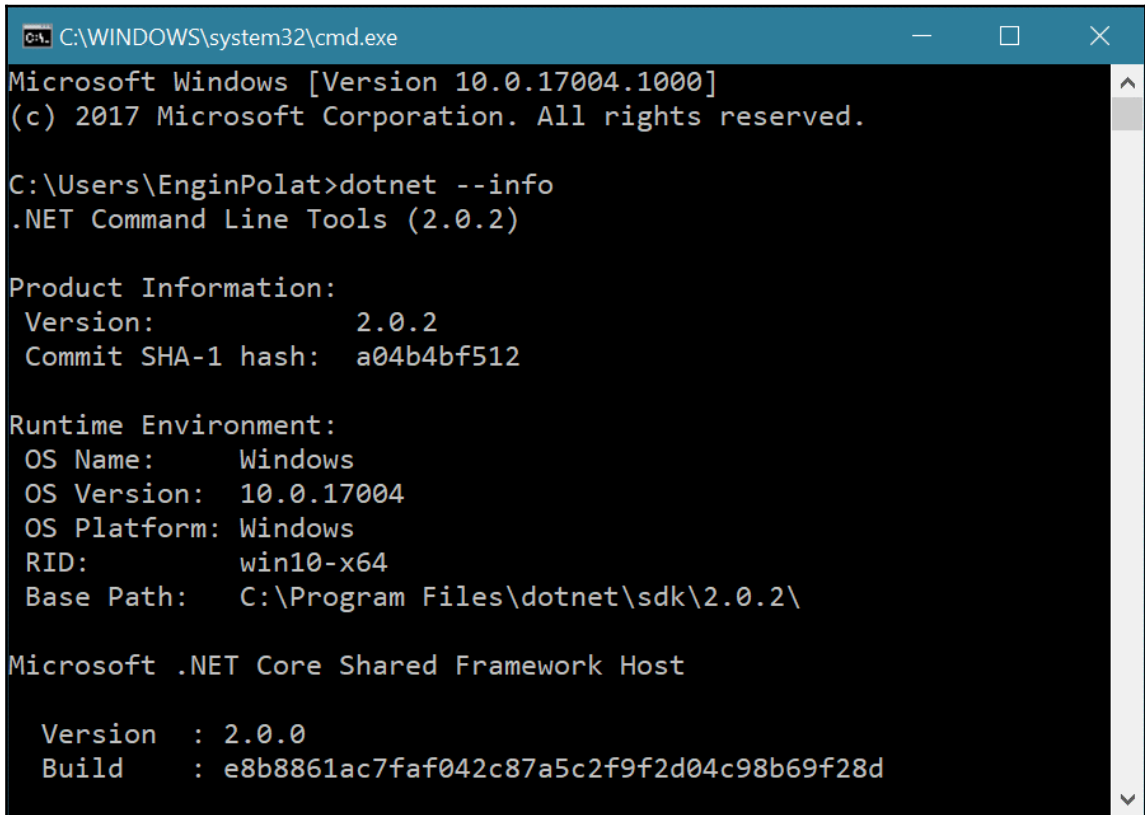


# Chapter 1: Cross-Platform with .NET Core



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.17004.1000]
(c) 2017 Microsoft Corporation. All rights reserved.

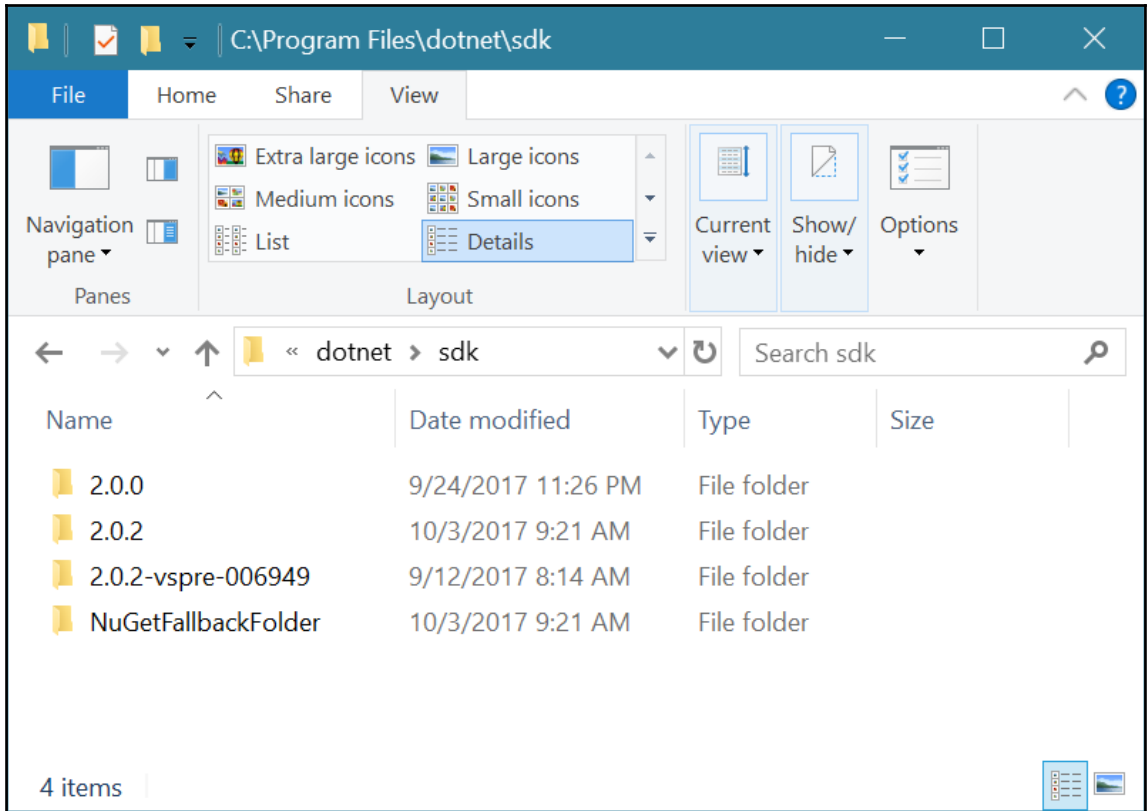
C:\Users\EnginPolat>dotnet --info
.NET Command Line Tools (2.0.2)

