

# MERN Stack (MongoDB, ExpressJS, ReactJS, NodeJS)

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## React JS

- **Emerging JavaScript**
  - Declaring Variable in ES6
  - Arrow function
  - Transpiling ES6
  - ES6 Objects and Arrays
  - Promises
  - Classes
- **Pure React**
  - Installation Node JS
  - Page Setup
  - The Virtual DOM
  - React Elements
  - React DOM
  - Children
  - Constructing Elements with Data
  - React Components
  - DOM rendering
- **Props, State and the Component Tree**
  - Property Validation
  - Refs
  - React State Management
  - State within component Tree
- **React Router**
  - Incorporating the Router
  - Nesting Routes
  - Route Parameters

## Node JS

- **Introduction**
  - Overview of NodeJS
  - Installing NodeJS on windows

- **Streaming Data Across Node And clients**
  - Creating and HTTP Server
  - The Request objects
  - Working with Headers
  - Handling Post Data
- **Access the File System**
  - Directories & iterating overs files and folders
  - Reading from File
  - Writing to a File

## **Express JS**

- **Introduction**
  - Installing Express and Making it Easier to Build Web Server
- **Express Basics**
  - Express Request
  - Express Response
  - Express Get
  - Express Post
- **Express Routing**
- **Express Middleware**
- **Express Template Engine**

## **MongoDB**

- **Introduction to MongoDB**
- **Mapping Relational database to MongoDB**
- **MongoDB installation and configuration in Windows**
- **MongoDB Create database**
- **MongoDB Drop Database**
- **MongoDB Create collection**
- **MongoDB Drop collection**
- **MongoDB Insert Document**
- **MongoDB Query Document**
- **MongoDB Update Document**
- **Delete document in MongoDB**

## **A Complete Project with MERN**