API-FIRST DEVELOPMENT

Supercharging your software’s potential

Hi! 👋

I'm Tiago, Head of Developer Relations at Rely.io where we're building a next-gen Internal Developer Portal.

I've been in the industry for +15 years, having worked most of the time at large tech companies like Microsoft, AWS and PagerDuty.

I'm passionate about solving problems with code and an open source fanboy.

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WE WILL EXPLORE

API-FIRST DEVELOPMENT

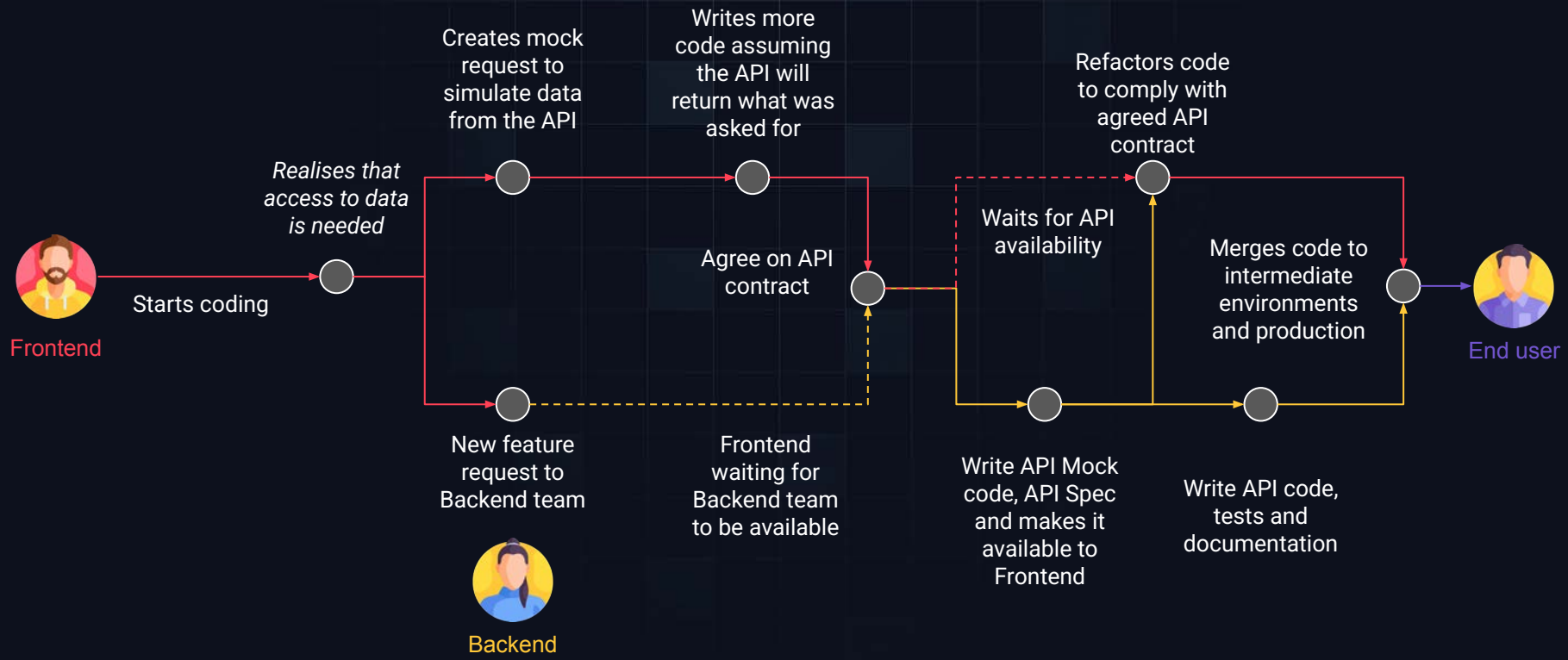
AND HOW IT CAN SUPERCHARGE YOUR SOFTWARE'S POTENTIAL IN UNPREDICTED WAYS

The benefits, real-world applications and best practices

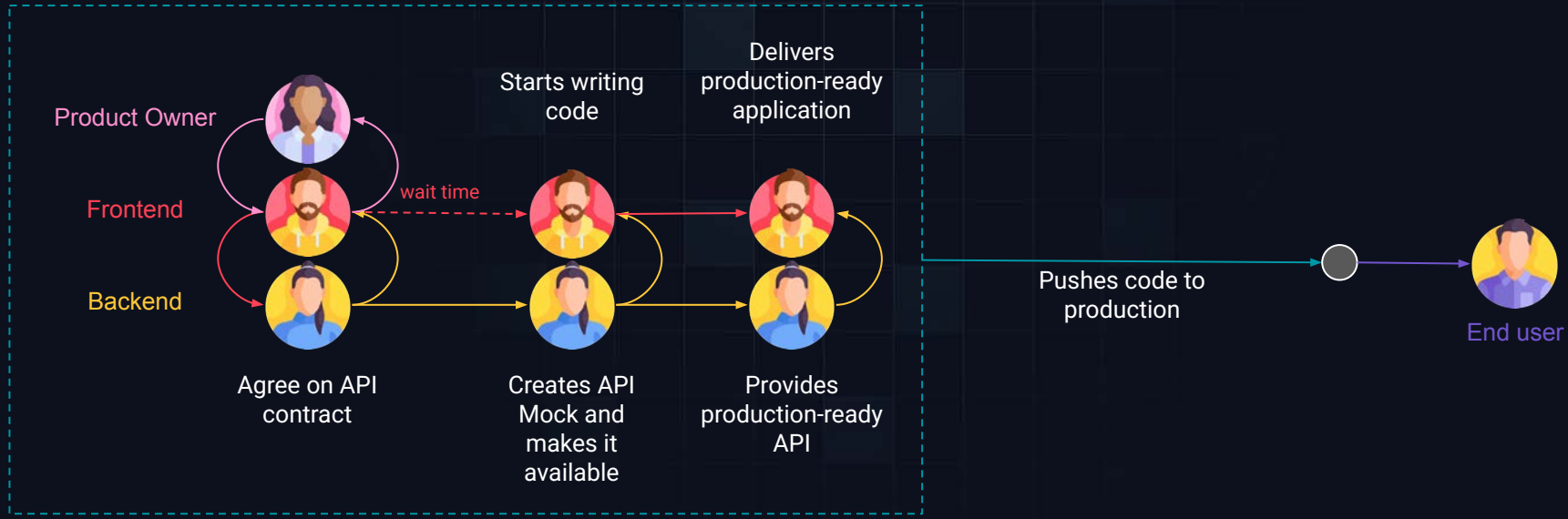
WHAT IS API-FIRST DEVELOPMENT?

API-first development is a strategy that prioritizes the design and development of APIs before building the actual application

TRADITIONAL CODE-FIRST APPROACH



API-FIRST APPROACH



Introduces collaboration way earlier making next steps much faster

KEY PRINCIPLES

DESIGN FIRST

APIs should be designed thoroughly before implementation begins

COLLABORATION

Involves cross-functional teams early in the process

USER-CENTRIC

Focus on the needs of end-users and developers who will consume the API

BENEFITS

PARALLEL SOFTWARE DEVELOPMENT

Teams work concurrently by establishing a clear API contract, eliminating sequential dependencies

IMPROVED DEVELOPER EXPERIENCE

Standardized, well-documented APIs simplify integration and accelerate developer understanding

ACCELERATED DEVELOPMENT PROCESS

Upfront API specification enables faster prototyping and rapid system validation