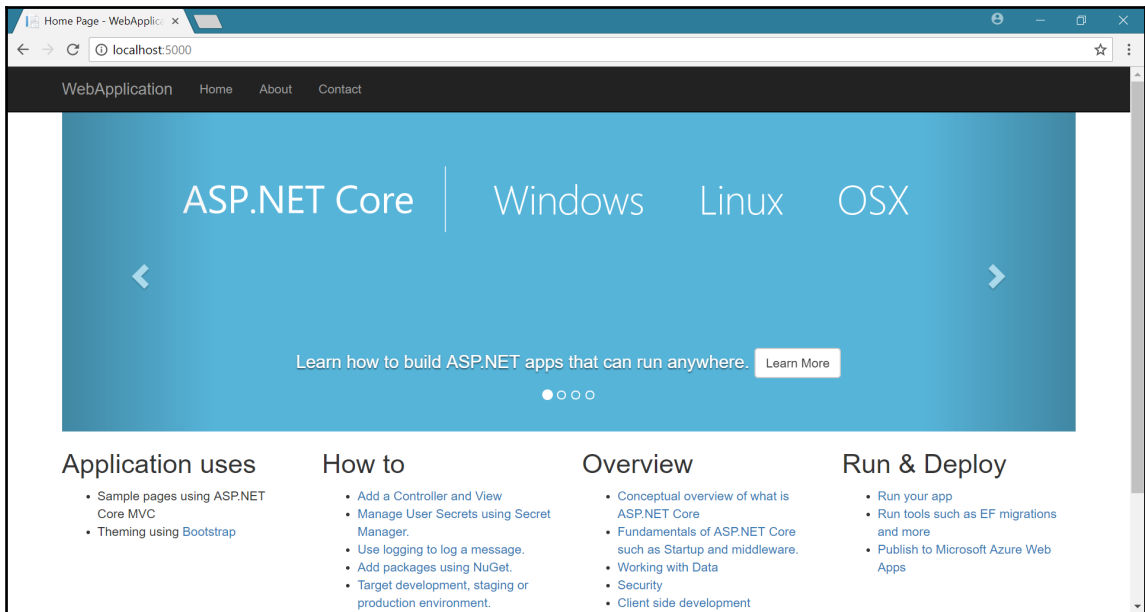
Product Information:
  Version:           2.0.2
  Commit SHA-1 hash: a04b4bf512

Runtime Environment:
  OS Name:           Windows
  OS Version:        10.0.17004
  OS Platform:       Windows
  RID:               win10-x64
  Base Path:         C:\Program Files\dotnet\sdk\2.0.2\

Microsoft .NET Core Shared Framework Host

  Version : 2.0.0
  Build   : e8b8861ac7faf042c87a5c2f9f2d04c98b69f28d
```





```
MacBook-ProdeThom:~ test$ ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
==> This script will install:
/usr/local/bin/brew
/usr/local/Library/...
/usr/local/share/man/man1/brew.1
==> The following directories will be made group writable:
/usr/local/.
==> The following directories will have their owner set to test:
/usr/local/.
==> The following directories will have their group set to admin:
/usr/local/.

Press RETURN to continue or any other key to abort
==> /usr/bin/sudo /bin/chmod g+rxw /usr/Local/.

WARNING: Improper use of the sudo command could lead to data loss
or the deletion of important system files. Please double-check your
typing when using sudo. Type "man sudo" for more information.

To proceed, enter your password, or type Ctrl-C to abort.

Password:
==> /usr/bin/sudo /usr/sbin/chown test /usr/local/.
==> /usr/bin/sudo /usr/bin/chgrp admin /usr/local/.
==> /usr/bin/sudo /bin/mkdir /Library/Caches/Homebrew
==> /usr/bin/sudo /bin/chmod g+rxw /Library/Caches/Homebrew
==> /usr/bin/sudo /usr/sbin/chown test /Library/Caches/Homebrew
==> Downloading and installing Homebrew...
remote: Counting objects: 3916, done.
remote: Compressing objects: 100% (3760/3760), done.
remote: Total 3916 (delta 30), reused 2263 (delta 19), pack-reused 0
Receiving objects: 100% (3916/3916), 3.40 MiB | 1.28 MiB/s, done.
Resolving deltas: 100% (30/30), done.
From https://github.com/Homebrew/homebrew
 * [new branch]      master    -> origin/master
Checking out files: 100% (3918/3918), done.
HEAD is now at 1cc74a1 cassandra: update 3.0.2 bottle.
==> Installation successful!
==> Next steps
Run `brew help` to get started
MacBook-ProdeThom:~ test$ brew tap aspnet/dnx
==> Tapping aspnet/dnx
Cloning into '/usr/local/Library/Taps/aspnet/homebrew-dnx'...
remote: Counting objects: 7, done.
remote: Compressing objects: 100% (7/7), done.
remote: Total 7 (delta 1), reused 2 (delta 0), pack-reused 0
Unpacking objects: 100% (7/7), done.
Checking connectivity... done.
Tapped 2 formulae (33 files, 136K)
MacBook-ProdeThom:~ test$ brew update
Already up-to-date.
```



```
MacBook-ProdeThom:~ test$ source dnvm.sh
MacBook-ProdeThom:~ test$ dnvm upgrade
Determining latest version
Latest version is 1.0.0-rc1-update1
Downloading dnx-mono.1.0.0-rc1-update1 from https://www.nuget.org/api/v2
Download: https://www.nuget.org/api/v2/package/dnx-mono/1.0.0-rc1-update1
##### 100,0%
Installing to /Users/test/.dnx/runtimes/dnx-mono.1.0.0-rc1-update1
Adding /Users/test/.dnx/runtimes/dnx-mono.1.0.0-rc1-update1/bin to process PATH
Setting alias 'default' to 'dnx-mono.1.0.0-rc1-update1'
MacBook-ProdeThom:~ test$ brew install node
==> Downloading https://homebrew.bintray.com/bottles/node-5.3.0.el_capitan.bottl
##### 100,0%
==> Pouring node-5.3.0.el_capitan.bottle.tar.gz
==> Caveats
Please note by default only English locale support is provided. If you need
full locale support you should:
  `brew reinstall node --with-full-icu`

