

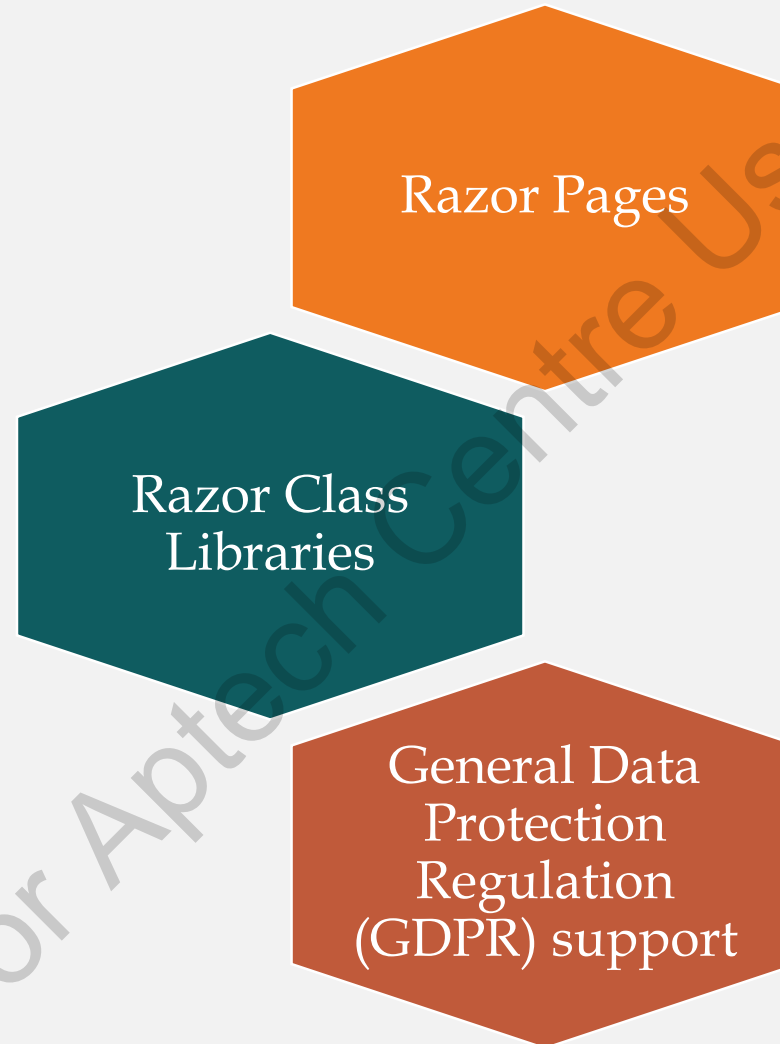
Session 16

Features of ASP.NET Core 2.1

Session Overview

- Describe Razor Pages in ASP.NET Core 2.1
- Explain Razor class libraries
- Describe General Data Protection Regulation (GDPR) Support in Core 2.1

ASP.NET Core 2.1 Features



Razor Pages

- Preferred way to create user interfaces for Web apps
- New feature in ASP.NET Core MVC designed to simplify Web app development that are more focused on pages
- Helps increase productivity
- Similar to a view in ASP.NET MVC
- Provides two-way data binding

One of the major differences between Razor pages and MVC is that model and controller code are included within the Razor Page itself.

