

# Documenting an ASP.NET Core API with OpenAPI / Swagger

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GETTING STARTED WITH OPENAPI / SWAGGER



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# Coming Up



Prerequisites and tooling

Why use Swagger / OpenAPI to document your API?

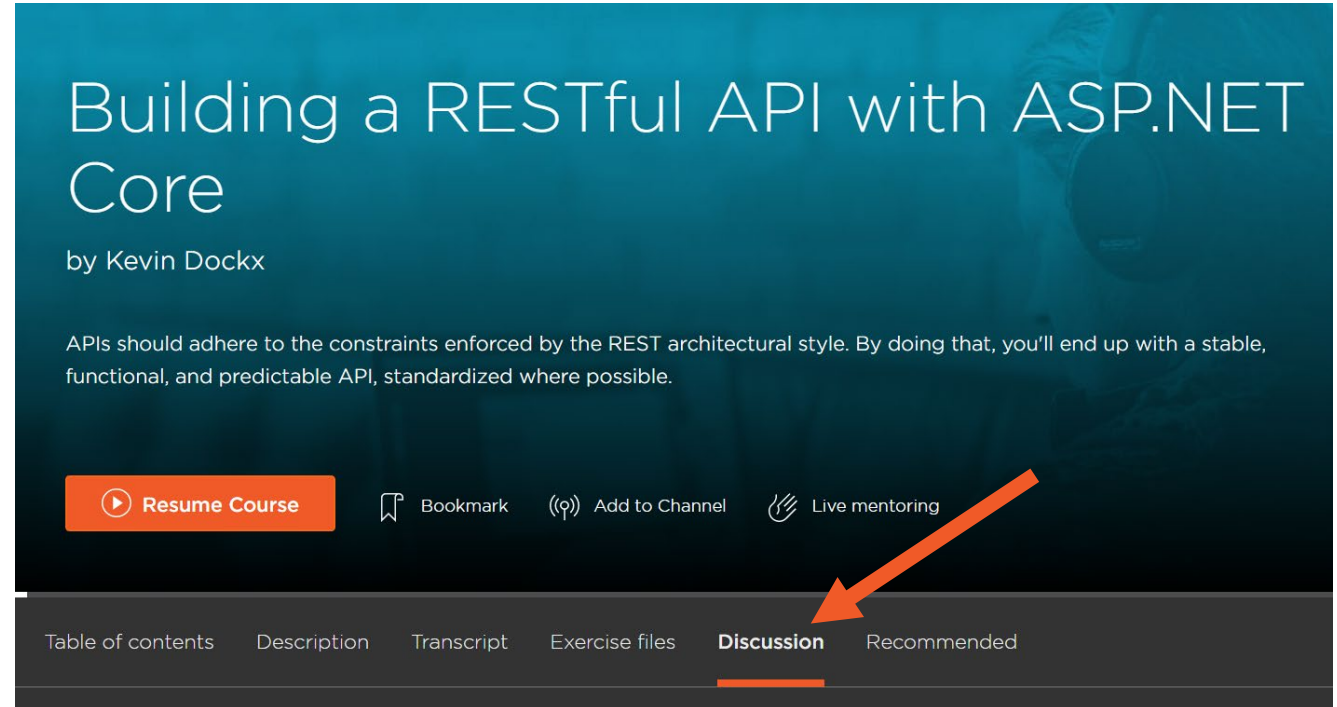
Clearing up the terminology confusion

Introducing the demo application



Discussion tab on the  
course page

Twitter: [@KevinDockx](https://twitter.com/KevinDockx)



(Course shown is one of my other courses, not this one)



# Course Prerequisites



Good knowledge of C#



Knowledge of building an API with  
ASP.NET Core



# Course Prerequisites



**ASP.NET Core Fundamentals  
(Scott Allen)**

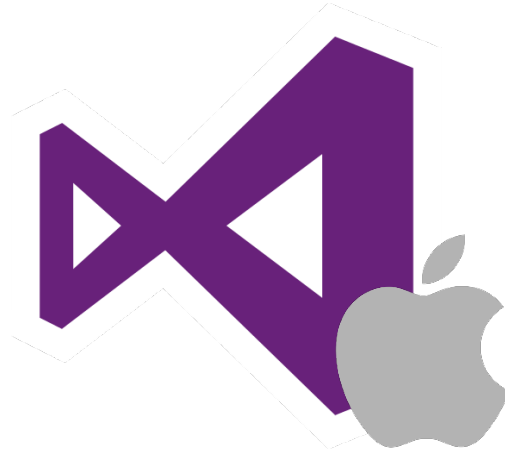
**Building Your First API with ASP.NET Core  
(yours truly)**



