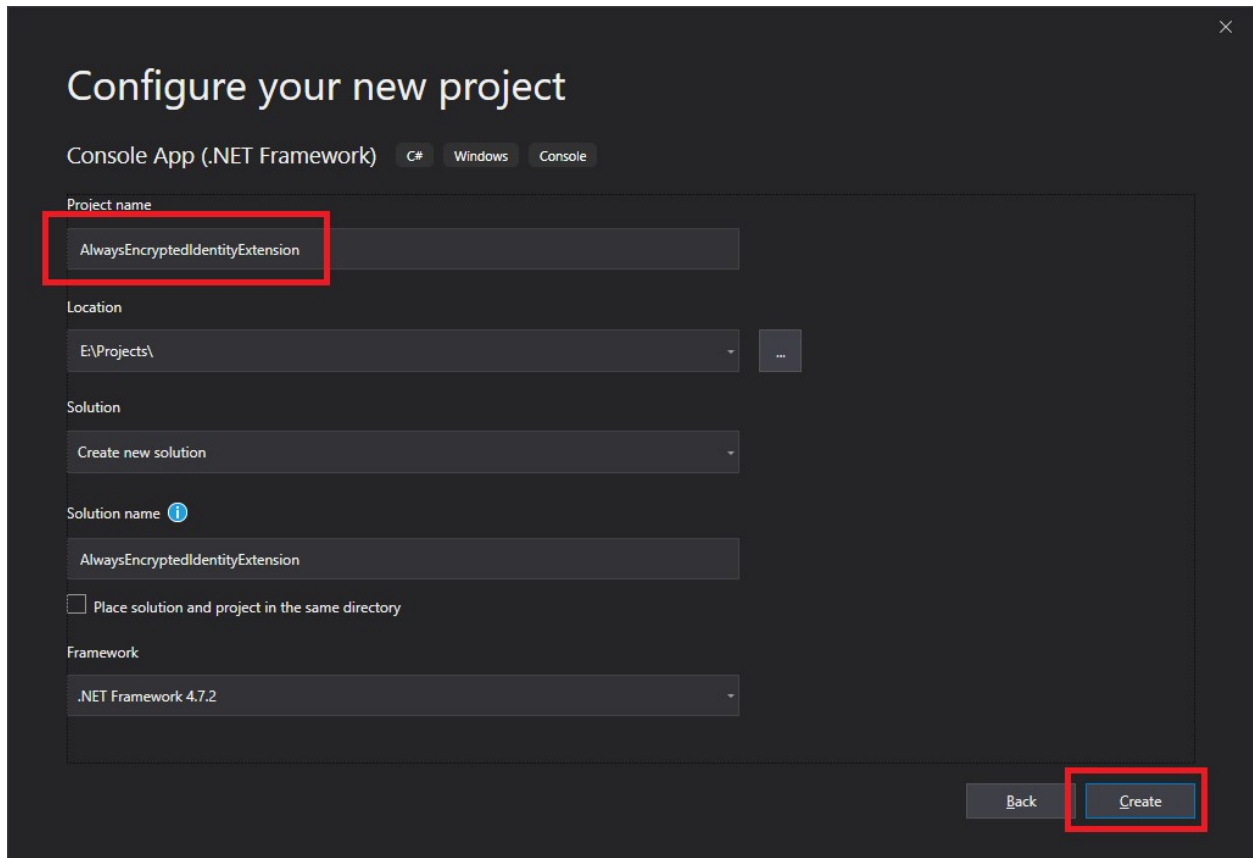


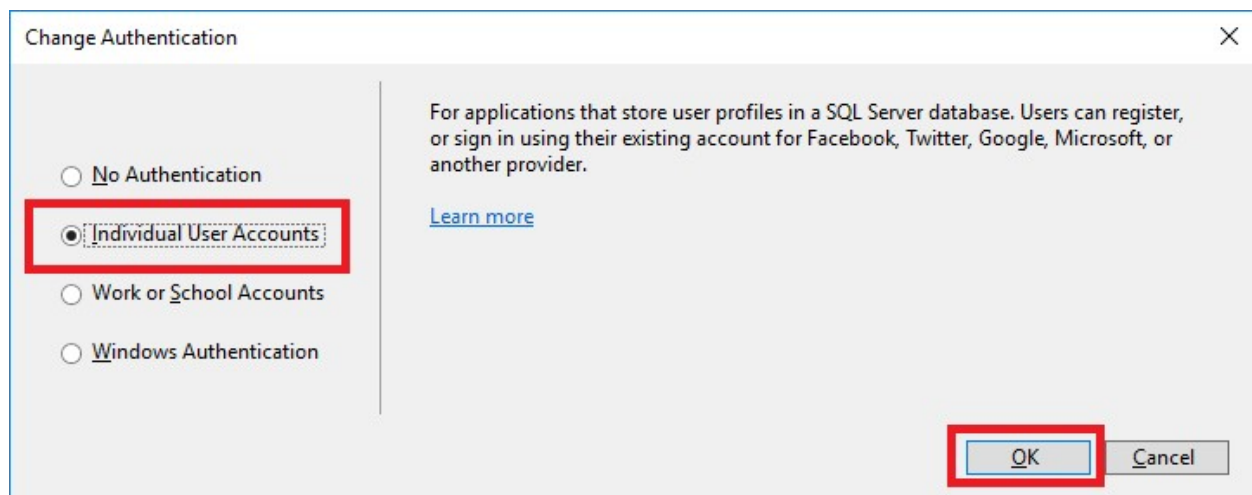
