# **ASP.NET Core**

### Note:

- 1. <a href="https://dotnet.github.io/">https://dotnet.github.io/</a>
- 2. There is a new version of .NET Framework available called .NET Core for cross platform development.



## Welcome to .NET Core

**Getting Started** 

Documentation

API reference

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## Welcome to ASP.NET Core

We've made some big updates in this release, so it's important that you spend a few minutes to learn what's new.

### You've created a new ASP.NET Core project. Learn what's new

# This application consists of:

Sample pages using ASP.NET Core MVC

Bower for managing client-side libraries

Theming using Bootstrap

#### HOW TO

Add a Controller and View

Add an appsetting in config and access it in app.

Manage User Secrets using Secret Manager.

Use logging to log a message.

Add packages using NuGet.

Add client packages using Bower.

Target development, staging or production environment.

#### **OVERVIEW**

Conceptual overview of what is ASP.NET Core

Fundamentals of ASP.NET Core such as Startup and middleware.

Working with Data

Security

Client side development

Develop on different platforms

Read more on the documentation site

#### **RUN & DEPLOY**

Run your app

Run tools such as EF migrations and more

Publish to Microsoft Azure Web Apps

We would love to hear your feedback

# Packages NuGet npm Bower Gulp







### Application uses

- Sample pages using ASP.NET Core MVC
- Bower for managing client-side libraries
- · Theming using Bootstrap

### How to

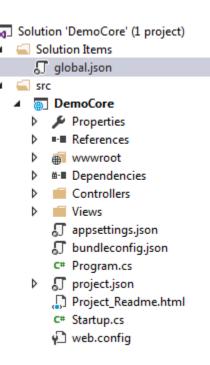
- · Add a Controller and View
- Add an appsetting in config and access it in app.
- Manage User Secrets using Secret Manager.
- Use logging to log a message.
- Add packages using NuGet.
- · Add client packages using Bower.
- Target development, staging or production environment.

### Overview

- Conceptual overview of what is ASP.NET Core
- Fundamentals of ASP.NET Core such as Startup and middleware.
- · Working with Data
- Security
- · Client side development
- · Develop on different platforms
- Read more on the documentation site

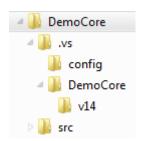
### Run & Deploy

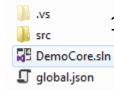
- Run your app
- Run tools such as EF migrations and more
- Publish to Microsoft Azure Web Apps



Visual Studio 2015 Core Tooling.

- 1. Src folder contains all source code.
- 2. Uses Builder design pattern.
- 3. .vs folder contains new applicationhost.config file.
- New DemoCore.xproj project templates.
- 5. It is a console application that creates a web server. The Program.cs contains a main method that does this.
- 6. Does not use System.web.dll. Uses NuGet packages and smaller modules to improve performance.
- 7. Uses dependency injection to setup a container with services and logging.
- 8. The Project Location is no longer the root for the web application. The root is now wwwroot with the world icon. This has been done to organize things better.
- 9. <a href="http://localhost:80/Home/Index">http://localhost:80/Home/Index</a> is the starting url.
- 10. Controllers and Views are special folders which are using to build user interfaces.
- 11. Controllers are now like MiddleWare because they use dependency injection.
- 12. A Controller can return JSON Data.





- .NETCoreApp, Version=v1.0
  - Microsoft.ApplicationInsights.AspNetCore (1.0.0)
  - Microsoft.AspNetCore.Diagnostics (1.0.0)
  - Microsoft.AspNetCore.Mvc (1.0.0)
  - Microsoft.AspNetCore.Razor.Tools (1.0.0-preview2-final)
  - Microsoft.AspNetCore.Server.IISIntegration (1.0.0)
  - Microsoft.AspNetCore.Server.Kestrel (1.0.0)
  - Microsoft.AspNetCore.StaticFiles (1.0.0)
  - Microsoft.Extensions.Configuration.EnvironmentVariables (1.0.0)
  - Microsoft.Extensions.Configuration.Json (1.0.0)
  - Microsoft.Extensions.Logging (1.0.0)
  - Microsoft.Extensions.Logging.Console (1.0.0)
  - Microsoft.Extensions.Logging.Debug (1.0.0)
  - Microsoft.Extensions.Options.ConfigurationExtensions (1.0.0)
  - Microsoft.NETCore.App (1.0.0)
  - Microsoft.VisualStudio.Web.BrowserLink.Loader (14.0.0)

### Note:

- Comes with a new web server called Kestrel.
- 2. New configuration extensions.
- 3. Application Insights to capture App metrics.
- 4. Runs using IISExpress.
- Uses Extension methods.

## Chose a Framework

| Mac Development 1     | Mac Development 2     | Cross Platform 1       | Cross Platform 2      |
|-----------------------|-----------------------|------------------------|-----------------------|
| Safari & Jquery UI    | Google Chrome         | Google Chrome          | Google Chrome         |
| JSON Rest Kit         | JSON Rest Kit         | Aurelia or Angular     | Generate Native Code  |
| PHP                   | PHP                   | Node JS                | Xamarin               |
| Cake PHP CakePHP      | Symfony of            | JSON Rest Kit Web API  | JSON Rest Kit Web API |
| Apache Web Server     | Apache Web Server     | Apache on Mac          | Apache                |
| Oracle Database       | My SQL Database       | Oracle on Mac          | Oracle                |
|                       |                       |                        |                       |
| Windows Development 1 | Windows Development 2 | Windows Development 3  | Windows Development 4 |
| Internet Explorer     | Internet Explorer     | Internet Explorer      | Internet Explorer     |
| DataSet               | Aurelia               | Angular 2 & Typescript | Django 1.8            |
| WebForms              | JSONP                 | JSONP                  | JSONP                 |
| Enterprise Library    | MVC Web API           | ASP.NET Core MVC 5     | Python (Anaconda)     |
| ODP.NET               | Dapper Micro ORM      | Entity Framework       | Dapper Micro ORM      |
| Oracle                | Oracle                | Oracle                 | Oracle                |

## Angular SPA Template

- 1. <a href="https://visualstudiogallery.msdn.microsoft.com/5af151b2-9ed2-4809-bfe8-27566bfe7d83">https://visualstudiogallery.msdn.microsoft.com/5af151b2-9ed2-4809-bfe8-27566bfe7d83</a>
- 2. Angular Seed Project. <a href="https://github.com/angular/angular-seed">https://github.com/angular/angular-seed</a>
- 3. Jet Brains Web Storm IDE.