Benefits of Razor Pages

Improved Structure

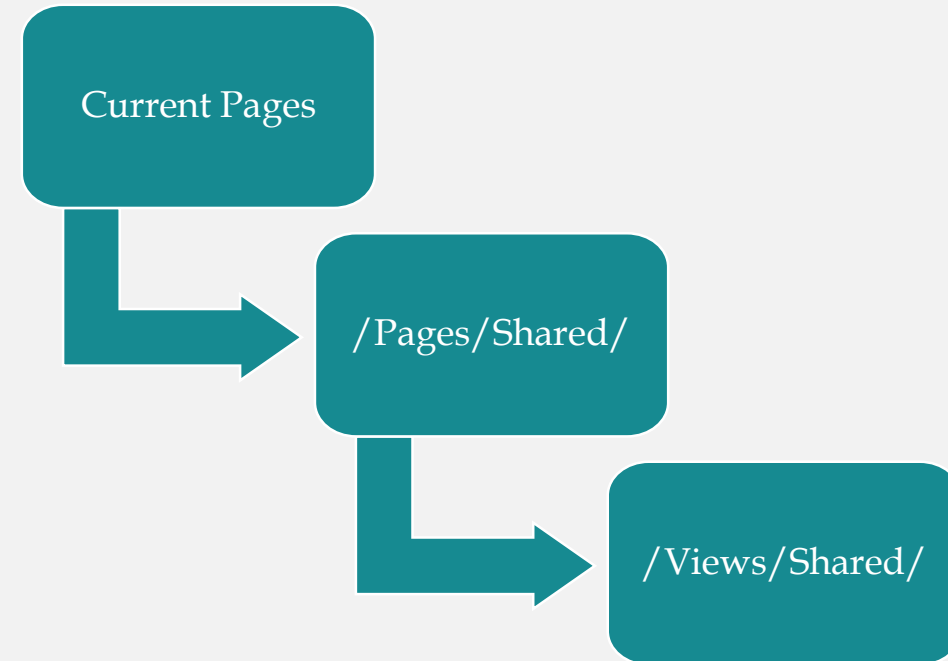
Self-Contained with Single Responsibility

Easier Form Creation

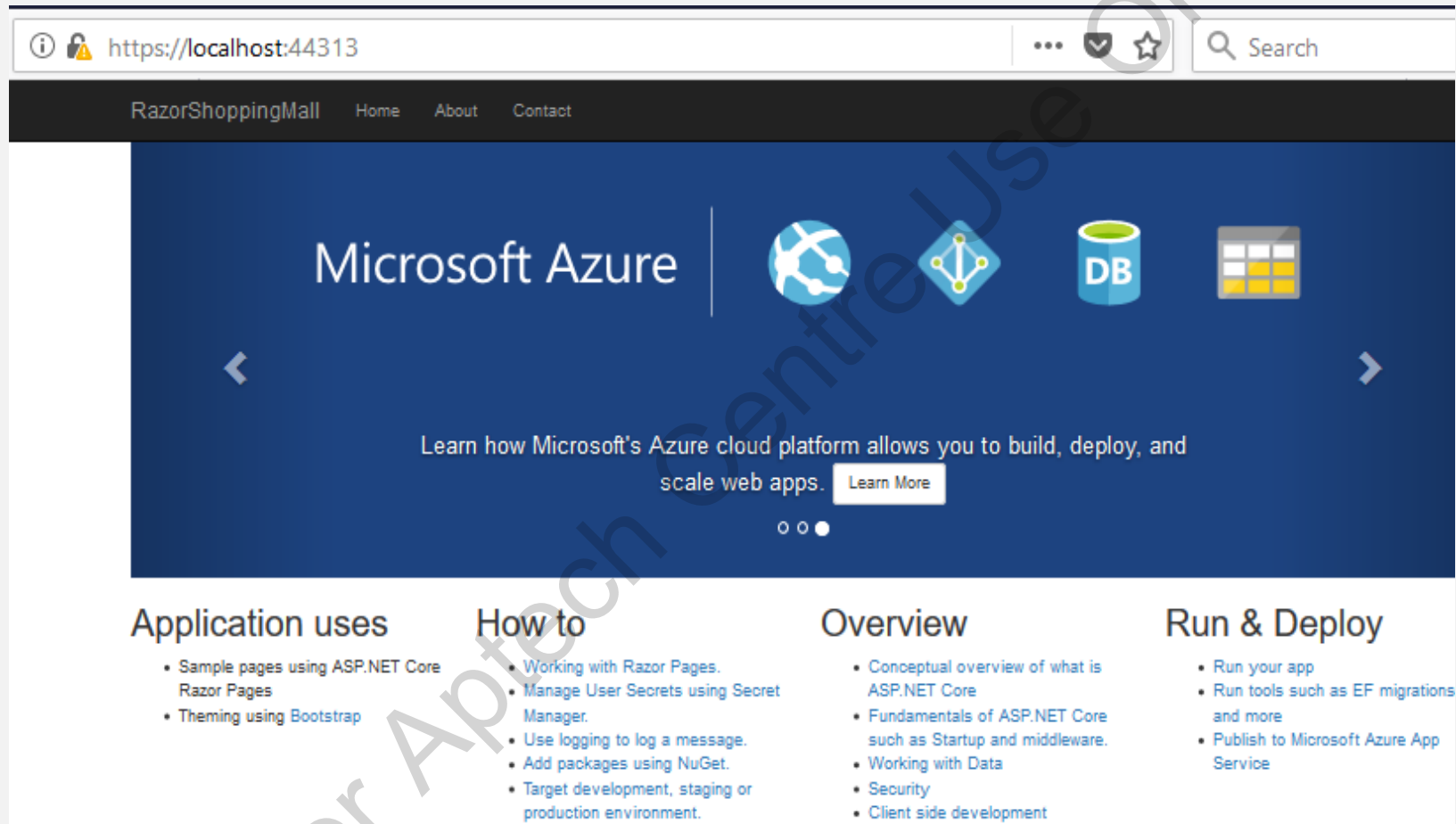
Razor Pages, Web App Files, and Folders 1-2

