<u>Laravel 9 MasterClass for Beginner & Intermediate</u>

Course Content

- 1. Section 1: Introduction and Environment Setup
 - a. Welcome to the course
 - b. About Laravel Versions
 - c. Setup Recommendations and Course Prerequisites
 - d. Code Editor: Visual Studio Code Setup, development extension recommendations
 - e. Additional Learning Resources (Cheat Sheet, Diagrams and Slides)
- 2. Section 2: Basics of PHP and OOP
 - a. What is PHP?
 - b. Variables & Data types
 - c. Conditionals & Loops
 - d. Functions
 - e. Array
 - f. Super globals
 - g. Sessions
 - h. Cookies
 - i. OOP PHP
 - j. Access Mutators
 - k. Inheritance
 - I. Constants
 - m. Abstract Classes
 - n. Interfaces
 - o. Traits
 - p. Static Methods
 - q. Static Properties
 - r. Namespace
- 3. Section 3: Environment Setup
 - a. Windows Setting Up XAMPP (PHP, Apache, MySQL)\
 - b. Windows PHP in the command line
 - c. Windows Composer setup
 - d. Question and Answer
- 4. Section 4: Scaffolding new Laravel Project
 - a. Creating a new laravel 9 project
 - b. Laravel Project Structure Overview
 - c. Artisan Command
 - d. .env file introduction
 - e. Question and Answer

- 5. Section 5: Routing
 - a. Overview of routing in Laravel
 - b. Defining Routes
 - c. Managing and Named Routes
 - d. Route Parameters
 - e. Optional Route Parameters
 - f. Constraining Possible Route Parameters Values
 - g. Problem and Solution
- 6. Section 6: Blade Template Engine & Views
 - a. Understanding blade template engine, Views and templating
 - b. Template Inheritance and Layouts
 - c. Passing and Rendering Data in Templates
 - d. Simple View Rendering Routes
 - e. Conditional Rendering
 - f. Alternative way of conditional rendering
 - g. Loops in Templates
 - h. More control loops in inside template
 - i. Partial templating
 - j. Partial templates in loops
 - k. Problem & Solution
- 7. Section 7: Request and Response Life Cycle
 - a. Understanding Request, Response life cycle
 - b. Headers and Cookies in Response code
 - c. Redirect Responses
 - d. Returning JSON
 - e. Returning File Downloads
 - f. Grouping Routes
 - g. Request Input aka User Input
 - h. Overview of Request Input
 - i. Middleware Running Code Before and After Request
 - j. Problem & Solution
- 8. Section 8: Controllers
 - a. Understanding Controllers
 - b. Single Action Controllers
 - c. Resource Controllers
 - d. Implementation of Resource Controller
 - e. Problem & Solution
- 9. Section 9: Database Configuration & Connection with .env file
 - a. Configuration and Environments Overview
 - b. Configuring the Database Connection
- 10. Section 10: Database Introduction & Migrations
 - a. Overview of Database
 - b. Migrations Overview

- c. Creating and Running migrations
- d. Problem & Solution

11. Section 11: Eloquent ORM

- a. Understanding Eloquent ORM Models
- b. MVC framework overview
- c. Models Creating & Updating
- d. Introduction to php thinker
- e. Models Retrieving Single Model
- f. Models Retrieving Multiple Models and Collections Overview
- g. Models Using the Query Builder
- h. Problem & Solution Practice

12. Section 12: Forms, CSRF token, Validation, Error Handling, Flash Messages

- a. Forms Markup Design
- b. Cross Site Request Forgery (CSRF) Explained
- c. Forms Storing submitted Data
- d. Forms User input validation
- e. Forms Showing validation eros
- f. Forms form request classes
- g. Session overview and Flash Messages using session
- h. Forms Old Input helper
- i. Mass Assignment using forms/models
- i. Problem & Solution

13. Section 13: CRUD - Create, Read, Update and Delete

- a. CRUD Create Form
- b. CRUD Store Data
- c. CRUD Read/Retrieve Data
- d. CRUD Edit Form
- e. CRUD Update Action
- f. CRUD Delete using Form
- q. CRUD Delete Models
- h. Problem & Solution Practice

14. Section 14: Assets & Styling - Laravel Mix compiling Javascript and CSS

- a. Introduction to Laravel Mix
- b. Installing Bootstrap CSS Framework
- c. Using NPM and Compiling Assets with Laravel Mix
- d. Including Assets in Views
- e. Versioned Assets (Cache Improvements)
- f. Brief Introduction to Bootstrap CSS
- g. Understanding CSS Flexbox in General and in Bootstrap
- h. Layout Grid and Styling Header Bar
- i. Styling Forms
- j. Styling Post List Page
- k. Styling Single Post Page
- I. Styling Flash Messages and Error Messages

m. Problem & Solution

15. Section 15: Eloquent Relationship

- a. Understanding Relationship between Models
- b. Types of Eloquent Relationships
- c. One to One relation with migration
- d. One to One assigning relationship
- e. One to One querying relationship
- f. One to Many relation with migration
- g. One to Many assigning relationship
- h. One to Many querying relationship
- i. Problem & Solution

16. Section 16: Querying Basics

- a. Lazy Loading Vs Eager Loading
- b. Querying relationship existence
- c. Querying relationship absence
- d. Counting related models
- e. Using withCount() in practice
- f. Problem & Solution

17. Section 17: Authentication

- a. Authentication Overview
- b. How user registration works in Laravel
- c. Guard component and how logging users in works
- d. Custom registration form and Auth routes
- e. Formatting validation errors
- f. Redirect if Authenticated middleware
- g. Log-in form with "Remember me" feature
- h. Logging Out, @guest directive, debugging CSRF token errors
- i. Retrieving the currently authenticated user
- j. Protecting routes
- k. Problem & Solution

18. Section 18: Model Factories

- a. Introduction of Model Factories
- b. Faker fake data generation
- c. Model Factory states
- d. Model Factory callbacks afterCreating and afterMaking
- e. Problem & Solution

19. Section 19: Database Seeding

- a. Database seeding basics
- b. Using Model Factory inside seeder
- c. Model relations inside seeder
- d. Individual seeder classes
- e. Making seeder interactive
- f. Problem & Solution

20. Section 20: Soft Delete & Force Delete

- a. Soft deletes
- b. Soft deletes querying
- c. Restoring soft deleted model
- d. Force delete
- e. Problem & Solution

21. Section 21: File Storage and Uploading

- a. File Storage Introduction
- b. File upload form
- c. Handling file uploads
- d. Using Storage facade to store files
- e. Getting the URL of stored file
- f. Image Model, One to One relationship along with migration
- g. Uploading Image URL
- h. Displaying uploaded image and styling
- i. Deleting files
- j. Validating uploaded files (size, types, dimensions)
- k. Problem & Solution Practice

22. Section 22: Sending Emails

- a. Development setup for sending emails
- b. The mailable class explained
- c. Rendering email content and email sending
- d. Attaching files and data to emails
- e. Embedding an image inside the e-mail
- f. Markdown mailable classes explained
- g. Creating the markdown mailable class
- h. Custom markdown email component and styling
- i. Rendering email previews in browser
- j. Problem & Solution
- 23. Section 23: Freelancing Marketplace
- 24. Section 24: Where to go next
- 25. Section 25: Live Class