

4/10/2018

Angular / Amexio Training

Hands on Workshop Training Proposal
Corporate Program

Presented to

Contact Person

Company

Address





BetaMAGIC Global Pvt Ltd

<http://www.metamagicglobal.com> : 329, Amanora Chambers, Magarpatta City Rd, Hadapsar Pune, India.

Angular / Amexio 1 or 2 Day workshop

Executive Summary

Angular is a UI platform (from Google) to build your Web and Smart Device Applications. It focuses on UI component development, navigation, dependency injection, security with a modular architecture.

Amexio is a rich set of Angular 6 components powered by HTML5 & CSS3 for Responsive Web Design and 50+ built-in Material Design Theme support. Amexio is completely Open Sourced and Free. It's based on Apache 2 License.

With 120+ UI Components which includes, Grid, Trees, Tabs, Dynamic Tabs, Form Inputs, Layouts, Charts, Dashboards, Maps etc. It's one of the best Angular UI Library in the market today.

The codebase follows the best in class coding standards and the Amexio build (Travis CI) process is integrated with an open source static code analysis tool - Sonar TS to check the code quality in every build. v5.1.0 release has a Code Quality rating as follows - Security - A. Maintainability - A Reliability - A grade. Sonar TS is a static code analyser for TypeScript detecting bugs and suspicious patterns in your code.

Target Audience

- Developers / Sr. Developers
- Architects / Sr. Architects

Course Schedules

Course Contents

1. Angular Architecture
2. Components & Modules
3. Routing and Route Guards
4. Dependency Injection
5. Service
6. Server Side Rendering
7. Amexio Angular UI Components
8. Amexio Angular Charts

Angular 6 Developer Workshop with Amexio UI Components

1	Getting Started & Angular Basic <ul style="list-style-type: none">• Angular Overview• Language Selection• Setting up development Environment• Getting Started with Hello world App	3	Input and Validation <ul style="list-style-type: none">• User Input• Form validation• Data Bindings
2	Angular Basic <ul style="list-style-type: none">• Angular Architecture• Component, Module, Template, Styles• Binding – Property, Class, Style and Event• Condition & Looping• Component Input and Output	4	DI, Routing and HTTP <ul style="list-style-type: none">• Dependency Injection• Service• Routing & Route Guards• Working with Cookies / Http Calls
		5	Build and Production <ul style="list-style-type: none">• Production Build• TS Lint Configuration

Objectives

1. Understand Angular Architecture
2. Understand Components and Modules
3. Understand Angular Routing and Route Guards
4. Understand Service and Server Side Rendering
5. Understand Amexio Angular UI Components
6. Understand Amexio Angular Charts

Pre-requisites for Developers / Architects

- TypeScript
- UI Design Patterns

Course Content Details

1 Overview

Course Intro, Structure & what you learn

Angular Overview

What is Angular

History of angular

Language Selection

Setting Up Development Environment

Install Node, NPM, Angular CLI & Select editor for development

2 Getting started

Creating first hello world app

Explain structure of project

How to consume external node dependency (package.json)

Editing of HelloWorld

3 Angular Basic

Angular Architecture

Module

Component

Angular Lifecycle

Working with template

Inline template

Template reference

Working with component styles

Inline style

Style reference

Global style

Component Selector

Binding

Interpolation

Property Binding

- Class Binding
 - class
 - ngClass
 - conditional class loading
- Style Binding
 - Style
 - ngStyle
 - conditional style loading
- Event Binding
 - How to bind event to component
 - Passing event object
 - Passing custom data or object
- Two Way Binding
- Condition & Looping
 - ngIf
 - ngIf with else
 - ngSwitch
 - ngFor
- Component Input/Output
 - Different data types
 - Input
 - Output

4 Dependency Injection, Service, Routing, HTTP & Module

- Dependency Injection
 - Need & How to implement
 - Hierarchical Injector
- Service
 - Need & How to implement
 - Using service for Cross Component Communication
- Routing
 - Component routing
 - Route Outlet
 - Module routing
 - Auxiliary routing
 - Wildcard routing
 - Route Guard
 - Passing parameter to route
 - Retrieving parameter from route

Module

- Default app module
- Creating new module
- Shared module

HTTP calls

- How to make server side (get/post..) HTTP calls.
- Working with header
- Catch HTTP Errors

Working with cookies

5 Inputs, Validation & Formatting

- User Inputs
- Form validation
- Format data using pipes
 - Default pipes
 - Custom pipes
 - Parameter to pipes
 - Chain of pipes

6 Working with DOM and Templates

- Why Avoid direct Dom queries
- Projecting content in Component using ng-Content
- Access to ng-Content using @ContentChild
- Access to template using @ViewChild
- Access to component DOM using ElementRef
- Host listener
- Host binding
- ng-template
- ng-container
- ngTemplateOutlet
- Entry component - Dynamic Component Creation

