Node.js Learning Path 💻📚

Backend | JavaScript | Programming | Node.js

Fundamentals

- JavaScript Basics
  - Data Types
  - Variables
  - Operators
  - Control Flow
  - Functions
  - Objects
  - Arrays
- Node.js Environment Setup
  - Installation
  - NPM/Yarn
  - Project Initialization
- Basic Modules & APIs
  - File System (fs)
  - HTTP (http/https)
  - Events (events)
  - Streams
  - Buffers

Intermediate Concepts

- Asynchronous Programming
  - Callbacks
  - Promises
  - Async/Await
- Testing
  - Unit Testing (Jest, Mocha)
  - Integration Testing
- Databases (MongoDB, PostgreSQL, MySQL)
  - Connecting to Databases
  - CRUD Operations
  - Data Modeling
- Express.js
  - Routing
  - Middleware
  - Templating Engines (EJS, Handlebars)
  - RESTful APIs

Advanced Topics

- Security
  - Authentication
  - Authorization
  - Input Validation
  - OWASP Top 10
- Microservices
  - Architecture
  - Communication (gRPC, REST)
  - Deployment
- Deployment & Scaling
  - Docker
  - Kubernetes
  - Cloud Platforms (AWS, Azure, GCP)
- Advanced JavaScript Concepts
  - Closures
  - Prototypal Inheritance
  - Modules (ES Modules, CommonJS)