

Activating AspCoreGen 3.0 Razor Pro Plus

Note: You need internet connection to activate AspCoreGen 3.0 Razor. You can install one (1) license of AspCoreGen 3.0 Razor for up to 2 computers you own or use for work. You need one (1) license per developer and the license cannot be shared with other developers.

The first time you open AspCoreGen 3.0 Razor Professional Plus edition you will be presented with an activation form right after the Splash screen as shown in Figure 1. You will not be shown the activation form when using the Express edition.

Figure 1 Activation Form

Enter the *Serial Number* (1) and *Activation Code* (2) we provided you in the respective text boxes. The *Serial Number* and *Activation Code* contains dashes "-", make sure to include these dashes when entering them. Then click the *Get Confirm Code* button to get the *Confirm Code*. See Figure 2.

Figure 2

Click the *Get Confirm Code (3)* button next. An error will pop up when you enter an invalid *Serial Number* or *Activation Code*. See Figure 3.

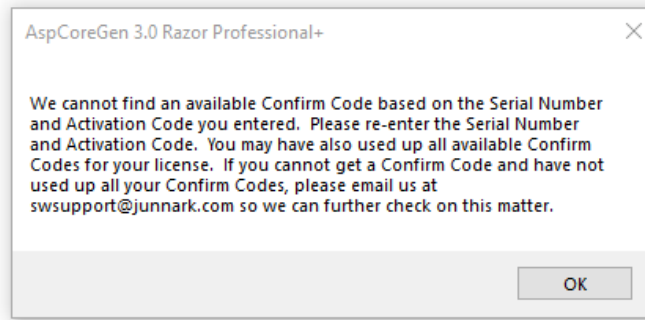


Figure 3 Invalid Serial Number or Activation Code

When this happens, click *OK* to close this message. Re-enter the correct *Serial Number* and *Activation Code* and then click the *Get Confirm Code* button. The *Confirm Code* will be sent via email to the original purchaser's email address we have on file. When the *Confirm Code* is sent, a pop up message will show as seen in Figure 4. Click the *OK* button.

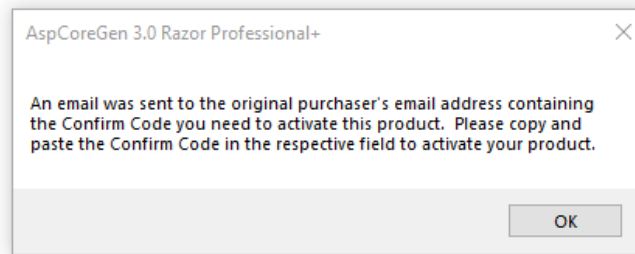


Figure 4 Confirm Code Sent

Enter the *Confirm Code (4)* you received from your email in the respective box and then click the *Activate* button. See Figure 5.

A screenshot of the "AspCoreGen 3.0 Razor Professional+ Activation" window. It contains the following fields and buttons:

- Serial Number: 1 [ME90-1LD0-DMLED] ?
- Activation Code: 2 [3M90-3L67-77] ?
- 3 [Get Confirm Code] ?
- Confirm Code: 4 [35PG347777] ?
- 5 [Activate] [Exit]

At the bottom, there is instructional text: "To activate, please enter the following information in order: Enter the (1) Serial Number, then the (2) Activation Code. Click the (3) Get Code button next. An email will be sent to the Email Address you used when you purchased our product. Enter the (4) Confirm Code you received in your email. Lastly, click the (5) Activate button."

Figure 5 Enter Confirm Code

If you enter an invalid *Serial Number*, *Activation Code*, or *Confirm Code* a warning pops up. When this happens, click the *Ok* button (See Figure 6), then re-enter the *Serial Number*, *Activation Code*, and *Confirm Code* Again.

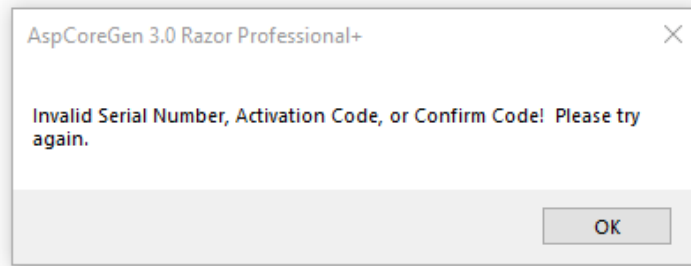


Figure 6 Invalid Serial Number, Activation Code, or Confirm Code

If you enter a valid *Serial Number*, *Activation Code* and *Confirm Code*, you will be presented with the main window of the application, see Figure 7. You will only see the Activation Form once. After that, you will always go straight to the main window.