7 Build & Production App ready

- JIT VS AOT compile
- Development Build
- Production Build & Deployment
- Ts Lint configuration - For following specific guideline

8 Advance Topics (There will be more details on this as we go)

How to Make App SCSS enabled
Angular Flex
Angular Animation

9 Secure APP

How Angular Prevent XSS with example
Dom Sanitization
JWT - Header
Adding HTTP interceptor

10 Service Worker

Introduction & Need
Getting Started
Communication
Configuration
Production ready

11 Server Side Rendering

Need for server side rendering
Angular Universal

Infrastructure Requirements

- NPM/Node - <https://nodejs.org/en/>
- Angular CLI - <https://cli.angular.io>
- Hardware – 8 GB RAM (Preferred) & 256 GB HDD, Intel i5 or i7 CPU
- Internet Connection

Mr. Araf Karsh Hamid – Co Founder / CTO, MetaMagic Global, NJ, USA

Araf Karsh has with over 25 years of experience leading the design and development of mission-critical, object-oriented and web-based applications for premier organizations including Bank of America, CIBC, Johnson & Johnson, Kaiser Permanente, the U.S. Department of State, and the U.S. Dept of Energy. Karsh has an established track record leading production software organizations and bringing new products to market using leading edge technology.

He has extensive knowledge of service-oriented architecture, Micro Services, Containers (Docker), Blockchain and key foundational technologies. He is well versed in building highly scalable and high performance distributed applications using Java technologies.

Training, mentoring and motivating his people is his first passion. He says chess taught him the importance of doing this, a pawn (or a rookie) can become the king when it reaches the other end, the challenge is to take it that far. But he is also known to demand a lot from his teams and again he uses a chess metaphor to explain that the worst enemy of a strategist is the clock.

Karsh focuses on Designing & Architecting innovative solutions for business problems which will be cost effective while using leading edge technologies. He uses his leadership skills in team building, technology research, while managing the creative aspect of software building, motivating and empowering team members to come up with new innovative solutions.

Mr. Ketan Gote – Co Founder / CDO, MetaMagic Global, NJ, USA

After getting his Masters in software development from Pune, Ketan started developing software products for a security provider. As he likes to call himself, he is a full-stack guy and security provided him the opportunity to work the entire stack and come up with pervasive and sustainable security designs and products.

Ketan joined IBM and worked on large projects servicing customers in North America. He worked across multiple products and technologies and started specializing in SOA and scalable architectures. He put this expertise to use to help customers translate futuristic concepts into real-world solutions and before he knew, he was the resident SME for a whole lot of things for his team and clients.

While Ketan is a hard-core techie at heart, he realized he had a strong desire to share his knowledge and ideas to brain-storm, train and mentor. And as things turned out, he has the skill to do so too and rose rapidly in the organization, taking on a mix of technical and people management responsibilities. His knowledge sharing includes both in-person and blogging for the community at large.

Fees, commercial terms and contact information

Contact Person

MetaMagic Global Inc. /
BetaMagic Global Pvt Ltd.
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Magarpatta City Road,
Pune, 411028
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Training at Customer Premise

- All the necessary infrastructure requirements will be setup by the customer.

Other costs

- **For Mumbai:** Travel and stay on actuals if the participants number is less than 15.
- **For Pune:** No Travel costs
- **Other Cities:** Travel and stay on actuals.
- All taxes, levies and duties as applicable will be charged separately and payable by the client organization.

Payment Terms

- 50% Advance
- All the participants can join our forum to ask questions and share their thoughts. This is available on an on-going basis without any fee. All participants should take maximum advantage of this as they will see a lot more here than just answers to their queries and become part of a community.

Course Pricing Details

1 Day Program

Participants	Amount / Participant
<= 10	Rs. 10,000/-
11 – 20	Rs. 7,000/-
21 – 50	Rs. 5,000/-

Minimum 10 participants for the workshop. If the number is less than 10 participants, then the entire 1 Day workshop will cost Rs. 1.0 Lakhs

2 Day Program

Participants	Amount / Participant
<= 10	Rs. 15,000/-
11 – 20	Rs. 12,000/-
21 – 50	Rs. 10,000/-

Minimum 10 participants for the workshop. If the number is less than 10 participants, then the entire 2 Day workshop will cost Rs. 1.5 Lakhs

Post Workshop Support

- MetaArivu Forum Support – Life long

- In addition, as the participants put their learning to use in real-life scenarios, they can use the expertise of our team to validate their ideas or high level architecture. This special facility is offered for a maximum of four hours of email/telephonic support (includes the time needed by our team to review and understand your artefacts and questions) over a period of 45 calendar days from the last date of the program. Please note this is a 'use it or lose it' and cannot be rolled over to a future period. To make best use of this, you can appoint one participant as a coordinator for queries emanating from your team to consolidate and prioritize your discussion points with our team.
- If you need further help with detailed architecture, design, development or testing cycles or additional training, please reach out to your relationship manager at MetaMagic for a separately priced service.