

.NET Core Summary:

.NET Core is an open source version of .NET Framework that is for general-purpose development, maintained by Microsoft.

Version:

We will be utilizing .NET Core 3.1 as it is the currently recommended version with full long term support expected to end in December 2022. The next version will be .NET 5.0 which is currently a release candidate since September of this year. We will not be using .NET Core 2.1 even though it still has full support because its support is ending in 2021.

Purpose:

.NET Core is designed to remove some of the limitations that come with .NET framework, such as only working on a windows desktop, or requiring specific APIs for different windows devices, So its purpose is an open source and cross platform compatible development tool for web apps, web APIs and microservices.

IDE:

The available IDEs are Visual Studio, Visual Studio Code, Visual Studio for Mac and GitHub Codespaces (currently in beta). We will primarily be using Visual Studio 2019 which requires version 16.4 or higher to support .NET Core SDK version 3.1.

Runtime:

When you download .NET, you can choose the SDK or a runtime, such as the .NET runtime or the ASP.NET Core runtime. Install a runtime on a machine that you want to prepare for running .NET apps. Install the SDK on a machine that you want to use for development. When you download the SDK, you automatically get the runtimes with it.

Operating Systems:

.NET Core supports Windows, macOS, Linux, Android, iOS, tvOS and watchOS

Language:

We will be using C# to develop our .NET Core application since C# is the most widely used and supported language.

Potential Upgrade:

We will eventually have to upgrade to .NET Core 5.0 when the support for version 3.1 expires. When we upgrade we will have to update the .NET Core SDK version, update the target framework, and update package references. We will also have to review any breaking changes that the new version may bring with it.