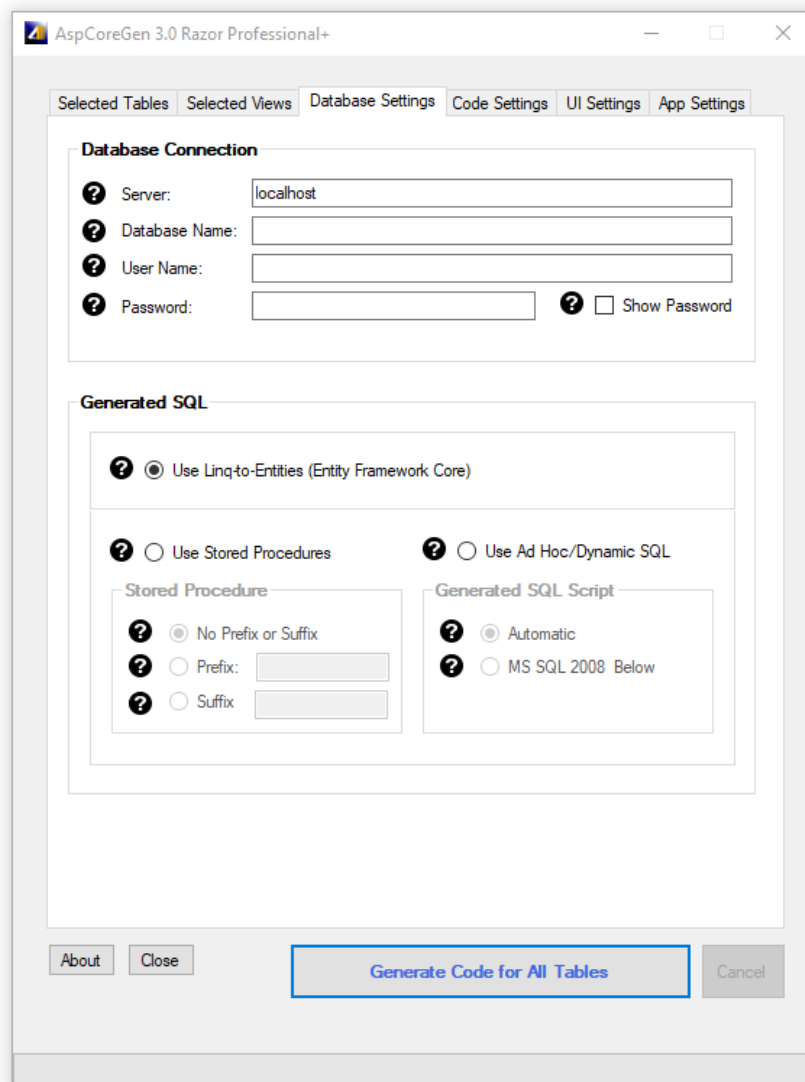


Figure 7 Main Window

A Simple Interface

To keep AspCoreGen 3.0 Razor simple, there's only one main interface as shown in Figure 7. The main window consists of six (6) tabs.

1. **Selected Tables:** AspCoreGen 3.0 Razor generates code from all the tables in your database by default. You can choose to generate from selected tables only from the Code Settings tab, and then select just the tables you need to generate from on this tab.
2. **Selected Views:** You can choose to generate from selected views only from the Code Settings tab, and then select just the views you need to generate from on this tab.
3. **Database Settings:** This is where you enter the database you want to generate code from and whether you want to generate linq-to-entities (entity framework core), stored procedures, or Ad-Hoc (dynamic) SQL. This is probably going to be your most used tab.
4. **Code Settings:** You'll find a selection here on where to generate your objects from: all tables, all views, selected tables, or selected views. The language the generated code will be in is C#.

Three projects can be generated and are shown in this tab in 3 separate boxes:

- a. Web Application (ASP.NET Core 3.1 Project).
- b. Business Layer and Data Layer API (Core 3.1 Class Library Project).
- c. Web API (ASP.NET Core 3.1 Web API Project). This is optional.

You can enter the Name of each project and the directory for the Web Application. Directories for the Business Layer and Data Layer API and Web API projects are filled automatically. You can choose to Generate Code Examples, and also a Web API project.

5. **UI Settings:** You can customize your own settings for the generated ASP.NET Razor Pages here. You can choose themes for the JQuery UI controls. You can also select which Razor Pages to generate and the Razor Page's filename prefix to use for each Razor Page.
6. **App Settings:** These are application settings. You can see a list of files that are overwritten every time you generate code for the same web project. You can also see a list of files that are only written once every time you generate code for the same web project. These (overwritten and written-once) files are listed per project (web project, class library project, web api project).

