
WEB PROGRAMMING ASP.NET MVC CORE

© 2017-2020, NOEL LOPES



VISUAL STUDIO

Visual Studio

Start with a familiar environment

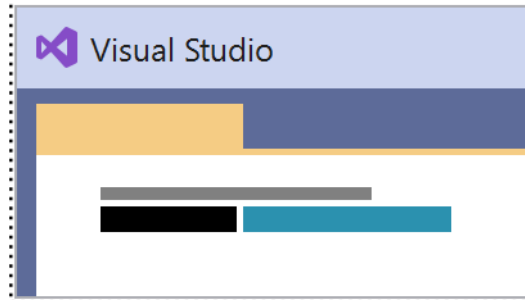
Development Settings:

General

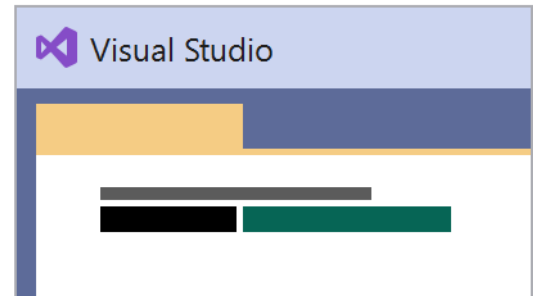


Choose your color theme

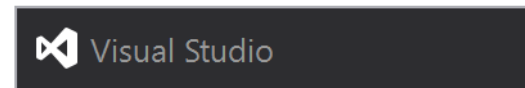
☒ Blue



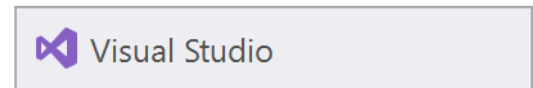
☐ Blue (Extra Contrast)



☐ Dark



☐ Light



Sign in to Visual Studio

Visual Studio will help you plan projects, collaborate with your team, and manage your code online from anywhere.

[Learn more](#)

Sign in to start using your Azure credits, publish code to a private Git repository, sync your settings, and unlock the IDE.

[Sign in](#)

No account? [Create one!](#)

[Account options](#)

All Accounts

[Sign In...](#)


16.0.30413.136 D16.7

Visual Studio

Community 2019

License: 30 day trial (for evaluation purposes only)

Your evaluation period has ended.

 Your evaluation period has ended. Please sign in to unlock the product.

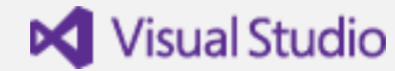
[Check for an updated license](#)

[Exit Visual Studio](#)

VISUAL STUDIO LOGIN

VISUAL STUDIO LOGIN

Iniciar sessão na sua conta



Iniciar sessão

E-mail, telefone ou Skype

Nenhuma conta? [Crie uma!](#)

[Não consegue aceder à sua conta?](#)

[Opções de início de sessão](#)

Anterior

Seguinte

Visual Studio 2019

Open recent

As you use Visual Studio, any projects, folders, or files that you open will show up here for quick access.

You can pin anything that you open frequently so that it's always at the top of the list.

Get started



Clone a repository

Get code from an online repository like GitHub or Azure DevOps



Open a project or solution

Open a local Visual Studio project or .sln file



Open a local folder

Navigate and edit code within any folder



Create a new project

Choose a project template with code scaffolding to get started

[Continue without code →](#)

CREATE A NEW
ASP.NET CORE MVC
PROJECT USING
VISUAL STUDIO

CREATE A NEW ASP.NET CORE MVC PROJECT USING VISUAL STUDIO

Create a new project

Recent project templates

A list of your recently accessed templates will be displayed here.


— □ ×

Search for templates (Alt+S) 🔍


All languages ▾

All platforms ▾


All project types ▾

 **Console App (.NET Core)**
A project for creating a command-line application that can run on .NET Core on Windows, Linux and MacOS.


