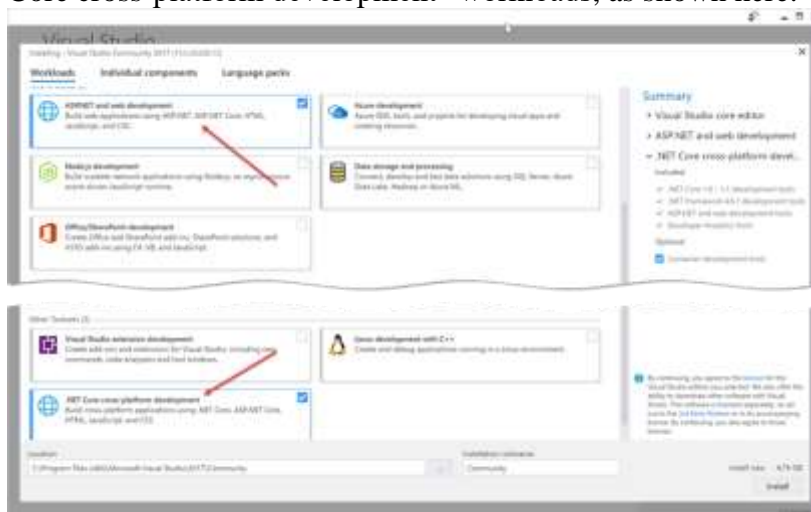# Build an EF and ASP.NET Core App HOL

Welcome to the Build an Entity Framework Core and ASP.NET Core Application in a Day Hands On Lab. Prior to starting the lab, you must have Visual Studio 2017, the .NET Core SDK, .NET Core runtime, and SQL Server 2016 installed. This lab walks you through the installation process.

Part 0: Installing the Prerequisites

Step 1: Download and install Visual Studio 2017 Community Edition

1) Download Visual Studio 2017 (any edition) from the Visual Studio home page: https://www.visualstudio.com/en-us/visual-studio-homepage-vs.aspx

    a) The Community Edition is free, and has everything you need to complete this Hands on Lab

2) Start the installer

    a) The new installation experience has separate workloads based on what type of work you intend to do. For this lab, select the "ASP.NET and web development" workload as well as the ".NET Core cross-platform development" workloads, as shown here:

    b) Select the Individual Components menu at the top of the installation screen, and check ".NET Core runtime", as shown here:

Step 2: Download and install the .NET Core SDK (1.0.1)

The .NET Core SDK includes the runtime and command line tools for creating .NET Core applications.

1) Download the .NET Core SDK installers (x64 and x86) from:
   https://www.microsoft.com/net/download/core.

2) Install both versions (x86 and x64)

3) Confirm the installation locations:

   a) Open up a command prompt, and type "where dotnet"
      C:\Users\skime>where dotnet
      C:\Program Files (x86)\dotnet\dotnet.exe
      C:\Program Files\dotnet\dotnet.exe

   b) Confirm that the "sdk\1.0.1" subdirectory exists under each of the listed locations.

4) Confirm the version installed:

   a) Open up a command prompt and type "dotnet –version"
      C:\Users\skime>dotnet –version
      1.0.1

Step 3: Download and install the .NET Core Runtime (1.1.1)

The .NET Core runtime doesn't contain any tooling and can only be used to run .NET Core applications.

NOTE: LTS vs Current https://docs.microsoft.com/en-us/dotnet/articles/core/versions/lts-current

1) Download the .NET Core Runtime installers (x64 and x86) from:
   https://www.microsoft.com/net/download/core.

2) Install both versions (x86 and x64)

Step 4: Download and install the SQL Server 2016 Express

1) Download the SQL Server 2016 Express Edition from https://www.microsoft.com/en-us/sql-server/sql-server-downloads

Summary

These are all of the tools you need to complete this Hands on Lab.

Next steps

In the next part of this tutorial series, you will create the solution and projects for this hands on lab.