2. ASP.NET Core Advanced

Where are we?

STAGE 1

1. **ASP.NET Core Essentials**
2. **ASP.NET Core Advanced**
3. **ASP.NET Core Security**

STAGE 2

4. **Azure Deployment**
5. **Stripe Payments**
6. **Integration Testing**
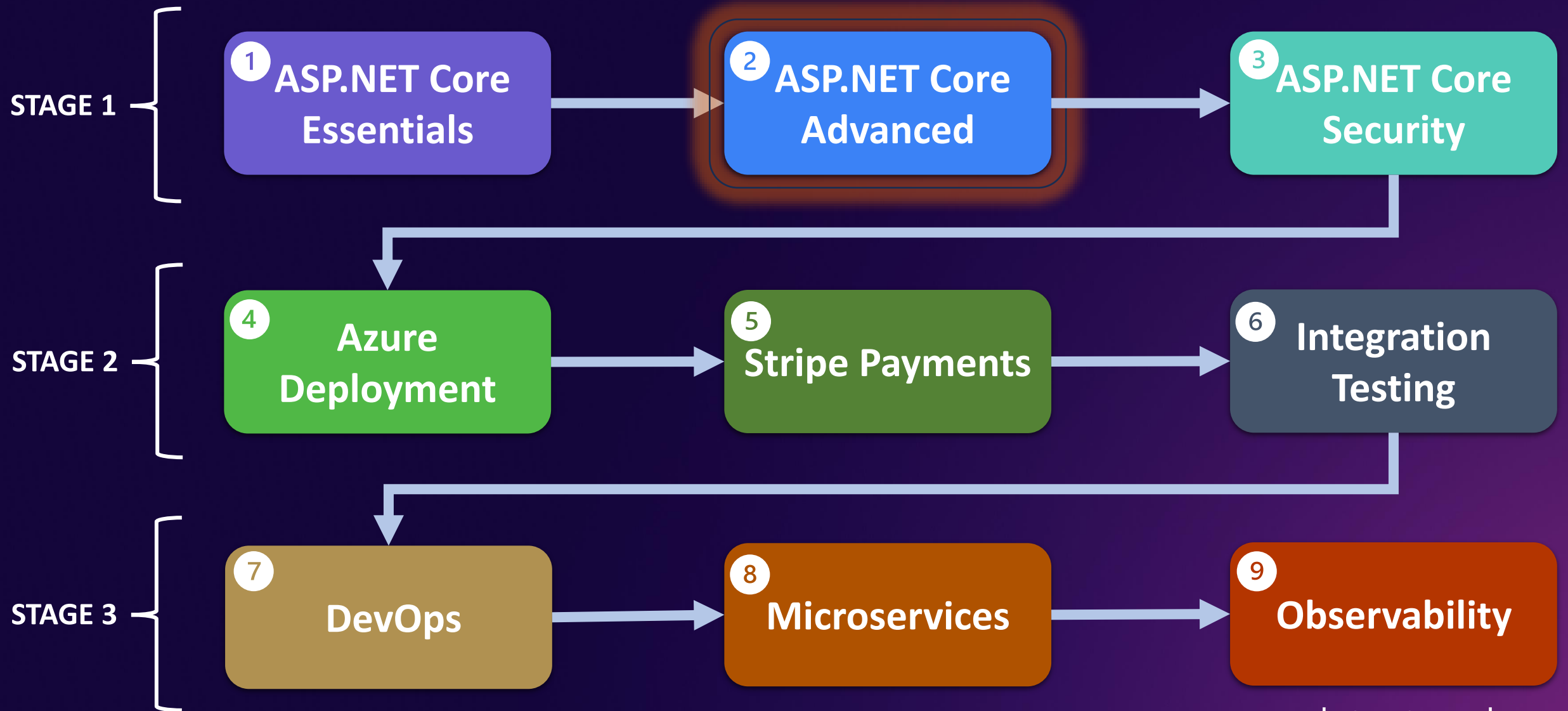
STAGE 3

7. **DevOps**
8. **Microservices**
9. **Observability**

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ASP.NET Core Advanced Topics

