developer tools. The video should be 5 minutes in length, demonstrating your new found knowledge of developer tools in the web browser. You can demonstrate this within Chrome as done in class, or another browser if you wish.

Your website should consist of a single HTML file, CSS file, and a JavaScript file, They should include:

- A properly formed HTML file consisting of at least 3 DIVs of content each applying one style rule from your CSS file.
- A CSS file with at least three style rules: one for a tag, one for a class, and one for an ID.
- A JavaScript file that demonstrates a basic understanding of JavaScript/jQuery and programming in general.
  - Create a FOR LOOP that counts backwards from 10 to 1 and outputs the count using jQuery to the page
  - Create a WHILE LOOP that counts from 1 to 10 and outputs the count using jQuery to the page.
  - Create an alert that consists of a text string and a variable.
  - Log a text string and variable to the console.
- All code should be contained within a jQuery function that runs when the document loads and is ready.

In the tutorial video, you must:
- Say who you are in the video, and mention briefly what you're about to demo :-)
- For each of the below, demo in Dev Tools and make sure to explain, in brief, why it is valuable to be able to use that particular feature.
- Show how you can change the content of one of your DIVs.
- Show how you can disable, change, and create a CSS rule.
- Demonstrate having the developer tools break on a JavaScript error
  - Show that you can determine the error location and exception information.
- Show you can have a script break at a chosen breakpoint.
  - Show you can observe variables, etc. while a script is paused and step through the script showing how this affects the previously observed variables.
- Find and demonstrate at least one thing you can do with developer tools that wasn't covered in class
- Show a site that uses AJAX, and show requests it makes when performing AJAX operations

It is highly recommend you use one of the following free software:
- Screencast-O-Matic - http://www.screencast-o-matic.com/
- Jing - http://www.techsmith.com/jing.html

The screen is all that needs to be captured visually, no camera view is required. The demo should have your voice as the audio.

Try to have fun with this! It does not have to be a perfect video, nor require editing. To make your life easier, try making a short outline ahead of time that you can have yourself follow that covers each thing you want to do in the video.

10% extra credit for:
- Demonstrating the developer tools concepts in a browser *other* than Chrome.

Handing in Your Work
- Upload your video to YouTube as "unlisted". (You may make it public if you wish, but this is NOT required. It cannot be set to "private".) or screencast.com
- Submit the link to your video.
- Submit the link to your workspace.
- Submit the link to the page you created.

Grading
- 6% of total grade

- This assignment is to be completed individually. Work and ideas should not be shared with others.
- Grade will be reduced by 50% for any assignment submitted without a video
- Grade will be reduced by 50% for workspace not shared correctly
- Grade will be reduced by 25% for assignment not submitted correctly
- +10% extra credit
  - Demo Dev Tools other then Chrome which is used in class. (You only need to do one demo in one browser)

Handing in Your Work

- Upload your video to YouTube as "unlisted". (You may make it public if you wish, but this is NOT required. It cannot be set to "private".)
- Then submit the link to your video into the Sakai project text box.
- Also, please provide the URL to your Cloud 9 workspace and the public URL to your working webpage.
  - Note: DO NOT make changes to your assignment after the deadline. If you want to continue experimenting, I recommend making a copy of your assignment in a different folder.