

Identity & stuff

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Action constraint

- Supports conditional logic to determine whether or not an associated action is valid to be selected for the given request.
- Inherits Attribute, IActionConstraint
- [HttpGet][HttpPost]

<https://docs.asp.net/en/latest/mvc/controllers/routing.html#understanding-iactionconstraint>

Action filters

- *Filters* in ASP.NET MVC allow you to run code before or after a particular stage in the execution pipeline. Filters can be configured globally, per-controller, or per-action.
- Filter types: Authorization, Resource, Action, Exception, Result
- Different filter types run at different points within the pipeline.
- <https://docs.asp.net/en/latest/mvc/controllers/filters.html>

Authorization filters

- Authorization filters are used to determine whether the current user is authorized for the request being made.
- Authorization filter attributes
 - AuthorizeAttribute
 - AllowAnonymousAttribute

<https://docs.asp.net/en/latest/mvc/controllers/filters.html#authorization-filters>

<https://docs.asp.net/en/latest/security/authorization/simple.html>

Claim

- A *claim* is a statement that one subject makes about itself or another subject.
- The statement can be about a name, identity, key, group, privilege, or capability,

[https://msdn.microsoft.com/en-us/library/system.identitymodel.claims.claimtypes\(v=vs.110\).aspx](https://msdn.microsoft.com/en-us/library/system.identitymodel.claims.claimtypes(v=vs.110).aspx)

- Pre-defined claim types:

Identity

- ASP.NET Core Identity is a membership system which allows you to add login functionality to your application. Users can create an account and login with a user name and password or they can use an external login providers such as Facebook, Google, Microsoft Account, Twitter and more.
- You can configure ASP.NET Core Identity to use a SQL Server database to store user names, passwords, and profile data. Alternatively, you can use your own persistent store to store data in another persistent storage, such as Azure Table Storage.
- <https://docs.asp.net/en/latest/security/authentication/identity.html>

Cookie Middleware

- Serializes a user claim principal into an encrypted cookie and then, on subsequent requests, validates the cookie, recreates the principal and assigns it to the User property on HttpContext.
- If you want to provide your own login screens and user databases you can use the cookie middleware as a standalone feature.

<https://docs.asp.net/en/latest/security/authentication/cookie.html>

Authorization







- Declarative
 - Simple or policy based
 - Defined at code level
 - Not suitable for multitenant applications
 - Leverages **authorization filters**
- Imperative
 - Authorization per resource handled by our own code
 - Leverages **ChallengeResult**