Bash completion has been installed to:
  /usr/local/etc/bash_completion.d
==> Summary
📦 /usr/local/Cellar/node/5.3.0: 2827 files, 37M
MacBook-ProdeThom:~ test$ node -v
v5.3.0
MacBook-ProdeThom:~ test$ npm -v
3.3.12
```

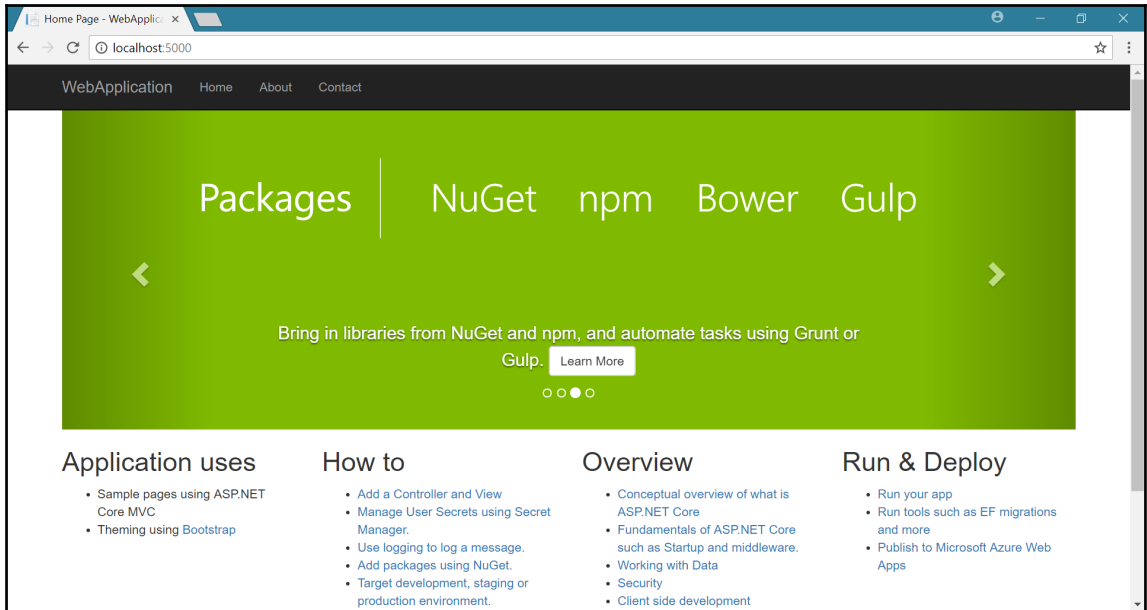
```
test — yo TERM_PROGRAM=Apple_Terminal SHELL=/bin/bash TERM=xterm-256...
└─ taketalk@1.0.0
└─ word-wrap@1.1.0
? =====
We're constantly looking for ways to make yo better!
May we anonymously report usage statistics to improve the tool over time?
More info: https://github.com/yeoman/insight & http://yeoman.io
===== Yes
[

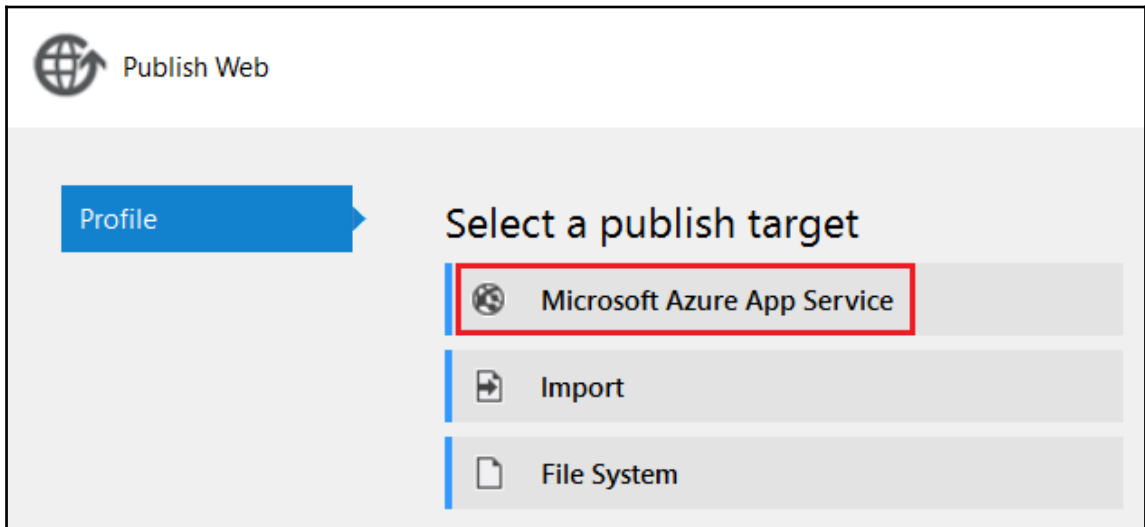
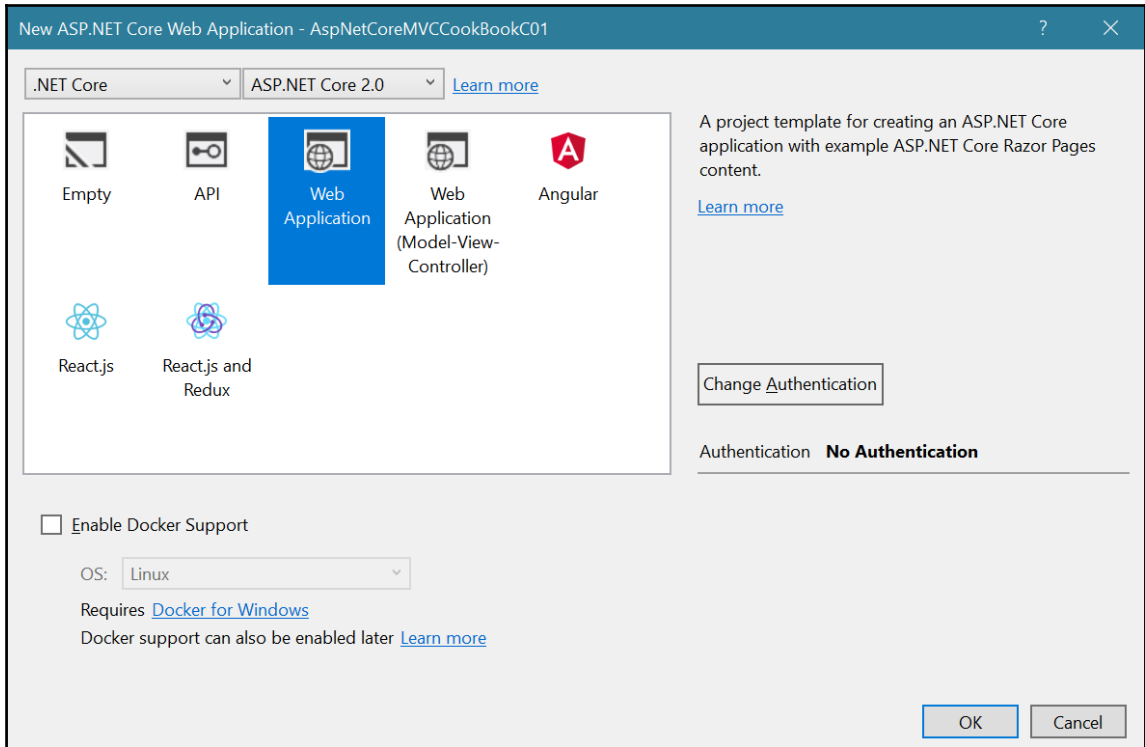
=====
┌---(o)---┐
├  _'U'_  │
└   A   ─┘
┌  ~  ─┘
└--'Y'--┘

Welcome to the
marvellous ASP.NET 5
generator!