C# Linux macOS Windows Console

 **Console App (.NET Core)**
A project for creating a command-line application that can run on .NET Core on Windows, Linux and MacOS.

Visual Basic Linux macOS Windows Console

 **ASP.NET Core Web Application**
Project templates for creating ASP.NET Core web apps and web APIs for Windows, Linux and MacOS using .NET Core or .NET Framework. Create web apps with Razor Pages, MVC, or Single Page Apps (SPA) using Angular, React, or React + Redux.

C# Linux macOS Windows Cloud Service Web

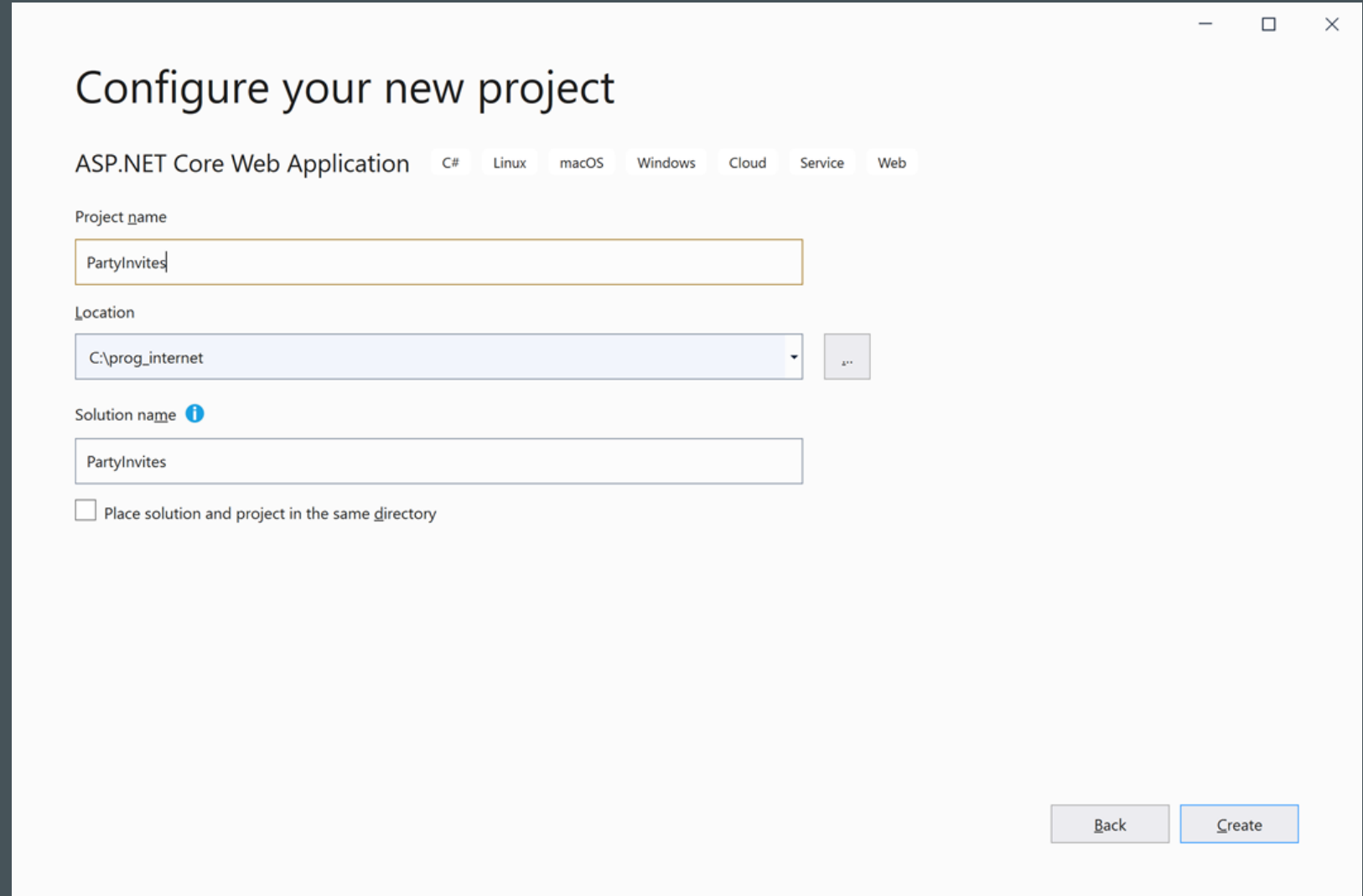
 **Blazor App**
Project templates for creating Blazor apps that run on the server in an ASP.NET Core app or in the browser on WebAssembly (wasm). These templates can be used to build web apps with rich dynamic user interfaces (UIs).

