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## Building Web Applications with TypeScript, Angular, and React

**Duration: 2 Days    Course Code: LO035407**

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### Overview:

This is a 2-day course packed with the right balance of theory and hands-on activities to help you take your TypeScript skills to the next level.

This course complies with instructional designing principles for all the 4 lessons. This will ensure that you frequently repeat and reinforce the knowledge you gain. Having been designed for the development of large applications, TypeScript is being widely incorporated into popular projects such as Angular.

TypeScript is the future of JavaScript. TypeScript offers a sliding scale of how much or how little effort you want to put into your declarations: the more effort you put in, the more type safety and code intelligence you get. TypeScript allows developers to write readable and maintainable web applications. Adopting TypeScript results in more robust software, while still being deployable in apps where regular JavaScript is running.

Pure JavaScript lacks certain language features that are taken for granted in languages such as C# and Java. For example, it has no built-in module system, meaning that there's no standard way of producing self-contained blocks of code that present well-defined interfaces to developers.

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### Target Audience:

This course is for web developers who are well-versed in JavaScript and want to take their TypeScript knowledge to the next level.

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### Objectives:

- In this course, we will begin by learning the fundamentals of TypeScript and eventually move toward advanced concepts. Learn how TypeScript relates to JavaScript that you may have written before. We will understand the benefits of TypeScript and how it can help you avoid software defects. We will learn to use type guards, check null and undefined, create tagged union types, and compare the performance of algorithms.
  - We will use TypeScript to build a weather forecast widget with Angular. We will then progress by building a note-taking client/server application using Angular, Node.js, and MongoDB. Finally, we will create a real-time chat application with React.
  - By completing this course, you will be able to build interesting TypeScript projects. This course will take your current TypeScript knowledge to the next level.
  - Here are the important topics that this course will cover:
    - Learn the fundamentals of TypeScript
    - Build a weather forecast widget with Angular
    - Create building a note-taking client/server application using Angular, Node.js, and MongoDB
    - Create a real-time chat application with React
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### Prerequisites:

No prior TypeScript knowledge is required.

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## Content:

### Lesson 1: TypeScript Fundamentals

- Introduction to TypeScript
- Type Checking
- Advanced Type Analysis Features
- Comparing Performance of Algorithms

### Lesson 2: Building a Weather Forecast Widget with Angular 4

- Using Modules
- Creating the First Component
- Using the Component in Other Components
- Using the Main Component

### Lesson 3: Note-Taking Client/Server App

- Setting up the Server
- Integrating with MongoDB
- Creating the Client Side with Angular

### Lesson 4: Real-Time Chat

- Setting up the Project
- Writing the Server
- Creating the Chat Room

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## Further Information:

For More information, or to book your course, please call us on 00 971 4 446 4987

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