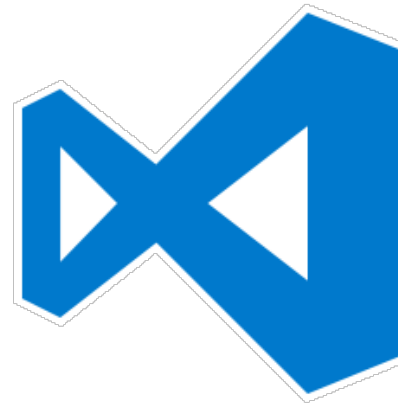
# Frameworks and Tooling



Visual Studio 2017  
(ASP.NET Core 2.2  
on v15.9.3)



Visual Studio for Mac



Visual Studio Code



JetBrains Rider,  
Sublime...





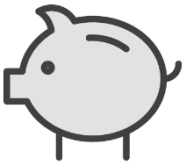
# Why Use Swagger / OpenAPI to Document Your API?



Public APIs need documentation, but so do in-company APIs



Documentation leads to knowledge leads to adoption



Clear documentation saves time and money



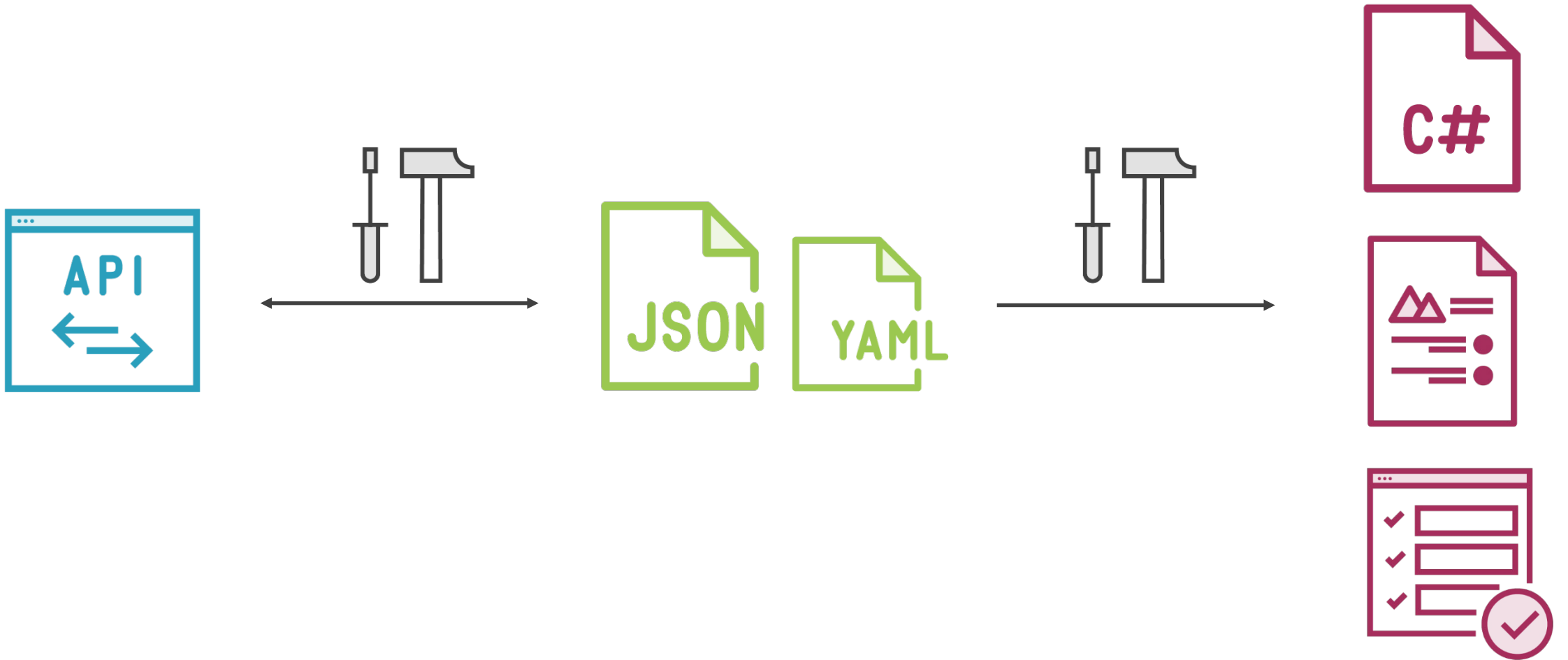


An OpenAPI specification describes the capabilities of your API, and how to interact with it

It's standardized, and in JSON or YAML format



# OpenAPI Components and Tools



# Why Use Swagger / OpenAPI to Document Your API?



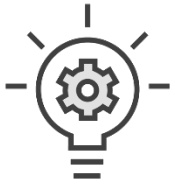
## Full specification

- <https://bit.ly/2yuDTKX>

## OpenAPI 3 is the current version as of this recording

- “Swagger” can be used, but “OpenAPI” is the preferred term

# Clearing up the Terminology Confusion



**OpenAPI specification and Swagger specification are the same thing**



**Swagger is a set of open-source built around that OpenAPI specification**



# Swagger in Detail



Swagger Editor helps with creating the specification