? What type of application do you want to create?
Empty Application
Console Application
Web Application
> Web Application Basic [without Membership and Authorization]
Web API Application
Nancy ASP.NET Application
Class Library
Unit test project
```







## Create App Service

Host your web and mobile applications, REST APIs, and more in Azure

Engin Polat  
engin@enginpolat.com

App Name  
AspNetCoreMVCCookBookC01

Subscription  
Windows Azure MSDN - Visual Studio Ultimate

Resource Group  
msdevops (centralus) [New...](#)

Hosting Plan  
DevOps20171213-hostingPlan (West Europe, S1) [New...](#)

Application Insights  
West Europe

[Export...](#) [Create](#) [Cancel](#)

### Explore additional Azure services

[Create a SQL Database](#)

---

**Clicking the Create button will create the following Azure resources**

App Service - AspNetCoreMVCCookBookC01

WebApplication [X]

Overview

Connected Services

**Publish**

## Publish

**Azure successfully configured:** [How was your experience?](#)

AspNetCoreMVCCookBookC01 - Web Deploy ▼
Publish

[Create new profile](#)

### Summary

Site URL	<a href="http://aspnetcoremvccook...">http://aspnetcoremvccook...</a>	<a href="#">App Service Settings...</a>
Resource Group	msdevopsresourcegroup	<a href="#">Settings...</a>
Configuration	Release	<a href="#">Preview...</a>
Username	\$AspNetCoreMVCCookBookC01	<a href="#">Rename Profile...</a>
Password	*****	<a href="#">Delete Profile</a>
Troubleshooting Info	<a href="#">See Guide</a>	

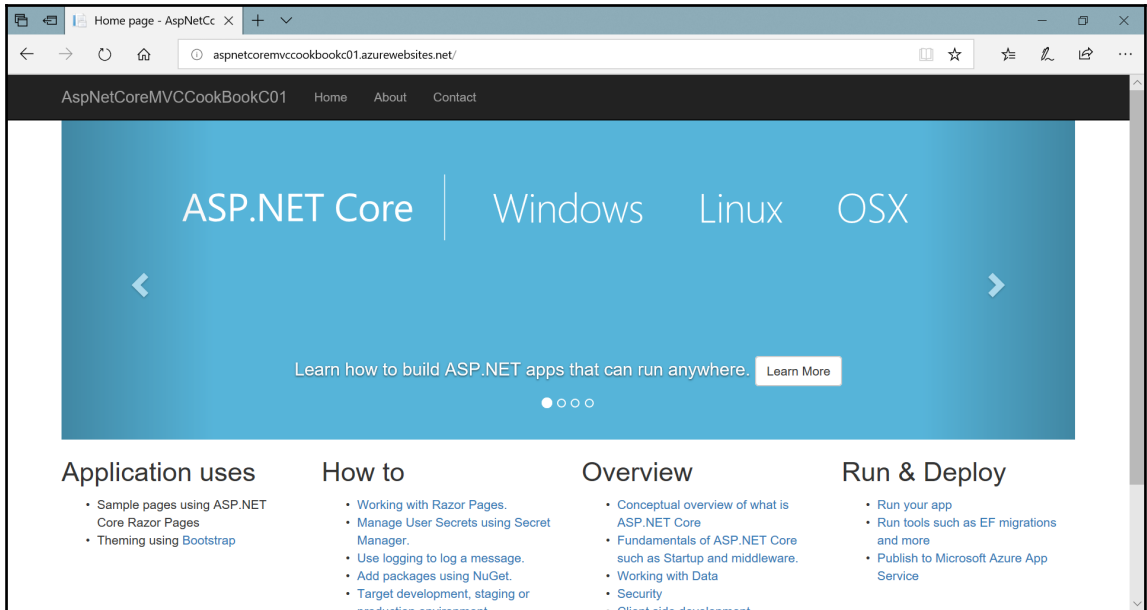
**Output**

Show output from: Build ▼

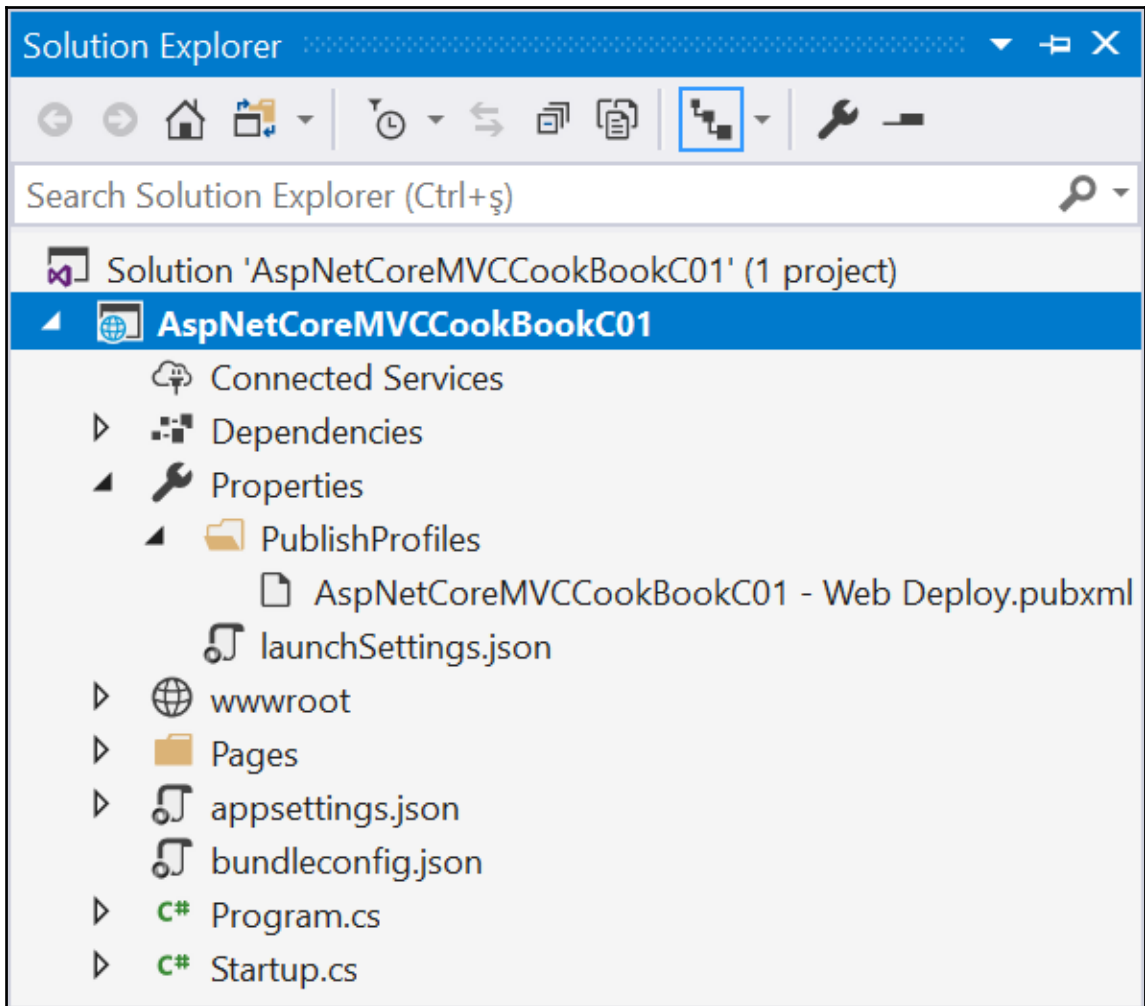
```

