

Get started with ASP.NET Core MVC

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By [Rick Anderson](#)

This tutorial teaches ASP.NET Core MVC web development with controllers and views. If you're new to ASP.NET Core web development, consider the [Razor Pages](#) version of this tutorial, which provides an easier starting point. See [Choose an ASP.NET Core UI](#), which compares Razor Pages, MVC, and Blazor for UI development.

This is the first tutorial of a series that teaches ASP.NET Core MVC web development with controllers and views.

At the end of the series, you'll have an app that manages, validates, and displays movie data. You learn how to:

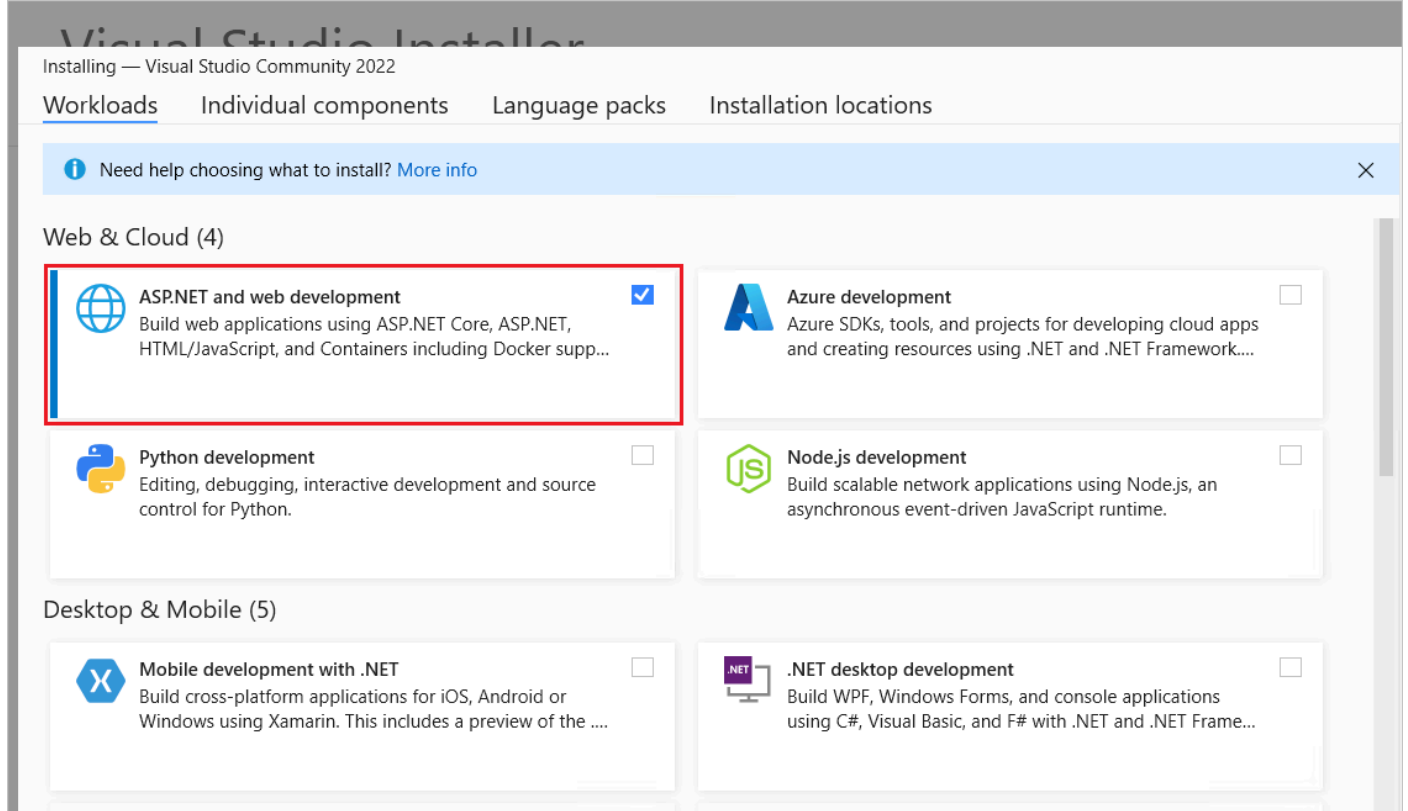
- ✓ Create a web app.
- ✓ Add and scaffold a model.
- ✓ Work with a database.
- ✓ Add search and validation.

