CS3500: Assignment 3 – JavaScript & jQuery

PART 1: JavaScript and jQuery [5.00 points]

Overview:

Part 1 of Assignment 3 will deal with JavaScript and jQuery. You will add a small piece of JavaScript or jQuery code so that every image can be hovered on to see a larger thumbnail as needed.

Instructions:

- 1. Create a file a3p1.html with the editor of your choice.
- 2. Begin by adding a link to a JavaScript file named **a3p1.js** in the head of your page.
- 3. Slightly modify the HTML to add a **class** for each thumbnail image.
- 4. In your JavaScript file, write a loop to seek out all the tags with the newly defined class (hint: use jQuery selectors).
- 5. For each image, attach a listener on the **mouseenter** event to create a new with a larger image inside (based on the src attribute). Add another listener on the **mouseleave** event to hide the newly created . This will create the effect shown in **Figure 3.2**.
- 6. The form should use the action http://www.randyconnolly.com/tests/process.php and once you click submit the values for search box, genre, action and all the selected paintings in the table should be process and display by the action linked. The apply and filter buttons do nothing, and the links in the edit buttons should be dummy links. Remember to use "checkbox_name[]", name of the checkbox with square brackets to be able to select as an array.
- 7. Create a CSS file **a3p1.css** to style the whole page. Feel free to add any style you want, as long as the layout looks similar to **Figure 3.1**.

Testing:

- 1. Test your page by seeing if it looks like the one in **Figure 3.1.**
- 2. Test the page and see that, as you hover over an image, a larger thumbnail is fetched and seen over the mouse location as shown in in **Figure 3.2**.
- 3. As you move your mouse out, the page should return to the way it was before you hovered.
- 4. Validate your HTML5 code!

Evaluation:

Below is the evaluation for Part 1.

Points	Item
1.00	Looks are similar to Figure 3.1
0.50	Use of CSS
0.50	Pass HTML5 Validation
3.00	Mouse hover effect is working with JavaScript

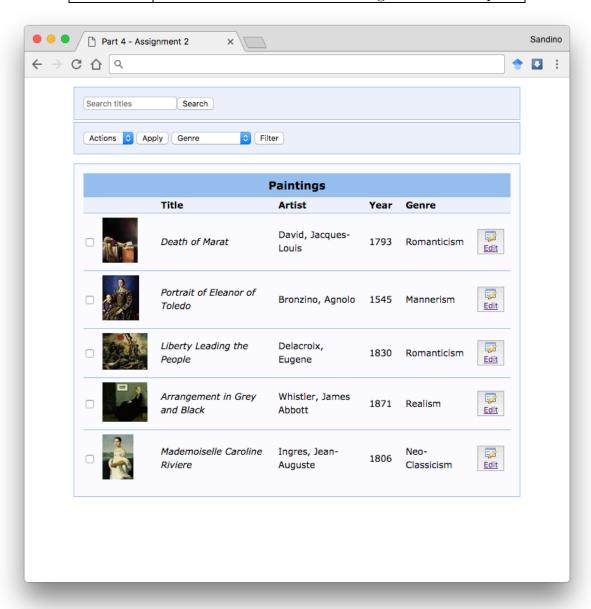


Figure 3.1: The final look of a3p1.html

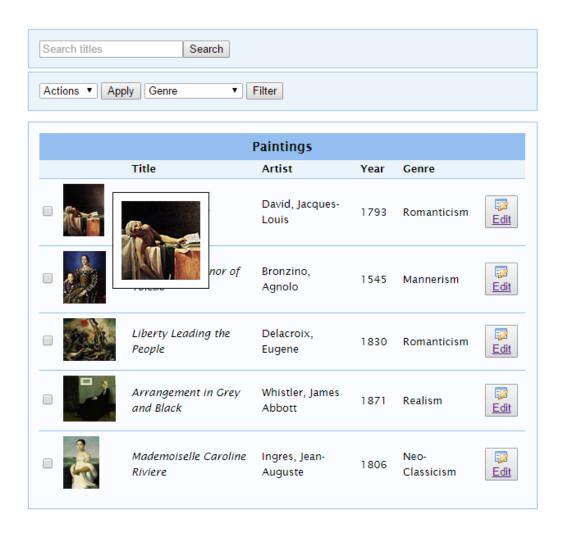


Figure 3.2: Effects of mouseenter for a3p1.html

PART 2: JavaScript and jQuery Validation [5.00 points]

Overview:

Part 2 of Assignment 3 will deal with JavaScript and jQuery validation of HTML forms.

