

Project 5

Due Date: December 9

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 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, each student will get the same grade.

Billionaire Elon Bust has come up with another can't miss idea: selling special "EB" pens online. These pens include electronic circuitry that allow them to write on any surface in any environment, including underwater. He calls this new venture *Busted Pens*, and hires you 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 quite a few 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 the *Busted Pens* 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, you should indicate who your partner is near the link to this project.

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 *Busted Pens* home page. Do not include a link back to your own home page.
3. The home page should:
 - establish the "look and feel" for the entire site. This includes the header mentioned above, as well as the colors and formatting.
 - include a CSS animation that shows a pen in action. This can be done with a photographic image or a drawing. This needs to be only a few seconds long, but should be more than just an image moving across the screen. Minimal animation will get you minimum points.
 - include image(s)/advertising copy, etc. promoting the pens.
 - 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 EB Pens 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 ink color of the pen.
- have functionality such that when an item's purchase button is pressed, the shopping cart number increases by one.
- show the price of the pens. It turns out that all of them are the same price! 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 pen.
- 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.
- have CSS 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 pen multiplied by the number of items input into the form. Since this is a Massachusetts company, a tax of 6.25% is added to the total.
- 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, an appropriate message should then 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. All CSS should be in one or more separate files.

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.

Notes

¹This is done with cookies.

- 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.
- 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 just 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 **project5** 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.*