.NET Conf 2019

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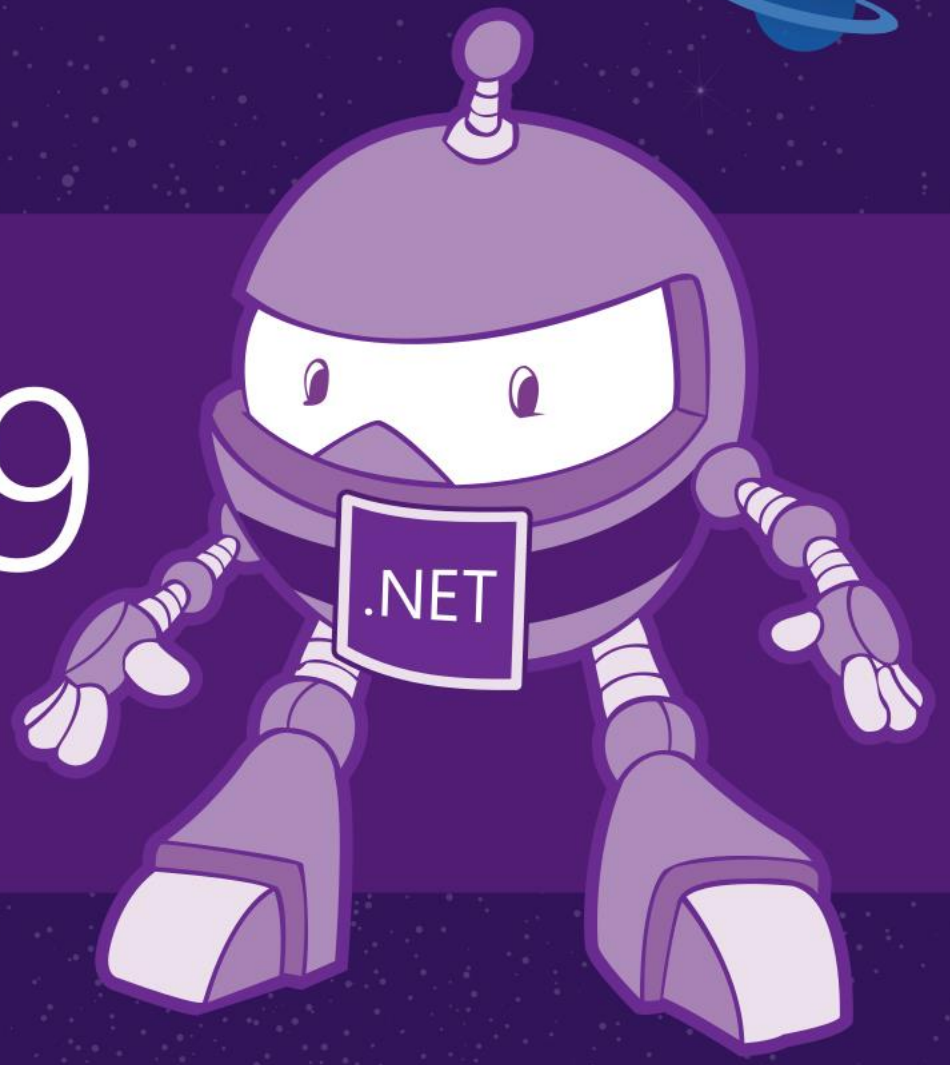

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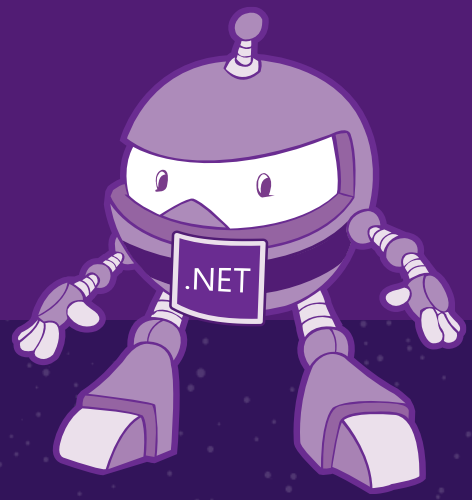
Introduction to Web API development with ASP.NET Core

