

## **AngularJS Programming**

#### **Audience Course AngularJS Programming**

This course is for Web Designers and Web Developers who want to learn how to create Single Page applications with Angular JS.

#### **Prerequisites Course AngularJS Programming**

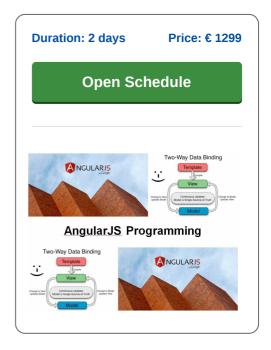
To participate in this course knowledge and experience with  $\underline{\textbf{HTML}}, \underline{\textbf{CSS}}$  and  $\underline{\textbf{JavaScript}}$  required .

#### **Realization Training AngularJS Programming**

The theory is discussed on the basis of presentation slides and is interchanged with practical exercises. Demos are used to clarify the theory. Most commonly used browsers are available for running the code. Course times are from 9:30 to 16:30.

#### **Certificate Course AngularJS Programming**

Participants receive an official certificate AngularJS Programming after successful completion of the course.



### **Content Course AngularJS Programming**

In the course AngularJS Programming you will learn to program with <u>AngularJS</u> and how to use this JavaScript Framework in the development of modern Single Page Applications. AngularJS is the predecessor to Angular 2 and further and new applications will typically be created with the successor to AngularJS. However many existing applications are still written with AngularJS and these applications require maintenance.

#### **AngularJS Intro**

The introduction examines the architecture of Single Page Applications and in particular the Model View Controller pattern. Also the essential features of AngularJS applications are discussed such as dependency injection and two way data binding. Declarative binding between data and user interface elements and the role of the scope object and controllers is also covered.

#### **Expressions and Directives**

Subsequently expressions in AngularJS are discussed with the mustache syntax with which variables and properties can be displayed. Also a number of important directives of AngularJS such as ngModel, ngController and ngBind are treated. With these directives HTML is as it were expanded.

#### **Filters and Validation**

Subsequently attention is paid to filters and validation and a wide variety of AngularJS functions are also on the course schedule. Both built-in filters and user defined filters are covered.

#### **Routing and Services**

Then it's the turn of Routing in AngularJS applications. Through routing part of a web page will be replaced or loaded with new data on the basis of a URL pattern, possibly with parameters provided. The built-in Angular router is discussed as well as external router libraries. And also treated are services in AngularJS that can typically be injected as a singleton anywhere in the application.

#### **Templates and Modules**

Finally templates are covered with which, among other things, reuse is realized and attention is paid to how the AngularJS module system works. Larger AngularJS applications are made up of modules that exchange data with each other. We also look ahead to various characteristics of the successor to AngularJS with respect to potential migrations.



# **Modules Course AngularJS Programming**

Module 1 : Intro Angular JS	Module 2 : Expressions and Directives	Module 3 : Filters and Validation
What is AngularJS?	Expressions	What are Filters?
Single Page Applications	JSON Data Structures	Filter in Templates
AngularJS Key Features	JSON Arrays and Objects	Currency Filter
Hello AngularJS	Built-in Directives	Upper and Lower Case Filter
Extending HTML	ng-Controller Directive	orderBy Filter
MVC Pattern	ng-Controller Declarations	Multiple Filters
HTML Templates	Lexical Closure	Date Filter
Two way Data Binding	ng-Bind Directive	JSON Filter
Directives	ng-BindHTML directive	LimitTo Filter
Dependency Injection	ngRepeat Directive	Custom Filters
AngularJS Popularity	ngModel Directive	Filter Anatomy
Tools	ngClick Directive	Using Filters in Controllers
AngularJS Resources	Custom Directives	Using \$filter in Controller
Module 4 : Forms and Validation	Module 5 : Routing	Module 6 : Services
AngularJS Forms	Routing	What are Services?
Text Inputs	AngularJS Routes	Need for Services
Checkboxes and Radiobuttons	Routing Configuration	Built-In Services
Select Options	ng-View	\$log Service
Tracking Changes by CSS	UI-Router	\$filter Service
Validation	Application Start	Creating Services with Factory
Validation Styling	Difference with ngRoute	Injecting Services with actory
Nested Forms	States and Services	Creating Services with Service
Form Submission	Activating States	Service with Provider
Ajax Form Submission	UI-Router Directives	\$http Service
Form Reset	\$stateProvider	Using built-in Service
Touched versus Dirty	\$stateParams	Dependencies
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Module 7 : Templates	Module 8 : Modules	Module 9 : Miscellaneous Topics
Angular Templates	Understanding Controllers	REST Services
Static Templates	Injected Controller in Module	\$resource Service
ng-include	Avoid Global Namespace	Create a Resource
\$templateCache Service	Controller in Module	Resource Factory
Static Template in File	Controller in Separate File	Resource Constructor
Dynamic Static Template	Scopes	Resource Instance
Nested ng-include	\$watch Scope	Animation in JavaScript
Recursive Templates	Inheritance	jQuery Animations
Recursive JSON Structure	Scope Inheritance	CSS Enabled Animations
Custom Directives	Scope Event Propagation	Animating in AngularJS
templateUrl Property	Scope Life Cycle	Animating ngRepeat
Variable Binding in Directive	<pre>\$watch, \$apply(), \$digest()</pre>	ngShow and ngHide
Isolating \$scope from Directive	Multiple Modules	Animating ng-view