Monoliths To Microservices. A Journey

@samelamin
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Events  CQRS  Cloud
Samelamin  Microservices  DDD
Docker  Commands  Distributed
Messages
Why people build Monoliths
Why Distributed?

- One monolithic database
- ASP.NET web application
- Doesn't scale
- Can't experiment with different technologies
- Versioning
- No domain ownership
- Long and hard deployments
Working with the code felt like.....
How we started?

TOGETHER

WE CAN DO THIS
Its only refactoring?
By making smaller components we are reducing the complexity.
Implementing DDD and CQRS
Using Pub / Sub

PUB/SUB

ALL THE THINGS
How PubSub works
Identify a bounded context

IT'S MINE

MY PRECIOUS
Define An Interface

I will just access the DB directly to change this one thing....

NO!!
What we found out.
Race Hazards????????

UH OH...
SAY RACE HAZARD

ONE MORE TIME.....
Testing is hard :(

I find your lack of tests disturbing.
Deployments

JUST BECAUSE YOU ARE UNIQUE

DOES NOT MEAN YOU ARE USEFUL

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Unclear Boundaries

LIKE I GIVE A FUCK
Strict Code Reviews

YOUR REQUEST HAS BEEN REJECTED.

PLEASE RESUBMIT FOR FURTHER REJECTION.
Monitoring

Mo' Services,

Mo' Problems
Hidden Complexity

COMPLEXITY

HIDDEN EVERYWHERE
What we should have done

CAPTAIN HINDSIGHT!

THE HERO OF THE MODERN AGE
Get the business involved!
Data Duplication?

DUPLICATION

NO
Orchestration layer?

DONE!

WHAT'S NEXT?
Self Monitoring > Acceptance Tests

COMPLETE MONITORING

OR LIAM NEESON WILL FIND YOU AND KILL YOU
Business Monitoring over Acceptance Tests

REAL CODERS

TEST IN PRODUCTION
With metrics come freedom!
The future? Vnext + Docker
Build your next feature as a microservice
IF YOU ASK ME QUESTIONS
THAT'D BE GREAT
JUST EAT are hiring!
Come talk to me if you want to know more....

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