[View or download sample code](#) ([how to download](#)).

Prerequisites

Visual Studio

- [Visual Studio 2022](#) with the **ASP.NET and web development** workload.



Create a web app

Visual Studio

- Start Visual Studio and select **Create a new project**.
- In the **Create a new project** dialog, select **ASP.NET Core Web App (Model-View-Controller)** > **Next**.
- In the **Configure your new project** dialog:
 - Enter `MvcMovie` for **Project name**. It's important to name the project `MvcMovie`. Capitalization needs to match each namespace when code is copied.
 - The **Location** for the project can be set to anywhere.
- Select **Next**.
- In the **Additional information** dialog:
 - Select **.NET 9.0 (Standard Term Support)**.
 - Verify that **Do not use top-level statements** is unchecked.
- Select **Create**.

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Additional information

ASP.NET Core Web App (Model-View-Controller)

C#LinuxmacOSWindowsCloudServiceWeb

Framework ⓘ

.NET 9.0 (Standard Term Support) ▾

Authentication type ⓘ

None ▾

☒ Configure for HTTPS ⓘ

☐ Enable container support ⓘ

Container OS ⓘ

Linux ▾

Container build type ⓘ

Dockerfile ▾

☐ Do not use top-level statements ⓘ

☐ Enlist in .NET Aspire orchestration ⓘ

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Create

For more information, including alternative approaches to create the project, see [Create a new project in Visual Studio](#).

Visual Studio uses the default project template for the created MVC project. The created project:

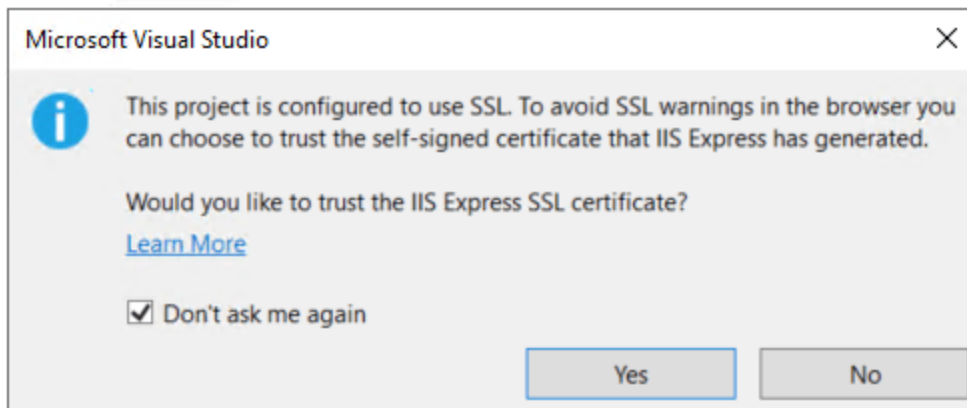
- Is a working app.
- Is a basic starter project.

