

Understand when and why to use Razor Pages

5 minutes

In this unit, you'll learn when and why to use Razor Pages for your ASP.NET Core app.

The benefits of Razor Pages

Razor Pages is a server-side, page-centric programming model for building web UIs with ASP.NET Core. Benefits include:

- Easy setup for dynamic web apps using HTML, CSS, and C#.
- Organized files by feature for easier maintenance.
- Combines markup with server-side C# code using Razor syntax.

Razor Pages utilize *Razor* for embedding server-based code into webpages. Razor syntax combines HTML and C# to define the dynamic rendering logic. This means you can use C# variables and methods within your HTML markup to generate dynamic web content on the server at runtime. It's important to understand that Razor Pages are not a replacement for HTML, CSS, or JavaScript, but rather combines these technologies to create dynamic web content.

Separation of concerns

Razor Pages enforces separation of concerns with a C# `PageModel` class, encapsulating data properties and logic operations scoped to its Razor page, and defining page handlers for HTTP requests. The `PageModel` class is a *partial class* that is automatically generated by the ASP.NET Core project template. The `PageModel` class is located in the `Pages` folder and is named after the Razor page. For example, the `PageModel` class for the `Index.cshtml` Razor page is named `IndexModel.cs`.

When to use Razor Pages

Use Razor Pages in your ASP.NET Core app when you:

- Want to generate dynamic web UI.
- Prefer a page-focused approach.
- Want to reduce duplication with partial views.

Razor Pages simplifies ASP.NET Core page organization by keeping related pages and their logic together in their own namespace and directory.

🕒 Note

ASP.NET Core also supports the Model-View-Controller (MVC) pattern for building web apps. Use MVC when you prefer a clear separation between Model, View, and Controller. Both Razor Pages and MVC can coexist within the same app. MVC is outside the scope of this module.

In the next unit, you'll take a tour of a Razor Pages app.

Check your knowledge

1. Which one of the following statements is true for Razor Pages? *

- ☐ Use Razor Pages for an ASP.NET Core app that isn't focused on generating HTML, such as a web API.
- ☐ Razor Pages can't coexist in an ASP.NET Core MVC app.

☒ A productivity advantage of Razor Pages is that it keeps together what tends to change together for views in your app.

✓ Correct! Use Razor Pages to keep ASP.NET Core pages organized in a simpler way. All view (page) specific logic and page properties (view model) are kept in the same proximity.