<https://docs.asp.net/en/latest/security/authorization/index.html>

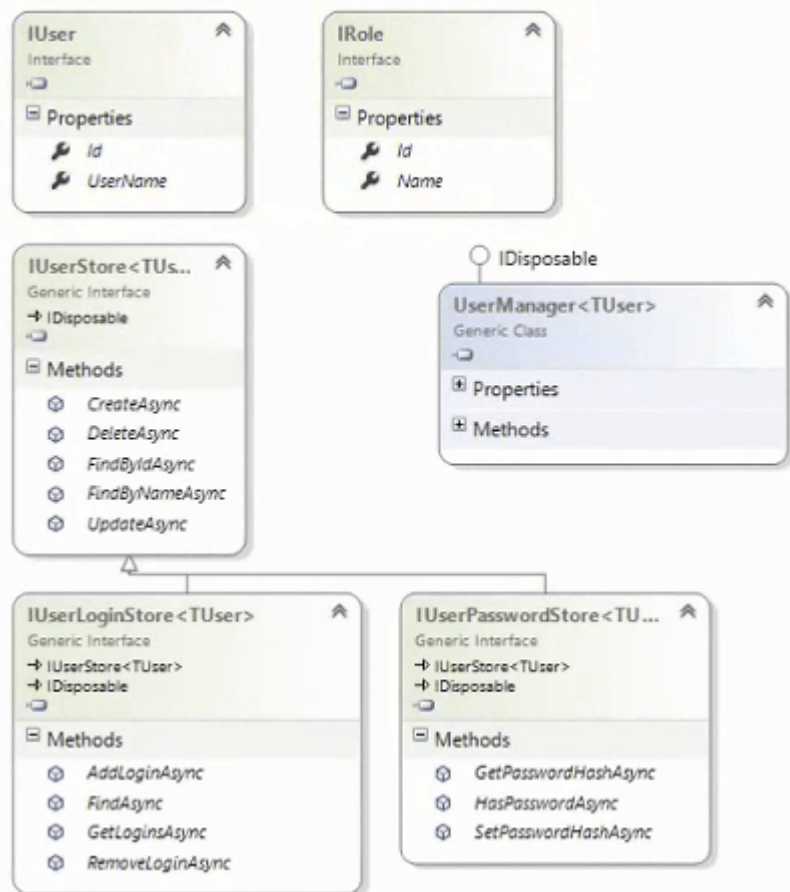
Identity

- Microsoft.AspNetCore.Identity
 - the core set of interfaces for ASP.NET Core Identity.
- Microsoft.AspNetCore.Authentication.Cookies
 - middleware that enables an application to use cookie based authentication.

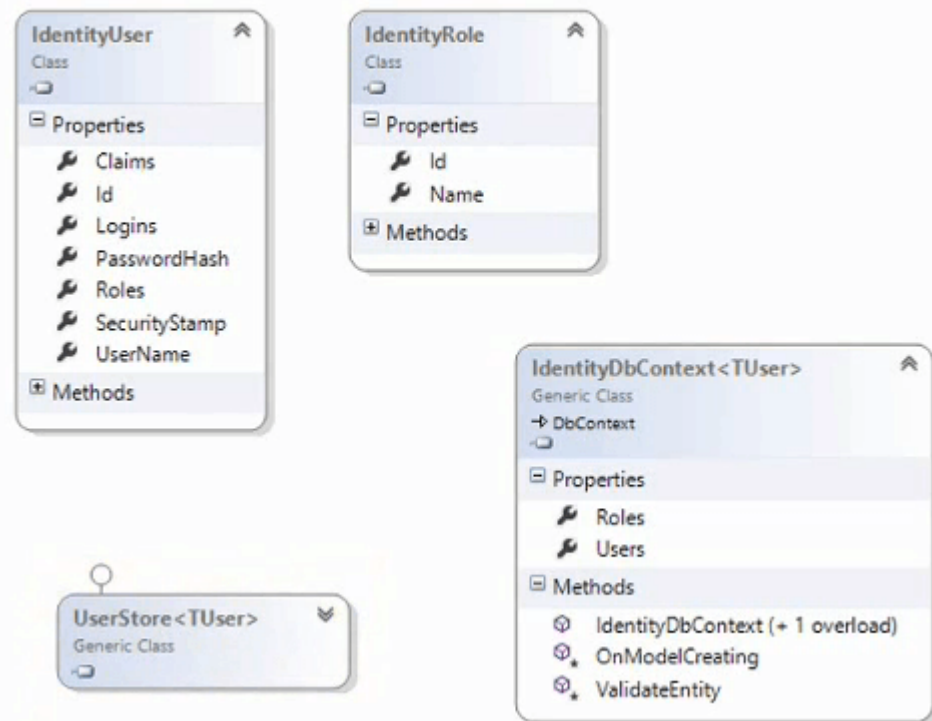
Microsoft.AspNetCore.Identity Include prerelease

 Prerelease	Microsoft.AspNetCore.Identity by Microsoft, 104K downloads ASP.NET Core Identity is the membership system for building ASP.NET Core web applications, including membership, login, and user data. ASP.NET Core Identity allows you to add login feat...	v1.1.0-preview1-final
 Prerelease	Microsoft.AspNetCore.Identity.EntityFrameworkCore by Microsoft, 87,3K downlo ASP.NET Core Identity provider that uses Entity Framework Core.	v1.1.0-preview1-final
	Microsoft.AspNetCore.Identity.MongoDB by Wes Higbee, 199 downloads A MongoDB provider for ASP.NET Core Identity	v1.0.2 
 Prerelease	Microsoft.AspNet.Identity.AspNetCoreCompat by Microsoft, 307 downloads A compatibility layer for sharing identity databases between Microsoft.AspNet.Identity.EntityFramework and Microsoft.AspNetCore.Identity.EntityFramework...	v0.2.0-preview1-final
	ElCamino.AspNetCore.Identity.AzureTable by David Melendez, 289 downloads Azure Table Storage Provider to support AspNet Identity Core 1.0	v1.6.1