C# Linux macOS Windows Cloud Web

Back

Next

CREATE A NEW ASP.NET CORE MVC PROJECT USING VISUAL STUDIO



The screenshot shows the 'Configure your new project' window in Visual Studio. At the top, there are tabs for 'ASP.NET Core Web Application', 'C#', 'Linux', 'macOS', 'Windows', 'Cloud', 'Service', and 'Web'. The 'ASP.NET Core Web Application' tab is selected. Below the tabs, there are three input fields: 'Project name' with the text 'PartyInvites', 'Location' with a dropdown menu showing 'C:\prog_internet' and a browse button, and 'Solution name' with the text 'PartyInvites'. An information icon is next to the 'Solution name' label. At the bottom, there is a checkbox labeled 'Place solution and project in the same directory' which is currently unchecked. In the bottom right corner, there are two buttons: 'Back' and 'Create'.

Configure your new project

ASP.NET Core Web Application C# Linux macOS Windows Cloud Service Web

Project name

PartyInvites

Location

C:\prog_internet

Solution name ⓘ

PartyInvites

☐ Place solution and project in the same directory


Back Create


CREATE A NEW ASP.NET CORE MVC PROJECT USING VISUAL STUDIO


Create a new ASP.NET Core web application


.NET Core


ASP.NET Core 3.1


 **Empty**
An empty project template for creating an ASP.NET Core application. This template does not have any content in it.

 **API**
A project template for creating an ASP.NET Core application with an example Controller for a RESTful HTTP service. This template can also be used for ASP.NET Core MVC Views and Controllers.

 **Web Application**
A project template for creating an ASP.NET Core application with example ASP.NET Razor Pages content.

 **Web Application (Model-View-Controller)**
A project template for creating an ASP.NET Core application with example ASP.NET Core MVC Views and Controllers. This template can also be used for RESTful HTTP services.

 **Angular**
A project template for creating an ASP.NET Core application with Angular

 **React.js**

Authentication
No Authentication
[Change](#)

Advanced
☒ **C**onfigure for HTTPS
☐ **E**nable Docker Support
(Requires [Docker Desktop](#))

