Laravel

Nature of the Course: Theory + Practical
Total Hours per Day: 2 Hours
Course Duration: 4 Weeks

Course Summary

Laravel is a popular PHP framework, and this course will show students how to set it up, manage it, and use it to create powerful and dynamic web applications.

Completion Criteria

After fulfilling all of the following criteria, the student will be deemed to have finished the Module:

1. Has attended 90% of all classes held.
2. Has received an average grade of 80% on all assignments
3. Has received an average of 60% in assessments.
4. The tutor believes the student has grasped all of the concepts and is ready to go on to the next module.

Required Text Books

1. Matt Stauffer, "Laravel: Up and Running", O'Reilly.
2. Martin Bean, "Laravel 5 Essentials", Packt Publishing.
3. Tony Lea, "The Laravel Survival Guide", DevDojo.
4. Christopher John Pecoraro, "Mastering Laravel", Packt Publishing

Prerequisites

- Fundamental understanding of programming, bits/bytes, procedures, classes, and computer architecture. It's absolutely acceptable if you only have a theoretical understanding of programming, but you should be certain about what programming is and what you intend to gain from this session.
- If you are only interested in theory and have no interest/patience in spending at least 10 hours every week throughout the duration of the course, then this course might not be for you.
- If you have absolutely no idea about programming or do not see yourself doing programming in the next six -odd months, then this class may not be for you.

Course Details

WEEK 1

INSTALLING AND SETTING UP LARAVEL

- Introduction to Laravel
- Concept of Composer
- Installing and using Composer
- Installing Laravel using Composer
- Installing & Using Open-Source Distributed Version Control System (GIT)
- Concept and use of GitHub
- Configuring Laravel
- Project Structure

ROUTING

- Basic Routing
- Named Routing
- Grouped Routing
- Handling Invalid Routes
- Route Filtering with Middleware

WEEK 2

CONTROLLERS

- Introduction
- Basic Controller
- Restful Resource Controller
- Controller Routing
- Controller Middleware

REQUESTS

- Handling Request Information
- Request Inputs
- Form Inputs
- Old Inputs
- Cookies
- Files

RESPONSE

- Attach Headers and Cookie to Response
- Response with View
- Response with JSON
- Response with File

WEEK 3
DATABASE

- Introduction
- Migration
- Schema Building
- Migration Structure
- Running Migration
- Writing Migration
- Seeding
- Database Configuration
- Running Raw SQL Queries

MODEL

- Eloquent ORM
- Defining Model
- Retrieving Model
- Insert and Update Model
- Eloquent Relationships
- One to One
- One to Many
- Many to Many

VIEW

- Passing Data into View
- Sharing Data to all View
- Blade Template Engine
- Introduction
- Template Inheritance 2
- Data Displaying
- Implement Control Structures

WEEK 4
LARAVEL FORMS AND HTML COMPONENTS

- Introduction
- Basic Usage
- CSRF Protection

LARAVEL SERVICES

- Authentication to the Application
- Configuring Auth Library
- Moving from Laravel 5 to 6 & 7
- Artisan Console
- Laravel Helpers
- Exception Handling and Error Logging
- Pagination
- Validations
- Validation Approaches
- Validation Rules with Associating Messages
- Mail

PROJECTS

- Basic Laravel Website
- To-Do List Application
- Business Listing
- Photo Gallery and Many More…

Learning Outcomes

- Learn how to make and use controllers, as well as what they are.
- Increased understanding on how to use Laravel to create applications
- Laravel setup and installation.