Run the app

Visual Studio

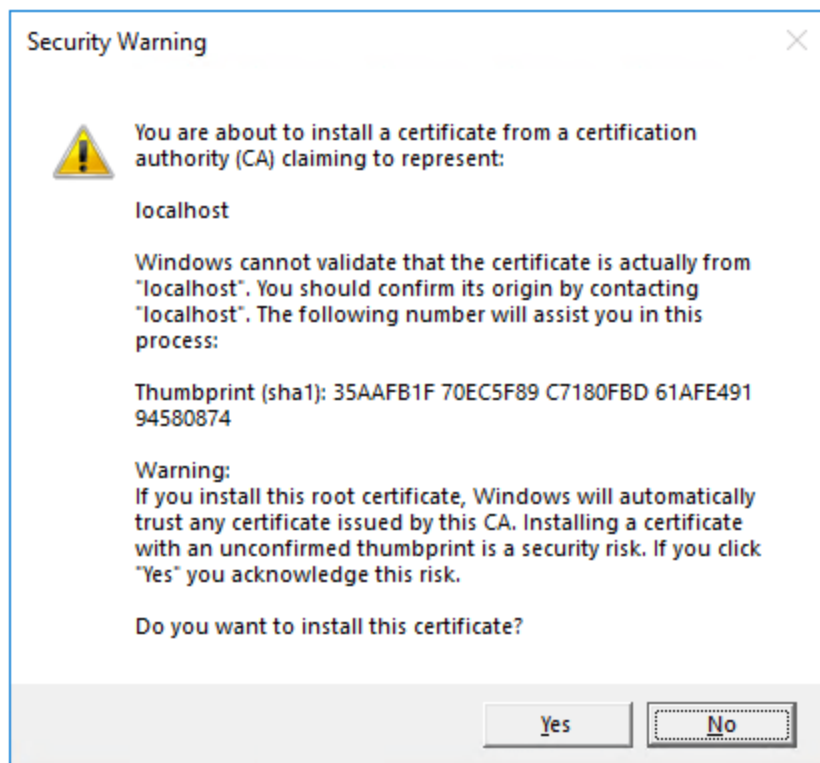
- Press `Ctrl` + `F5` to run the app without the debugger.

Visual Studio displays the following dialog when a project is not yet configured to use SSL:



Select **Yes** if you trust the IIS Express SSL certificate.

The following dialog is displayed:



Select **Yes** if you agree to trust the development certificate.

For information on trusting the Firefox browser, see [Firefox SEC_ERROR_INADEQUATE_KEY_USAGE certificate error](#).

Visual Studio runs the app and opens the default browser.