Linux

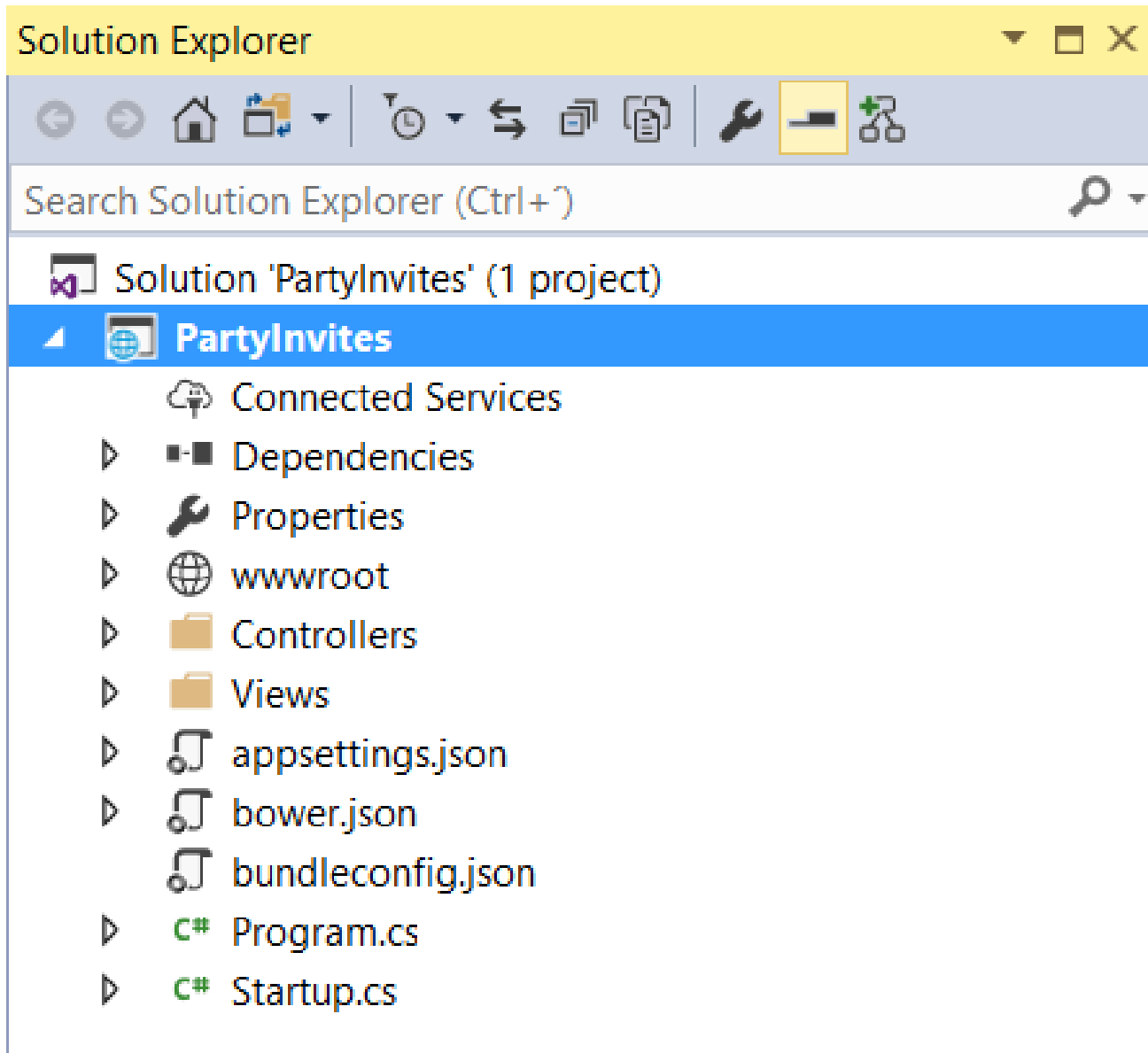
☐ **E**nable **R**azor runtime compilation

Author: Microsoft
Source: Templates 3.1.8

[Get additional project templates](#)

Back

Create



SOLUTION EXPLORER

MVC APPLICATION STRUCTURE

DIRECTORY	PURPOSE
/Models	Data (business) objects
/Views	UI template files for rendering output (e.g. HTML)
/Controllers	Controller classes that handle URL requests
/Views/Shared	Layouts and views that are not specific to a single controller.
/Views/_ViewImports.cshtml	Contains the namespaces that will be included in Razor view files.
/Views/_ViewStart.cshtml	Default layout for the Razor view engine.
/wwwroot	Static content (e.g. CSS, image, javascript files)
/wwwroot/lib	Third-party JavaScript and CSS packages

MVC APPLICATION STRUCTURE

DIRECTORY	PURPOSE
/Areas	Areas are a way of partitioning a large application into smaller pieces.
/Dependencies	Provides details of all the packages a project relies on.
/Components	This is where view component classes, which are used to display self-contained features such as shopping carts, are defined.
/Data	This is where database context classes are defined
/Migrations	This is where details of database schemas are stored so that databases can be updated.
/bower.json	List of packages managed by the Bower package manager. This file is hidden by default.
/appsettings.json	Basic configuration options for the project, including the NuGet packages it uses
/Program.cs	This class configures the hosting platform for the application
/Startup.cs	This class configures the application

RUNNING THE APPLICATION

ASP.NET Core

Windows

Linux

OSX

Learn how to build ASP.NET apps that can run anywhere.