You can also reset all settings to its original default from here.

That seems like a lot of features, you're probably asking ***"where's the One Click feature?"***

Since AspCoreGen 3.0 Razor remembers the last settings you used such as, e.g. server, database name, directory, namespace, etc., the next time you open AspCoreGen 3.0 Razor, and you are developing for the same web project, you can just click the *Generate... button*, that simple.

A Quick Tour

Let's learn how to generate an ASP.NET Core Web Application, a Class Library (our middle tier and data tier), the optional ASP.NET Core Web API project using AspCoreGen 3.0 Razor. **We're going to use Microsoft's Northwind database for this demo. Please Google and download it.** Or you can use your own database; just follow the steps shown below.

1. Open the AspCoreGen 3.0 Razor app.
2. Click the "Generate Code for All Tables" button at the bottom of the app. Notice an error message box pops up showing the required fields to fill. See Figure 8.

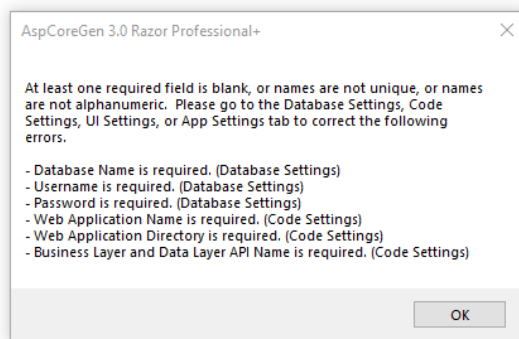


Figure 8 Error Message

2. Click the *OK* button to close the pop up message. Go to the *Database Settings* tab and start filling the required fields. Do the same in the *Code Settings* tab. See Figures 9 and 10.
 - a. **Database Connection:** This is the MS SQL Server Database connection settings to the database. All of these items are required and cannot be blank.
 - **Server:** Server Name. If the MS SQL Server Database is local, you can just enter "localhost".
 - **Database Name:** The database you're trying to access.
 - **User Name:** An admin user name login that has access to the database.
 - **Password:** The password associated with the user name.

Note: Checking the *Show Password* in Figure 9 will remember the password you enter here so you don't have to enter it again the next time you open AspCoreGen 3.0 Razor.
 - b. **Generated SQL:** SQL script that will be generated.
 - **Use Linq-to-entities (Entity Framework Core):** Entity Framework.
 - **Use Stored Procedures:** Scripts generated straight in your MS SQL database.
 - o **No Prefix or Suffix:** Names the generated script with no prefix or suffix. E.g. *Products_SelectAll*.
 - o **Prefix:** Names the generated script with a prefix. For example, when you enter "sp_" on the Prefix text box, the generated stored procs will start with an "sp_". E.g. *sp_Products_SelectAll*.
 - o **Suffix:** Names the generated script with a suffix. For example, when you enter "_sp" on the Suffix text box, the generated stored procs will end with an "_sp". E.g. *Products_SelectAll_sp*.
 - **Use Ad-Hoc/Dynamic SQL:** Scripts generated in your C# code.
 - o **Automatic:** Automatically determines your MS SQL Server version before generating scripts.
 - o **MS SQL 2008 Below:** Generates scripts for MS SQL Server versions 2008 and below. There's a slight difference with the generated script for older versions because some keywords are not available during this time.

