

Assignment 3: Foundation

[Submit Assignment](#)

Due Apr 15 by 11:59pm **Points** 100 **Submitting** a text entry box, a website url, or a file upload

April 3: Assignment is now complete.

Assignment 3 is due on April 15, 2016, by 11:59 PM. Regrade and late policy are listed below. This assignment is worth 25% of your grade for the course.

Part 1: Build a Website with Foundation (required, 66% of the grade)

Build a 2-3 page website leveraging the Foundation framework. Elements your site must include are listed below. You will be expected to incorporate some required elements, as well as reading the documentation and including some elements not covered in class.

- **Write your own content for the site.** Please don't use lorem ipsum or Wikipedia entries. The site can be about anything you want provided it's work-safe, legal, ethical, and moral. If you are redesigning a page or two from a site, you may use that site's content. **You may use the content from assignments 1 and/or 2 if you wish, or you may build a new one.**
- **Grid:** You must use Foundation's grid system to lay out the website. You may customize the grid using Sass, or you may use the default layout. Incorporate one of the following special grid features: combined column/row, fluid row, nesting, offsets, incomplete row, gutters, collapse/uncollapse rows, centered columns, source ordering, block grid.
- **Navigation:** The site should include a navigation bar that links the relevant pages together, and it should be available on all pages of the site. You may style this navigation bar however you wish. You must use one of the following navigation options to create this bar: responsive nav (with or without the hamburger button), top bar, drilldown, accordion.
- **Styling:** Incorporate 3 instances of styled items in your pages. Examples: buttons, button group, close button, switch, breadcrumbs, badge, flex video, label, thumbnail, table, visibility classes, helper classes, callout, media object. Choose three from this list. (Three buttons counts as one item, not three!)
- **Form:** Include a form with at least 4 form fields (a submit button is required but does NOT count as a form field -- it may count as a styled item). The form does not need to submit. The form field types should be appropriate to the data collected. For example, the "email" field type should be used when collecting email addresses. (Hint: you could error-check your form with Abide if you want.)
- **REQUIRED JavaScript-based widget:** You must incorporate Interchange in at least one instance in your site.
- **YOU CHOOSE JavaScript-based widgets:** THREE widgets are required. TWO must be widgets not covered in class. ONE may be one covered in class. (You don't have to incorporate any of the elements used in class, but you may if you wish.)
 - Read the documentation for **TWO** of the following widgets and incorporate it in your pages: Abide, Toggler, Sticky, Tooltip, Orbit, Reveal, Off-Canvas, Accordion, Magellan, Slider, Drilldown, Accordion
 - You may use **ONE** of these, which were covered in class: Tabs, Dropdown, Equalizer
 - If you use Drilldown or Accordion, those count for navigation AND this requirement
 - Interchange DOES NOT COUNT for this requirement and is counted separately.
- Using Sass, change the look of your Foundation website in some way.
 - Change at least 3 variables in the correct way, as demonstrated in the videos.
 - Create at least 3 new styles, or modify existing styles, in the correct way as demonstrated in the videos.

Part 2: Complete one of these options (34% of the grade):

Option A: Foundation for Email

Create a Foundation-based email as demonstrated in the guest lectures from James Stone.

- The email does not need to be generated as a result of your form, but if you want to connect it, you can.
- Create a basic layout for the email, demonstrating rows and columns, and include at least one image (either placeholder images or your own).
- You are not required to get into the Sass for styling this email, but you may do so if you wish. If you do use Sass for styling this email, this may count towards your overall Sass styling requirements (listed in part 1).
- As always, write your own content for this email. You may use content from your part 1 website, or you may write new content. Don't use lorem ipsum or Wikipedia content.

Option B: Comparison exercise

Compare responsive design frameworks, like Foundation and Bootstrap (and a zillion others) to completely custom responsive design, like we explored in the first few weeks of the course.

1. **Create a comparison grid with at least 10 criteria.** State what each criteria is clearly. State how that criteria is implemented (or not) in the items you're comparing. Which is better based on that criteria?

- You may have more than 10 criteria if you wish.
- Try to go a bit beyond the obvious and terse in your comparison. Example of the obvious:
 - Foundation: comes with Equalizer component
 - Custom: Must download and include your own
 - Which is better: it depends!
- A better way of dealing with this would be:

- Foundation: ships with several Javascript-based components to address common responsive design problems. All components are designed to work together without conflict and integrate easily with the framework using HTML attributes.
 - Custom: Must research and identify Javascript-based components to address common responsive design problems. Potential exists for conflicts between components. May not integrate with HTML attributes, meaning you must tweak or modify JavaScript to work with your HTML. Alternatively, you could code your own, which adds to development time.
 - Which is better: ...
 - In other words, don't be a community college student. Go beyond and show me what a Harvard graduate student does when thinking about a list of criteria.
2. Once this list of 10 criteria is generated, then **write a 1-2 page paper explaining which is better**, responsive design frameworks or custom responsive design.
- If you have a clear winner for most situations, defend your answer. Why is your choice the best? Why should everyone use it?
 - If you don't have a clear winner, or if you think the answer is "it depends", explain. What does it depend on? What is an ideal project for each approach?

Remember **this is a critical thinking exercise** driven by your opinions of what's important when building a responsive website. There is no correct answer, but there are answers not sufficiently supported by data. An A answer will demonstrate the data (the criteria grid) that supports your opinion (the paper).

