**### Week 1: TypeScript Fundamentals and Advanced Concepts**

#### Day 1-2: TypeScript Basics

- \*\*Day 1:\*\* Introduction to TypeScript, Basic Types, and Functions

- \*\*Day 2:\*\* Advanced Types, Interfaces, Classes, and Generics

#### Day 3-4: TypeScript with React

- \*\*Day 3:\*\* Setting up a TypeScript React Project, Basic Components

- \*\*Day 4:\*\* State Management, Hooks, and Functional Components

#### Day 5-7: TypeScript with React (Contd.)

- \*\*Day 5:\*\* Routing and Navigation in TypeScript React Apps

- \*\*Day 6:\*\* Forms and Form Validation

- \*\*Day 7:\*\* Context API, Redux or MobX for State Management (Choose one)

**### Week 2: React with REST API and Laravel Basics**

#### Day 1-3: Integrating React with REST API

- \*\*Day 1:\*\* Understanding REST API, Fetching Data in React

- \*\*Day 2:\*\* Posting Data, Handling API Responses, Error Handling

- \*\*Day 3:\*\* Authentication and Authorization with REST API

#### Day 4-5: Laravel Basics

- \*\*Day 4:\*\* Introduction to Laravel, Setting Up Laravel Project

- \*\*Day 5:\*\* Routes, Controllers, Views, and Blade Templates

#### Day 6-7: Laravel Models, Eloquent ORM, and Relationships

- \*\*Day 6:\*\* Creating Models, Database Migrations, and Seeders

- \*\*Day 7:\*\* Eloquent ORM, Relationships (One-to-One, One-to-Many, Many-to-Many)

**### Week 3: Advanced Laravel and TypeScript**

#### Day 1-3: Advanced Laravel Concepts

- \*\*Day 1:\*\* Middleware, Requests, and Validation

- \*\*Day 2:\*\* Services, Dependency Injection, and Service Providers

- \*\*Day 3:\*\* REST API in Laravel, API Resource, CORS

#### Day 4-5: Testing and Debugging in Laravel

- \*\*Day 4:\*\* Writing Unit Tests and Feature Tests

- \*\*Day 5:\*\* Debugging Laravel Applications, Logging

#### Day 6-7: Advanced TypeScript and Best Practices

- \*\*Day 6:\*\* Advanced TypeScript Patterns, Advanced Hooks in React

- \*\*Day 7:\*\* TypeScript Best Practices, Error Handling, Code Splitting

**### Week 4: Project Development and Deployment**

#### Day 1-3: Project Development

- \*\*Day 1:\*\* Planning Your Project, Database Design, and Schema

- \*\*Day 2:\*\* Frontend Development with React, Backend Development with Laravel

- \*\*Day 3:\*\* Integrating Frontend and Backend, Testing the Application

#### Day 4-5: Deployment and Optimization

- \*\*Day 4:\*\* Deployment Strategies, Setting Up Deployment Environments

- \*\*Day 5:\*\* Performance Optimization, Security Best Practices

#### Day 6-7: Project Refinement and Documentation

- \*\*Day 6:\*\* Refining UI/UX, Handling Edge Cases, Performance Tuning

- \*\*Day 7:\*\* Documentation, Code Comments, Readme File, Project Submission

Remember to practice what you learn by building small projects, experimenting with code, and seeking help from online communities and resources whenever you encounter challenges. Good luck with your learning journey!