Asynchronous Programming

Logging

Middleware

Error Handling

Pagination

Search

File Upload

UI Integration

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What you need to know first

Create REST APIs with ASP.NET Core

Vertical Slice Architecture

Dependency Injection

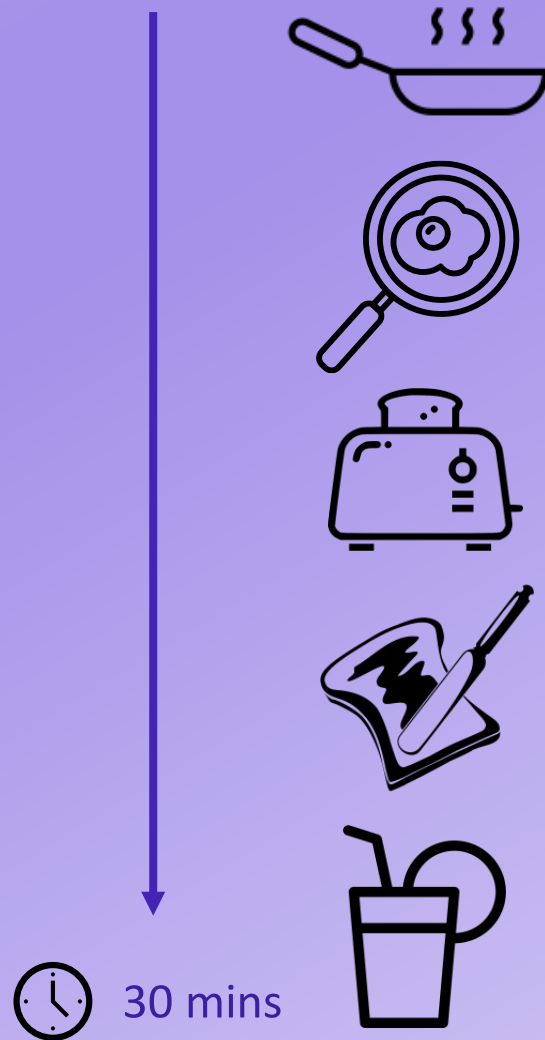**Working With Data (EF Core)**

Configuration System

ASP.NET Core
Essentials

.NET