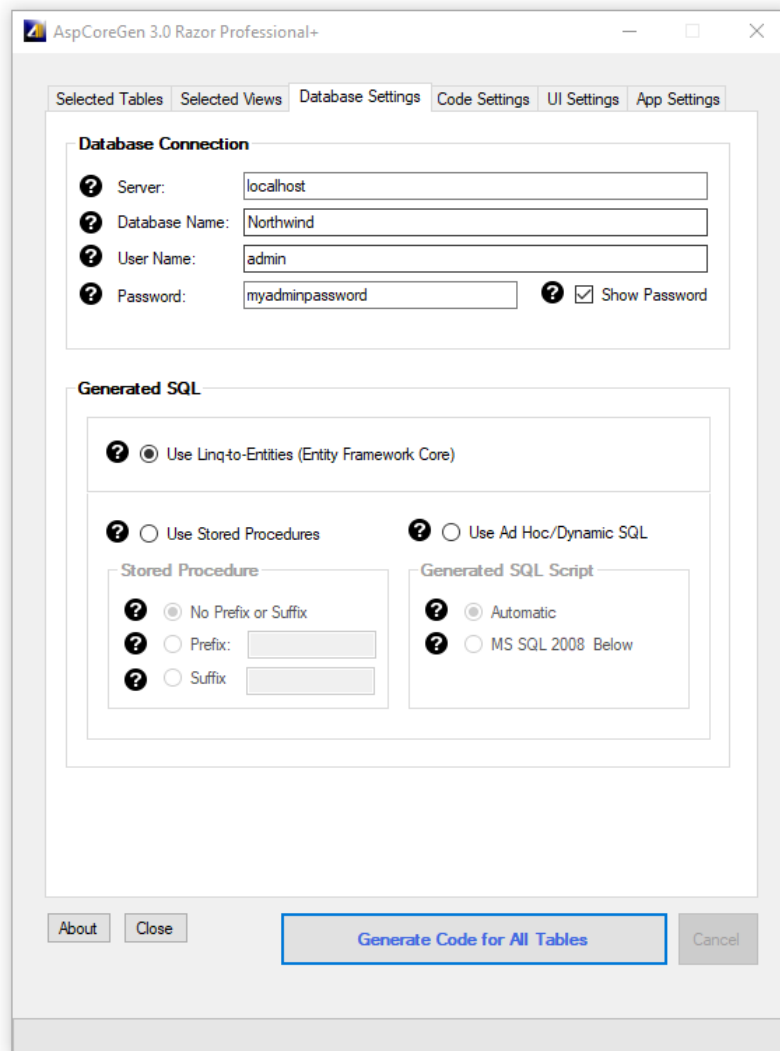


Figure 9 Database Settings Tab

- a. **Database Object to Generate From:** Generates code from the Database Name you entered on the *Database Settings* tab.
 - **All Tables:** Generates code for all the database tables.
 - **All Views:** Generates code for all the database views. Not available for EF Core.
 - **Selected Tables Only:** Generates code for selected database tables. Clicking this will open the *Selected Tables* tab. You can load all the tables from your database here and select (check) the tables you want to generate code from.
 - **Selected Views Only:** Generates code for selected database views. Clicking this will open the *Selected Views* tab. You can load all the views from your database here and select (check) the views you want to generate code from. Not available for EF Core.

- b. **Web Application:** There are 3 projects that can be generated by AspCoreGen 3.0 Razor. The web project is the user interface (front end). It houses the Razor Pages, javascript, css files, etc.
 - **Name:** Web application name.
 - **Directory:** Directory where the web app will be generated.
 - **Generate Code Examples:** Generates code examples placed in the web app.
 - **Dev Server Port:** The port number used when you run your web app while developing locally using Visual Studio. The web app will open up in a browser and at the address bar you'll see something like this: `http://localhost:27229/index`. 27229 here is the dev server port.

- c. **Business Layer and Data Layer API:** A class library project. This houses middle-tier (business object) and data-tier (data layer) classes. These classes can be reusable in your other application. Middle-tier classes are referenced by the web app in CRUD operations by default unless the web API project is generated.
- **Name:** Class library application name.
 - **Directory:** Directory where the class library app will be generated.
- d. **Web API:** A web API project. This project is optional.
- **Use Web API:** When checked, a web API project is generated and referenced by the front end (web application) in CRUD operations instead of the middle-tier.
 - **Name:** Web API application name.
 - **Directory:** Directory where the web API app will be generated.

The screenshot shows the 'Code Settings' tab of the 'AspCoreGen 3.0 Razor Professional+' application. The window has a title bar with the application name and standard Windows window controls. Below the title bar is a tabbed interface with 'Selected Tables', 'Selected Views', 'Database Settings', 'Code Settings' (active), 'UI Settings', and 'App Settings'. The 'Code Settings' tab contains four sections: 1. 'Database Objects to Generate From' with four radio button options: 'All Tables' (selected), 'All Views', 'Selected Tables Only', and 'Selected Views Only'. Each option has a help icon. 2. 'Web Application' with fields for 'Name' (RazorEfApp), 'Directory' (C:\inetpub\wwwroot\), and a 'browse...' button. It also has a checked 'Generate Code Examples' checkbox and a 'Dev Server Port' field (27229). 3. 'Business Layer and Data Layer API' with fields for 'Name' (RazorEfAppAPI) and 'Directory' (C:\inetpub\wwwroot\RazorEfApp\RazorEfAppAPI). 4. 'Web API' with a checked 'Use Web API' checkbox, and fields for 'Name' (RazorEfAppWebAPI) and 'Directory' (C:\inetpub\wwwroot\RazorEfApp\RazorEfAppWebAPI). At the bottom of the window are buttons for 'About', 'Close', 'Generate Code for All Tables' (highlighted in blue), and 'Cancel'.