[Learn More](#)

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](#)
- [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.](#)

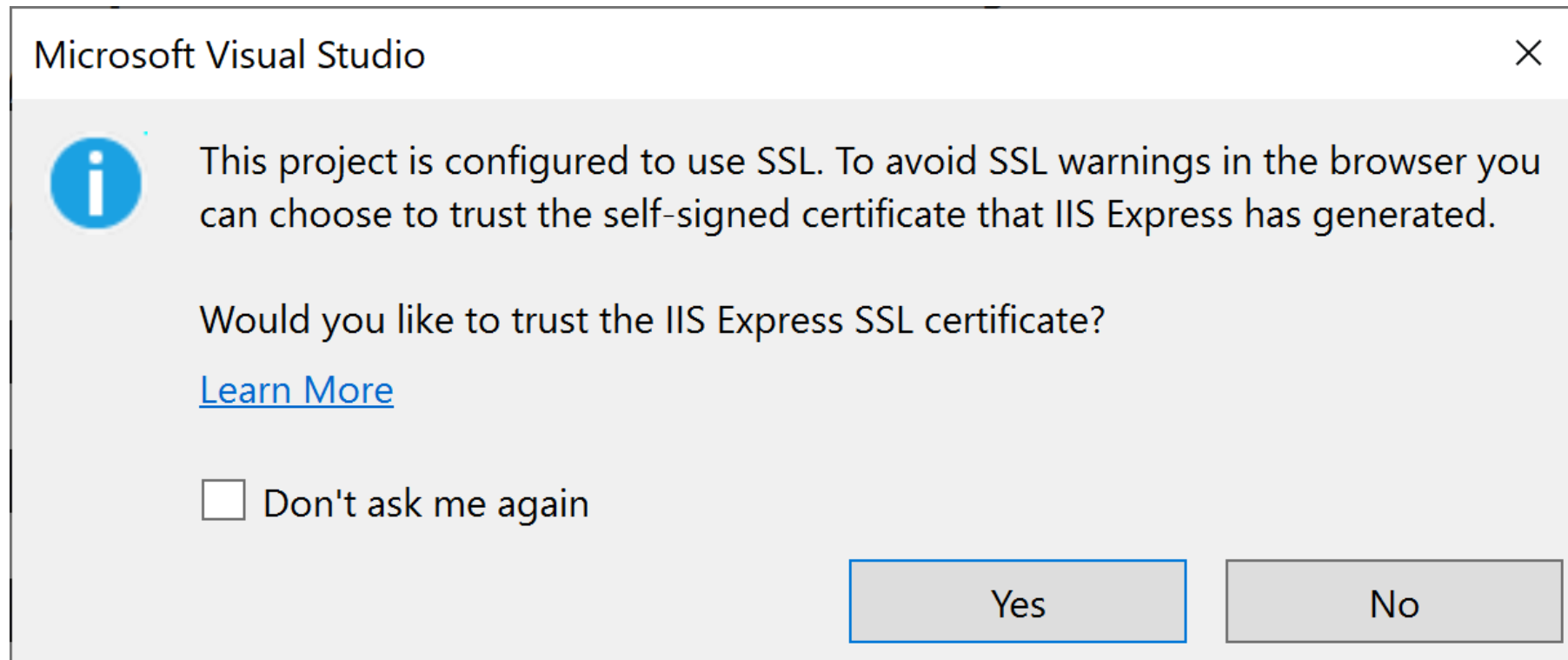
Overview

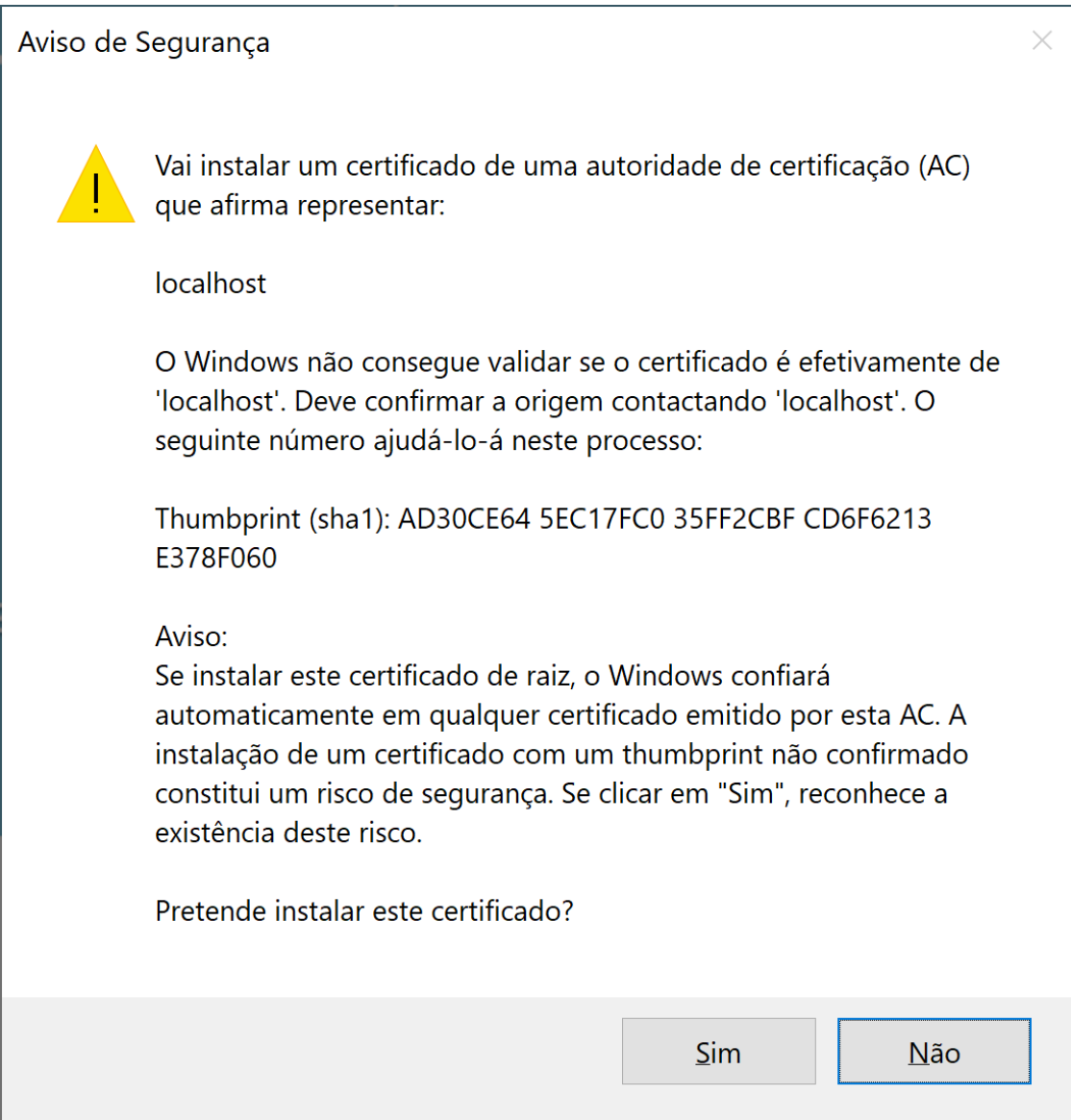
- [Conceptual overview of what is ASP.NET Core](#)
- [Fundamentals of ASP.NET Core such as Startup and middleware.](#)
- [Working with Data](#)
- [Security](#)
- [Client side development](#)
- [Develop on different platforms](#)
- [Read more on the documentation site](#)

