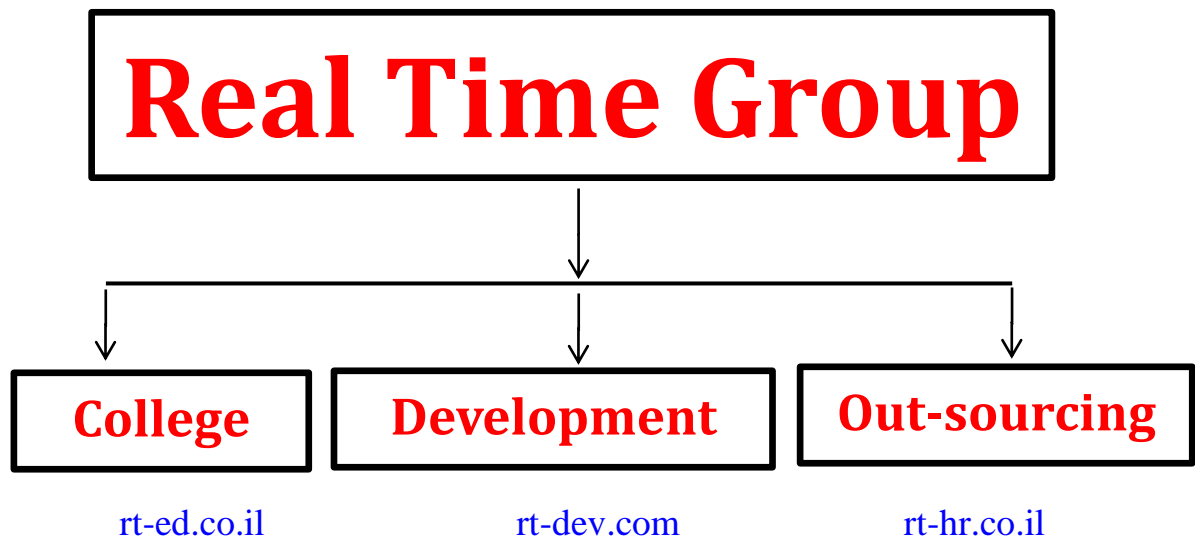# Real Time College

Course: Angular & TypeScript

Duration: 80 Hours
Hands-On-Training: 50%

Real Time Group is a multi-disciplinary dynamic and innovative Real-Time O.S. and Embedded Software Solutions Center, established in 2007.

Providing Bare-Metal and Embedded Linux solutions, professional services and consulting, end-to-end flexible system infrastructure, outsourcing, integration and training services for Hardware, Software and RT-OS \ Embedded Systems.

The company is divided into the following three Divisions:

Real Time Group

College	Development	Out-sourcing
rt-ed.co.il	rt-dev.com	rt-hr.co.il

<u>Training Division</u>:

Professional Training Services for Hardware, Software, RT-OS and Embedded systems industries.

We provide the knowledge and experience needed to enable professional engineers to Develop, Integrate and QA Hardware, Software and Networking Projects.

In order to insure experience, all courses are practical – hands-on-training.
The latest Development, QA and Automation equipment which are adopted by the industry are used.

All students are supplied with Development-Boards for home-work and course projects.

Course Overview:

This course focuses on professional development of web applications using Angular. Course objectives

- Quickly and efficiently start building applications using modern Angular.

- Debug existing applications and improve them.

- Learn to use a number of helper libraries that often complement Angular

During the course, a pilot project is built from scratch, in which the main components of the user interface are created - trees, tables, data entry forms., Pop-up windows, dialogs.
As a server - a service provider, a Node JS server is used with services already deployed on it and a MySQL database with a ready-made data schema for work.

After the course, developers will be able to independently deploy and configure the Angular environment, navigate additional components and libraries, create complex user interfaces for displaying data in modern Web browsers. Deploy your applications on enterprise servers, link your WEB applications with ready-made services..

Who should attend:

- Developers of the user interface of WEB applications.
- Developers who provide interaction of client web applications with ready-made enterprise services,
- Web interface developers.

Prerequisite:

- Familiarity with HTML / CSS
- Knowledge of modern JavaScript.
- Basic knowledge of object-oriented programming

TypeScript strong typing mechanism
for JavaScript

Type annotations, interfaces, optional interface properties, arrow functions, private modifier, public, inheritance.

OOP basics, encapsulation, polymorphism, inheritance, abstraction. Using TS interfaces for typing methods and classes, templates for parameters of interfaces, methods and classes

1. Introduction

2. Basic data types

3. De-structuring

4. Classes

5. Interfaces

6. Generics

7. Modules

8. Namespaces

9. Ambientes

10. Decorators

11. Advanced Types

Angular (NG) - WEB application development tool

1. Angular Introduction

2. Building single page applications

3. Template

4. Controller

5. Scope & Scope Inheritance

6. Directives

7. Modules

8. Dependency Injection

9. Services

10. Interception

11. Rendering HTML

12. DOM event handlers

13. Filters

14. Validation

15. Routing

16. Server communication

17. Custom directives