Figure 10 Code Settings Tab

- Simply hover over any of the *Question Mark* images if you need information from the respective fields.
- Click the “*Generate Code for All Tables*” button. AspCoreGen 3.0 Razor will start generating code. See Figure 11.

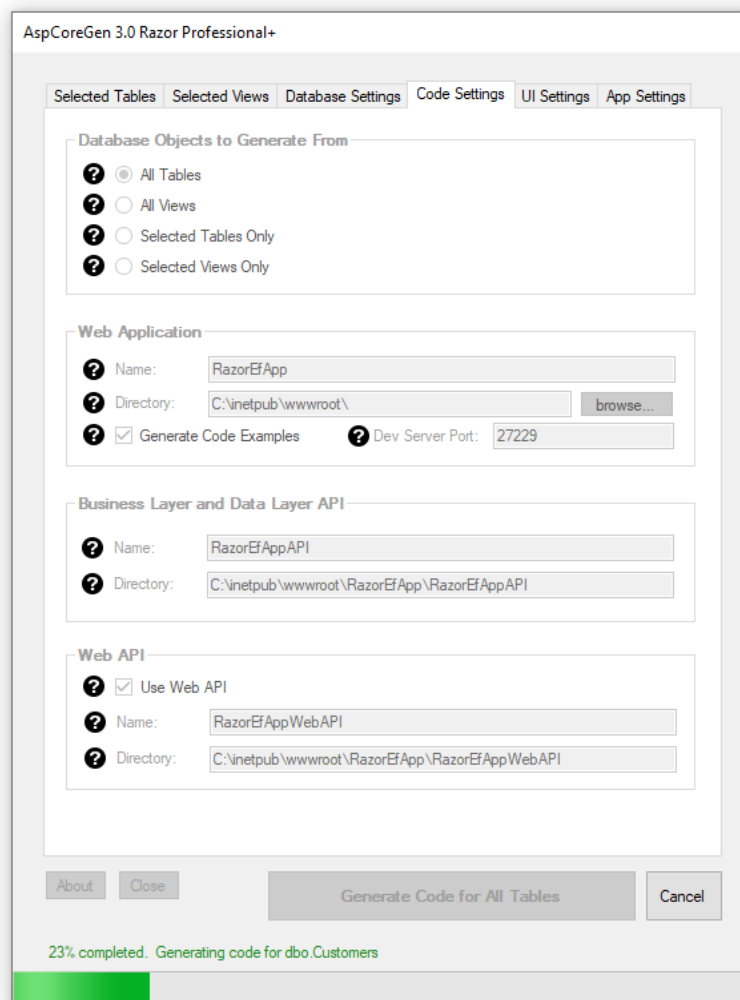


Figure 11 Generating Code

- Wait for a few seconds. When AspCoreGen 3.0 Razor is done generating objects, a message pops up. See Figure 12.

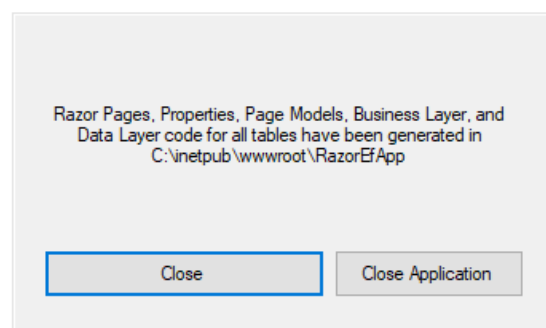


Figure 12 Done Generating Objects

- Click the *Close Application* button to close the message box and exit the application.

7. To view the generated Web Application simply go to the directory you specified from the *Code Settings* tab of ASP.NET Core 3.0 Razor. You will see three folders and a solution file like the one shown in Figure 13.

