Kentico

Identity & OWIN

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2015

Authorization

- Authorization filter attributes
  - AuthorizeAttribute
  - AllowAnonymousAttribute

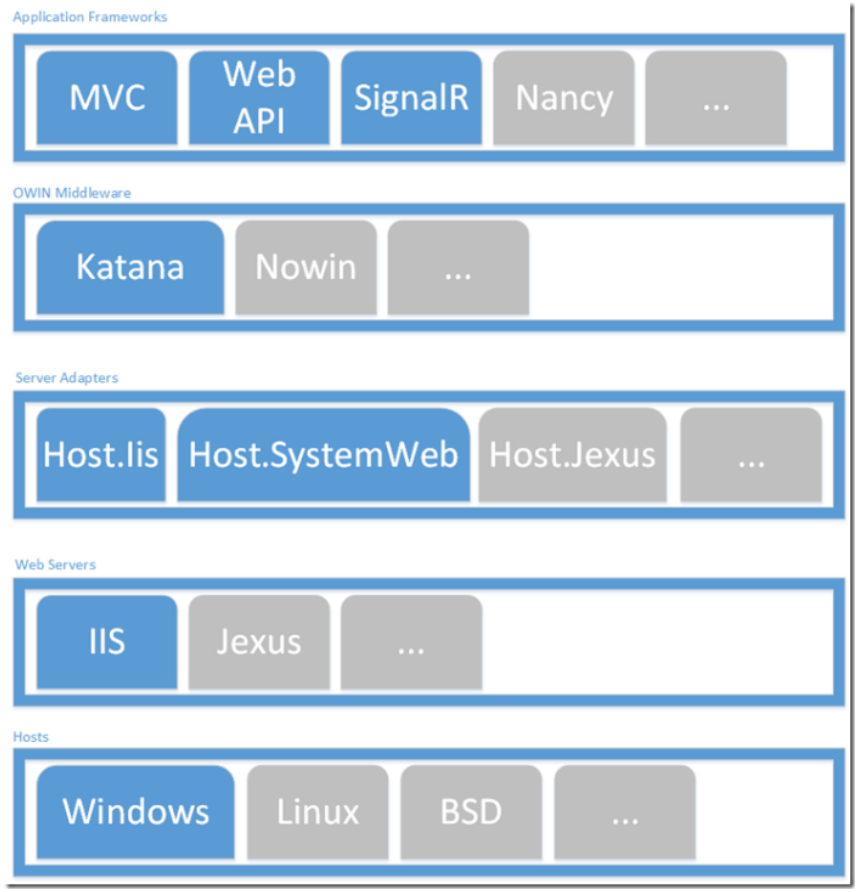
https://msdn.microsoft.com/en-us/library/system.web.mvc.authorizeattribute(v=vs.118).aspx
https://msdn.microsoft.com/en-us/library/system.web.http.allowanonymousattribute(v=vs.118).aspx

- You can also return unauthorized access from your action by returning HttpUnauthorizedResult

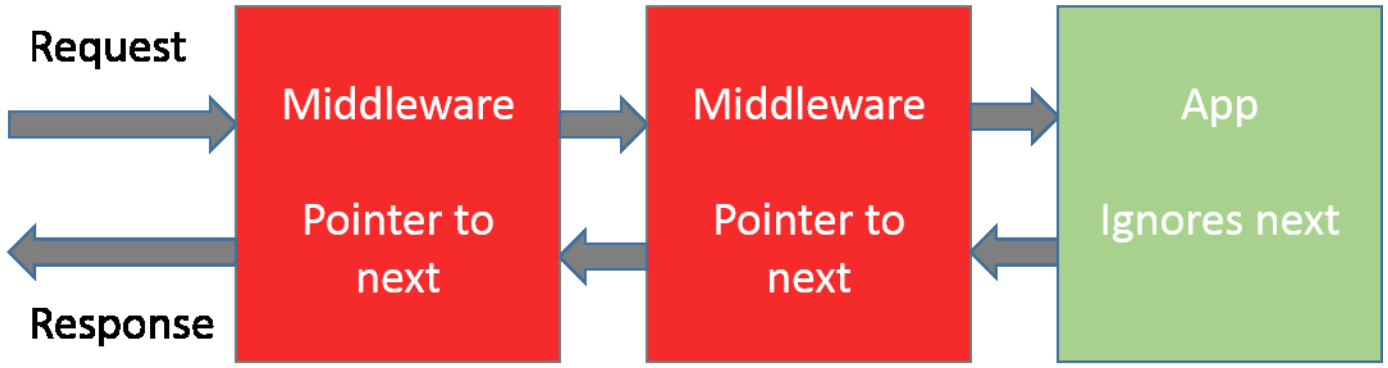
https://msdn.microsoft.com/en-us/library/system.web.mvc.httpunauthorizedresult(v=vs.118).aspx

