

CS3500: Assignment 2 – HTML Forms and Table, CSS and Bootstrap

PART 1: Using CSS for Layout [2 points]

Overview:

Part 1 of Assignment 2 is dealing with CSS layout. You are asked to create a grid of images for an Art Store webpage.

Instructions:

1. Open **a2p1.html** on the editor of your choice. You do not need to alter it, just make sure to understand all the details such as included fonts and classes.
2. Create a CSS file in which you'll define the classes requested in **a2p1.html**. Name this file **a2p1.css**.
3. Start defining the classes using properties like float, top, left, position, and so on such that you end up with a page looking like **Figure 2.1**. You'll need to make a "best guess" as to what are the CSS properties needed.
4. All the figures for the webpage are provided in the **images/p1** folder, so use them appropriately.
5. In **Figure 2.2**, images **A** and **J** are **580px × 390px**. Images **B, C, F, G, I**, and **K** are **285px × 190px**. Images **D, E**, and **H** are **285px × 390px**. The space between images in the grid is **10px**.

Hints:

Figure 2.1 contains three layouts tasks. The first will be the large text on top of the banner image in the header. Use absolute positioning to place the `<div>` with the `banner--title` class on top of the banner image. The exact position is not important; just try to get it approximately in the middle.

The next layout task is the highlights section. You will use a float to move the image within the `highlights--media` element to the left of the text. The `highlights--buttonlink` will be floated to the right. You will also use a float to move the `highlights--container` elements to the left.

The final layout task will use absolute positioning to construct the mosaic of paintings. Remember that absolute positioning is relative to the last positioned ancestor. The recommendation is to use relative positioning on the `mosaic` class and absolute positioning for each mosaic image.

Testing:

1. First, test your page by seeing if it looks like the one in **Figure 2.1** on the next page.
2. Try resizing the browser window and make it smaller. The layout will be a mess!
It illustrates one of the main problems with complicated positioning layouts; they don't scale well to smaller browser windows.
3. **Validate the page by either using a built-in tool in your browser, or pasting your HTML5 code into <http://validator.w3.org/> and ensure that the code has no errors!**

Evaluation:

Below is the evaluation for Part 1.

Points	Item
0.40	Looks are similar to Figure 2.1
0.10	Pass HTML5 Validation
1.50	Correct layout tasks