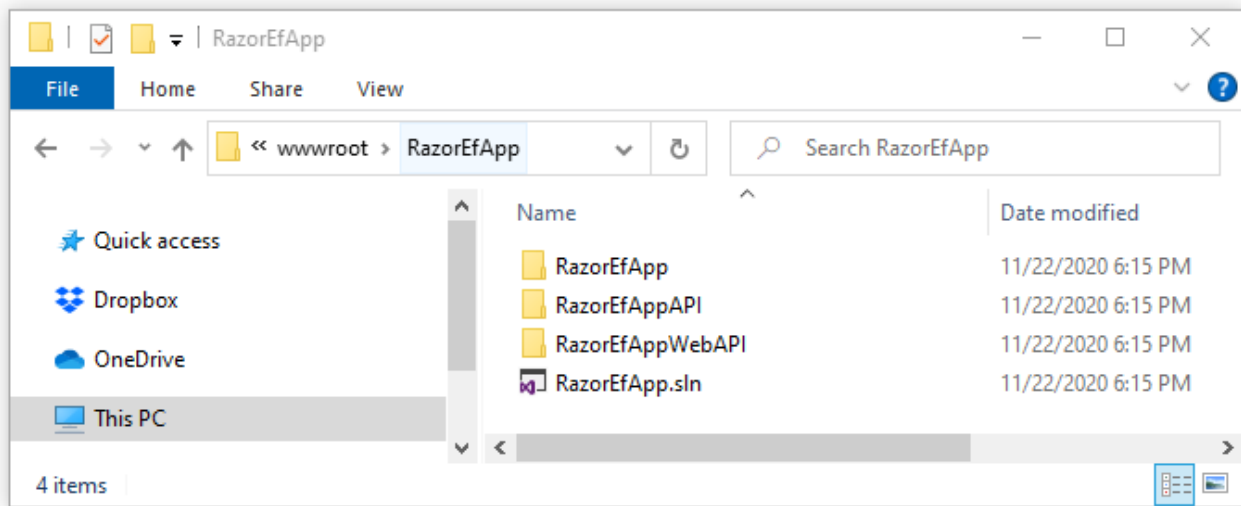


Figure 13 Generated Web Application

8. *Double-Click* the solution file (*RazorEfApp.sln*). A *User Account Control* dialog may appear. Click *Yes* to open the project Visual Studio. See Figure 14.



Figure 14 Elevated Permissions Dialog

9. The generated *Web Application* will now be opened/loaded into Visual Studio 2019. See Figure 15.

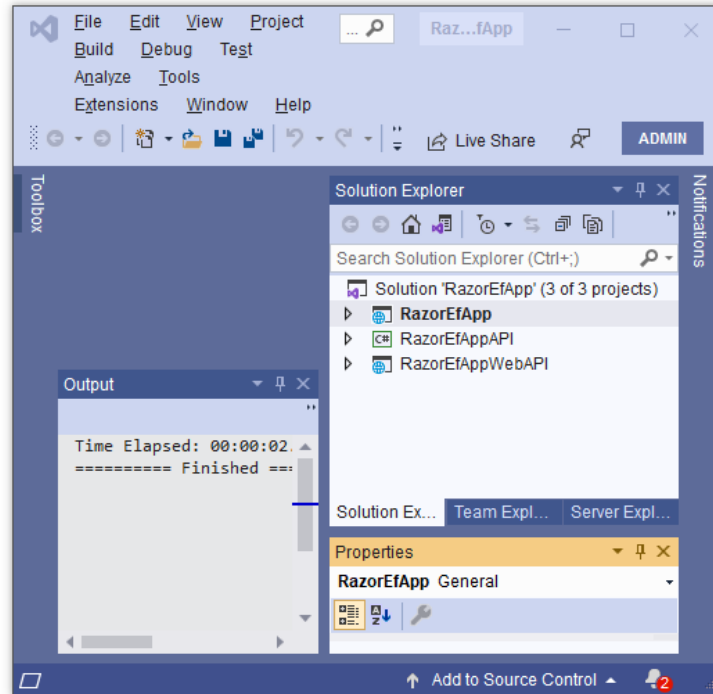


Figure 15 Generated Web Application in Visual Studio

10. Run the solution by pressing *F5*. You will see a list of all the generated ASP.NET Core Razor Pages in the *Home Page*. See Figure 16. You can click any link to preview the functionality of each of the generated Razor Page. However, we're not going to discuss this in this tutorial.