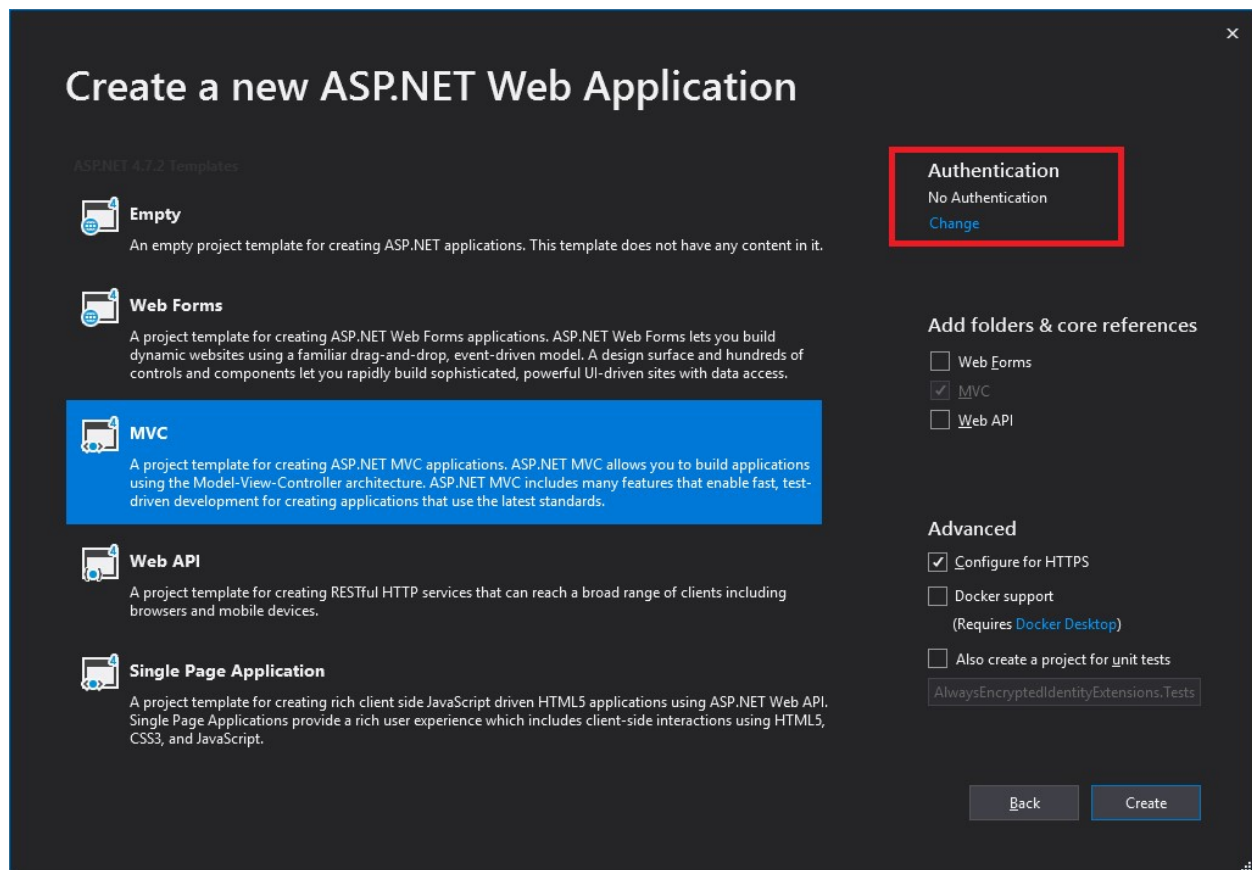
How To Use

