Twitter Thread by Ankur■■■



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MERN Stack Developer roadmap!

MERN stands for:

"MongoDB, Express.js, React.js, and Node.js."

A Thread... ■

#100DaysOfCode

What is a stack?

A “stack” refers to any combination of programming languages and technologies or a combination of software products.

Few things need to consider for before choosing stack your project:

- Know your requirements
- agility
- Expertise and knowledge of a team
- Flexibility & scalability of the development team
- The final development cost

MERN stack is a popular and powerful stack to work in.

MongoDB: A document-based open source DB

Express: A Fast, minimalist web framework for Node.js

React A JS front-end library for building UI.

Node.js: It brings JavaScript to the server

1■Introduction to JavaScript

- What is JavaScript?
- What is the ECMA Script?
- JS vs. Other Static Languages
- Setting up Dev Environment
- JS Advantages And Disadvantages
- JS Data Types – Primitive & Non-Primitive
- Variables and Statements: var, let, const keywords

2■ JavaScript Data Types and Operators

What you will learn:

- Numbers
- Math Object
- Boolean
- Null and Undefined
- Operators
- Operators Precedence

3■ JavaScript Functions, Scope, and Prototypes

What you will learn:

- JavaScript Functions
- Function Parameters
- Advanced Function
- Scope
- Hoisting
- Prototypes

4■ ES6: Object-Oriented JavaScript

What you will learn:

- Objects
- Object Properties
- ES5 Classes
- ES6 Classes
- Class Members and Methods
- Prototype and Class
- Inheritance

5■ JavaScript Advanced Concepts: Module, Promises, and Ajax

What you will learn:

- JavaScript Modules
- CommonJS, AMD and UMD
- ES6 Modules
- Promises
- Async/Await
- AJAX
- AJAX Advantages & Disadvantages

6■ Introduction to Node.js

What you will learn:

- Intro to Node.js
- Why Server-side JavaScript?
- Node.js Architecture
- JS Event Loop
- Node.js Application Area
- Advantages of Node.js
- Limitations of Node.js
- Node.js Application Deployment Server

7■ Node.js Fundamentals

What you will learn:

- Node CLI
- Module
- Callback
- NPM and NPM CLI
- Local packages and Global packages
- Buffers
- Streams
- Events and Event Emitters
- File System
- Path Modules

8■ Express.js Fundamentals

What you will learn:

- Introduction to Express
- Routing
- Nodemon
- Router Class
- View Engine
- Express Generator
- Handlebars

- Middleware
- Express Request Processing

9■ Introduction to MongoDB

What you will learn:

- What is NoSQL Database?
- Types of NoSQL Database
- Introduction to MongoDB
- Why MongoDB?
- MongoDB Advantages and Limitations
- MongoDB Installation and Configuration
- MongoDB: Hierarchical Objects
- Mongo Shell

■ Working with MongoDB

What you will learn:

- Data Types
- Collections and Capped Collection
- Documents
- MongoDB CRUD Operations
- Querying Collections
- Schema Validations
- Indexes
- Find document(s) and Perform Operations

11- MongoDB Advanced Concepts

What you will learn:

- Data Modeling
- Embedded Document
- Reference Document
- Model Relationships
- Aggregation
- Map-reduce
- Data Import/Export
- Database Backup/Restore

12- Building REST API Using Express, MongoDB

What you will learn:

- Express Project Architecture

- Setting Up Project
- Defining Models and Relationships using Mongoose
- Repository Design Patterns
- Async and Await
- Defining Controllers and Routes
- Performing CRUD Operations

13- Introduction to React: Getting Started

What you will learn:

- Introduction to React
- React Top-Level APIs
- React CLI
- JavaScript XML (JSX)
- JSX Transpiler: Babel
- Top-Level SX Fundamentals

14- React Fundamentals

What you will learn:

- Introduction to React Component
- Types of React Components
- Props
- State
- Data Binding
- Events in React

15- React Routing

What you will learn:

- React Router Basics
- NavLink and Link
- React Routes
- Route Parameters
- Routing with Login and Logout State
- Nested Routes
- Lazy Loading

16- React Advanced Concepts

What you will learn:

- React Components Inheritance
- React Components Composition

- Passing Data to Child Components
- Component Life Cycle
- React Hooks
- State and useEffect Hooks

17- React Forms and Validations

What you will learn:

- Introduction to React Forms
- Controlled Form
- Uncontrolled Form
- Creating React Form
- React Form Validations
- Custom Validations

18- MERN Stack App with CRUD Operations

What you will learn:

- MERN Stack App Structure
- Setting Up Project
- Configuring Frontend Using React
- Configuring Routing using React Router
- Defining API Client using Axios
- Performing CRUD Operations
- Deployment

19- React Unit Testing

What you will learn:

- Introduction to Unit Testing
- React Jest Test Setup
- Unit Testing Enzyme
- Simulate Event
- Testing Component

20- React State Management Using Redux

What you will learn:

- Intro to Redux
- When to Use Redux?
- Intro to React Redux
- Setting Up React App with React-Redux
- Redux Flow

- Creating Actions, Reducers, & Store
- Connecting React Components to Store

Top 4 Online Courses to Learn MERN Stack in more depth

- MERN Stack Front To Back: Full Stack React, Redux & Node.js

https://t.co/KeMKt92ZeR

- The MERN Fullstack Guide By Maximilian Schwarzmüller

https://t.co/2G2akXdksP

- Full-Stack Web Development with React Specialization

This course is offered by the hong kong university of science and technology and instructed by its professor, Jogesh K. Muppala.

Available on Coursera

MERN Stack Master Course - Building your own Instagram

https://t.co/altOY70eW9

MERN Stack Developer roadmap ■
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https://t.co/pyDnexmQAQ