# **MEAN Stack Syllabus**

## **MEAN Stack**

- 1. Overview
- 2. Architecture
- 3. Need
- 4. Advantages
- 5. Disadvantages
- 6. When to Use
- 7. When Not to Use
- 8. Building blocks
- 9. What Is MongoDB?
- 10. What Is Express?
- 11. What Is Angular.js?
- 12. What Is Node.js?
- 13. Setting Up things
- 14. How it all fits in
- 15. Deployments

## **MongoDB**

- 1. Structure
- 2. Working with MongoDB
- 3. Shell Commands
- 4. Native Commands

- 5. Models
- 6. Mongoose

## **Express**

- 1. Installing and Setting Up things
- 2. Build a Web Application with Express
- 3. Authentication
- 4. Authenticate and Authorize Your Users with Passport
- 5. Communicate in Real-Time with Socket.IO

## Node.JS

- 1. Overview
- 2. Setting up things
- 3. Building Blocks
- 4. Npm
- 5. Using third party packages
- 6. Working with Node.js

## **Angular.JS**

1.Introduction to AngularJS	2.First AngularJS application
What does AngularJS do for me? When to use AngularJS	A basic application Two-way data binding
When not to use AngularJS	Directives
	Model, View, Controller from the AngularJS Perspective
3.Single Page Applications	4.Controllers

What do we mean by Single Page Application? Creating Angular Modules Using Angular's Routing Service Routing Basics Accessing URL Data Using the \$location Service Creating a Skeleton Single Page Application	Where Controllers fit in, and what they do, from Angular's perspective Managing Scope Setting up Behavior Building a basic controller A more advanced controller ControllerAs
5.Models	6.Views
How to create a model Explicit models Implicit models	Angular's take on the View: a little bit different Tying a View to a Controller Tying a View to a model
7.Expressions	8.Filters
Expressions are lightweight code snippets Expression capabilities Limitations The border between expressions and \$eval	Standard filters Writing your own filter Tying filters together Custom Filters
9.Scopes	10.Angular Forms
What are scopes? What do scopes provide? Scope lifecycle Scopes as glue between controller and view Scope hierarchies Scope and events	Angular forms vs HTML forms Angular form controls Form events The form controller Form validation
11.Ajax, Data, and Angular	12.Directives
High level interactions with servers Low-level server interactions with \$http The deferred/promises API Making RESTful Service calls with	Teaching HTML new tricks Binding text and attributes Directive processing lifecycle DOM Processing

#### \$resource

Compilation Linking A basic directive Directives and scopes Creating reusable directives

## 13.Angular UI

UI Grid Introduction to Angular Bootstrap