From Visual Studio browse “File” > “New” > “Project...”
Give your project a desired name. In the example below I use
“AlwaysEncryptedIdentityExtension”.



The screenshot shows the 'Configure your new project' dialog box in Visual Studio. The title bar is dark gray with a close button (X) in the top right corner. The main title 'Configure your new project' is in white. Below the title, there are tabs for 'Console App (.NET Framework)', 'C#', 'Windows', and 'Console'. The 'Project name' field is highlighted with a red rectangle and contains the text 'AlwaysEncryptedIdentityExtension'. Below it, the 'Location' field shows 'E:\Projects\'. The 'Solution' field shows 'Create new solution'. The 'Solution name' field is highlighted with a red rectangle and contains the text 'AlwaysEncryptedIdentityExtension'. Below it, there is a checkbox labeled 'Place solution and project in the same directory'. The 'Framework' field shows '.NET Framework 4.7.2'. At the bottom right, there are two buttons: 'Back' and 'Create'. The 'Create' button is highlighted with a red rectangle.

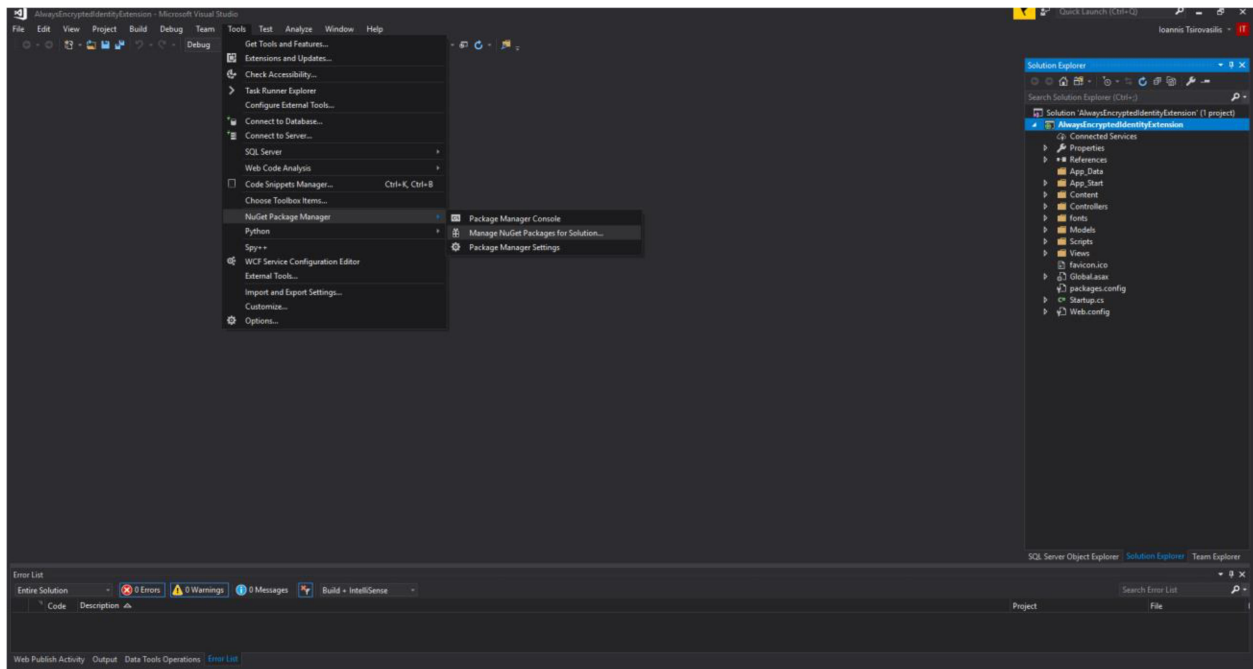
Select “MVC” template and “Change” authentication to “Individual User Accounts”