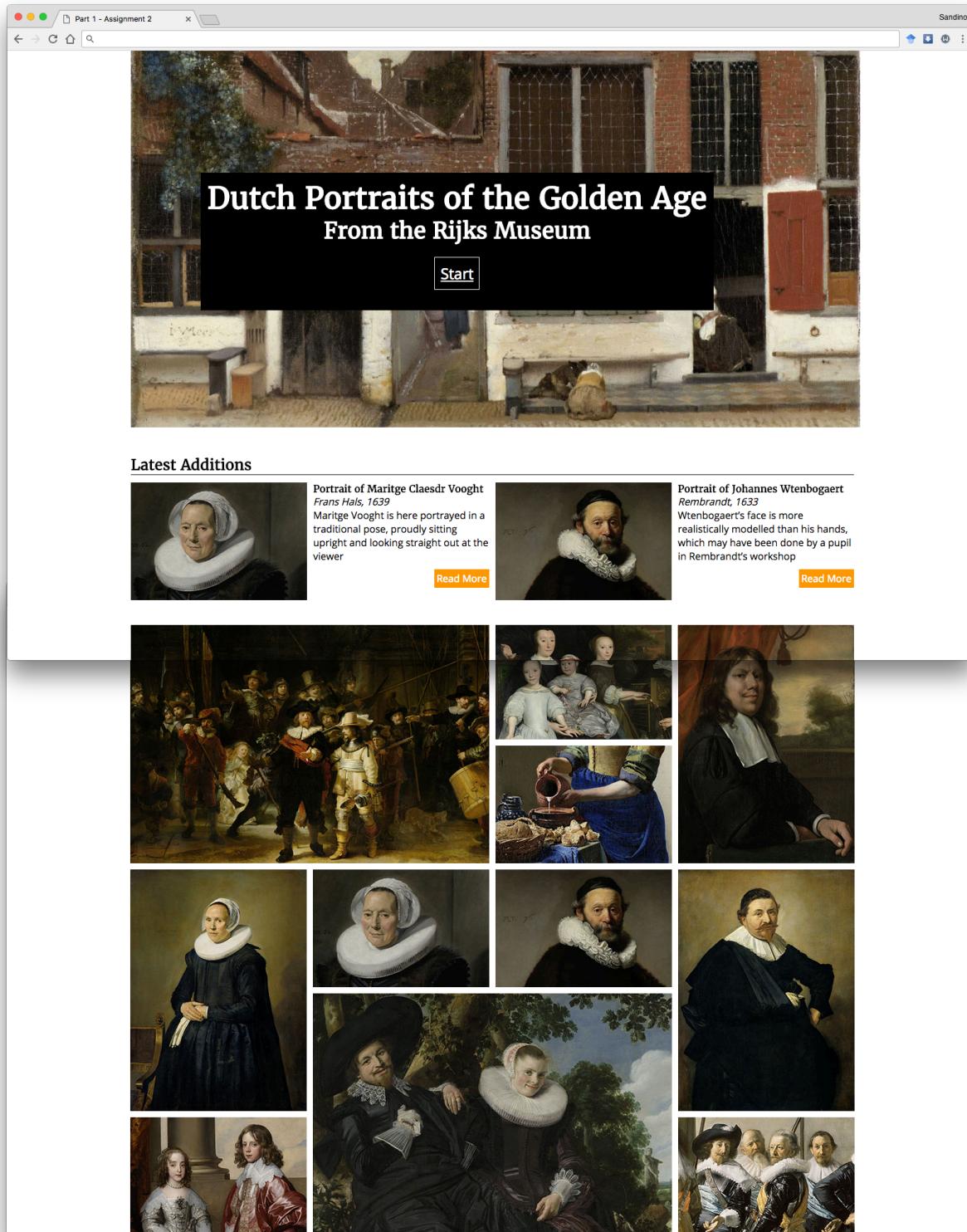


Figure 2.1: The final look of *a2p1.html*



Figure 2.2: The images grid in [a2p1.html](#)

PART 2: Tables and Forms [2 points]

Overview:

Part 2 of Assignment 1 will deal with tables and forms. You'll be asked to make an Appointments webpage in which people can set meeting details.

Instructions:

1. Create a HTML file named **a2p2.html** and start adding code to create a mock calendar of the month of February of the current year 2018 (the one in **Figure 2.3** shows October 2017). The calendar should be build using **<table>**. Make sure to use **<thead>**, **<tfoot>** and **<tbody>**, along with **<caption>** and the appropriate **<tr>**, **<th>** and **<td>**.
2. Below the calendar, you should create a form with the following fields: client name, client email, a checkbox, three radio boxes, a meeting date and a meeting time, and a submit button. Be sure to use the appropriate for elements and input types. The form **action** should take you to
<http://www.randyconnolly.com/tests/process.php>
3. Create a CSS file **a2p2.css** and start by giving style to the different table and form elements (by element selectors, classes, id, and so on) so it looks like **Figure 2.3**. You have the freedom to use your creativity for the style applied to the calendar and the form, **Figure 2.3** is a guide for the layout of the page, but you can use the colors, borders, fonts, or whatever style you want.
4. When you click the submit button, the form should be process by the page in the action attribute and look like **Figure 2.4**.

Hints:

The following hints are offered:

Hint 1: The left and right-angle quotes, and the bullet in the **<tfoot>** are obtained using HTML codes. Also use the HTML code for table cells without text in it.

Hint 2: Both the calendar and the form should be centered in the page.

Hint 3: Define and **id** selector to change the style of the cell in the calendar containing today's date (Tuesday 11 for example in **Figure 2.3**). Choose today's date randomly.

Testing:

1. Firstly, test your page by seeing if the layout is similar to the one in **Figure 2.3**.

2. Try resizing the browser window and make it smaller. The layout should remain in the middle of the page all the time. The form should shrink or expand as you shrink or expand the display.
3. **Validate the page by either using a built-in tool in your browser, or pasting your HTML5 code into <http://validator.w3.org/> and ensure that the code has no errors!**

Evaluation:

Below is the evaluation for Part 2.

Points	Item
1.00	Layout is similar to Figure 2.3
0.10	Pass HTML5 Validation
0.20	Hint 1 Satisfied
0.30	Hint 2 Satisfied
0.40	Hint 3 Satisfied

The screenshot shows a web browser window titled "Part 2 - Assignment 2". At the top, there's a navigation bar with back, forward, search, and other standard icons. Below the navigation bar is a calendar for October 2017, centered on the 11th. The days of the week are labeled from Monday (M) to Sunday (S). The 11th is highlighted in blue. Below the calendar is a "Meeting Details" form with the following fields:

- Client Name:**
- Client E-mail:**
- First Meeting?**
- Client Type:** School College University
- Meeting Date:**
- Meeting Time:**
- Submit** button

Figure 2.3: The final layout of `a2p2.html`

The screenshot shows a web browser window titled "Chapter 5 - Form Processor". The URL in the address bar is `www.randyconnolly.com/tests/process.php?client=joe&email=joe%40email.com&first=on&type=College&date=2017-10-11&date=12%3A00`. The page content is displayed in two sections:

Form Input

GET Data

```
client=joe
email=joe@email.com
first=on
type=College
date=12:00
```

POST Data

There are no POST variables

Figure 2.4: Form processed.