Grading criteria for the paper:

- Please no more than 2 pages. Say it in fewer words. I'm not going to play games with fonts and margins. I'm asking you to write clearly and compactly to make your argument.
- Good grammar and spelling count. You're Harvard grad students, for goodness sake.
- Have you made a good, supported argument?
- Have you made an argument that someone could follow who may not know much about responsive design? Imagine you're talking to a CTO or other technical manager who may not write the code for this, but who may have a reasonable technical background. (You don't need to explain what HTML, CSS, Sass, compiling, etc are, for example.)

What Jen cares about

- You make good use of the Foundation framework, leveraging all components and widgets as described.
- HTML and CSS validate as much as possible. YOUR code should validate. If you see errors or warnings in Foundation's files, you may ignore those.
- You manage to get Sass working the way that was demonstrated in the videos.
- You make a working responsive email OR you write a good paper, as defined above.

What Jen doesn't care about

- Your graphic design and color matching abilities/inabilities don't matter to me. Neither does your ability/inability to make pretty pictures.
- I don't care what compiler you use for Sass.

How to turn in your assignment

Turn your assignment in via the Assignments link in Canvas.

Include a Canvas comment or text file in your submission, indicating the following:

- Paste the URL for the assignment web page. You do not need to provide a link for the CSS.
- Indicate your browser/operating system combination (Mac/PC, Firefox/Chrome).
- Provide details about each of the elements described above with HTML document names and line numbers:
 - **Grid:** It is assumed you used the grid system, so no information is required about this. Indicate which of the special grid features you used and its starting line number.
 - **Navigation:** Indicate which nav bar you used and the starting line number for this on one page of your site.
 - **Styling:** for each instance, indicate where (file name and starting line number) and what. Example: Button in index.html on line 23, table in about.html starting line 50, etc.
 - **Form:** Indicate which page contains your form and its starting line number.
 - **Interchange:** Indicate page and starting line number.
 - **JavaScript widgets:** Indicate which widget, which page it's on, and the starting line number. If something appears across multiple pages (maybe a dropdown menu, for example), indicate one page where it's located and its starting line number.
 - **Sass:** Zip up the relevant Sass documents and submit these. Detail where you have made changes in which file(s) and on which line number(s) in those files. You do not need to submit all of the Sass documents, just the ones you've changed.
- **Foundation for Email option:** If you choose this option, zip up all relevant files pertaining to the email (including your coded files and the final output email plus images) and submit these.
- **Comparison option:** If you choose this option, zip together your relevant documents and submit, or point to those files online (if you did something like Google Docs, for example). If you are using Google Docs, make sure Ed (hebert01@gmail.com (<mailto:hebert01@gmail.com>)) and I (jen@jenkramer.org (<mailto:jen@jenkramer.org>)) are able to see your document(s).

Oh no! I can't make the deadline!

This project is due on April 15, 2016, at 11:59 PM Eastern time. It is expected that you will turn the assignment in on time.

You have one "free pass" to turn in one assignment late for this class. You may use this pass with assignment 1, 2, or 3, but not assignment 4 (due to Extension timelines and end of term).

Should you choose to use this late pass for this assignment, your assignment is due on April 18, 2016, at 11:59 PM Eastern time. You do not need to do anything special to activate the pass. Simply turn the assignment in late, exactly the way you would have done earlier. We will mark that you've used your free pass in the grade book. If you don't turn in Assignment 3 by April 18 at 11:59 PM, you will receive a zero for this assignment.

Exceptions: In our experience, the #1 reason students need a late pass is due to poor planning. The lectures may look easy, but once you start working on your site, you may hit snags along the way. You need to plan for bad things to happen, both personally and professionally. If you have the assignment done early, that's not a tragedy!

However, we know that life happens when you are in graduate school, and we are willing to work with you in extreme cases if you need an additional extension beyond the one provided. These exceptions include things like being in the hospital (or having a significant other or children in the hospital), a car accident or other debilitating accident, and so forth.

Traveling for work or pleasure is NOT an exception -- budget your time to get the assignment in on time. (Jen has little sympathy for this request, as she is on the road for 29 days this term and still manages to post lectures weekly for two courses.)

Being sick is NOT an exception, either for yourself or your children or significant other, unless this is an extreme case (like being in the hospital).

I used my late pass in Assignment 1 or 2, now what?

Your assignment is due on April 15, 2016, at 11:59 PM. Please budget your time accordingly.

Grading timeline

Grades will be posted online in Canvas. Jen will send an email to the class when these are ready for viewing. When this email is sent, Jen will indicate the date that regrade requests are due. Typically it takes 1-2 weeks to grade all assignments.

Regrading of assignments

You are permitted a regrade for either assignments 1, 2, or 3. Regrades are not permitted for assignment 4 due to the timing at the end of the term.

Should you wish for a regrade on your assignment, submit your regrade within 3 days of the completion of grading. Jen will send an email when grading is complete with the due date for regrades. A courtesy email to Ed Hebert is appreciated, to indicate you'd like a regrade.

Typically, regrades take longer than the first round of grading, because these are fit into our schedules as possible. If you have not received your regrade within 2 weeks of submitting it, email Ed Hebert to check on status.