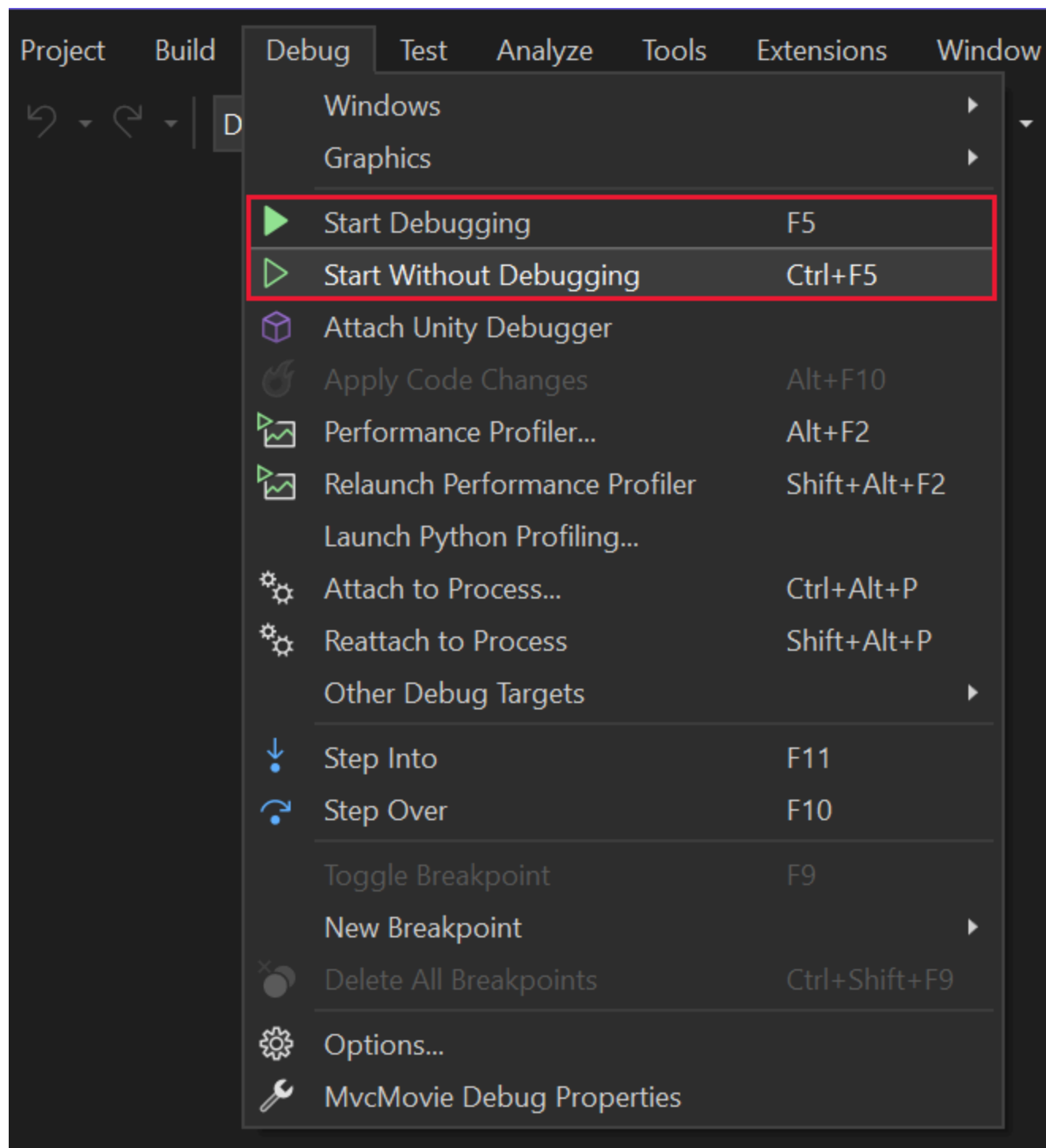
The address bar shows `localhost:<port#>` and not something like `example.com`. The standard hostname for your local computer is `localhost`. When Visual Studio creates a web project, a random port is used for the web server.

Launching the app without debugging by pressing `Ctrl + F5` allows you to:

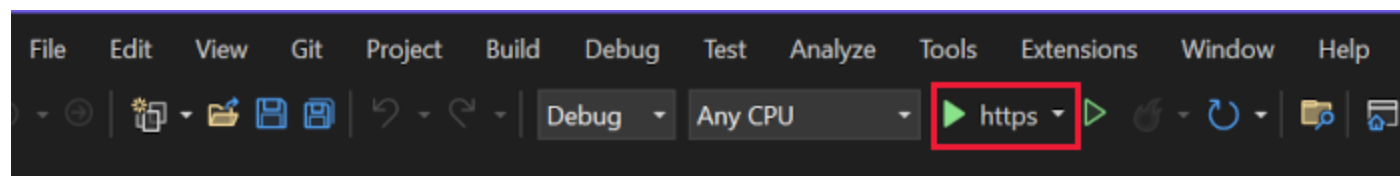
- Make code changes.

- Save the file.
- Quickly refresh the browser and see the code changes.