Publish Succeeded.
Web App was published successfully http://aspnetcoremvccookbookc01.azurewebsites.net/
===== Build: 1 succeeded, 0 failed, 0 up-to-date, 0 skipped =====
===== Publish: 1 succeeded, 0 failed, 0 skipped =====
|

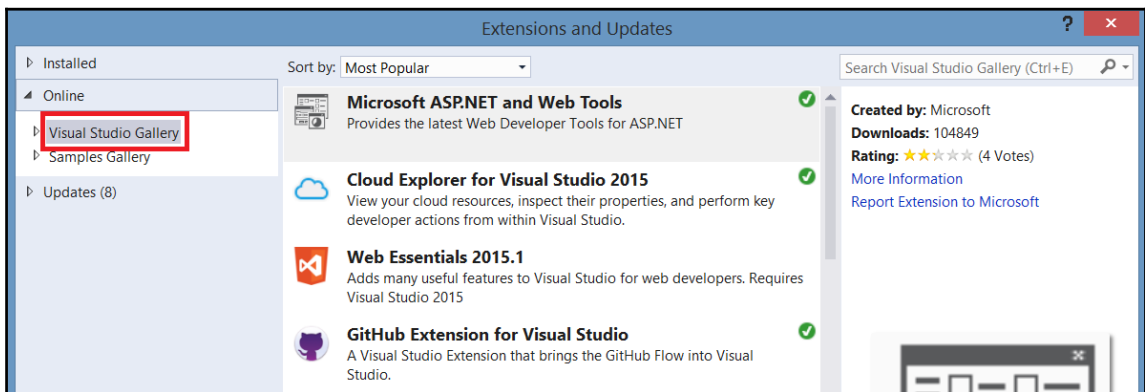
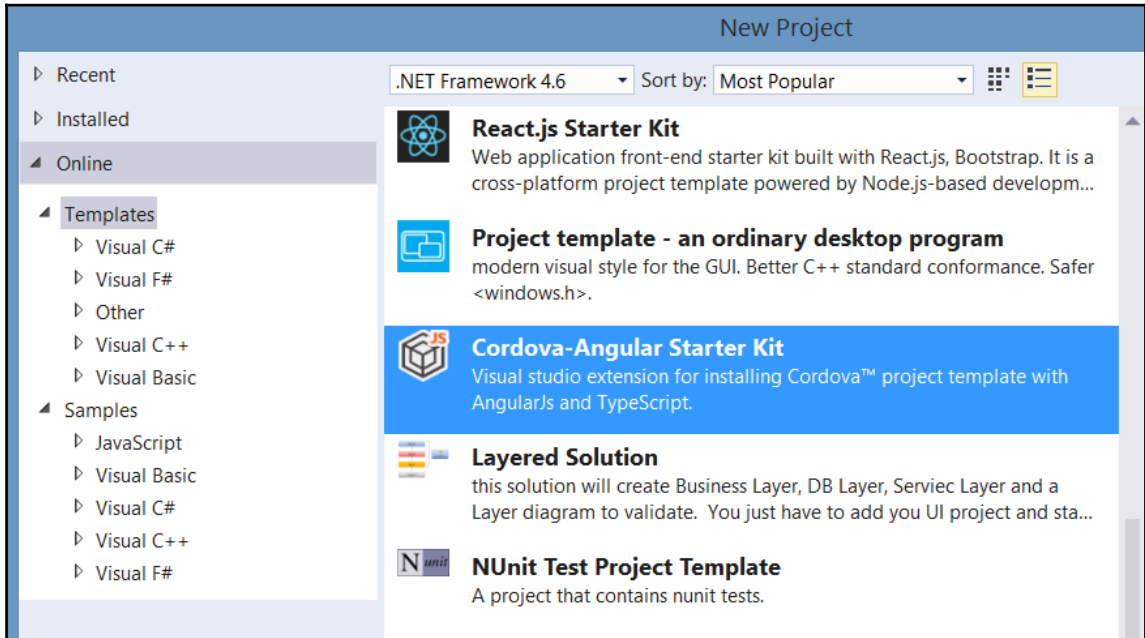
```

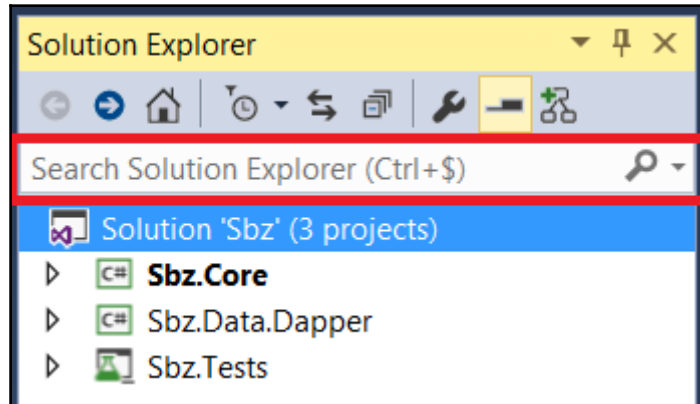
