



CIKLUM

SPEAKER'S
CORNER

OCTOBER, 11

17:30 (CET)

ZOOM

ENHANCING NODE.JS ARCHITECTURE: EXPLORING NESTJS



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SENIOR JAVASCRIPT
DEVELOPER AT CIKLUM

Meet Ciklum



We empower companies to meet their digital initiatives by providing end-to-end software, integration and innovation services

Our services:

Digital Commerce	Intelligent Automation	ITO & Managed Service
Data & Analytics	Cloud	Engineering Services

2002
founded

4000+
professionals

20+
offices

300+
clients

Leading companies choose us:



Speaker:

Daniel Gorgan

Senior JavaScript Developer at Ciklum

- Tech enthusiast specializing in Node.js, SQL/NoSQL and Cloud technologies with 5+ years of experience
- Hands-on experience in projects across outsourcing and product companies contributing to the development of in-house products, smart chatbots and voicebots by leveraging different AI technologies



Agenda

01

Code architectural challenges

02

NestJS

03

Demo

04

Conclusions



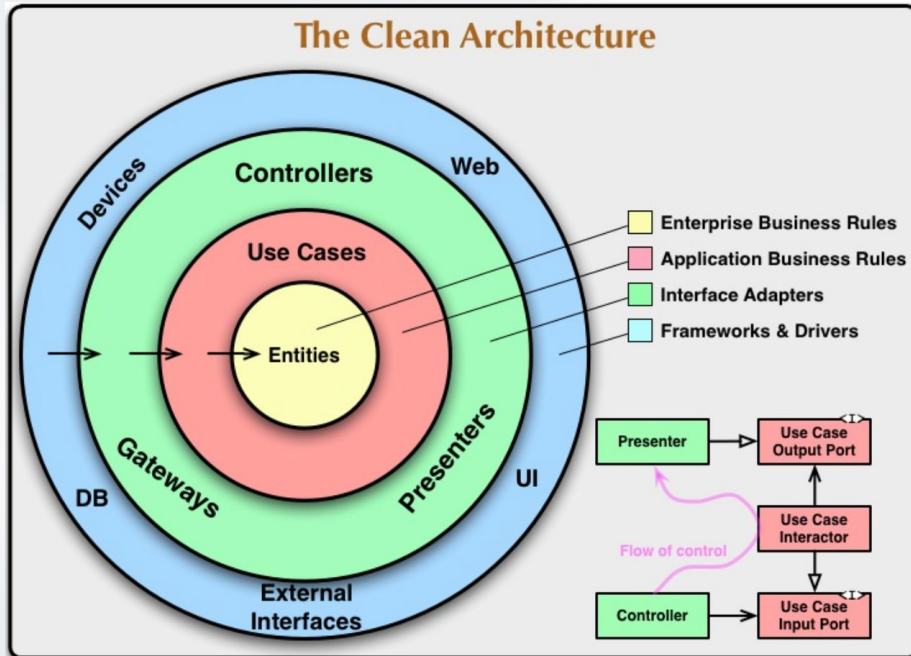
**The most common
architectural problems**

Found architectural problems

- No separation of concerns
- Hard to maintain the code
- Hard to test the code
- Adding external dependencies interfere with the business logic code
- No standards and consistency to follow



Clean Architecture



Node Clean Architecture Diagram, Image by Robert C. Martin

NestJS  nest



More about

Released in 2016

A Node.js framework for building efficient, scalable and maintainable server-side applications

It combines elements of:

- OOP (Object Oriented Programming)
- FP (Functional Programming)
- FRP (Functional Reactive Programming).



Nestjs is not Nextjs



API development

vs

NEXT.JS

Server Side Rendering

Nestjs is not Express.js



Opinionated

vs

express

Unopinionated



Comparison



<https://npm trends.com/@hapi/hapi-vs-@nestjs/core-vs-express-vs-fastify-vs-koa-vs-sails>

Key features

- Modular architecture inspired by **Angular**  **ANGULAR**
 - Decorators
 - Dependency injection
- **Typescript** integration 
 - JS support as well



