final Project description

The final project for FEWD will be to design and build a website of your choice. This project will test your knowledge of front-end web development, and it encapsulates everything you’ve learned in this course. The result will be a site that can be used in your portfolio.

The objective of this project is to:

* To demonstrate understanding of all topics covered during this course.
* To apply knowledge gained during this course by building a website from the ground up.
* To combine technical and design skills to create an efficient website that is compatible with all the latest modern browsers and devices.

We encourage you to exercise your creativity; instructors will validate feasibility and manage scope. Below are the core requirements that must be included.

core requirements

These features must be included in your project.

* **Navigation bar.** Include a navigation bar and have at least two web pages linked together.
* **Styled with CSS.** Include CSS to style your website.
* **Hosted Website.** No need to pay for hosting services, you can use GitHub pages. If you already have a personal domain name and hosting services, you are welcome to use that instead.
* **JavaScript.**
  + Make sure you use event handling as necessary to monitor and respond to user behavior.
  + Use JavaScript function to logically group your code.

nice to haves

Include at least 2 of the following in your project

* **Contact Form.** Make it easy for users to connect with you, include a contact form. Contact information should include links to your email, phone number, twitter handle etc.
* **Sprite Images**. Make fetching images faster. Use sprites instead of multiple separate image files.
* **Interactive custom animations.** Make your site visually interesting. Include animations and interactivity. Practice good design and don’t over do it.
* **CSS3 techniques.** Include at least two of the CSS3 properties introduced during the course along with the proper vendor prefixes: border-radius, text-shadow, box-shadow, opacity, RGBA.
* **Form input widgets and validation.** Reduce your chances of receiving spam, your site should verify for empty fields in text boxes and valid email address formats. Include the jQuery UI library and at least one widget (accordion, date picker, etc).
* **Namespace.** Implement your own application namespace. .
* **Responsive:** Create and use media queries to make your site respond to various screen sizes.

Milestones

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| --- | --- |
| Week 3 | Project wireframe |
| Week 5 | Project draft due (HTML/CSS) |
| Week 10 | Project due |

Deliverables

GitHub pages and source code link.

Challenge

Up for a challenge? Test your understanding of JS and use some external libraries.

* **underscore.js**: It will help you with some of the boilerplate js functions you may have to write from scratch. In general, try not to reinvent the wheel, but also understand exactly why you are using something.

Bigger Challenge  
if you want a bigger challenge test your front-end web development skills by completing one of the following.

* **backbone.js**: Create a logical separation in your app, between data, presentation, and behavior. You’ll really have to dig into the docs, but with the knowledge you have, you should be able to do it.
* **D3 library**: If you have any interest in data visualization, try to implement the D3 library (this is going to be very hard, and we don’t suggest it unless you really feel like you are rocking everything above).

Best Practices

Your instructor and T.As will provide feedback on how well you execute best practices. Even though it is not part of the requirements, you should keep these in mind.

* **Clean And Readable Code**. Instructors and T.As should be able to read and follow code easily.  Maintain clean and readable code including: consistent indentation, code commenting (e.g. when closing <div> tags, demarcating sections of code, describing possibly ambiguous code choices) and use proper and consistent naming conventions.
* **Correct use of classes and ID**. Use classes for identifying a type of element, and IDs for identifying a specific unique element on the page.
* **Search Engine Optimization (SEO).** Implement SEO best practices related to HTML markup, and content optimization.
* **Avoid deprecated tags**. Uses best practices and build using supported HTML and CSS tags.

Grading

A project is considered satisfactory if it meets all core requirements and includes at least 2 nice to haves. Completing the challenge in addition to the requirements would be above satisfactory. Sample projects can be found [here](http://generalassemb.ly/gallery).