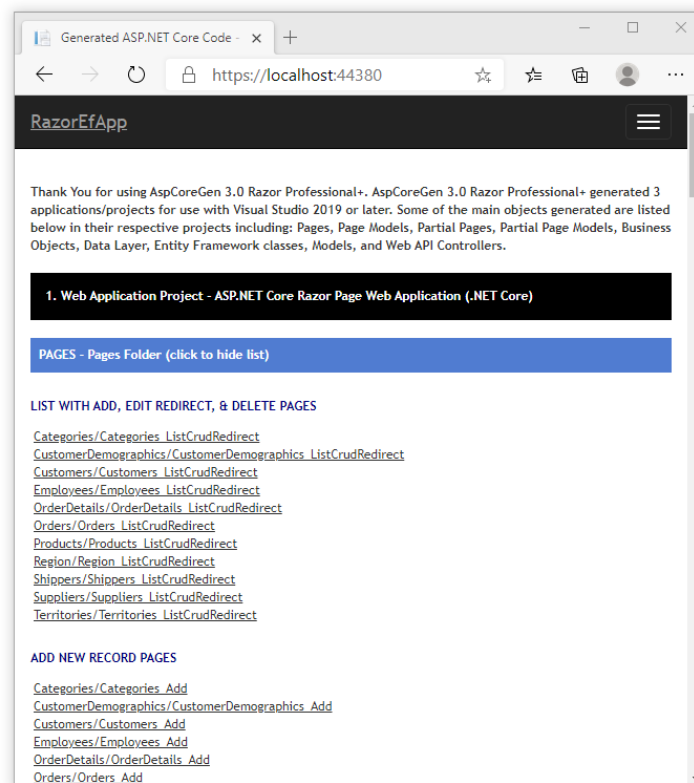


Figure 16 List of Generated Razor Pages

11. When you click any of the links you will be redirected to that specific page. Play around to see the functionality of each web page. See Figure 17, this is an example of one of the pages.

Figure 17 shows a screenshot of a web browser displaying the 'List of Products' page. The browser's address bar shows the URL 'https://localhost:44380/Products/Products_ListCrudRedirect'. The page has a black header with the text 'RazorEfApp'. Below the header, there is a link 'Add New Products'. The main content is a table titled 'List of Products' with columns: Product ID, Product Name, Supplier ID, Category ID, Quantity Per Unit, Unit Price, Units In Stock, Units On Order, Reorder Level, and Discontinued. The table contains 10 rows of product data. Each row has a 'Discontinued' checkbox and two icons (a pencil and a trash can) for editing and deleting the product. The page footer shows '© 2020 - RazorEfApp'.

Product ID	Product Name	Supplier ID	Category ID	Quantity Per Unit	Unit Price	Units In Stock	Units On Order	Reorder Level	Discontinued
1	Chai	1	1	10 boxes x 20 bags	\$18.00	39	0	10	<input type="checkbox"/>
2	Chang	1	1	24 - 12 oz bottles	\$19.00	17	40	25	<input type="checkbox"/>
3	Aniseed Syrup	1	2	12 - 550 ml bottles	\$10.00	13	70	25	<input type="checkbox"/>
4	Chef Anton's Cajun S	2	2	48 - 6 oz jars	\$22.00	53	0	0	<input type="checkbox"/>
5	Chef Anton's Gumbo	2	2	36 boxes	\$21.35	0	0	0	<input checked="" type="checkbox"/>
6	Grandma's Boysenbe	3	2	12 - 8 oz jars	\$25.00	120	0	25	<input type="checkbox"/>
7	Uncle Bob's Organic	3	7	12 - 1 lb pkgs.	\$30.00	15	0	10	<input type="checkbox"/>
8	Northwoods Cranber	3	2	12 - 12 oz jars	\$40.00	6	0	0	<input type="checkbox"/>
9	Mishi Kobe Niku	4	6	18 - 500 g pkgs.	\$97.00	29	0	0	<input checked="" type="checkbox"/>
10	Ikura	4	8	12 - 200 ml jars	\$31.00	31	0	0	<input type="checkbox"/>

Figure 17 Example Page – Products/ListCrudRedirect

12. From the *Home Page*, Each black bar is the specific Project generated by ASP.NET Core 3.0 Razor. Each black bar contains blue bars. Each blue bar on this page is clickable. Each blue bar is a section of the generated project. When clicked, each blue bar toggles which would either show or hide the list beneath them. See Figure 18.