File/Folder Name	Description
wwwroot	Contains static assets such as style sheets and images.
Pages	Includes a sub-folder named Shared that has three files: <ul style="list-style-type: none">• <code>_Layout.cshtml</code> file• <code>_ValidationScriptsPartial.cshtml</code>• <code>_CookieConsentPartial.cshtml</code>
appsettings.json	Is a configuration file.
Program.cs	Configures the host of the ASP.NET Core application.
Startup.cs	Is one of the most important ones in the application and configures services and request pipeline.

Order of search for Razor Assets



Razor Pages, Web App Files, and Folders 2-2



Page Associations with URL Paths

/Pages/Index.cshtml

/ or /Index

/Pages/Contact.cshtml

/Contact

/Pages/Store/Contact.cshtml

/Store/Contact

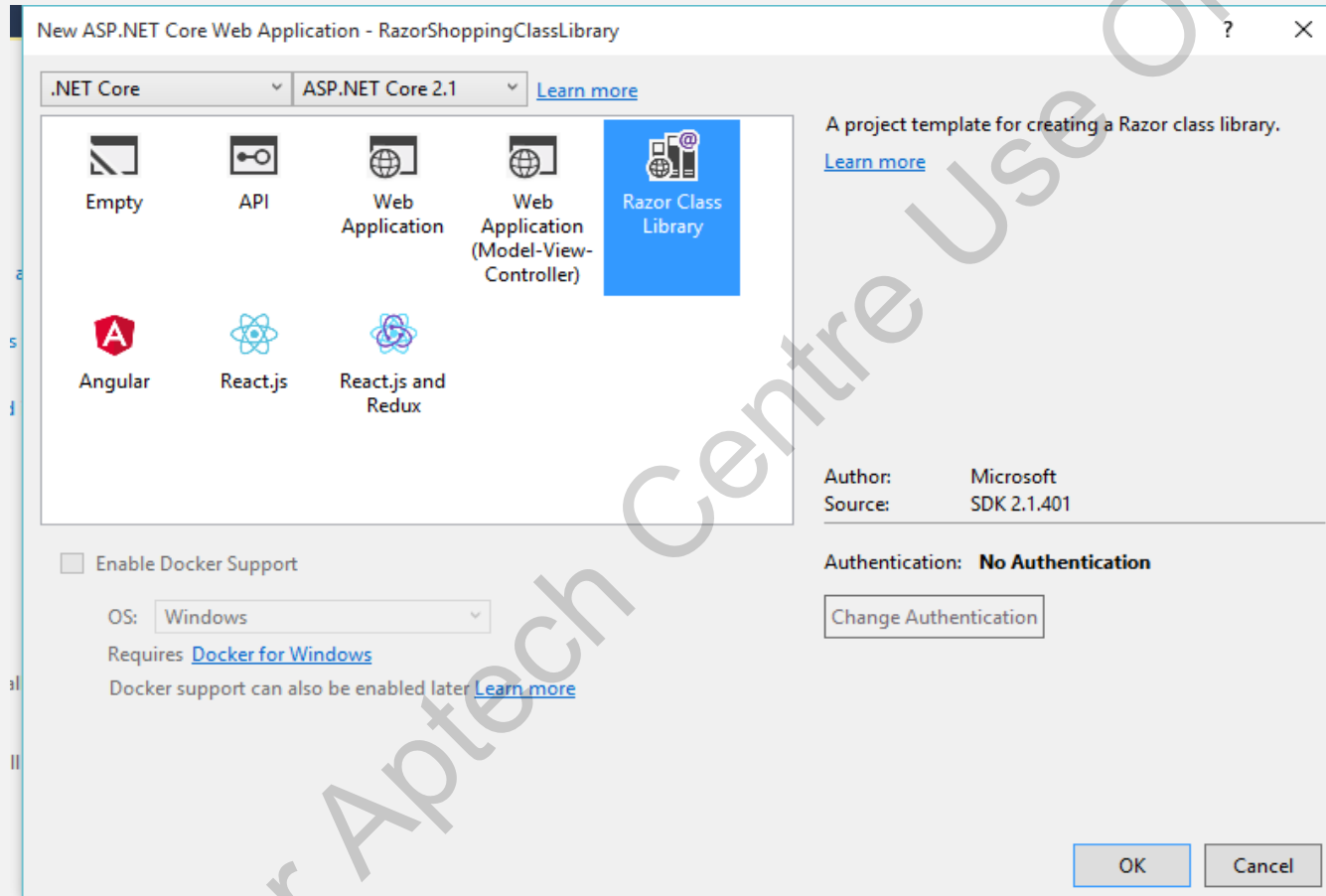
/Pages/Store/Index.cshtml

/Store or /Store/Index

Razor Class Libraries

- Create a Razor-based UI as a library and share it across multiple projects.
- This promotes reusability as the Razor class library can be reused across projects.
- Razor SDK enables developers to build a Razor class library that can be packaged into a NuGet package.
- To make login functionality in apps easier, faster, and more secure, ASP.NET Core 2.1 also provides ASP.NET Core Identity as a Razor Class Library.
- ASP.NET Core Identity is a membership mechanism to incorporate login functionality in ASP.NET Core apps.
- Developers can use items such as Razor views, pages, controllers, page models, View components, and data models as part of a Razor Class Library.

Creating Razor Class Libraries



Selecting Razor Class Library Template

GDPR Support in ASP.NET Core (1-2)

- Set of rules formulated to give European Union (EU) citizens greater control over their personal data.
- Lays down provisions and requirements pertaining to data collation and processing.
