

# Project Overview

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For this first project, you'll create an app that displays random famous quotes each time a button is clicked. You will select your own quotes from famous historical figures, artists, scientists, celebrities, etc.

Example:

"Every great developer you know got there by solving problems they were unqualified to solve until they actually did it." - Patrick McKenzie

You'll locate and select your own quotes. Please select tasteful, positive, and uncontroversial quotes, for the sake of this project. Thank you.

You'll use your growing knowledge of basic JavaScript syntax, variables, loops, conditionals, dom-manipulation, and object literals to:

- Build the array of quote objects to store the quotes.
- Write your own functions for selecting random quotes from the array and printing them to the screen.

This project is a fun and effective way for you to practice the fundamental JavaScript skills while also creating a simple interactive portfolio piece to showcase your understanding of JavaScript fundamentals.

After completing this project, you'll have a tremendous sense of accomplishment, an awesome example of your hard work to show off, and you'll be one important step closer to your goals. Best of luck and happy coding!

# Before You Start

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1. Complete all the course materials from Class 01 to Class 07. Make sure you have a better understanding of the class topics, you are familiar with the concepts and you have the confidence to start this project.
2. Each milestone project needs its own GitHub repo that you'll use to submit your finished project. A preferred developer workflow is to create a new repo when you begin a project, and then make regular updates to the repo after important changes at key stages of development, like after adding new files or implementing new functionality.

A project repo should only contain the project files and/or files you need to add to make the project run. If you need a reminder on how to use GitHub and Github pages please refer back to Class 08.

3. Carefully read the project instructions. Writing code for a project is easier and more enjoyable if you divide the project into smaller, more manageable parts that you can program one at a time. The project instructions divide the project into individual sections, which are further broken up into even smaller steps. Read through the complete list of instructions for a glimpse of how the individual sections come together to complete the project. Then start at the beginning and follow along, one step at a time.

# Project Instructions

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1. Review your class videos. Know what to do and how to get help when you have questions about getting started or implementing individual project requirements. Ask for help in the messenger group if you are stuck with your project.
2. Review the project files. If you haven't already downloaded the project starter files, unzip them, add them to your project folder and push them to your GitHub repo.
3. Create an Array of objects to store the data for your quotes. A data structure is necessary to store and organize the quotes in your app. A basic array of objects is a lightweight way to store information. Create a variable named `quotes` and add a minimum of ten objects to your quotes array.
4. Add data to your quote objects. The objects in the quotes array store the individual properties of the quotes. Add the following properties to each quote object:
  - a. `quote` - *string* - the actual quote
  - b. `source` - *string* - the person or character who said it.
  - c. Add a `citation` property to at least one quote object. The value should be a string holding a reference to the source of the quote, like the book, movie, or song where the quote originates.
  - d. Add a `year` property to at least one quote object. The value should be a string or number representing the year the quote originated.

5. Pause development and test your code. Frequently testing your code can catch bugs as they arise, and avoid the undesirable experience of writing dozens of lines of code, just to discover that your code contains multiple bugs that need to be tracked down and fixed. Use the `console.log()` whenever necessary to test if your code is working/returning values as it should.
6. Create the `getRandomQuote` function. The `getRandomQuote` function should create a random number, and use that random number to return a random quote object from the `quotes` array.
7. Create a function named `printQuote`. You will program the `printQuote` function to perform three tasks: call the `getRandomQuote` function, use the returned quote object to build a string of HTML and quote properties, then use that string to display a random quote in the browser. The app should display a new quote each time the user clicks the "Show another quote" button using a `printQuote` function.
8. Use conditionals to test if objects or elements exist before trying to do something with them. As an example-
  - a. If the random quote object has a `citation` property, concatenate a `<span>` element with the class "citation" to the HTML string.
  - b. If the random quote object has a `year` property, concatenate a `<span>` element with the class "year" to the HTML string.
9. The final stage of the project is perhaps the most important. This is where your developer skills really shine as you carefully double-check that you've accomplished all requirements and that your project is ready for submission.
  - A. Code comments - It's a best practice for development code to be well commented. Replace provided comments with your own to briefly describe your code.
  - B. Code readability - Readability is second only to functionality. Double-check your code to ensure the spacing and indentation are consistent.

- C. Cross-browser consistency - To pass, your project only needs to work in Chrome. But it's common for developers to test their projects in multiple browsers to know how they will perform out in the wild.
- D. Quality Assurance Testing - This is the keystone step in the development process.
  - a. Open and run your app.
  - b. Open the Chrome DevTools console.
  - c. Pretend to be a user and test all aspects of functionality and every possible state of the app, while monitoring the console for bugs and resolving any that arise.

## Before Submitting the Project

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Before you submit your project, check off each item in the project submissions checklist below-

- ☐ I have read all of the project instructions for this project.
- ☐ I understand what is needed to complete the project.
- ☐ My GitHub repo for this project contains only this project, only files needed to make this project run, and a README.md file providing details about my project.
- ☐ I wrote all of my own code for this project. Any code included in my project that I did not write myself is appropriately attributed to its source.
- ☐ I understand that in order to receive an Exceeds Expectations grade, I must complete all extra credit items.
- ☐ I have completed all of the project requirements and believe the project is ready to submit for grading.

# Extra Credit

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To get extra credits complete this bonus task. This task will be count as bonus marking and student who completes these tasks will receive bonus mark for it.

1. Change the design of this project and do a custom HTML, CSS design that reflects an aesthetic look without breaking the functionality.
2. Add another property named `tag` in your quote object and try to filter quotes by tag. As an example, if a user select “programming” then it will select a quote randomly which has the tag programming in it.
3. Quotes automatically refresh at regular intervals.
4. Background color changes to a random color each time the quote refreshes.