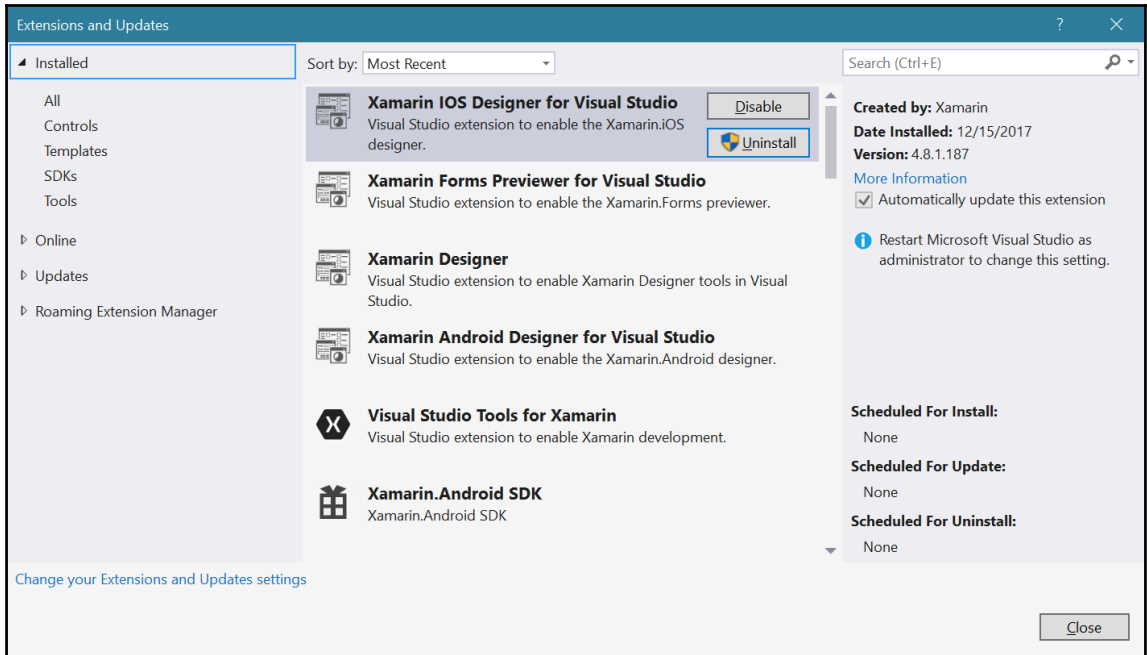


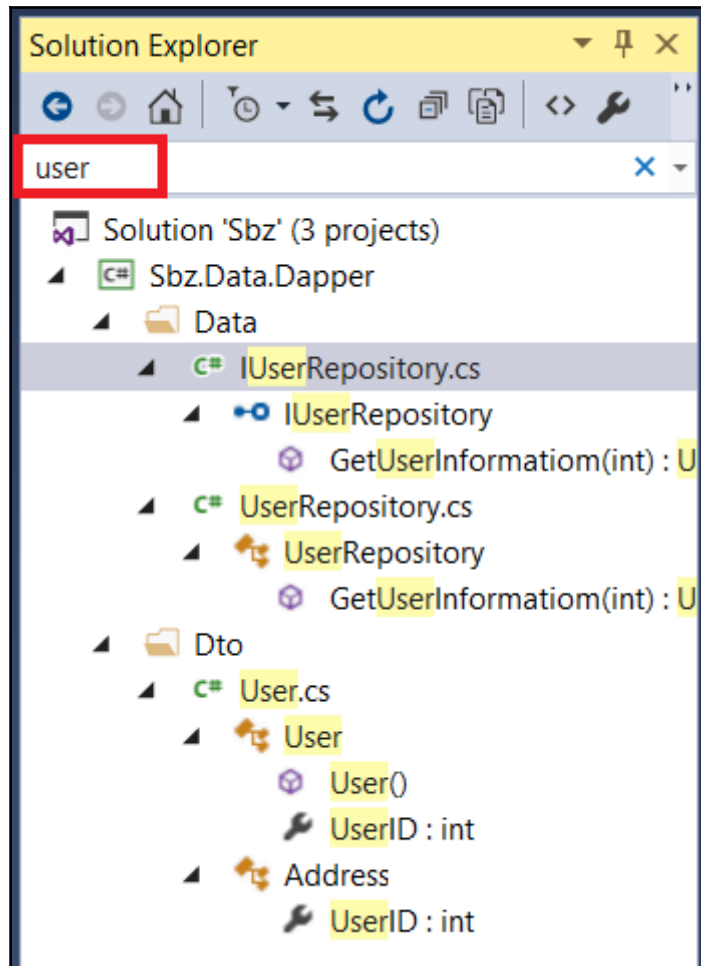


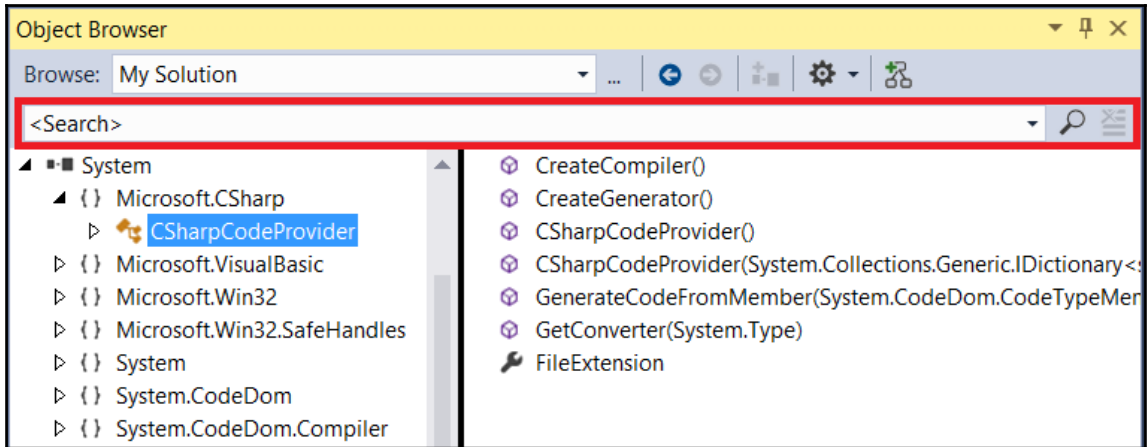


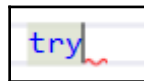
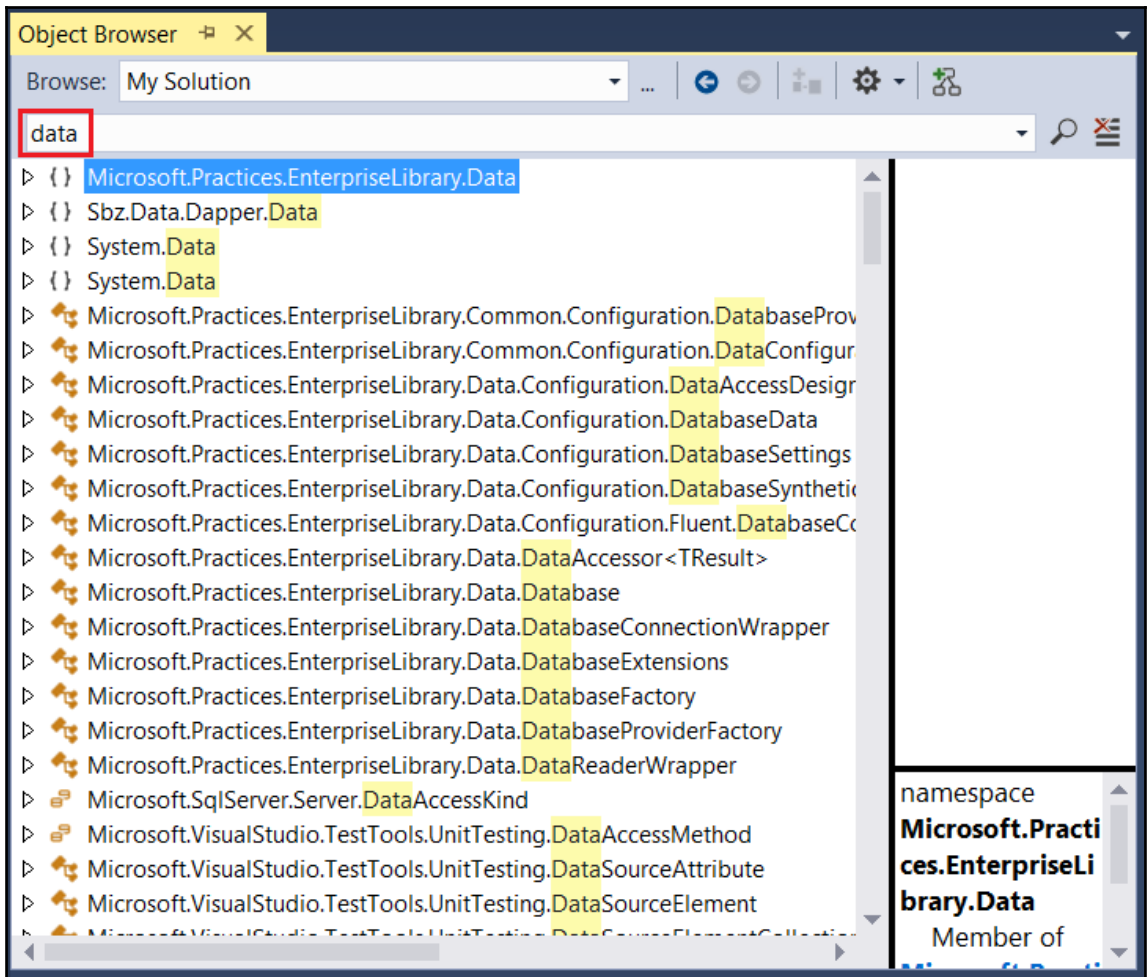
# Chapter 2: Visual Studio 2017, C# 6, IDEs, and Roslyn











---

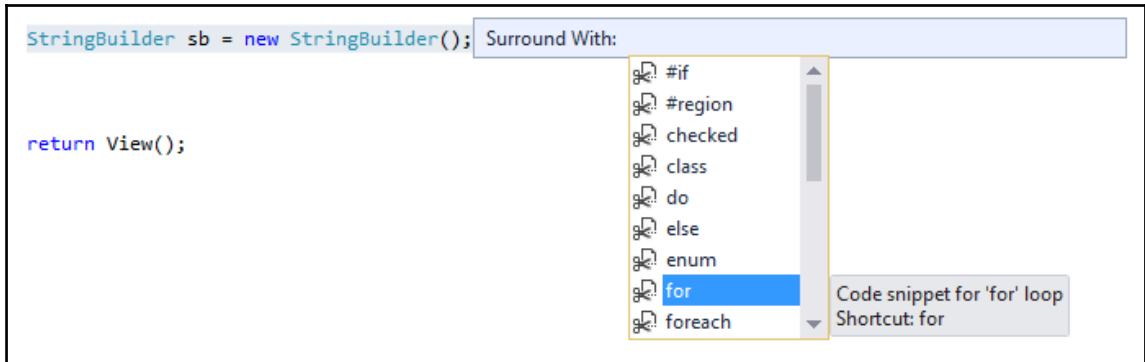
```
try
{
}
catch (System.Exception)
{
    throw;
}
```