Owin

- OWIN defines a standard interface between .NET web servers and web applications.
- Katana - OWIN implementations for Microsoft servers and frameworks



Owin pipeline



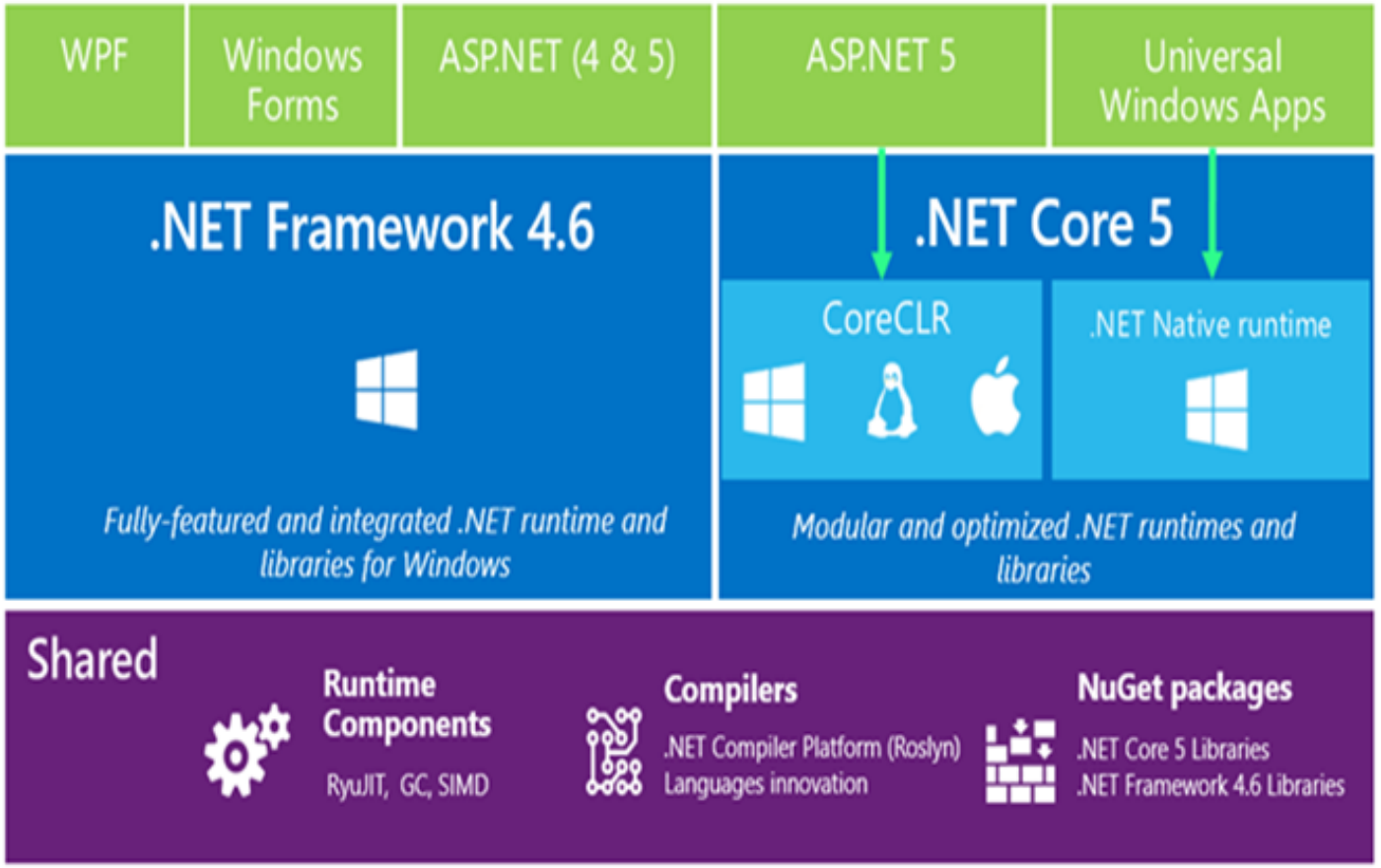
Owin resources

http://www.asp.net/aspnet/overview/owin-and-katana/getting-started-with-owin-and-katana
http://benfoster.io/blog/how-to-write-owin-middleware-in-5-different-steps

http://www.asp.net/mvc/videos/pluralsight-aspnet-mvc-5-fundamentals (video)