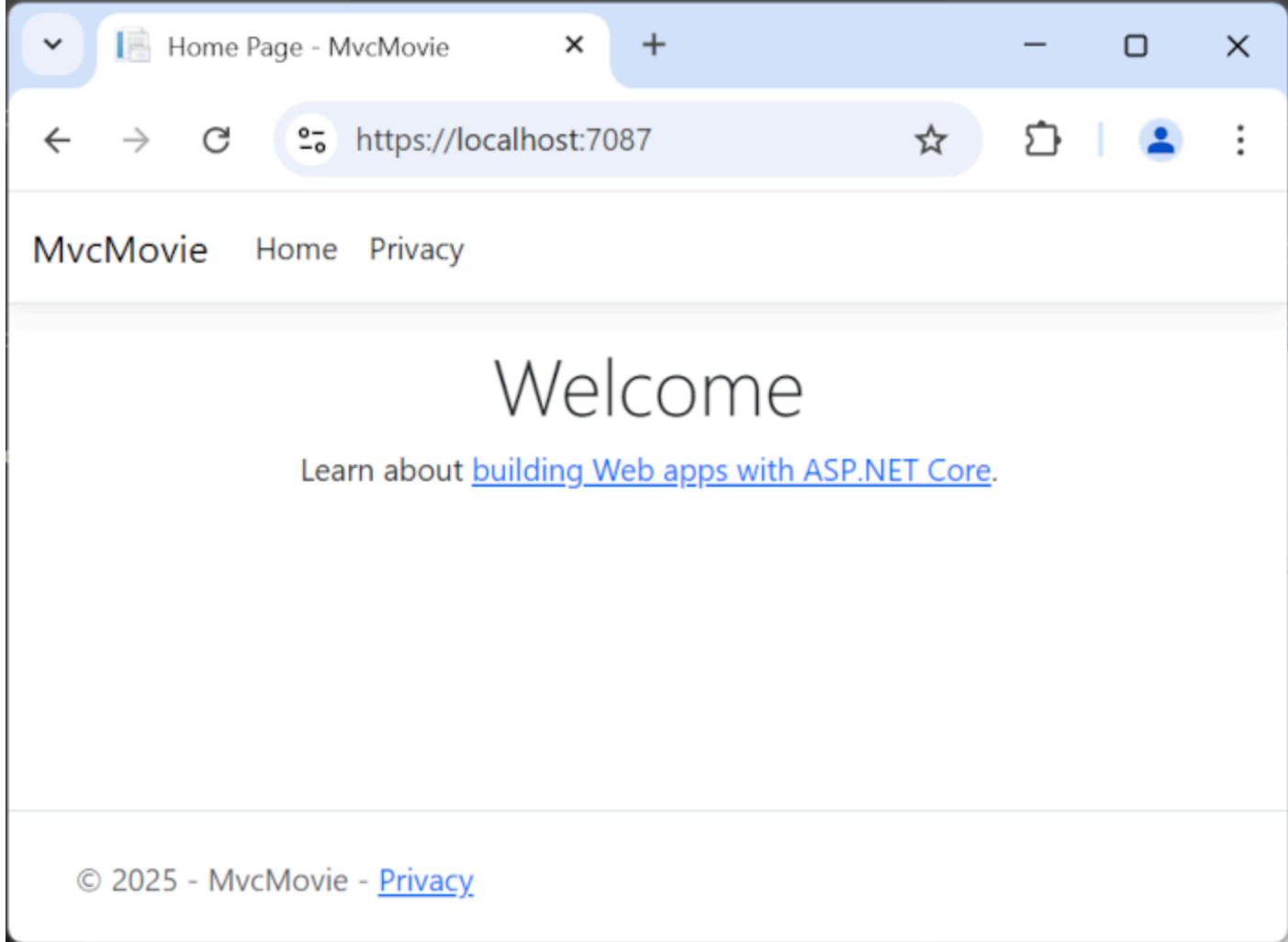
You can launch the app in debug or non-debug mode from the **Debug** menu:



You can debug the app by selecting the **https** button in the toolbar:



The following image shows the app:



- Close the browser window. Visual Studio will stop the application.

Visual Studio

Visual Studio help

- [Learn to debug C# code using Visual Studio](#)
- [Introduction to the Visual Studio IDE](#)

In the next tutorial in this series, you learn about MVC and start writing some code.

Next: Add a controller