Microsoft.AspNet.Identity.Core



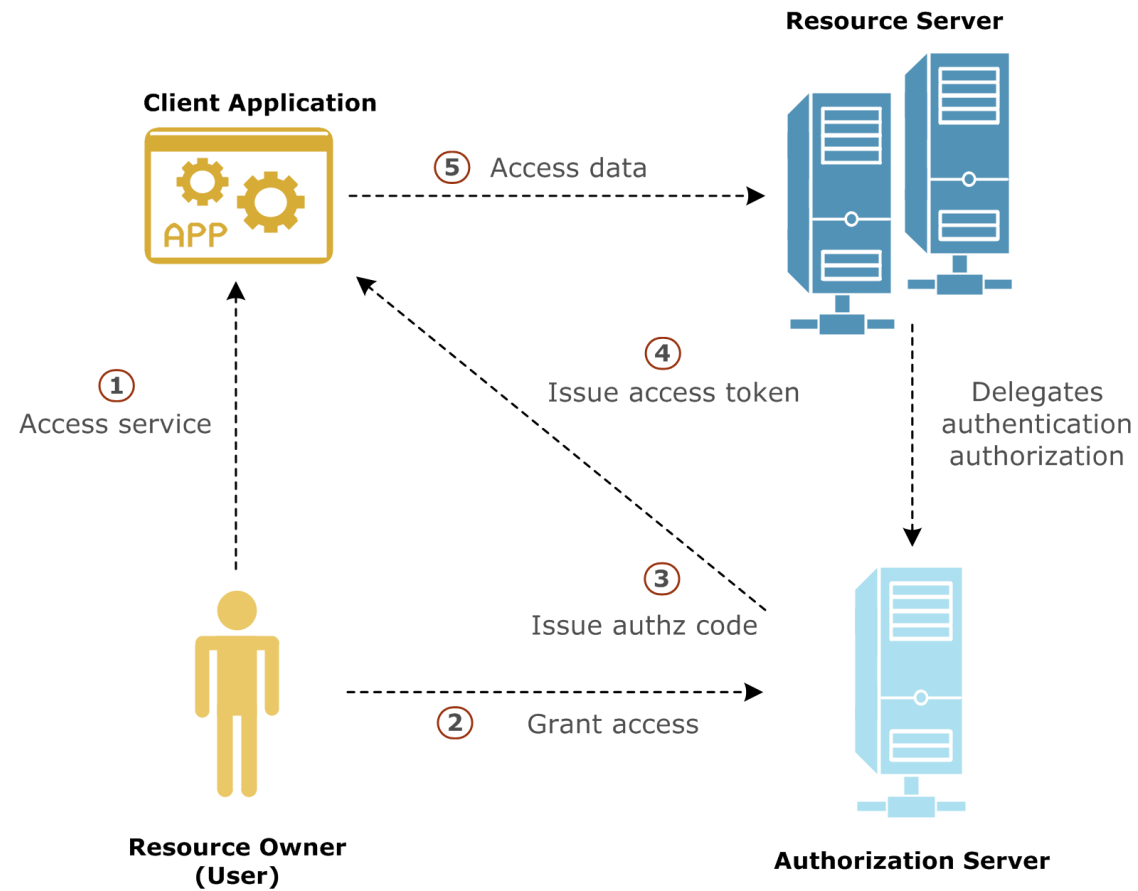
Microsoft.AspNet.Identity.EntityFramework



Identity class overview

- IdentityUser – implementation of IUser
- UserManager – APIs to CRUD user, claim and auth info via UserStore
- RoleManager – APIs to CRUD roles via RoleStore
- UserStore – Talks to data layer to store users, login providers (external auth), user claims, user roles
- RoleStore – Talks to data layer to store roles
- SignInManager
 - High level API to sign in users

OAuth



View components

- Similar to partial views
- Intended anywhere you have reusable rendering logic that is too complex for a partial view
- Can have parameters and business logic

<https://docs.asp.net/en/latest/mvc/views/view-components.html>

Resources

<https://docs.asp.net/en/latest/security/authentication/index.html>

<https://docs.asp.net/en/latest/security/authorization/index.html>