Run & Deploy

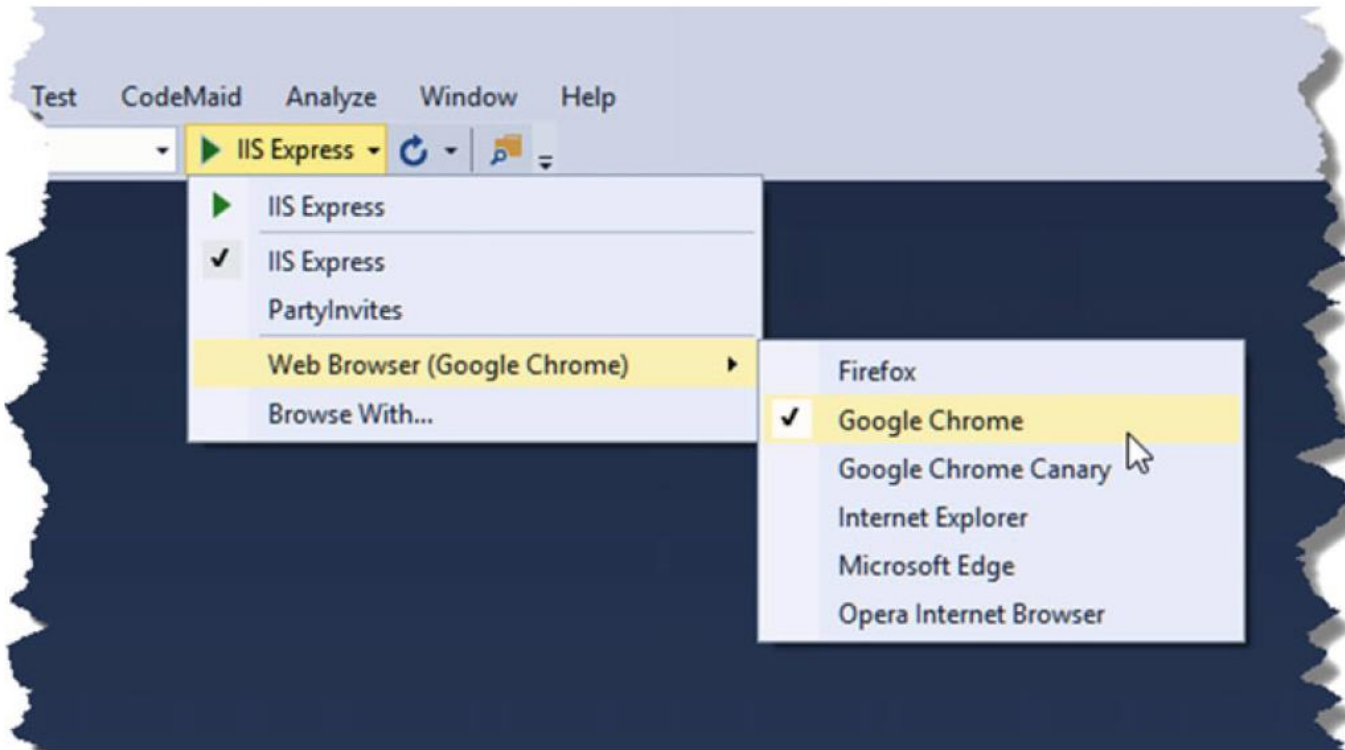
- [Run your app](#)
- [Run tools such as EF migrations and more](#)
- [Publish to Microsoft Azure Web Apps](#)

RUNNING THE APPLICATION





RUNNING THE APPLICATION



CHANGING THE BROWSER