Team Treehouse PHP Techdegree Curriculum

Unit 1: Random Quote Generator in PHP

Practice your knowledge of basic PHP syntax and data structures by building a Random Quote Generator, a program that displays a randomly selected quote each time the user clicks a button.

List of courses and workshops you need to complete in order to do the project:

Note: Some of the courses/workshops/instructional videos listed below won't be available to you unless you enroll in the Techdegree program. I underlined ALL OF THE COURSES.

Go through the courses that are available to you with a regular Team Treehouse membership.

- 1. Introducing the Random Quote Generator for PHP
- 2. Introducing the VS Code Text Editor
- 3. Setting up a Local PHP Development Environment
- 4. Introduction to HTML and CSS
- 5. Going further with HTML and CSS
- 6. 3 Ways to Build a Habit of Learning
- 7. PHP Basics
- 8. Practice PHP Basics
- 9. PHP Arrays and Control Structures
- 10. Battling Imposter Syndrome
- 11. PHP Functions
- 12. Share your Techdegree Projects with Github Desktop
- 13. Overview of PHP Project 1: Random Quote Generator
- 14. Reusing Code in a Techdegree Project
- 15. Project: Random Quote Generator in PHP

Unit 2: Create a PHP Quiz App

Use data persistence with PHP to build a working quiz app that tests a user's math skills. Add logic to receive user input, keep track of progress and display the final results on the screen.

List of courses and workshops you need to complete in order to do the project:

- 1. Build a Learning Mindset
- 2. Basic Error Handling in PHP
- 3. Build a Basic PHP Website
- 4. Working with \$ GET and \$ POST in PHP
- 5. Browser Persistent Data with PHP
- 6. Learn like an Expert
- 7. **Project**: Create a PHP Quiz App

Unit 3: Build a Personal Learning Journal

Create a web application using PHP Data Objects (PDO) and a SQLite database. The web application, a personal learning journal, lets a user add and edit journal entries and store the results in a database. The result is a useful, blog-like web application.

List of courses and workshops you need to complete in order to do the project:

- 1. Continued Practice: PHP Quiz App
- 2. PHP, SQL, and Databases
- 3. SQL Basics
- 4. Reporting with SQL
- 5. Practice SQL
- 6. Modifying Data with SQL
- 7. Going Further with SQL
- 8. HTML Forms
- 9. <u>Integrating PHP with Databases</u>
- 10. CRUD Operations with PHP
- 11. Practicing with PHP and Databases
- 12. PHP & Databases with PDO
- 13. **Project**: Build a Personal Learning Journal

Unit 4: OOP PHP Game Show App

Create a browser-based, word guessing game: "Phrase Hunter." You'll use PHP and OOP (Object Oriented Programming) to select a random, hidden phrase. A player tries to guess the phrase by selecting individual letters from an onscreen keyboard. Can they guess the phrase before they run out of attempts?

List of courses and workshops you need to complete in order to do the project:

- 1. Use Peer Review to Push yourself forward
- 2. Focus Your Mind, Improve Your Learning
- 3. Object-Oriented PHP Basics
- 4. Basic Exception Handing with PHP
- 5. Extending Object-Oriented PHP
- 6. Designing Interfaces in PHP
- 7. **Project**: OOP Game Show App

Unit 5: Build a Blog with Slim

Build a blog web site, using Slim, a framework for developing sites with PHP. Define the application routes, use PDO (PHP Data Objects) to access application data, use a templating engine for rendering HTML and create forms for the user to add new blog entries and comment on existing ones.

List of courses and workshops you need to complete in order to do the project:

- 1. Build Job-ready Skills with Peer Review
- 2. JavaScript Quickstart
- 3. Practice JavaScript
- 4. Introduction to the Terminal
- 5. HTTP Basics
- 6. Dependency Management with Composer
- 7. Introducing MVC Frameworks in PHP
- 8. <u>Templating with Twig</u>
- 9. **Project**: Build a Blog with Slim

Unit 6: Unit Testing in PHP

Developing reliable software means writing code that you're confident will work in a variety of settings. A crucial piece to making this happen is adding software tests to your programs. Add unit tests to an existing application to ensure that it is functioning as intended. Add code to make the tests for a new feature pass.

List of courses and workshops you need to complete in order to do the project:

- 1. Use Peer Review to Learn More
- 2. PHP Standards and Best Practices
- 3. Getting Started with PHP Unit Testing
- 4. Debugging CSS with Chrome DevTools
- 5. Debugging CSS with Chrome DevTools
- 6. Debugging JavaScript in the Browser
- 7. **Project:** Unit Testing in PHP

Unit 7: Todo API with PHP

In this project, you'll use the Slim microframework and a SQLite database to create a REST API that lets users create, list, update, and delete items from a todo list.

List of courses and workshops you need to complete in order to do the project:

- 1. File Handling with PHP
- 2. Introduction to REST APIs
- 3. Introduction to Git
- 4. Using the Github API with PHP
- 5. Build a REST API with PHP
- 6. **Project**: Todo API with PHP

Unit 8: PHP User Authentication

You have a Todo Application that will allow you to added, edit, delete, and check off tasks. You also have some friends who are looking for a way to track their own todos. You're ready to put this on the internet and share it with your friends, but you don't want everyone to have access to everyone else's todos. Before you can go live, you need to lock this app down with some User Authentication.

List of courses and workshops you need to complete in order to do the project:

- 1. Introduction to Data Security
- 2. <u>Introduction to Application Security</u>
- 3. Practice Hashing Passwords in PHP
- 4. OWASP Top 10 Vulnerabilities
- 5. Environment Variables with PHP
- 6. Introduction to User Authentication in PHP
- 7. <u>Using Cookies and JWTs for Secure Authentication</u>
- 8. **Project:** PHP User Authentication

Final Exam