REDUCED RISK OF FAILURE

Early API design catches potential integration issues before they become costly problems

OPTIMIZED DEVELOPMENT COSTS

Minimizes rework, reduces communication overhead and prevents technical debt

REAL WORLD EXAMPLES

AT RELY.IO





Following an API-first approach allowed us to develop further integrations more easily to facilitate easier developer onboarding into our platform and allow developers to interact with it using their existing technology stack

REAL WORLD EXAMPLES

FROM CUSTOMERS

Anonymized customer A leveraged their existing Kubernetes Operator framework and blueprints to extend Rely's software catalog and keep information in Rely.io in-sync at all times.

Anonymized customer B wanted an integration to a security platform that Rely.io doesn't provide yet as part of the built-in plugins list. Having a well-designed REST API and an extensible data model they were able to use Logstash to ship security violations into Rely.io and associate them with their dependencies allowing for easier accountability and awareness.

BEST PRACTICES

- Define clear and concise API specs
- Keep APIs simple and easy to use
- Automate API documentation
- Automate API testing and validation
- Monitor API performance and usage

The focus must be on the developer experience and API usability

QUICK RECAP

Adopt an API-first approach for

Improved collaboration

Faster time to market

Greater Extensibility

Better development experience

Consider an API-first approach
in your next project.

Start small,
Iterate fast.

THANKS.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