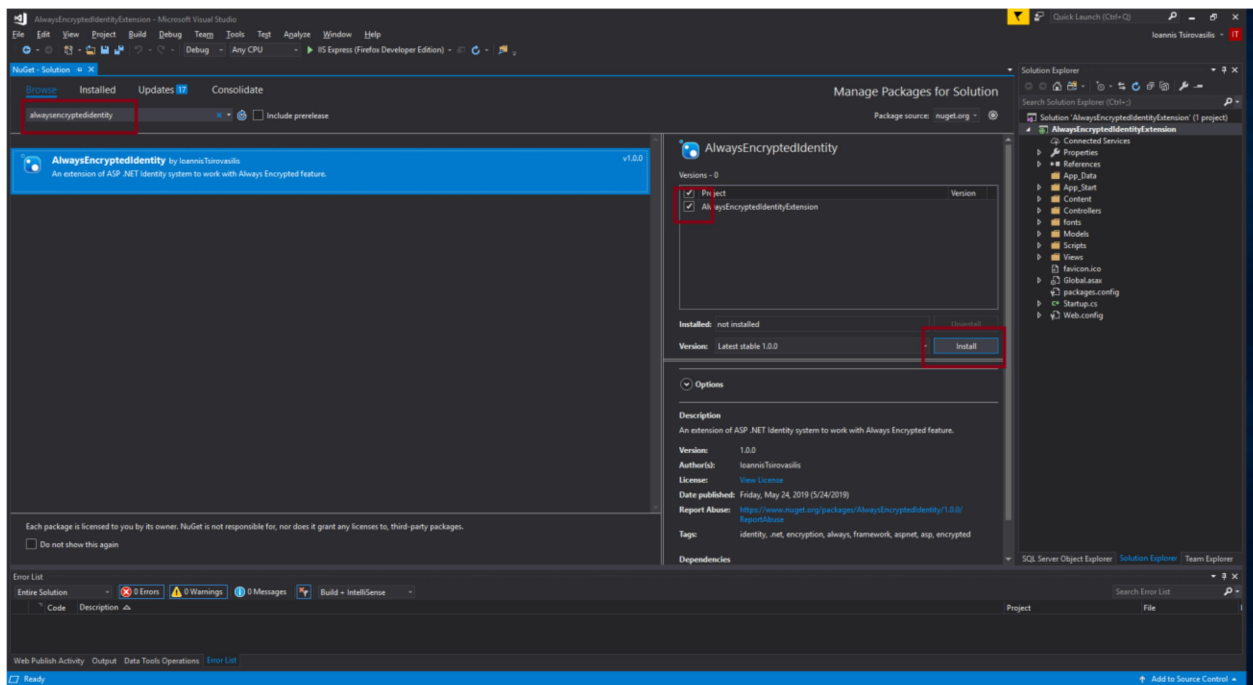
Click “OK” and “Create”.

Wait for the project to load...

Download the nuget by browsing “Tools” > “NuGet Package Manager” > “Manage NuGet Packages for Solution...”



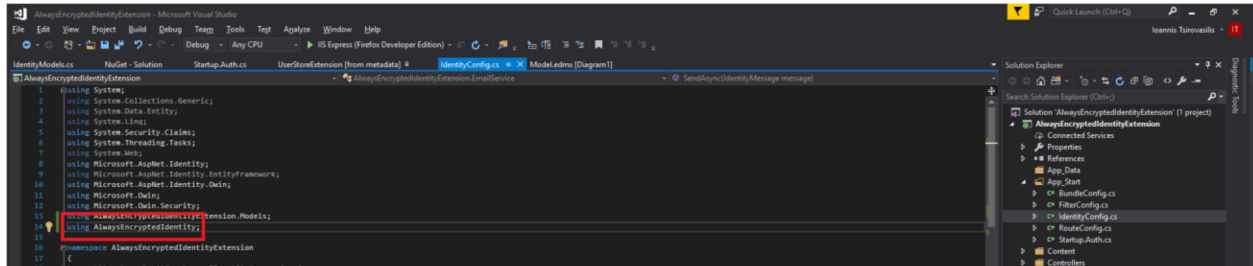
From “Browse” tab type “AlwaysEncryptedIdentity” and install the nuget.