Marco Minerva
Microsoft MVP
https://about.me/marcominerva

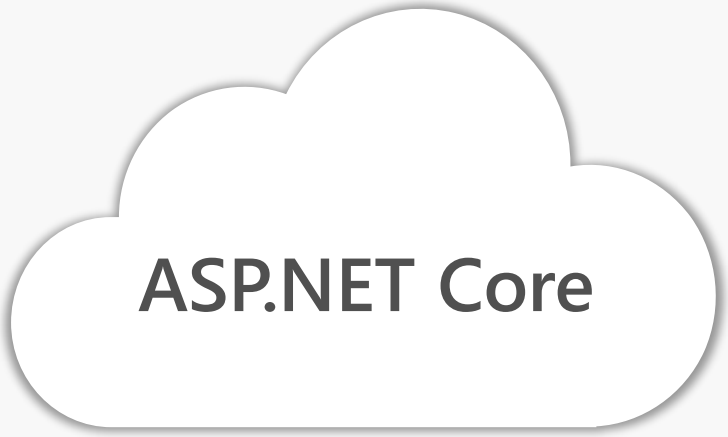


ASP.NET Core 3.0: A full stack solution

Client

- Blazor
- Components
- SPA (JavaScript)

Frontend



- MVC / Razor Pages
- SignalR
- Security & identity

Backend

- Web APIs
- Worker services
- gRPC

ASP.NET Core 3.0

gRPC

High performance contract-based RPC services with .NET

Works across many languages and platforms

Worker Service

Starting point for long running back processes like Windows Server or Linux daemon

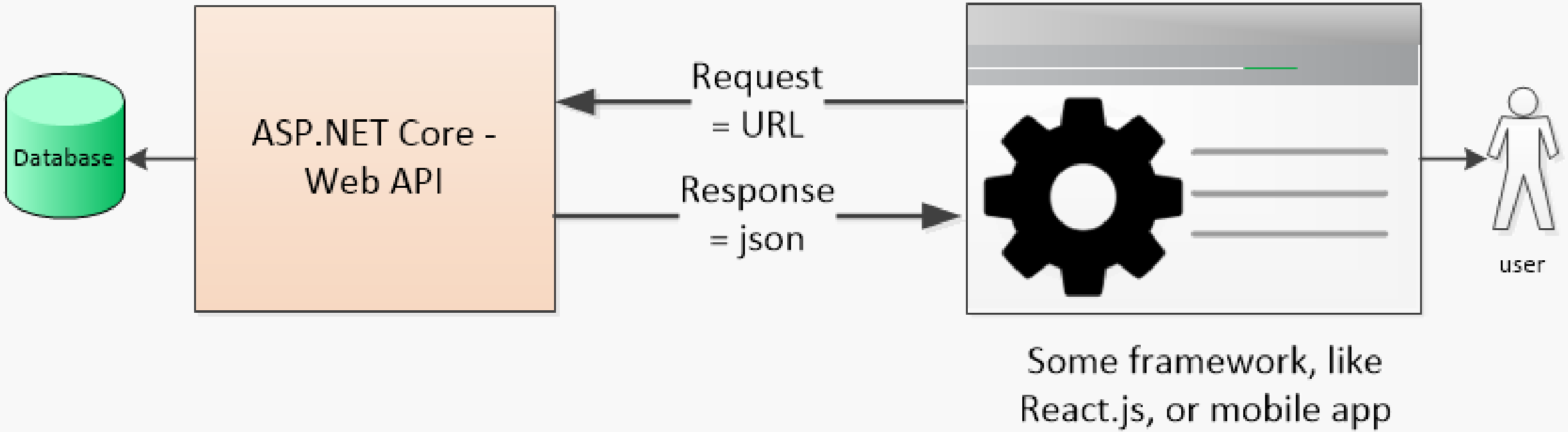
Producing or consuming messages from a message queue