A digital course by
Julio Casal

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Software prerequisites

POSTMAN

Postman
https://www.postman.com/downloads

Performing asynchronous work
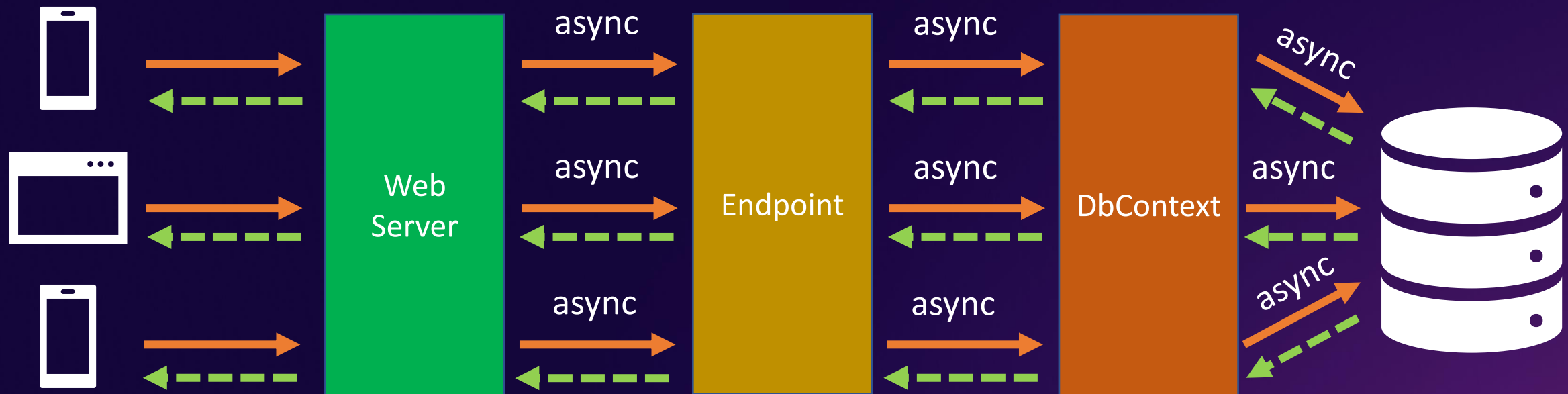

30 mins

Synchronous

15 mins

Asynchronous

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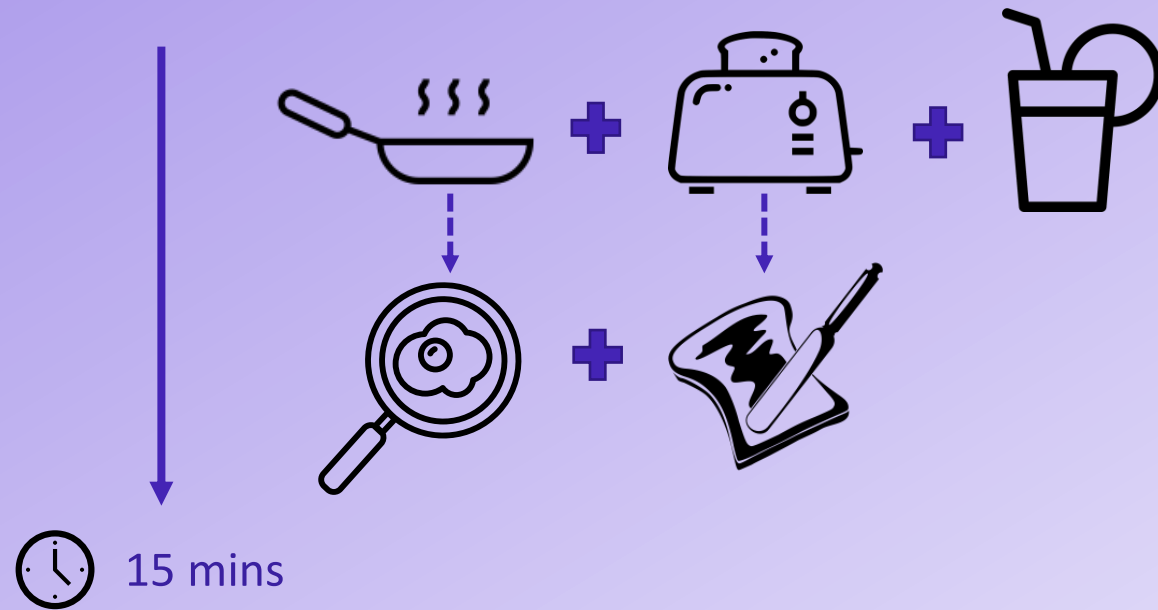
Asynchronous programming in ASP.NET Core

