MERN SYLLABUS

MERN Stack (MongoDB + ExpressJS +

Duration: 6-7 weekends

<u>Prerequisites</u>

Basic Knowledge of Computer.

MongoDB

1. Design Goals, Architecture and

Installation

- What is need for Non RDBMS
- Benefits of using Document based

databases

- 2. CRUD Operations
- Understanding of CRUD Operations
- Functional usage of CRUD
- . Read/Write Operations with CRUD

NodeJS and ExpressJS

- 1. Introduction to Node JS
- . Foundation
- Introduction to the Node JS framework

Installing NodeJS

• Using NodeJS to execute scripts

The Node Package Manager

- The package json configuration file
- Global vs local package installation
- Automating tasks with Gulp
- The HTTP protocol
- Building an HTTP server
- Rendering a Response
- . Using Representational State Transfer 2. Express Framework
- Connecting to Mongo databases
- Performing CRUD operations
- The Node.JS framework
- Installing NodeJS
- The HTTP protocol
- Building an HTTP server
- Rendering a response
- Processing query strings
- NodeJS using Representational State

Transfer • Configuring TLS 4. Express JS

- An Introduction to Express is
- . Schema Design and Data Modelling
- Schema Design and

Data Modelling in MongoDB®

- Various Data Structure and
- Tools to Manage Data Model in Mongo DB
- Routing o Setting Up Router o Route

Parameter and queries . HTTP Interaction

- Handling Form Data
- Handling Query Parameters
- Error Handling
- Creating and Consuming RESTful Services
- Using Templates
- The model-view-controller pattern
- Building a front-end controller Defining routes
- Creating actions
- Configuring Express to use Handlebars
- Using REST reading POST data Adding middleware
- Data Sources
- How Node.JS connects to databases RDBMS databases and NoSQL database

Redux

- The Gist Of Redux Creating a Redux Store
- Alert Reducer, Action & Types
- Alert Component & Action Call