# Assignment 3

**Assignment 3 is due on January 25, 2015, by 12:00 PM.** Because this is the end of the term, **there are no regrades and no extensions**. This assignment is worth 34% of your grade for the course. There are two graded components to this assignment, a presentation and a project. There are also several other components that are required, but not graded. (In other words, if you don’t complete them, you’re marked down, but if you complete them, your grade is unaffected.)

## Overview

Working in teams is part of life with web development. So is learning new stuff without having to take a class! This assignment addresses both of these soft skills that are so critical in a web developer’s career.

For this assignment, you will work with 1 or 2 partners on a topic of your choosing. You will build your own coded project individually, and you will jointly construct a presentation on that topic.

## Topics

Your topic may be anything of your choosing that goes deeper into CSS. CSS must be at least peripheral to the project, if not its focus. You may choose one of these ideas, or you may propose your own.

* Software comparison of front-end workflows (like Grunt, Gulp, etc), including minifying CSS output
* Sass vs LESS: a comparison
* Comparison of responsive design frameworks (Bootstrap, Foundation, UIkit, etc)
* An in-depth look at a single responsive design framework
* Which is better: a responsive design framework or a custom responsive design?
* Optimizing UI/UX for mobile devices: Best practices
* Deeper exploration of one of the course topics (animation, FlexBox, etc)
* Cross-browser hackery
* An in-depth look at media query magic
* Collaborating on building CSS/Sass/LESS files using Git/GitHub
* What is Mobile First and how do its principles impact building a website?
* Or propose your own

NOTE: If you took DGMD E-20 with me, you can’t focus on Bootstrap as a topic! Learn something new! (Your partner could focus on Bootstrap while you focus on Foundation, however.)

## Timeline

Below is the timeline for this project and the deliverables generated.

* **January 5**: Assignment presented to students
* **January 7**: OPTIONAL: Lunch after class in Harvard Square, so students can meet each other informally and discuss project interests
* **January 15, 11:30 AM-12 PM**: Time in class to finalize project interests, partners, and proposals
* **January 19, 12 PM**: Proposal due (explained below)
* **January 20, 9 AM-10:30 AM:** FlexBox lecture
10:30 AM – noon: Time to work in class on the project
* **January 20, 12 PM**: Grading rubric due
* **January 21, 9 AM-10:30 AM**: Animation lecture
10:30 AM – noon: Time to work in class on the project
* **January 22**: Presentations (explained below)
* **January 25, 12 PM**: Coded projects due in Canvas (explained below)
* **January 25, 12 PM**: Partner reviews due (explained below)

## Part 1: Proposal, due January 19 12 PM

There is no formal proposal, nor is this graded, but you must outline what you intend to explore. Please email me (jen@jenkramer.org), cc all partners, the following information:

* Partner names and email addresses
* Working title for the project
* A summary explaining:
	+ What you want to learn from this project and any other project goals
	+ What will be the focus of your presentation
	+ What each partner will deliver for a project. A broad description is fine.

	For example:
	Sally will build a sample page in Foundation, leveraging the grid system, responsive images, and 2-3 additional features. Bob will build a similar sample page with Bootstrap. We’ll compare our outcomes in the presentation, including strengths and weaknesses of each framework.

For sake of organization, each group should send a single email containing this information.

**The proposal is due by Monday, January 19, at noon.** However, I strongly urge you to turn the proposal in before this, so I can get you feedback and you can tweak things if required. Remember that there is no class on 1/19, so you probably really want to get the proposal to me before that so you have Monday to work on the project.

**HINT: Don’t bite off more than you can chew!** With student projects like this, I typically see students taking on a capstone-sized project rather than a little project worth 34% of their grade. A small, focused project is much better than a broader, sprawling project going in many directions.

## Part 2: Rubric, due Jan 20 12 PM

A grading rubric is a description of how you expect your project to be assessed. How much of your grade should consist of the presentation, and how much should it consist of the project? What characteristics describe a presentation deserving of A, B, or C grades?