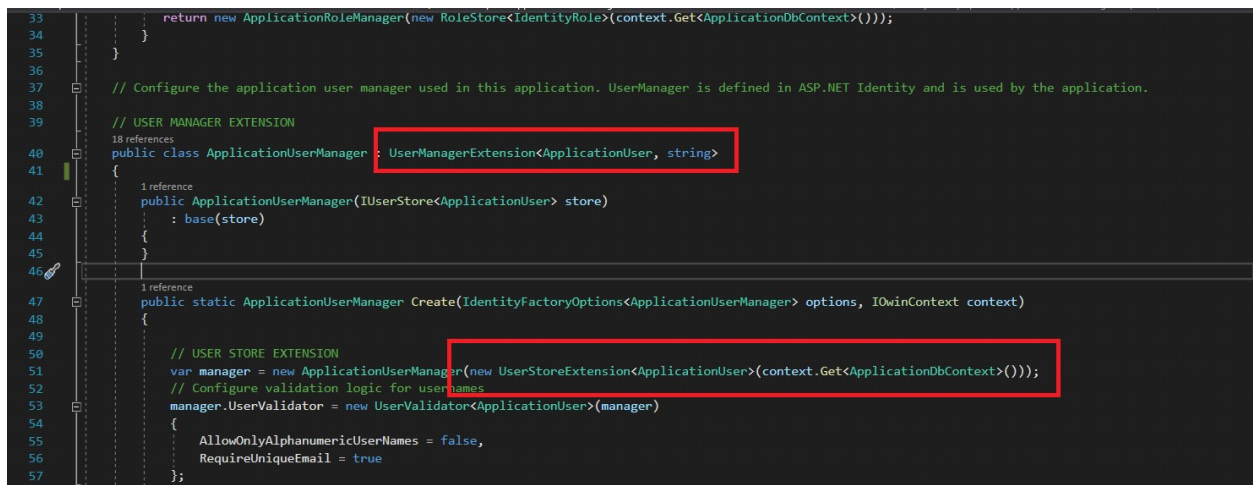
After installation completes there are a couple of necessary steps to be done in order for the nuget to work.

From “Solution Explorer”, browse “App_Start” folder and open “IdentityConfig.cs”.

Add “using AlwaysEncryptedIdentity”, at the top of the file



Move further down and change the following lines as depicted below:



Finally browse “Models” folder from “Solution Explorer”, open “IdentityModels.cs” and add/change the lines shown below:

```

12 // You can add profile data for the user by adding more properties to your ApplicationUser class, please visit https://go.microsoft.com/fwlink/?LinkID=311501
13 public class ApplicationUser : IdentityUser
14 {
15     [Column(TypeName = "nvarchar(MAX)")]
16     public new string PhoneNumber { get; set; }
17
18     public async Task<ClaimsIdentity> GenerateUserIdentityAsync(UserManagerExtension<ApplicationUser> manager)
19     {
20         // Note the authenticationType must match the one defined in CookieAuthenticationOptions.AuthenticationType
21         var userIdentity = await manager.CreateIdentityAsync(this, DefaultAuthenticationTypes.ApplicationCookie);
22         // Add custom user claims here
23         return userIdentity;
24     }
25 }
26
27
28 public class ApplicationDbContext : IdentityDbContext<ApplicationUser>
29 {
30     public ApplicationDbContext()
31     {
32         : base("DefaultConnection", throwIfV1Schema: false)
33     }
34 }

```

Including the PhoneNumber property is necessary otherwise the app will throw an exception of type “Operand type clash: nvarchar(MAX) is incompatible...”.

The application is ready to support Always Encrypted feature.