

NestJS learning scope

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Databases

1. Good knowledge of database normalization, understanding at least 1-3 Normal Forms (1NF, 2NF, 3NF)
2. SQL (musts: select, joins ,where, group by, having, order by, subqueries)
3. Database transactions (including isolation levels) and ACID database properties - please use Postgresql I or MS SQL as an real life example.
4. Database indexes - theory and implementation in Postgresql.

Coding

1. Design patterns - a required knowledge includes understanding of the design patterns listed here (<https://refactoring.guru/design-patterns/catalog>) plus Dependency Inversion Principle, Dependency Injection Pattern, Single Responsibility Principle
2. Touch Typing - required speed: min. 40 words per minute

Technology

1. Git - this is a must! ((for example this guide is quite good: <https://git-scm.com/book/en/v2>). You have to be fluent in git.
2. Javascript and Typescript
3. NestJS (<https://nestjs.com/>)
4. Jest (<https://jestjs.io/>)
5. GraphQL (<https://graphql.org/>, <https://docs.nestjs.com/graphql/quick-start>)
6. Docker along with docker-compose

Security

1. OWASP TOP 10: <https://owasp.org/www-project-top-ten/>