



Capgemini
CONSULTING. TECHNOLOGY. OUTSOURCING

Angular JS

MV* Framework for
creating Single Page
Application



People matter, results count.

(v1.2.20)

Instructor Notes:

Add instructor notes here.

Course Goals and Non Goals

➤ **Course Goals**

- Learning the fundamentals of AngularJS.

➤ **Course Non Goals**

- Comparison with other MV* frameworks like Backbone.JS, Knockout, EmberJS, Meteor, ExtJS
- Writing unit tests and Integrated end to end test for Angular components
- Creating RESTful Services.



Instructor Notes:

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Pre-requisites

➤ HTML, JavaScript, AJAX Basics & jQuery Basics

Instructor Notes:

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Intended Audience

➤ Web application developers



Instructor Notes:

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Day Wise Schedule

- **Day 1**
Lesson 1: Introduction to AngularJS
- **Day 2**
Lesson 2: AngularJS Directives
- **Day 3**
Lesson 3: AngularJS Filters
Lesson 4 : AngularJS Services
- **Day 4**
Lesson 4 : AngularJS Services(Contd)
Lesson 5: AngularJS Routing

Instructor Notes:

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➤ Lesson 1: Introduction to AngularJS

- 1.1. JavaScript Fundamentals
 - JavaScript fundamentals
 - Objects in JavaScript
 - Creating objects
 - Checking for non existing property in object
 - Iterating over object keys
 - Object reference
 - this keyword
 - Constructor Function
 - Prototypal inheritance
 - Static variables and methods
 - JavaScript Functions
 - Working with JavaScript Functions
- 1.2. MV* Frameworks
 - MV* Frameworks
 - Model, View and Controllers
- 1.3. AngularJS Introduction
 - AngularJS Features
 - AngularJS Controller and Scope
 - AngularJS Model

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- AngularJS View and Templates
- AngularJS Modules
- AngularJS Expressions
- \$rootScope
- Steps for Coding Hello World in AngularJs
- Dependency Injection
- AngularJS Services
- injector Service
- How Angular uses injector Service
- Config and Run Method
- jqLite
- How AngularJs Works

➤ Lesson 2: AngularJS Directives

- 2.1: Controllers
 - Controllers
 - Controllers – Best practices
- 2.2: Directives Introduction
 - Directives
- 2.3: Built-In Directives
 - Built-In Directives
 - Built-In Event Directives

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- 2.4: Form Validation Directives
 - Form Validation
- 2.5: Custom Directives
 - Custom Directives
 - Applying restrictions to directives
 - Custom Directives - template
 - Custom Directives - templateUrl
 - Custom Directives – compile() & link function()
 - Custom Directives - controller Function and require
 - Custom Directives – Directive's Scope
 - Custom Directives – Isolated Scope using '@ = &'
 - Custom Directives – Transclusion
 - Working with jQuery UI
- 2.6: Digest Cycle
 - Digest Cycle and \$scope
 - \$watch
 - \$digest
 - \$apply

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Lesson 03: AngularJS Filters

3.1: Introduction to filters

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Filters

3.2: Built-In filters

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Built-In Filters

3.3: Custom filters

•

Custom Filters

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Lesson 04: AngularJS Services

4.1: AngularJS Service Introduction

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Service Introduction

4.2: Creating and Registering a Service

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Creating and Registering a Service

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Registering service using factory() function

•

Registering service using service() function

•

Registering service using provider() function

•

Registering a Service with \$provide

•

Registering service using constant() function

•

Registering service using value() function

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4.3: Built-In Services

- Built-In Services
- AngularJS promise
- \$q Service
- \$http Service
- \$resource Service
- \$anchorScroll Service
- \$cacheFactory Service
- \$compile Service
- \$locale Service
- \$timeout Service

➤ Lesson 05: AngularJS Routing

5.1: AngularJS Routing

- Routing
- AngularJS Routes
- Setting up page for routing
- Routing Modes
- Route Parameters
- \$routeParams
- \$route
- resolve property
- \$location service
- Route Events

Instructor Notes:

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References

- ng-book The Complete Book on AngularJS by Ari Lerner
- O'REILLY AngularJS by Brad Green & Shyam Seshadri
- APress Pro AngularJS by Adam Freeman
- PACKT Publishing Instant AngularJS Starter by Dan Menard
- PACKT Publishing Dependency Injection with AngularJS by Alex Knol
- PACKT Publishing AngularJS Directives by Alex Vanston
- <https://docs.angularjs.org/guide>
- <https://docs.angularjs.org/api>



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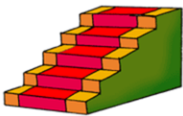
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Next Step Courses (if applicable)

- ▶ Creating Web application using MEAN (MongoDB, ExpressJS, AngularJS, NodeJS) Stack



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Other Parallel Technology Areas

- Knockout
- Backbone.JS
- EmberJS
- Meteor
- ExtJS