PART 3: CSS Bootstrap [3.00 points]

Overview:

Part 3 of Assignment 2 will deal with CSS Bootstrap.

Instructions:

1. Open the file **a2p3.html** with the editor of your choice.
2. You must integrate two Google fonts: Cookie and Cuprum. Their use is defined in **a2p3.css** file.
3. <https://www.w3schools.com/bootstrap/default.asp> provides information for implementing the layout using Bootstrap. The various labels in **Figure 2.5** refers to the class names within bootstrap.
4. All the icons in **Figure 2.5** are Glyphicons. You can find a list of them and how to use them in
https://www.w3schools.com/bootstrap/bootstrap_ref_comp_glyphs.asp
5. Notice the form in the bottom right of the footer. This must be a functioning form in that it must use <http://www.randyconnolly.com/tests/process.php> as its action. The same applies to the search at the top right side of the page.

Hints:

Figure 2.5 contains hints as class labels that will tell you what specific classes are required for **a2p3.html**. You might use the bootstrap.css file provided or a CDN.

Testing:

1. Test your page by seeing if it looks like the one in **Figure 2.5**
2. Try resizing the browser window and make it smaller. The layout should adapt to the new display sizes.
3. **Validate your HTML5 code!**

Evaluation:

Below is the evaluation for Part 3. Same evaluation strategy as in Part 1.

Points	Item
1.00	Looks are similar to Figure 2.5
0.40	Correct use of Google font
0.10	Pass HTML5 Validation
1.50	Correct use of Bootstrap