- "OWIN and katana" chapter

ASP.NET 5 (vNext)



http://www.asp.net/vnext

Claim

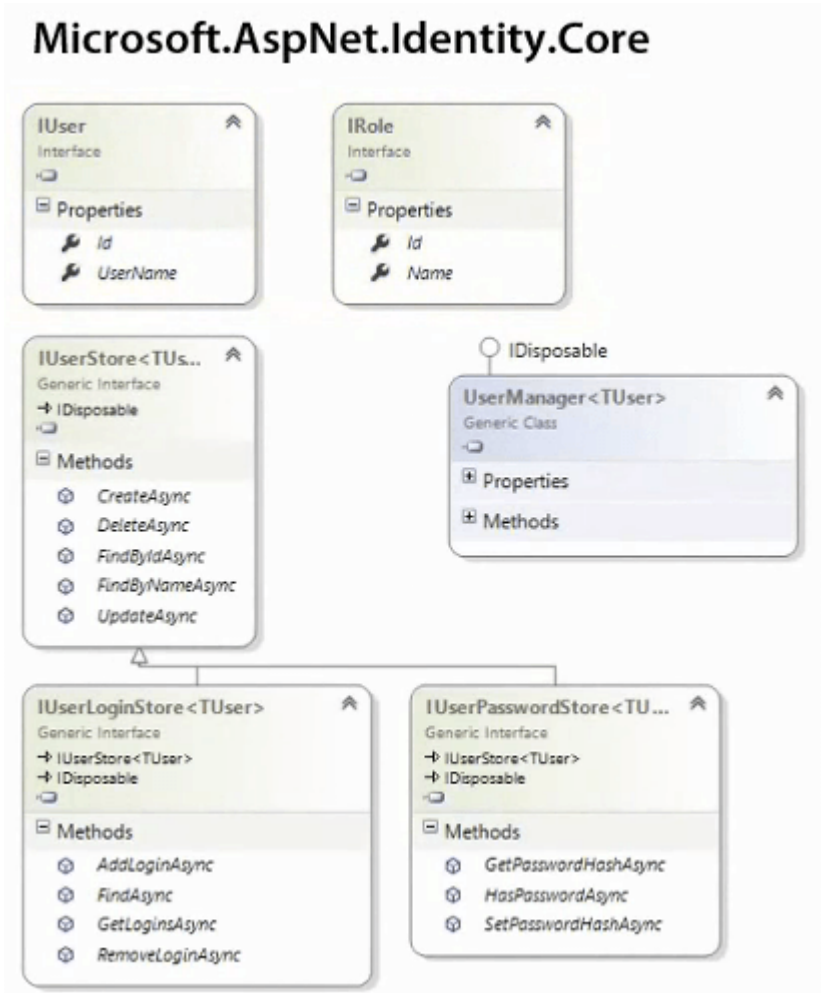
- A *claim* is a statement that one subject makes about itself or another subject.
- The statement can be about a name, identity, key, group, privilege, or capability,

