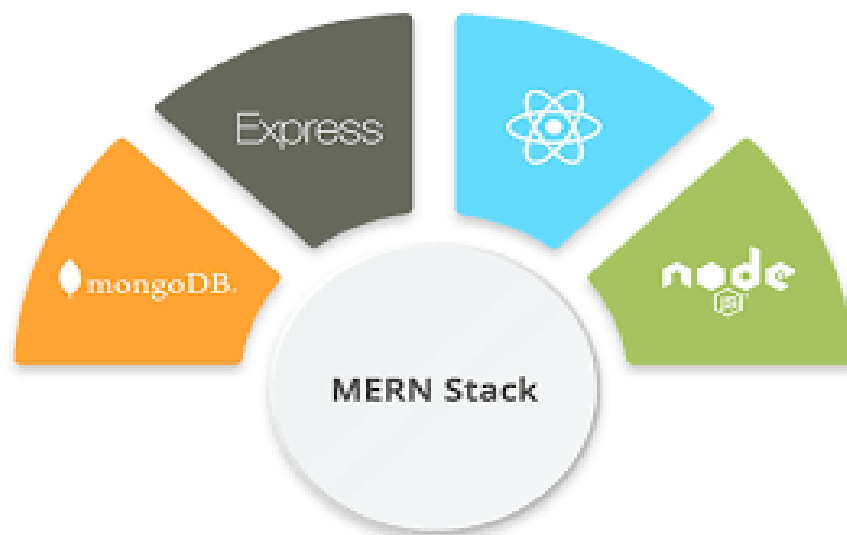


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REACT JS

JAVASCRIPT ES 5 AND ES 6

- Basic JavaScript
- Object Based JavaScript
- Introduction to ES6
- JavaScript Helpers (for Each, filter, map, filter, every, some)
- String Literals
- DE structuring
- Rest parameters and spread operator
- Arrow function
- Default parameter
- Class : Inheritance, constructor
- Promise

INTRODUCTION TO TYPESCRIPT

- Why Use Typescript
- Basic Types
- Classes and Interfaces
- Type Definitions
- Compiling Typescript

GITHUB

- Real-time environmental setup with GitHub

INTRODUCTION TO REACTJS

- What React JS?
- Why React JS?
- What is Single Page Application?
- Why SPA?
- React JS Version
- What is CLI : create-react-app project name
- Advantage using CLI
- How to debug React JS application.

SETUP REACTJS ENVIRONMENT

- Installation CLI
- Create a hello world example

BASIC FEATURES OF REACTJS

- React Concepts
- JSX
- TSX
- Render Elements

- Components and Props
- State and Lifecycle
- Handling Events
- Practice on above topics

KEY FEATURES OF REACTJS

- Conditional Rendering
- Lists and Keys
- Forms

COMPONENT LIFECYCLE

- Understanding component lifecycle

EVENT HANDLING IN REACT

- Understanding React event system
- Passing arguments to event handlers

WORKING WITH FORMS

- Controlled components
- Understand the significance to default value prop
- Using react ref prop to get access to dom element

ROUTING WITH REACT ROUTER

- Setting up react router
- Understand routing in single page applications
- Working with browser router components
- Configuring route with route component
- Making routes dynamic using route prams
- Working with nested routes
- Nvigating to pages using link and navlink component
- Redirect routes using redirect component

INTRODUCTION TO REDUX

- What is React Redux
- Why React Redux
- Redux Install and setup
- Actions
- Reducers
- Store
- High order component
- Understanding map State To Props and map Dispatch To Props usage

REDUX ADVANCED

- Async Actions
- Middleware
- What is redux saga
- Install and setup redux saga
- Working with Saga helpers (Crud Operation)
- Sagas vs. promises

NODE JS

Introduction to Node.js

- Introduction to Node.js
- History of Node.js
- Introduction to io.js
- What is Node.js Foundation?
- V8 JavaScript Engine
- Why Server-side JavaScript?

GETTING STARTED WITH NODE.JS

- Node.js Architecture
- JavaScript Event Loop
- Node.js vs. others Server-Side Frameworks
- Node.js Application Area
- Advantages of Node.js
- Limitations of Node.js

JAVASCRIPT WITH NODE.JS

- Writing Asynchronous Code
- Blocking vs. Non-Blocking Code

MODULES

- Understanding Modules
- Built-In Modules
- Creating Module
- Exporting Module
- Importing Modules
- Node.js CLI and NPM
- Understanding CLI
- Node's Package Manager: NPM
- Local Packages and Global Packages
- Installing, Updating and Removing Modules using NPM
- Understanding package.json file

EXPRESS FRAMEWORK

- Understanding Express
- Installing Express
- Creating and Running Express App

NODE.JS PACKAGE AND PUBLISHING

- Creating a Node Package
- Publishing Package
- Using published package

BUFFERS

- Creating buffer
- Buffer decoding

STREAMS

- Creating streams
- Streams types
- Readable Stream
- Writable Stream
- Stream Pipe

EVENTS

- Understanding Events
- Event Emitter class
- Emitting Event
- Listening Event

EXCEPTIONS HANDLING

- Try. Catch
- Callback
- Event Emitters

CODE DEBUGGING

- Built-In Debugger
- Node Inspector
- IDE Debuggers

FILE SYSTEM AND PATH MODULE

- Introduction to fs Module
- The fs modules operations
- Manipulating Files – Create, Open, Read, Write, Close, Rename, Delete
- Manipulating Directives – Create, Read, Remove
- The path Module

HTTP

- Building a Web Server
- HTTP Request Methods, Headers
- Response Codes and Headers

ROUTING AND VIEW ENGINES

- Routing
- Router Object
- Router Object Methods
- View Engine – Handlebars
- Response Methods

MIDDLEWARE AND REQUEST PROCESSING

- Middleware
- Express Middleware
- Express Request Processing

MONGODB

- Understanding NOSQL DB
- NOSQL vs. SQL DB
- Understanding Mongo DB
- MongoDB Advantages
MongoDB Fundamentals
- Analogy between RDBMS & MongoDB
Data Model
- MongoDB Data types
- MongoDB Shell
- MongoDB Shell Commands
- Understanding dB, collection and
document
- Understanding Embedded documents
- Querying database Tools & API
- MongoDB Tools
- Introduction to Mongo Chef
- Mongo Chef for database operations

INDEXING AND RELATIONSHIPS

- Understanding Indexing
- Types of Indexes
- Creating an Indexes
- Dropping an Indexes
- Defining Relationships between Documents

MONGODB ODM – MONGOOSE AND POSTMAN

- Introduction to Mongoose
- Exploring fundamentals of Mongoose
- Mongoose Models
- Mongoose Data Types
- Mongoose Relationships
- Mongoose CRUD operations

REST API WITH MONGOOSE, MONGODB AND POSTMAN

- Creating REST API using Express and
Mongoose

IMPLEMENTING THE MINI PROJECT DEPLOYMENT OF MERN APPLICATION