Benefits of the Asynchronous Programming Model

- **Improved Performance:** Avoids blocking callers, freeing them up for other tasks
- **Improved Scalability:** Allows your application to handle more requests and users simultaneously
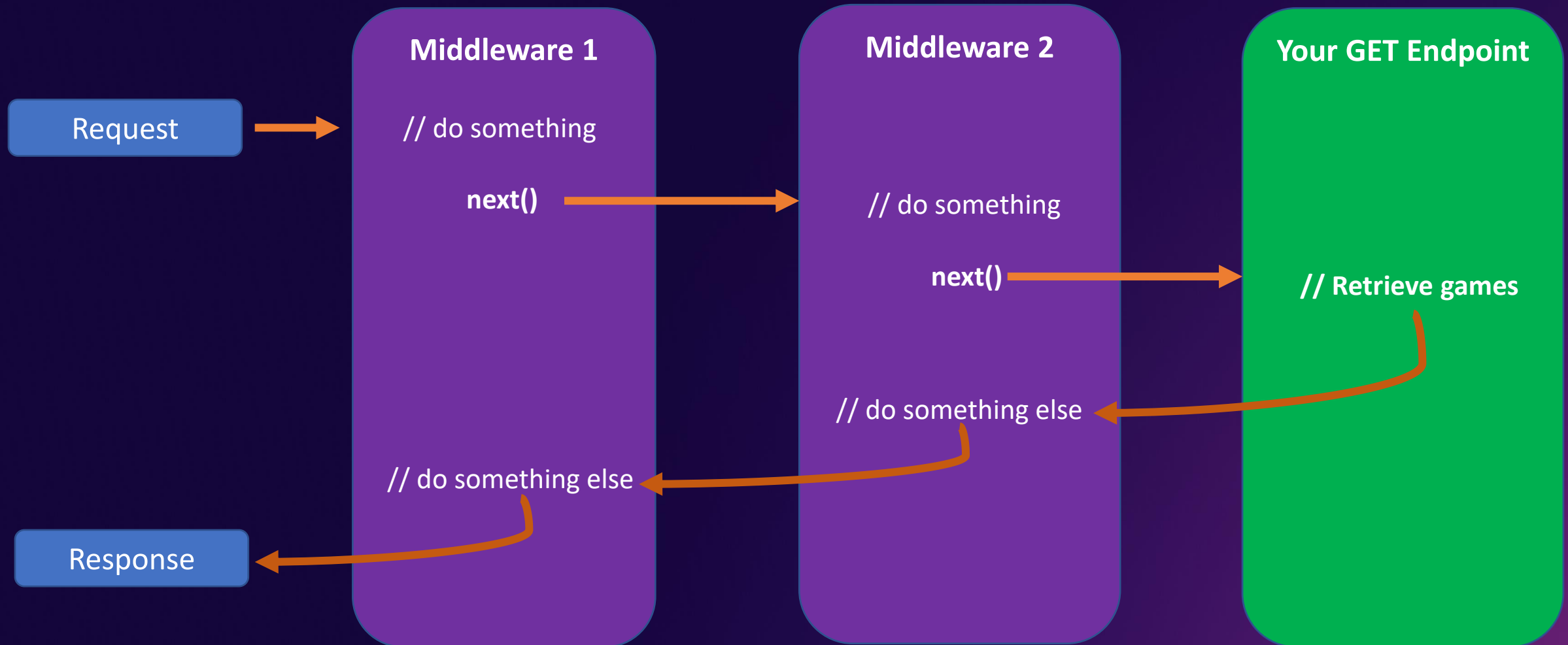- **Simplified code:** Asynchronous code is simple to write via task objects and the async and await keywords

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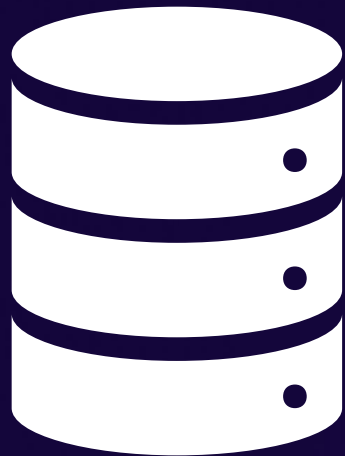# How Logging Works in ASP.NET Core