Instructions:

- 1. Open file **a3p2.html** with the editor of your choice. Start by adding the corresponding form elements such that the final page looks like **Figure 3.3**.
- 2. The form elements in each heading should be layout using tables.
- 3. The form must use http://www.randyconnolly.com/tests/process.php as its action. Be sure to name the form elements as shown in **Figure 3.4**.
- 4. Use the correct form element types. Remember that some of the HTML5 elements look different in different browsers. (The screen captures are from Chrome).
- 5. While I don't expect your form to look exactly like **Figure 3.3**, it should be close.
- 6. You will need to validate the entire form using JavaScript or jQuery. Create a file named **a3p2.js** and add it to the head of your page. If a validation is not passed change the color of the label element that belongs to the input to red and italics to indicate the user of the error.
- 7. You will perform the validation of the whole form when the submit button is clicked. The two password fields should be validated as the user types (hint: use the keypress event).

Hints:

The following hints are for JavaScript or jQuery validation:

- **Hint 1:** All the elements of the form should be non-empty.
- Hint 2: Both password fields should have the same value and be between 6 and 12 characters long. Validate this field as the user types.
- Hint 3: Validate that the phone number is in the format NNN-NNN-NNNN, that is 269-888-9999 for example. So, make sure the dash line "-" is present too. This field should only accept numbers (from 0 to 9) and the "-" character. Validate this as the user types, so if the user tries to input something else, it is denied.
- **Hint 4:** The "Sign me up!" button cannot be activated or clicked if the "I agree to the <u>Terms of the Site</u>" checkbox is unchecked. Once the box is checked, enable the button.

Testing:

- 1. Test your page by seeing if it looks like the one in **Figure 3.3.**
- 2. Test the page and see that all fields are validated with JavaScript or jQuery and the corresponding error messages are given to the user.
- 3. Make sure that after submitting the form, it looks similar to Figure 3.4.
- 4. Validate your HTML5 code!

Evaluation:

Below is the evaluation for Part 2.

Points	Item
0.50	Pass HTML5 Validation
0.50	Proper use of form elements
1.00	When an error occurs, change label color and style
0.75	Hint 1 Satisfied
0.75	Hint 2 Satisfied
0.75	Hint 3 Satisfied
0.75	Hint 4 Satisfied

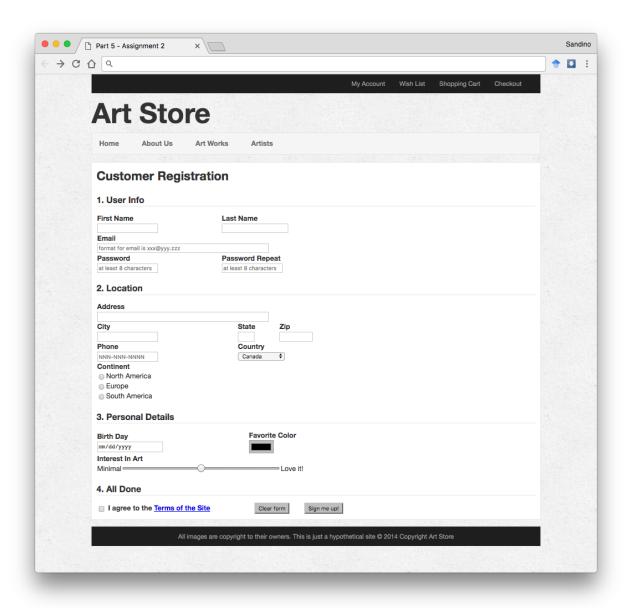


Figure 3.3: The final look of a3p2.html



Figure 3.4: The name of the form elements in a3p2.html