Web API's + Identity

Add security and authentication to Web API's

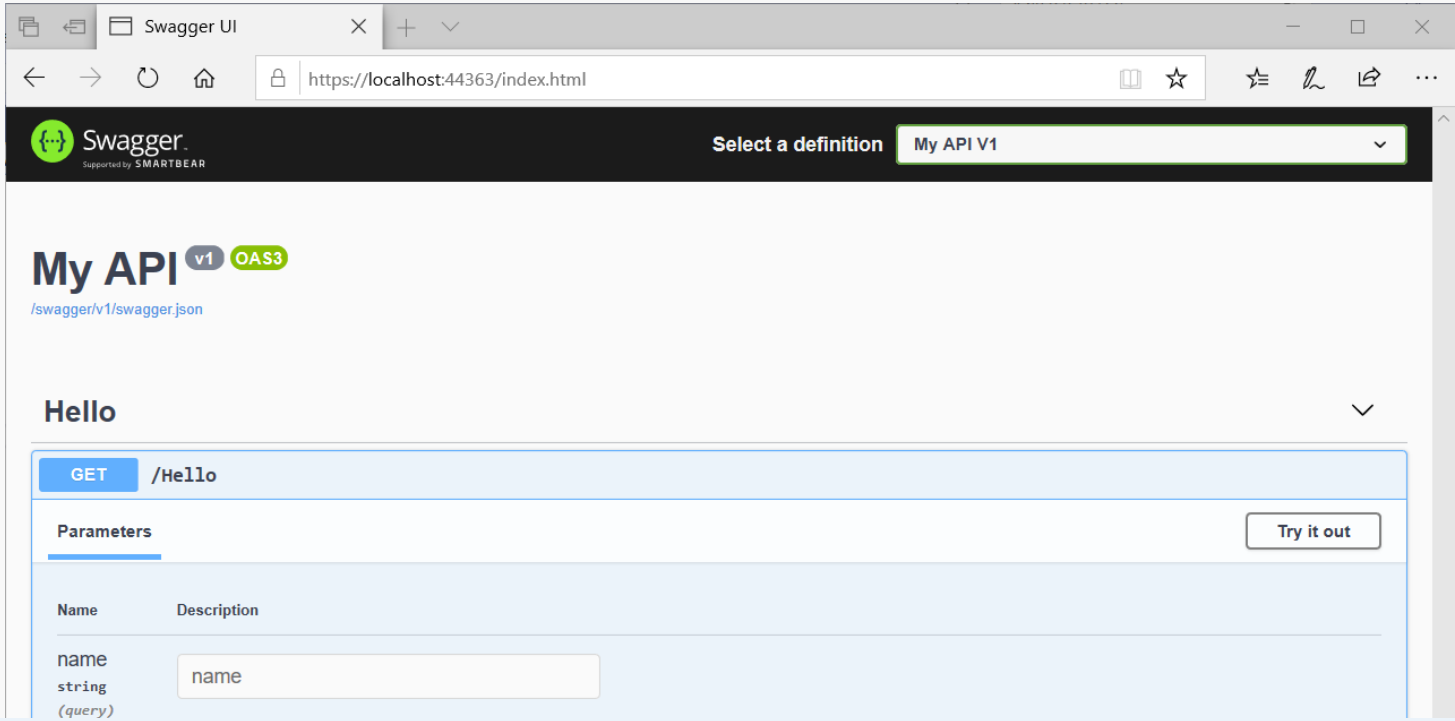
ASP.NET Core Web API architeture

The external system is in charge



ASP.NET Core Web API at a glance

```
[ApiController]
[Route("[controller]")]
public class HelloController : ControllerBase
{
    [HttpGet]
    public ActionResult Get(string name)
    {
        return Ok(new
        {
            Message = $"Hello, {name}!",
            Date = DateTime.UtcNow
        });
    }
}
```



Request URL

```
https://localhost:44363/Hello?name=Marco
```

Server response

Code	Details
200	Response body

```
{
  "message": "Hello, Marco!",
  "date": "2019-10-21T15:00:36.4914701Z"
}
```

Download

Response headers

Demo

My First Web API

ASP.NET Core cross-platform

Demo

ASP.NET Core on Linux

Resources

- https://docs.microsoft.com/aspnet/core
- https://dotnet.microsoft.com/apps/aspnet/apis
- https://docs.microsoft.com/en-us/dotnet/core/install/linux-package-manager-ubuntu-1904
- https://github.com/marcominerva/WebAPI-Samples

Thanks! Questions?

Marco Minerva - @marcominerva
Microsoft MVP – Windows Development
http://about.me/marcominerva

DotNet Liguria