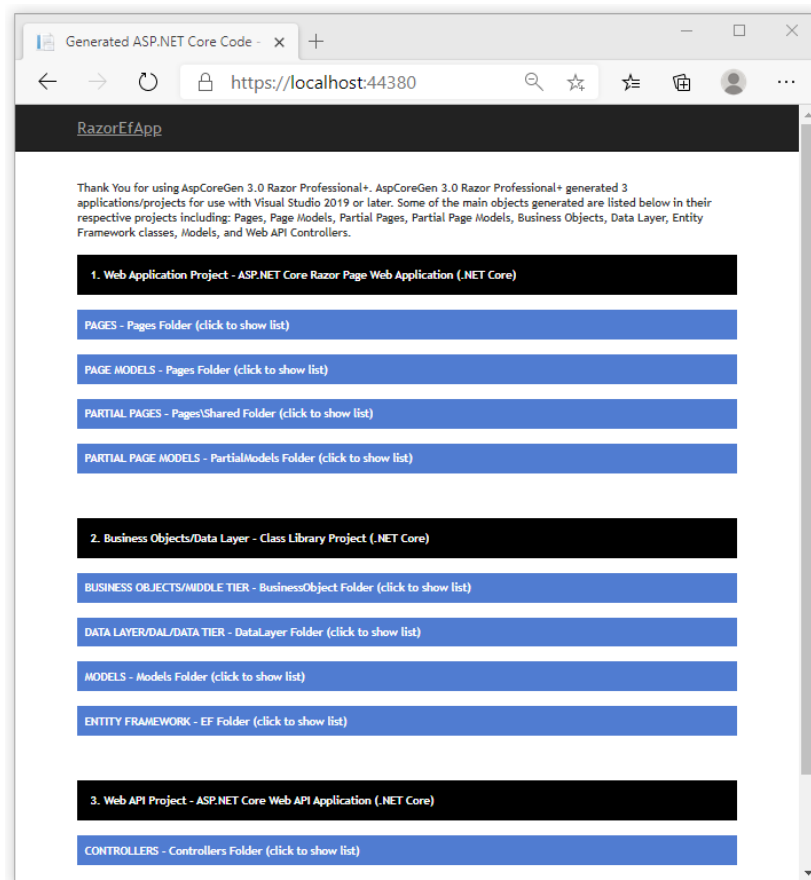


Figure 18 Three Generated Projects

13. Close the web page and go back to Visual Studio 2019. Expand each one of the projects in the *Solution Explorer*. The generated code's layout separated in 3 projects can be seen in Figure 19.

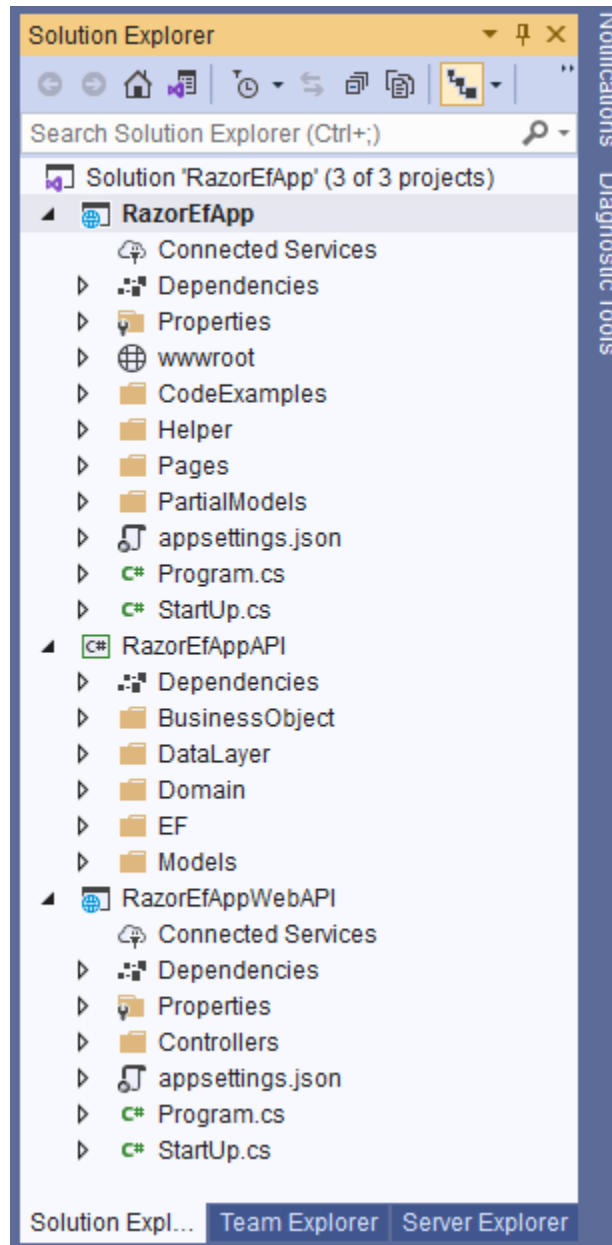


Figure 19 Three Projects Generated By AspCoreGen 3.0 Razor in Visual Studio 2019

This tutorial offers a quick look in using AspCoreGen 3.0 Razor. You can read end-to-end tutorials on more subjects on using AspCoreGen 3.0 Razor Professional Plus that came with your purchase. These tutorials are available to customers and are included in a link on your invoice when you purchase AspCoreGen 3.0 Razor Professional.

Note: Some features shown here are not available in the Express Edition.

End of tutorial.