- Applies to an enterprise established in the EU that is processing the personal data of people residing in the EU.
- To be GDPR compliant, organizations must put in place appropriate technical and organizational measures.
- ASP.NET Core provides APIs and templates to help meet some of the GDPR requirements.
- Project templates include extension points and stubbed markup which can be replaced by developers with the organization's privacy and cookie use policy.
- A cookie consent feature allows developers to prompt (and track) consent from users before storing personal data.

GDPR Support in ASP.NET Core (2-2)

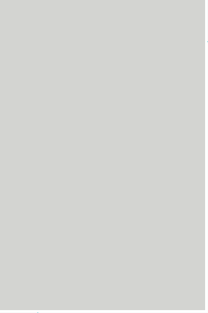
Some of the built-in GDPR support in Razor Pages and MVC projects created with project templates:



CookiePolicyOptions and UseCookiePolicy are by default added in Startup.cs.



The _CookieConsentPartial.cshtml partial view.



The Pages/Privacy.cshtml page or Views/Home/Privacy.cshtml view provides a page to display an organization's privacy policy.



The _CookieConsentPartial.cshtml file generates a link to the Privacy page.

Summary

- ASP.NET Core 2.1 offers several new and powerful features that improve productivity and performance such as Razor Pages, Razor Class Libraries and GDPR support.
- Razor Pages is a new feature in ASP.NET Core MVC designed to simplify Web app development that are more focused on pages.
- In ASP.NET Core 2.1, developers can create a Razor-based UI as a library and share it across multiple projects.
- GDPR is a set of rules and requirements pertaining to data collation and processing and applies to enterprises in the EU that process personal data of people residing in the EU.
- To be GDPR compliant, organizations must put in place appropriate technical and organizational measures.
- ASP.NET Core provides APIs and templates to help meet some of the GDPR requirements.