

Project 4

Due Date: December 6

Project Description

This project brings together most of the ideas we have covered over the course of the semester, including a little taste of JavaScript programming. Although the project is not really longer than the previous one, the end of the semester is fast approaching and there is quite a bit of new content to include in the site. Because of this, **you may work with one partner** if you wish. If you do this, the pair turns in one project and each student will get the same grade.

The artist Claudio Monetio is a prolific painter, but his income is not what he'd like. Thus, he'd like to sell prints online, and be ready for this holiday season. He has hired your company to design and build a website to promote the business and allow for ordering and paying online.

Requirements

You will create a website that works/looks good on **both** an iPad/Kindle style device **and** a mobile phone. This means that this project requires responsive design, but only for these two general sizes. A separate team in the company is working on a design for larger laptop and desktop screens.

In order to have full functionality, this site will need several pages. However, each page will have a singular focus. With this in mind, the website should have the following pages/features:

1. A link from your own home page to this project's home page.

If you are working in pairs, then both students should have a link to this page. The pages need to be stored in only one student's account. In each of your own home pages by the link to this project, you should indicate the name of your partner.

2. All pages should have a custom logo and an icon that opens a navigation menu to the rest of the site. The menu should have good feedback for hovering, clicking, etc. Navigation should include links to an ordering/catalog page, a checkout page, and at least one more page of your choice. Note that there should always be a way to get back to the project home page. Do not include a link back to your **own** home page.
3. The project home page should:
 - clearly show the name and/or logo of the company
 - establish the "look and feel" for the entire site. This includes the header mentioned above, as well as the colors and formatting.
 - include image(s)/advertising copy, etc. promoting the prints.
 - use at least two imported fonts from the Google or other site.

4. The ordering/catalog page should:

- display an icon/element that shows the number of items in the shopping cart.
- have a listing of different prints for sale. This would include a photo/image and a purchase button for adding an item to the cart, as well as a small drop-down menu or other appropriate form for choosing the size of the print and/or framing options.
- have functionality such that when an item's purchase button is pressed, the shopping cart number increases by one.
- show the price of the prints, which can be unique or the same for each size, or however you'd like to sell them. You can advertise this in any way you like; for example, you can just display the price once on the page, or you can display the price next to each print and/or size.
- include a button/link that allows the shopper to move to the checkout process. This should link to the checkout page, below.
- follow general practices on how to display e-commerce items as is done in major websites (see, for example, allposters.com).
- have an external CSS file(s) that styles all of the elements in a **professional** manner.

5. The checkout page should have the information usually associated with the process:

- because we don't know how to move information from one page to the next¹, we will simulate the number of items in the shopping cart by having the user type in the number of items at the top of a form.
- there should be a button to calculate the purchase price. This is computed based on the cost per print multiplied by the number of items input into the form. To make this simpler, assume each print is \$19.99. Since this is a Massachusetts company, a tax of 6.25% is added to the total. You may also want to add in shipping charges.
- the next section (or can be a separate page) should be a form to input credit card information.
- at the bottom, a button finishes the transaction; when clicked, the total cost should be displayed as well as other common messages. All of this should appear **on this page**.
- all parts of this page should be nicely formatted to look as professional as possible. Forms should be sized appropriately for the data to be typed in, numbers should line up, etc. See real sites for examples.

6. An additional page of your choice. This page should still follow the same design aesthetic as the rest of the site. It does not need to be very long or complex.

7. An additional feature of your choice, somewhere in the site. Examples include:

- a CSS animation that helps to advertise the site or a product in some way. This should be different than what you've done previously.
- adding more functionality to the checkout page. This could be doing more complex calculations and/or input, such as adding in a different shipping cost based on the user's location.

¹This is done with cookies.

- adding in additional JavaScript to a page other than the checkout page. This should do something useful, and not simply be a copy of JavaScript on a different page.

Note that just adding more content or having longer pages will not count towards this additional feature. Feel free to check in with me with your ideas.

As usual, all of the above pages should be completed using HTML and CSS, and JavaScript for the dynamic interaction. You can use whatever images you can find on the interwebs. The company logo should be custom-made, as well as the CSS animation (if done).

Notes

- As always, follow the principles of good design.
- Be sure to have a consistent, overall design. It should look as professional as possible. To this end, first design the sizes and placement of the different items within the site.
- You may want to go through established e-commerce apps/websites to see how the various ordering methods are implemented and what their forms look like. The more professional this project looks, the better.
- Test your pages by using Responsive Design Mode on the Firefox browser. It is not good enough to just resize a browser.
- Especially with the JavaScript, work on very small pieces at a time. When that piece works, add a little more code. This way, when something breaks (and it will!), the problem will lie in the little bit of code that you just added.

Project Submission

For full credit, you must be sure to upload all of the pages/images to the cs server by 11:59:59 PM on the due date. All of the files and folders should be stored in a folder called `project4` within `www`. If you are working in pairs, then the project needs to be in just one student's account.

Hofstadter's Law:

*It always takes longer than you expect,
even when you take Hofstadter's Law into account.*