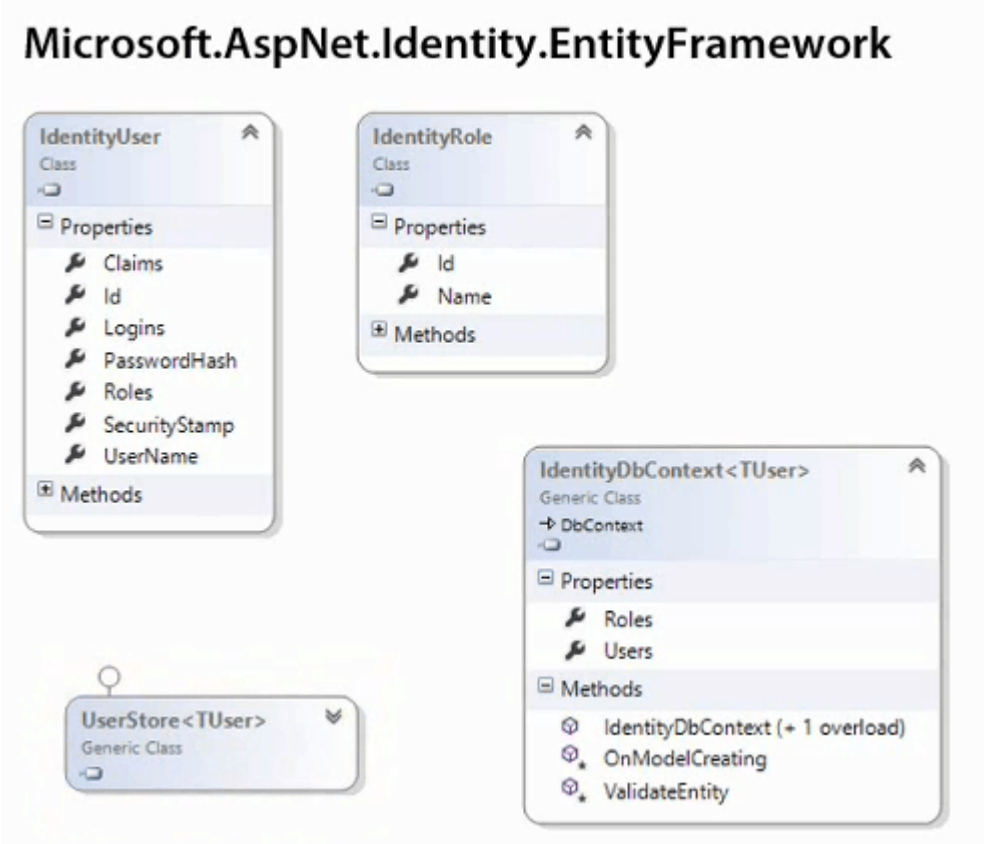
https://msdn.microsoft.com/en-us/library/ff359101.aspx
https://msdn.microsoft.com/en-us/library/system.identitymodel.claims.claimtypes(v=vs.110).aspx

- Pre-defined claim types:

Identity

- Microsoft.Owin.Security
  - Common types which are shared by the various authentication middleware components
  - IAuthenticationManager
    - Interacts with authentication middleware that have been chained in the pipeline.
    - HttpContext.GetOwinContext().Authentication
- Microsoft.Owin.Security.Cookies
  - Middleware that enables an application to use cookie based authentication, similar to ASP.NET's forms authentication.
- Microsoft.AspNet.Identity.Core
  - Core interfaces for ASP.NET Identity.
- Microsoft.AspNet.Identity.EntityFramework
  - ASP.NET Identity providers that use Entity Framework.
- Microsoft.AspNet.Identity.Owin
  - Owin extensions for ASP.NET Identity.


Microsoft.AspNet.Identity.Core
IUser
Interface
Properties
Id
UserName
IRole
Interface
Properties
Id
Name
IUserStore<TUs...
Generic Interface
IDisposable
Methods
CreateAsync
DeleteAsync
FindByIdAsync
FindByNameAsync
UpdateAsync
IDisposable
UserManager<TUser>
Generic Class
Properties
Methods
IUserLoginStore<TUser>
Generic Interface
IUserStore<TUser>
IDisposable
Methods
AddLoginAsync
FindAsync
GetLoginsAsync
RemoveLoginAsync
IUserPasswordStore<TU...
Generic Interface
IUserStore<TUser>
IDisposable
Methods
GetPasswordHashAsync
HasPasswordAsync
SetPasswordHashAsync


Microsoft.AspNet.Identity.EntityFramework
IdentityUser
Class
Properties
Claims
Id
Logins
PasswordHash
Roles
SecurityStamp
UserName
Methods
IdentityRole
Class
Properties
Id
Name
Methods
IdentityDbContext<TUser>
Generic Class
DbContext
Properties
Roles
Users
Methods
IdentityDbContext (+ 1 overload)
OnModelCreating
ValidateEntity
UserStore<TUser>
Generic Class

Identity class overview

Microsoft.AspNet.Identity.EntityFramework

- 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 (Microsoft.AspNet.Identity.Owin)
  - High level API to sign in users
  - Calls UserManager and IAuthenticationManager internally

Identity resources

https://channel9.msdn.com/Series/Customizing-ASPNET-Authentication-with-Identity (video)

- All videos except 05

http://www.asp.net/mvc/videos/pluralsight-aspnet-mvc-5-fundamentals (video)

- “Identity and Security” chapter

http://www.asp.net/identity

- Complete learning documentation