



.NET Core Web APIs.

Class 0 - Things you should know



Who's this weird guy?



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- ASP.NET CORE.
- MVC AND WEBAPI PROJECTS.
- THE STARTUP CLASS
- ROUTING.
- ACTIONRESULTS
- TESTING ENDPOINTS WITH POSTMAN

Class 0

ASP.NET CORE

WHAT IT IS?

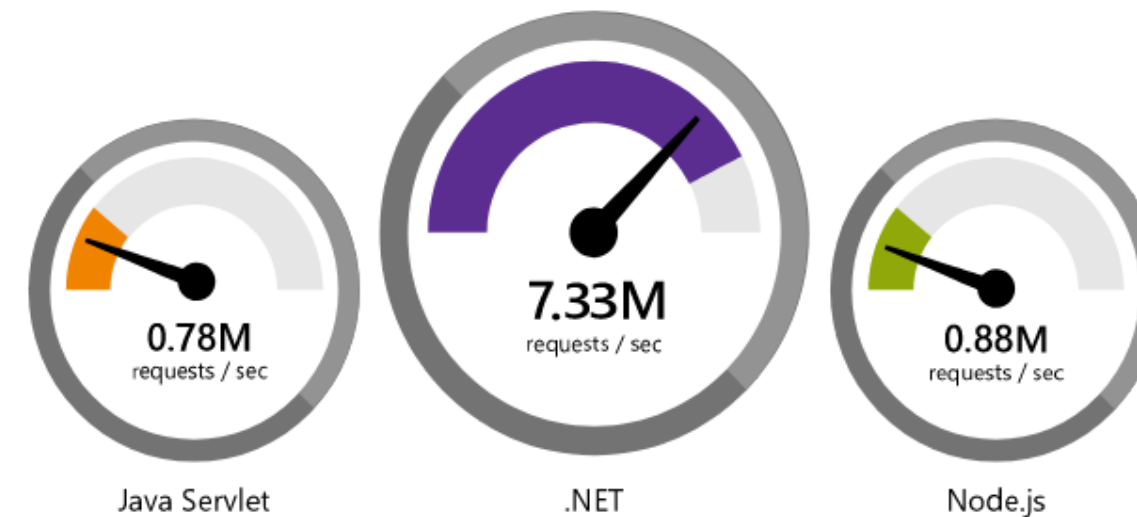
ASP.NET is a popular web-development framework for building web apps on the .NET platform.

OPEN SOURCE

Like the rest of .NET, ASP.NET is open source on GitHub. Over 60,000 developers and 3,700 companies have already contributed to .NET. Learn more about .NET and open-source.

PERFORMANCE

Presentations are communication tools that can be used as lectures, reports, and more.