```
if
```

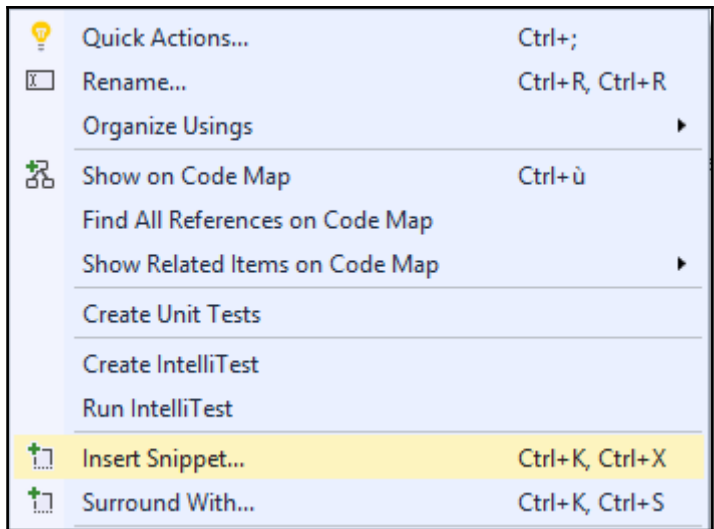
```
if (true)
{
}
}
```

```
foreach
```

```
foreach (var item in collection)
{
}
}
```



```
for (int i = 0; i < length; i++)  
{  
    StringBuilder sb = new StringBuilder();  
}
```