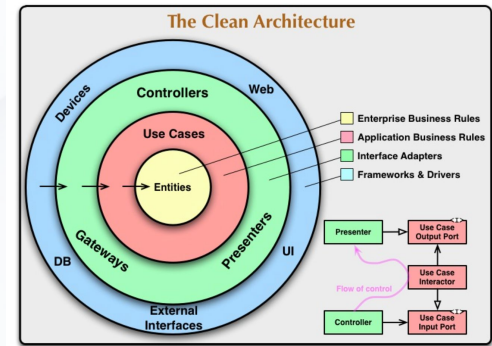
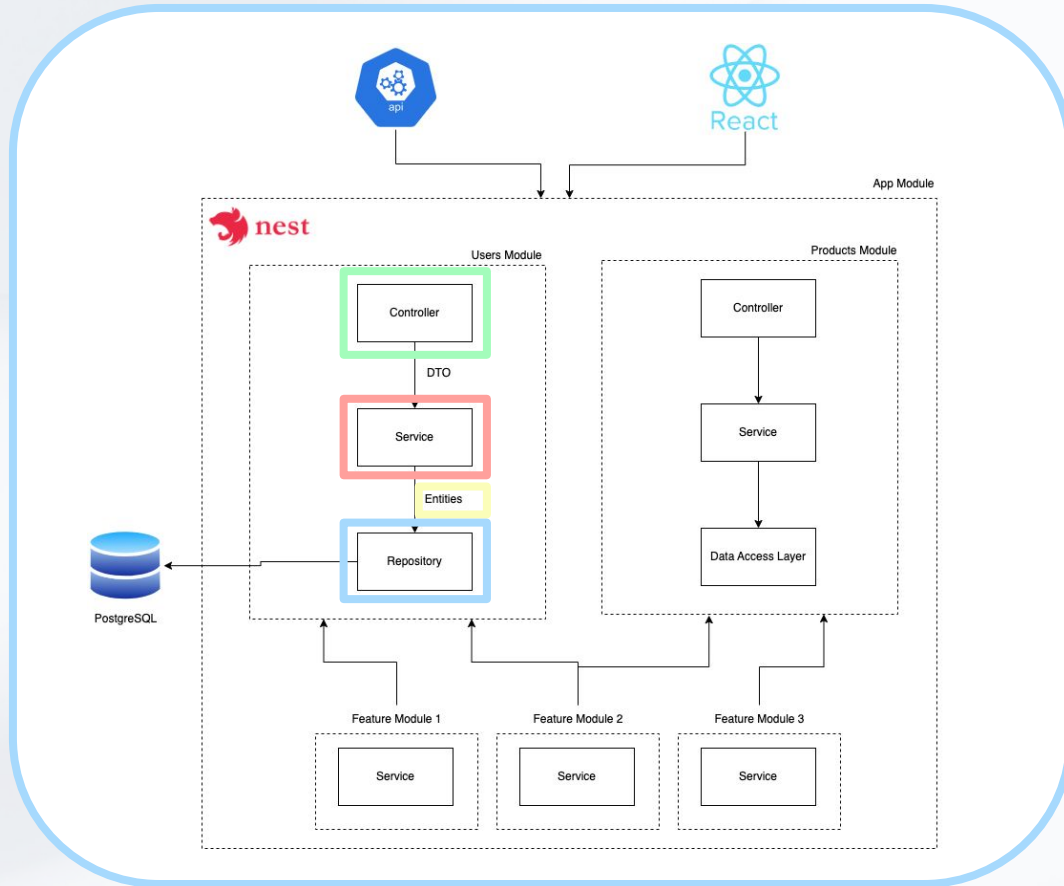
Key features

Extensive ecosystem and built-in modules

- Nest CLI (optional: monorepos)
- REST, gRPC, GraphQL
- MVC
- WebSockets
- Microservices
- RabbitMQ / Kafka
- Authentication and authorization
- Different databases support (sequelize, TypeORM, mongo)
- Testing utilities and best practices



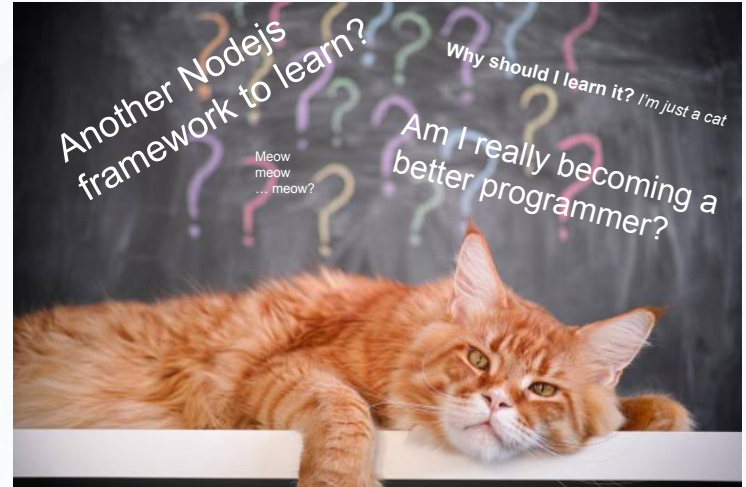
Simplified (initial) Nest architecture



Demo



Is it worth Learning Nestjs?

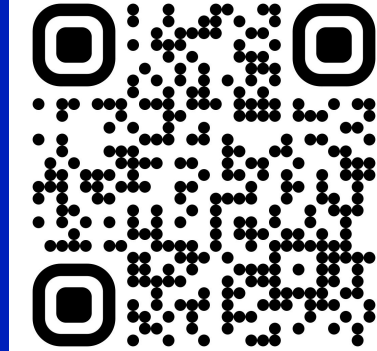


What industry thinks about it

- 3-5 years of relevant work experience with at least 2 years of proven experience in BackEnd Development of Web and Mobile applications with NodeJS and Nest
 - NodeJS microservices with Typescript and NestJS
- Back-end Node.js, NestJS, Python
 - Knowledge of **Node.js** and frameworks available for it (**Nest.js**)
- Demonstrated experience with back-end development using NestJS.

Any questions?

Share your feedback!



Thank you!



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