Swagger UI renders a documentation UI from the specification



Swagger Codegen consists of a set of tools that help with generating client classes, tests, ... from the specification



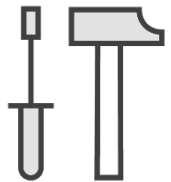
# Clearing up the Terminology Confusion



**OpenAPI specification and Swagger specification are the same thing**



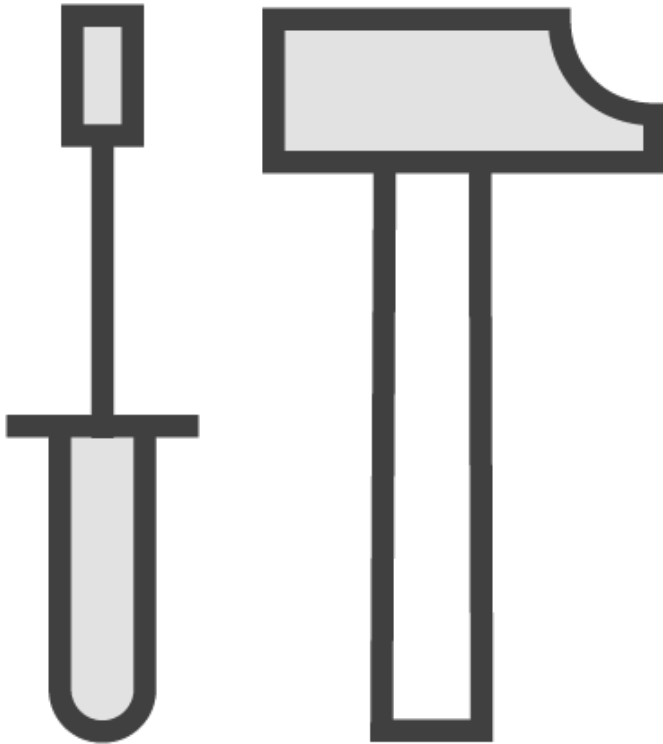
**Swagger is a set of open-source built around that OpenAPI specification**



**Swashbuckle.AspNetCore helps with working with OpenAPI in ASP.NET Core**



# Clearing up the Terminology Confusion



## Swashbuckle.AspNetCore

- Generates an OpenAPI specification from your API
- Wraps Swagger-UI and provides an embedded version of it
- <https://bit.ly/2sWdUby>

## NSwag is an alternative for Swashbuckle

- <https://bit.ly/2WtNdIB>

Standards-based development allows you to mix and match components based on that standard

A promise, and an advantage





# Demo



## Introducing the demo application



# Summary



**Correct API documentation is essential**

**Documentation can be generated from an OpenAPI specification**

- OpenAPI specification = Swagger specification
- Swashbuckle can generate such a specification
- Swagger UI generates documentation from an OpenAPI specification