

Project 1: Random Quote Generator Study Guide

Sections Of This Guide:

- **How to approach this project** includes detailed guidance to help you think about how to organize your code, project and files.
- **How to succeed at this project** lists the grading requirements for the project, with hints, links to course videos to refresh your memory and helpful resources.

How To Approach This Project

Beginning your first project can feel intimidating. And now that it's time to start writing your own code, without a teacher to follow along with, it's not uncommon to feel as though you've forgotten what you've learned so far. Don't worry. Even experienced coders can feel overwhelmed when staring at a blank file in the editor, wondering where to begin.

The way to break through this initial paralysis is to break down a large problem into a series of smaller, easier ones. Just find a first step, and then take it one small digestible chunk at a time until you reach the finish line.

If you get stuck, here are some helpful steps to follow:

- 1) Check the “**How To Succeed At This Project**” section below. For every instruction step, you'll find a link to a specific resource to help you.
- 2) Reread the original project instructions and refer back to the material in the unit, checking for anything you may have missed or forgotten.
- 3) Do a good Google search. Even professional developers use Google a dozen or more times a day. Example search: “php multidimensional array”.
- 4) Walk away from the computer for a minute. Often, just walking away from the screen for a few minutes can trigger a break through.
- 5) Reach out on Slack. Briefly describe what's not working, where the problem is, and what you've tried so far, then post a friendly question on Slack.

A problem solving process like this is how many developers solve most of the coding problems they encounter. And it's important to start practicing your own problem solving process early on, as getting better at problem solving is important for any developer.

For the basic requirements of this project, you'll create at least a pair of functions to grab a random quote item from the quotes array, and conditionally print its properties to the screen as string of HTML. You'll also have a button that links to the current page to refresh the page.

Need help? Visit the **unit-01** Slack channel

The getRandomQuote Function

This function needs to accomplish three basic tasks. Generate a random number, use the random number to grab a quote item from the quotes array, and return the random quote item.

```
function getRandomQuote(array) {  
    // generate a random number between 0 and the last index in the array parameter  
    // use the random number and box notation to grab a random item from the array  
    // return the random item  
}
```

The printQuote Function

This function needs to call getRandomQuote and store it in a variable. And then using the properties in the quote item stored in the new variable, conditionally generate the HTML string using the template in the project instructions as your guide. Lastly, output the variable within the .quote-box HTML to equal the complete HTML string.

```
function printQuote() {  
    // create a variable that calls the getRandomQuote() function, passing in the quotes  
    // array as an argument  
    // create a variable that initiates your HTML string  
    // using the template in the project instructions, add the two default quote properties  
    // if the quote contains a citation value, add it the string  
    // if the quote contains a year value, add it the string  
    // close the string with the necessary closing HTML tags  
    // display the complete HTML string  
}
```

Call printQuote Function

You will first need to include the functions.php file, making sure to include the path to the file. Use a PHP code block to call the printQuote function from within the .quote-box HTML element.

How To Succeed At This Project

Here are the things you need to do pass this project. Make sure you complete them **before** you submit. To help you, we've put together this guide that links each step directly to helpful resources.

- ❑ Create a multidimensional array named **quotes** to hold the data for your quotes.
 - ❑ Related video: [Indexed Arrays](#)
 - ❑ Related video: [Multidimensional Arrays](#)
- ❑ Each element in the **quotes** array should be an inner associative array with the following items:
 - ❑ A **quote** and **source** item which contains a string.
 - ❑ An optional **citation** and **year** property.
 - ❑ Related video: [Associative Arrays](#)
 - ❑ Related course: [PHP Functions](#)
- ❑ Create a function named **getRandomQuote** and inside that function:
 - ❑ Generate a random number.
 - ❑ Uses it to select a quote item from the quotes array.
 - ❑ Return the randomly selected quote element.
 - ❑ Related link: [Create a random number](#)
 - ❑ Related video: [Indexed Arrays](#)
 - ❑ Related video: [Returning Values From a Function](#)
- ❑ Create a function named **printQuote** and inside that function:
 - ❑ Create a variable that stores the getRandomQuote function.
 - ❑ Create a variable to store the HTML string that contains the quote and source properties using the example HTML in the instructions.
 - ❑ Use separate conditional statements to add the citation and year properties only if they exist.
 - ❑ Display the HTML string
 - ❑ Related video: [Combining Strings](#)
 - ❑ Related video: [PHP Conditionals](#)
- ❑ Call the **printQuote** from within the `'quote-box'` div to display the HTML string.
 - ❑ Rename the index file
 - ❑ Add a PHP code block to include the functions file
 - ❑ Call the function from the appropriate location
 - ❑ Related video: [HTML and PHP](#)