INSTALLING .NET CORE SDK

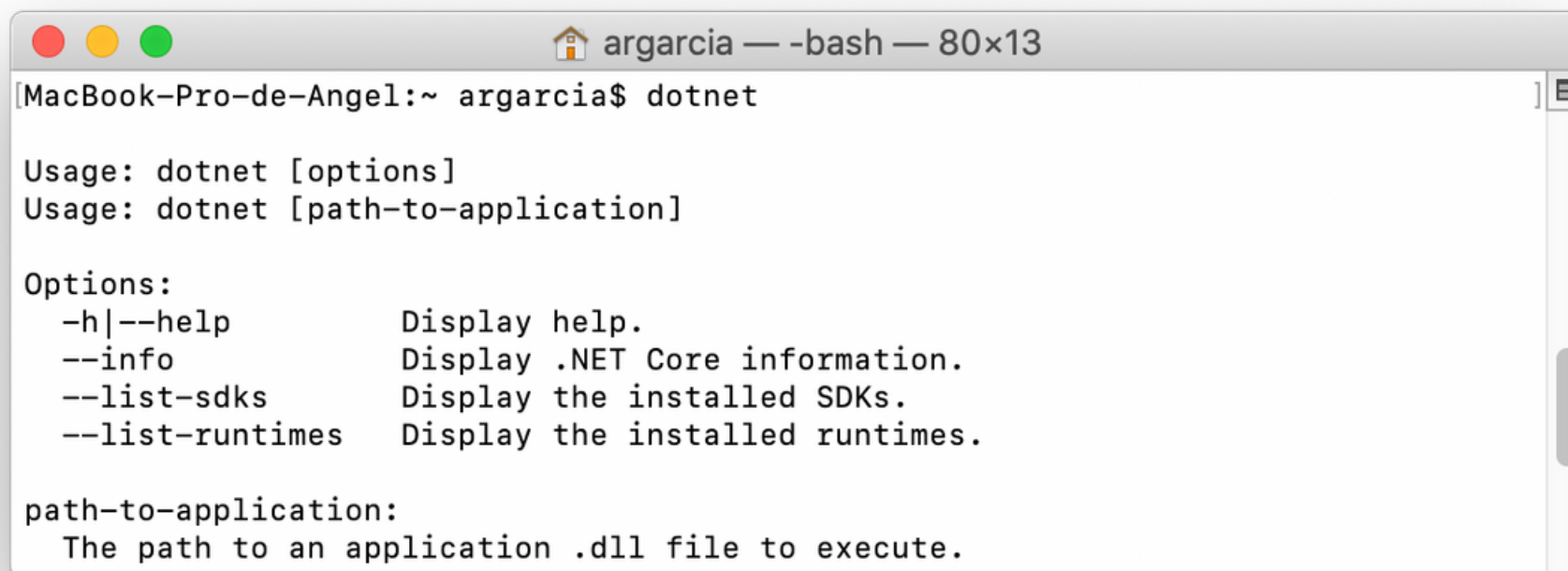
1- DOWNLOAD THE SDK.

<https://dotnet.microsoft.com/download>

2- CHECK IF EVERYTHING IS OK.

In a terminal run:

dotnet

A screenshot of a macOS terminal window. The title bar shows the user 'argarcia' and the shell '-bash' with a window size of '80x13'. The terminal content shows the command 'dotnet' being executed, which displays the usage and options for the .NET Core SDK. The output includes 'Usage: dotnet [options]', 'Usage: dotnet [path-to-application]', and a list of options: '-h|--help' (Display help), '--info' (Display .NET Core information), '--list-sdks' (Display the installed SDKs), and '--list-runtimes' (Display the installed runtimes). It also shows the 'path-to-application' as 'The path to an application .dll file to execute.'

```
MacBook-Pro-de-Angel:~ argarcia$ dotnet

Usage: dotnet [options]
Usage: dotnet [path-to-application]

Options:
  -h|--help          Display help.
  --info             Display .NET Core information.
  --list-sdks        Display the installed SDKs.
  --list-runtimes    Display the installed runtimes.

path-to-application:
  The path to an application .dll file to execute.
```


DOTNET CORE CLI

The .NET Core command-line interface (CLI) is a cross-platform toolchain for developing, building, running, and publishing .NET Core applications.

THE MAGIC PARAMETER.

When you don't know what options you could execute with the dotnet CLI just add the `--help` parameter after the desired command.

MVC AND WEBAPI PROJECTS.

dotnet new mvc -o MyFirstMvcApp

When you need to develop webapps with the MVC pattern.

dotnet new webapi -o MyFirstApi

When you need to develop RESTful APIs.

THE STARTUP CLASS

Startup.cs

The Startup class configures services and the app's request pipeline.

The ConfigureServices method

The ConfigureServices method is where configuration options are set by convention.

The Configure method

The Configure method is used to specify how the app responds to HTTP requests, as a series of middleware components.

ROUTING

MVC

```
app.UseEndpoints(endpoints =>
{
    endpoints.MapControllerRoute(
        name: "default",
        pattern: "{controller=Home}/{action=Index}/{id?}");
});
```

WebAPI

```
app.UseEndpoints(endpoints =>
{
    endpoints.MapControllers();
});
```

ACTIONRESULTS

The ActionResult types represent various HTTP status codes. Any non-abstract class deriving from ActionResult qualifies as a valid return type.

Some common return types in this category are:

- BadRequest (400)
- NotFound (404)
- Ok (200)