

What to Learn After a Basic MERN CRUD Application

You have completed a Node.js + Express + MongoDB authentication & CRUD project. This document explains what to learn next to become a strong MERN / MEAN developer and crack MNC interviews.

1. Advanced Backend (Node.js & Express)

- Node.js event loop, async internals, non-blocking I/O
- Middleware patterns & centralized error handling
- API versioning & REST best practices
- Security: rate limiting, CORS, headers
- Logging & monitoring

2. Authentication, Authorization & Security

- JWT access vs refresh tokens
- Role-based access control
- OAuth (Google / GitHub login)
- Password reset & email verification
- OWASP Top 10

3. MongoDB & Database Design

- Schema design & indexing
- Aggregation pipelines
- Transactions & consistency
- Performance optimization
- MongoDB vs SQL comparisons

4. Frontend Depth (React & Angular)

- React hooks internals & Redux Toolkit
- Angular change detection & RxJS
- Performance optimization
- Reusable component architecture
- Frontend security basics

5. System Design Basics

- Designing scalable REST APIs
- Authentication system design
- Pagination, caching, filtering
- File uploads & media handling
- Monolith vs microservices

6. Testing, DevOps & Deployment

- Backend testing with Jest
- Frontend testing basics
- Docker fundamentals
- CI/CD concepts
- Production deployment

7. Interview Preparation

- JavaScript deep-dive questions
- DSA fundamentals
- Angular vs React comparisons
- Backend scenario questions
- Resume-ready projects