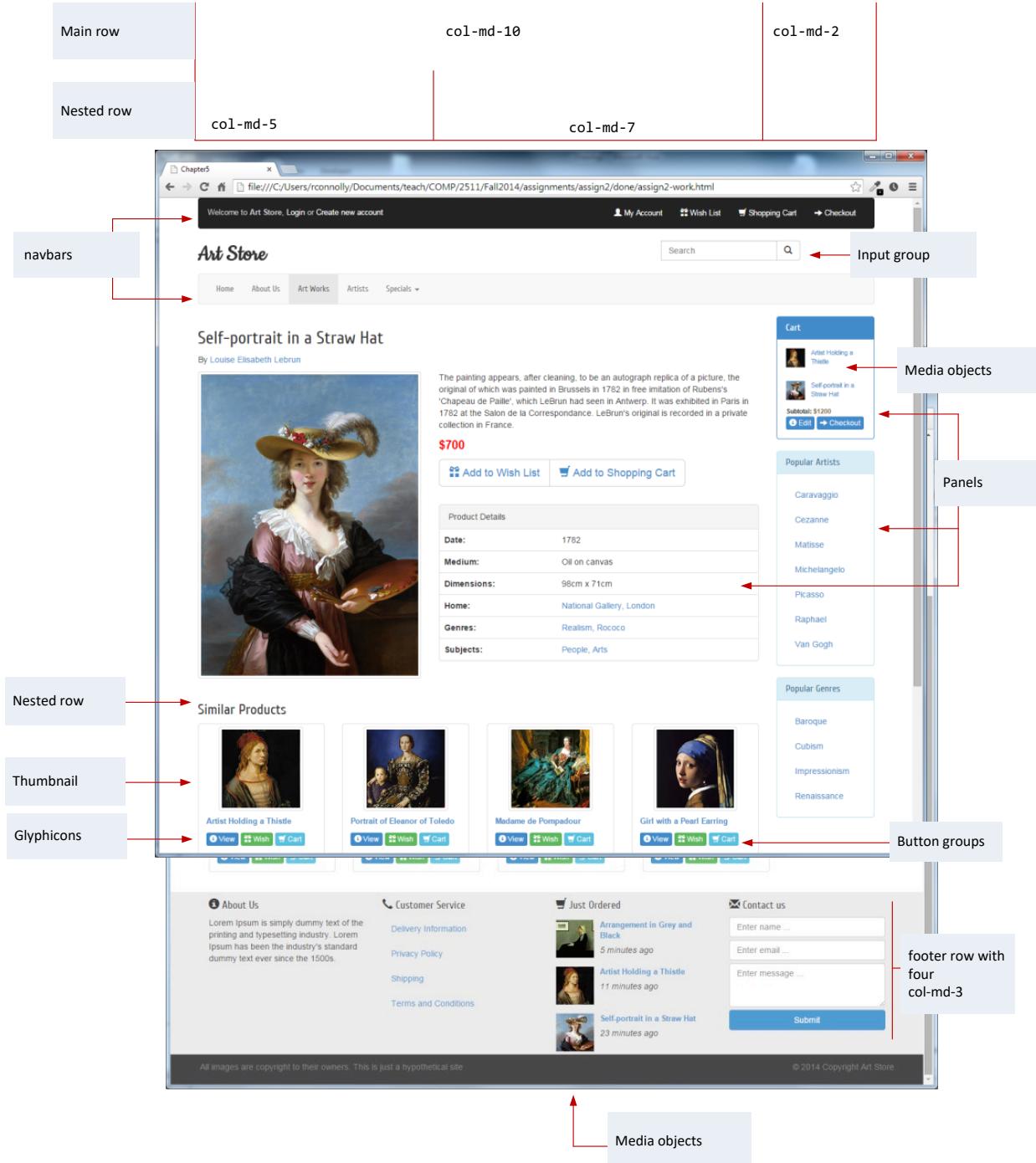


Figure 2.5: The final look of `a2p3.html`

PART 4: HTML Forms with Validation [3.00 points]

Overview:

Part 4 of Assignment 2 will deal with HTML forms and validation.

Instructions:

1. Open file **a2p4.html** with the editor of your choice. Start by adding the corresponding form elements such that the final page looks like **Figure 2.6**.
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 2.7**.
4. Use the correct form element types including `<label>`. 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 2.6**, it should be close.
6. You will need to validate the entire form. So, remember to add the appropriate `required` attribute to the form fields, as well as the attributes `pattern`, `placeholder`, `checked`, and `selected`.

Hints:

The following hints are for the form validation:

Hint 1: All the elements of the form should be non-empty.

Hint 2: Both password fields should have a minimum of 6 characters and a maximum of 12. The password must start with a **letter** and end with a **number**.

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.

Hint 4: The “Sign me up!” button cannot be activated if the “I agree to the Terms of the Site” checkbox is unchecked.

Testing:

1. Test your page by seeing if it looks like the one in **Figure 2.6**.
2. Test the page and see that all fields are validated and that the form is not submitted if there is an error.
3. Make sure that after submitting the form, it looks similar to **Figure 2.7**.
4. **Validate your HTML5 code!**

Evaluation:

Below is the evaluation for Part 4.

Points	Item
0.10	Pass HTML5 Validation
1.00	Proper use of form elements
0.40	Hint 1 Satisfied
0.50	Hint 2 Satisfied
0.50	Hint 3 Satisfied
0.50	Hint 4 Satisfied

The screenshot shows a web browser window titled "Part 5 - Assignment 2". The page is titled "Art Store" and features a navigation bar with links for "Home", "About Us", "Art Works", and "Artists". The main content area is titled "Customer Registration". It contains four sections: "1. User Info", "2. Location", "3. Personal Details", and "4. All Done".

- 1. User Info:** Contains fields for First Name, Last Name, Email (with a placeholder "format for email is xxx@yyy.zzz"), Password (with a placeholder "at least 8 characters"), and Password Repeat (with a placeholder "at least 8 characters").
- 2. Location:** Contains fields for Address, City, State, Zip, Phone (with a placeholder "NNN-NNN-NNNN"), Country (with a dropdown menu showing "Canada"), and Continent (with radio buttons for "North America", "Europe", and "South America").
- 3. Personal Details:** Contains fields for Birth Day (date input field), Favorite Color (color picker), Interest In Art (with a slider from "Minimal" to "Love it!"), and a note: "All images are copyright to their owners. This is just a hypothetical site © 2014 Copyright Art Store".
- 4. All Done:** Contains checkboxes for "I agree to the Terms of the Site" and "Sign me up!", and buttons for "Clear form".

Figure 2.6: The final look of *a2p4.html*

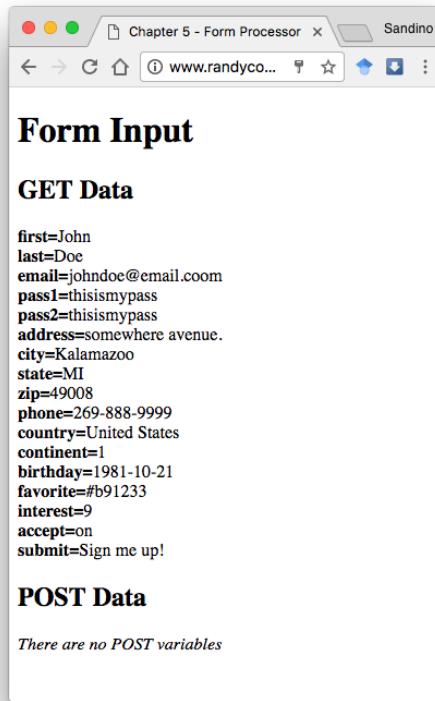


Figure 2.7: The name of the form elements in `a2p4.html`