Rubrics described in detail: <http://www.learningoutcomeassessment.org/Rubrics.htm>

In Canvas, there is a blank rubric for you to use as a template for completion, and there is a sample rubric there for your review. Decide how you’d like this assignment assessed. Describe the grading breakdown for each part of the rubric (what’s an A, a B, etc), and what percentage of the assignment grade correlates to that work.

The presentation must comprise at least 20% of your grade, while the project deliverable must comprise at least 50% of your grade. You may assign the remaining 30% of the grade as you see fit.

Email your rubric to me individually for review by the deadline: jen@jenkramer.org

## Part 3: Presentation, happening Jan 22 9 AM-12 PM

You and your partners will jointly present your findings from your topic of research.

You will have a minimum of 10 minutes to present. Depending on the breakdown of partner groups, you may have only 10 minutes or as much as 15 minutes, depending on formation of pairs and trios. The presentation time will be finalized by January 19.

Clearly, this is not time to cover everything you will learn in this project, so I recommend you pick one area and focus on it. Typically, it’s best to present the 30,000 foot view. What is this technology and why is it important? What makes LESS better than Sass (or Sass better than LESS) and why? Will this technology still be relevant in 5 years, or is something replacing it? Think in elevator pitches rather than essays. You won’t have time to explain the complexities of Bootstrap’s code, but you can explain what it provides out of the box and what can be modified.

## Part 4: Project, due Jan 25 at 12 PM

**Each partner must have a piece of work that is all their own**. You may assist each other in creating each piece (code critiques, help with bugs, sharing resources, etc), but ultimately, I need a piece of work unique to each student for grading.

The project must consist of some code that is individually graded, but it may also consist of some research or some educational materials that are jointly graded. These materials are optional, but code is required.

For example, consider a project comparing responsive design frameworks. You build a little site with Framework A, and your partner builds a little site with Framework B. Those are individually graded items.

After that, together you create a spreadsheet comparing characteristics of each framework. This could be assigned one grade, which each partner will receive.

Your rubric should reflect this breakdown. In this example, perhaps you choose the following grading distribution:

* 30% presentation
* 30% spreadsheet
* 40% 3 web pages coded with framework

This fills the minimum grading requirements (20% presentation, 50% project), includes the individual coding mandate, and reflects the underlying goal of this project – to better understand the strengths and weaknesses of Frameworks A and B.

Alternatively, you could choose to assign 50% of your grade to the presentation and 50% to the project, not having the spreadsheet graded as its own deliverable. It’s all up to you!

## Part 5: Partner Assessment, due Jan 25 at 12 PM

I will distribute some questions about what it was like working with your partner(s). Please complete an assessment for each partner.

The point of this is for me to understand group dynamics. If one person feels they did all of the work, this is the opportunity to let me know. It’s also a way to praise strengths and indicate where improvement may be needed.

Some parts of this survey may be shared with the other partner, while other parts will be confidential. I will indicate these parts clearly as we approach the end of this project.

A link to this assessment will be provided through Canvas.

## What Jen cares about

* **You learn something new!** There’s so much to know, and no one person knows it all. I am looking forward to learning lots of new things from you.
* **You clearly present your topic of interest.** Developers are notorious for being incredibly smart and completely lacking in communication skills. This is frequently because developers don’t understand how to talk with non-developers. Show us you can present a topic clearly, without a bundle of jargon, and without treating us like idiots.
* **You meet your project goals.** If you don’t meet your goals, what was the point of this whole thing anyway?
* **You work well with your partner(s).** You’ll work in person, and you’ll probably do a bit of remote work as well. These are valuable experiences in this field!

## 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. That also goes for pretty/glossy/slick presentations. Content is king!
* A focused project will get you a higher grade than a project that’s too big. Don’t try to impress me with breadth – impress me with depth and understanding your topic.

## How to turn in your project

Your presentation will be given in class on January 22. It’s expected that your presentation is complete at 9 AM – please do NOT work on the presentation while others are presenting. (Points off if you do, and I will require you to have your computers off while presentations are happening.)

As for the project and any additional deliverables, we will negotiate how that will be turned in on an individual basis.