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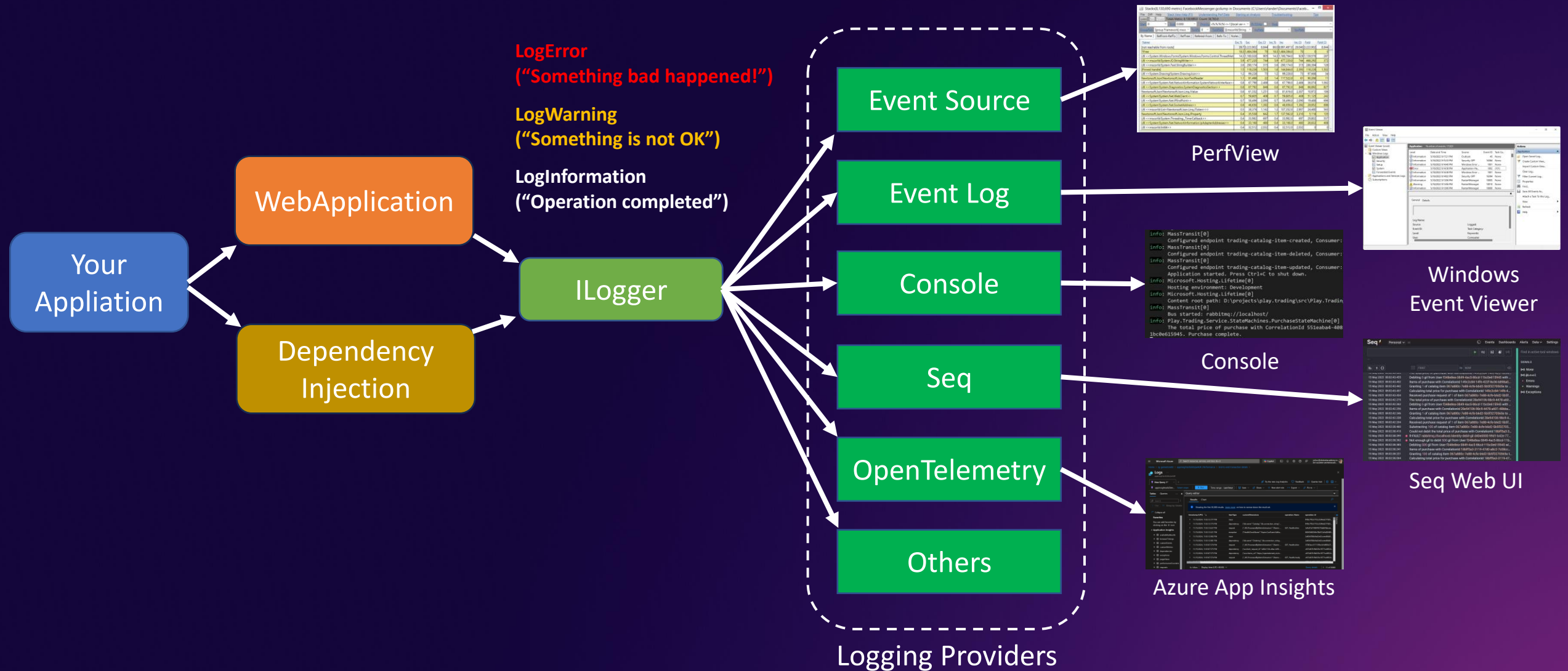
What is Middleware in ASP.NET Core?

Middleware is software that's assembled into an app pipeline to handle requests and responses.

The ASP.NET Core Request Pipeline

Request

Middleware 1

// do something

next()

Middleware 2

// do something

next()

Your GET Endpoint

// Retrieve games

// do something else

// do something else

Response

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Where to upload user files?

Database

Website
File System

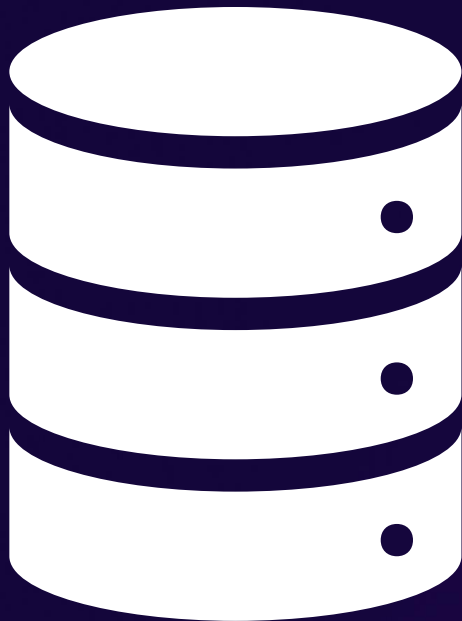dotnetacademy.io

Storing files in the database

Issues

Increased database size

Slow performance

Hard to scale

Challenging to backup

Cost

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Storing files in the website file system

Benefits

Better performance

Simpler to implement

Cost effective

No database impact

Caching

Issues

Security risk

Hard to scale

Limited disk space

Challenging to back up

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File upload choice for this course

This course

Later in the bootcamp