> Fullstack Web Development using Java Script frameworks Mongo,Express,Angular,Node (MEAN)

> > Raghu Prasad K S

**B.E, MS (Software Systems)** 

# CEO

Kaushalya Technical Training and Consultancy Services

#1094,Indushankara,23 Cross, MCECHS Layout, Dr. Shivarama karanth Nagar, Bangalore 560 077

+91 – 9845547471 www.kaushalya.tech <u>raghuprasadkonandur@kaushalya.tech</u>

#### Course Details:

Name	Fullstack web development using Java Script frameworks – MEAN
Course Duration	80 hours

Fullstack web development using Javascript has become the hot skill in the industry. It is essential for the graduates and professionals to learn and master these skills. One has to be well versed with front end,middleware and database programming to become a full stack web developer.

MEAN is a free and open-source JavaScript software stack for building dynamic web sites and web applications.MEAN is the powerful and most sought after course in the industry. Mastering javascript programming is essential for this course to develop front and backend programming.

#### **Objectives of Training**

- Provide minds-on and hands-on training
- Understand Javascript and its applications
- Learn rapid web application development using HTML/CSS/JavaScript/JQuery/AJAX and Bootstrap
- Learn how Node.js changed the javascript as a server-side programming
- Learn building RESTful Webservices using Node and Express
- Learn database programming using Mongo
- Learn front end development using Angular
- Build sample project using MEAN

#### Outcome of Training

- Trainees should be able to independently develop sample web application
- End to end (Full stack) application development
- Trainees can develop web application or back end application for their projects/internships
- Training on MEAN should enable trainees to solve objective and programming type questions. This would help them to prepare for placements/switch career.

# Syllabus

Module	Topics
Modules 1 – Basics	<ul> <li>Introduction to web design and application development</li> </ul>
of Web Application	✓ Installation of Sublime text
Development	✓ Basics of HTML programming
	<ul> <li>HTML Elements</li> </ul>
	<ul> <li>HTML Forms</li> </ul>
	✓ Basics of CSS programming
	<ul> <li>Style attributes – Color, Font, Image, etc</li> </ul>
	<ul> <li>Internal, Inline and external styling</li> </ul>
	<ul> <li>Introduction to responsive web design</li> </ul>
	✓ Basics of Java script programming
	<ul> <li>Building blocks – variables, operators, conditional</li> </ul>
	statements, loops
	<ul> <li>✓ Basics of Bootstrap</li> <li>✓ Basics of AJAX</li> </ul>
	✓ Sample programs and assignment
Module 2 –	✓ Introduction to Node
Node.jsand	✓ What,Why and How of Node
Express.js	✓ Node Projects
	<ul> <li>Working with shrink-wrap to lock the node modules versions</li> </ul>
	<ul> <li>✓ Working with asynchronous programming</li> </ul>
	<ul> <li>Building a HTTP Server with Node.JS using HTTP APIs</li> </ul>
	✓ File System
	<ul> <li>✓ Buffers, Streams, and Events</li> <li>✓ Multi Dragoning in Nacle 10</li> </ul>
	<ul> <li>✓ Multi-Processing in NodeJS</li> <li>✓ Everyone IS</li> </ul>
	✓ ExpressJS
	<ul> <li>Express JS with MongoDB and Sqlite</li> <li>Socket in The Front and A Chot App</li> </ul>
	<ul> <li>Socket.io, The Front-end, and A Chat App</li> <li>Introduction to Took Managers with unit testing</li> </ul>
	<ul> <li>Introduction to Task Managers with unit testing</li> </ul>
Module 3 –	✓ Introduction to NoSQL databases
MongoDB	<ul> <li>MongoDB A Database for the Modern Web</li> </ul>
	✓ CRUD Operations in MongoDB
	✓ Indexing and Aggregation
	✓ Replication and Sharding
	<ul> <li>Developing backend programming using Node, Express with</li> </ul>
	MongoDB
	<ul> <li>Assessment and feedback</li> </ul>

Module 4 – Angular	✓ What is a SPA?
	✓ What is Angular?
	✓ Preparing for TypeScript
	✓ Angular-4/6 new features
	✓ Building with A4 Components
	✓ Bootstrap Scaffolding
	✓ Angular 4/6 Binding and Events
	<ul> <li>Dependency Injection and services</li> </ul>
	✓ Directives
	✓ Pipes
	✓ Forms
	✓ HTTP, Promises, and Observables
	✓ Testing
Module 5 – Project	✓ Develop a project using MEAN
	✓ Assessment