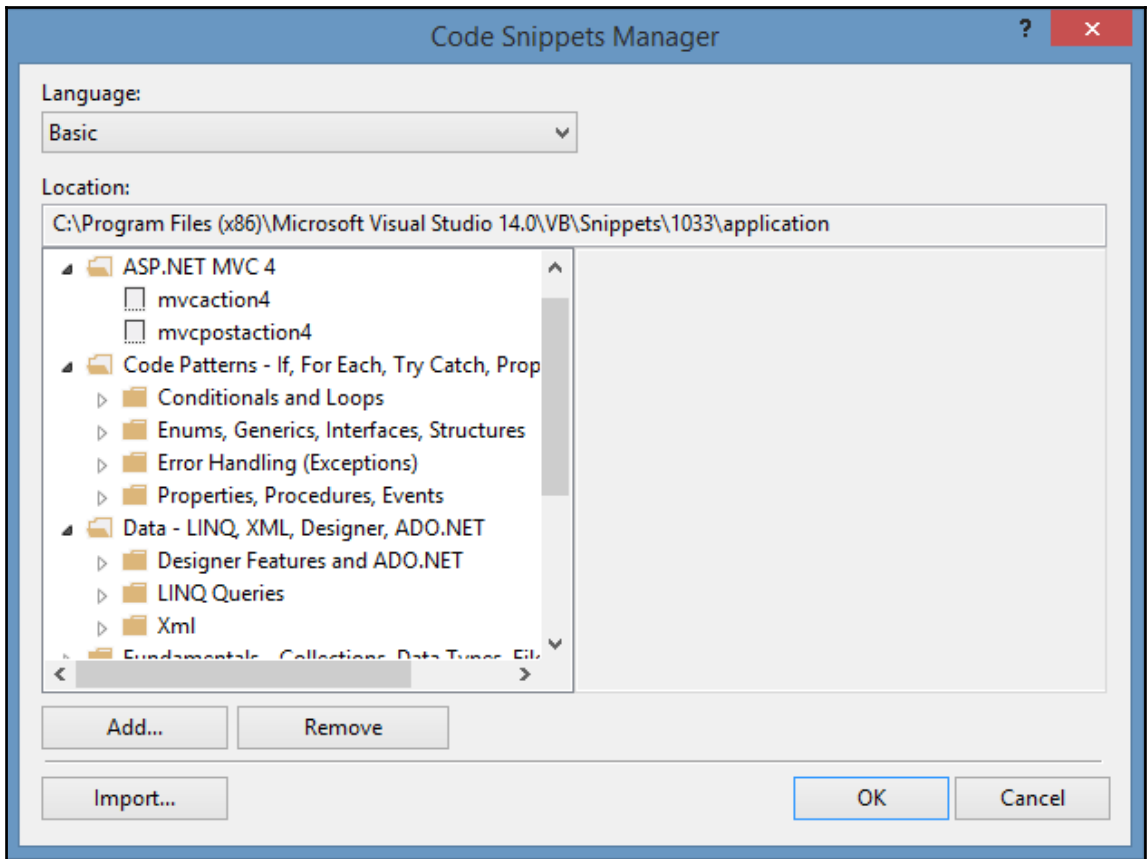
0 references | 0 changes | 0 authors, 0 changes

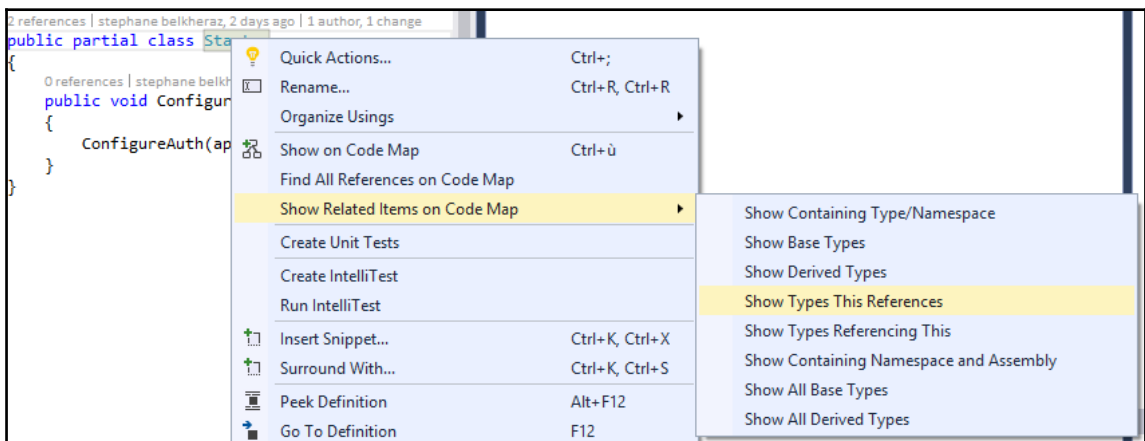
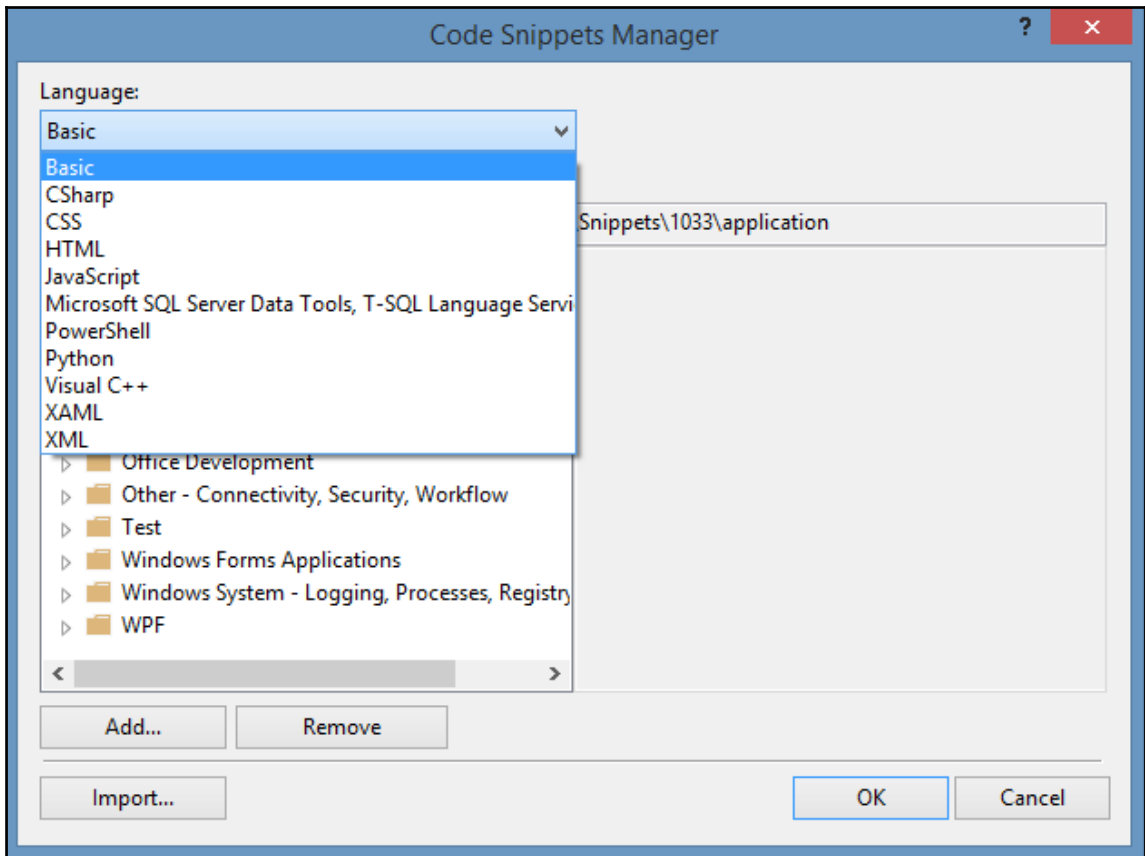
```
public void Helper()  
{  
  Insert Snippet:  
}  
}
```

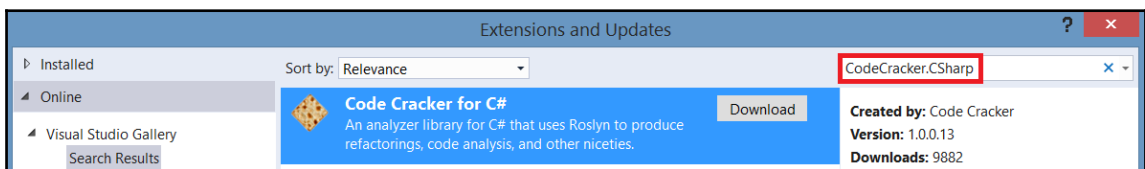
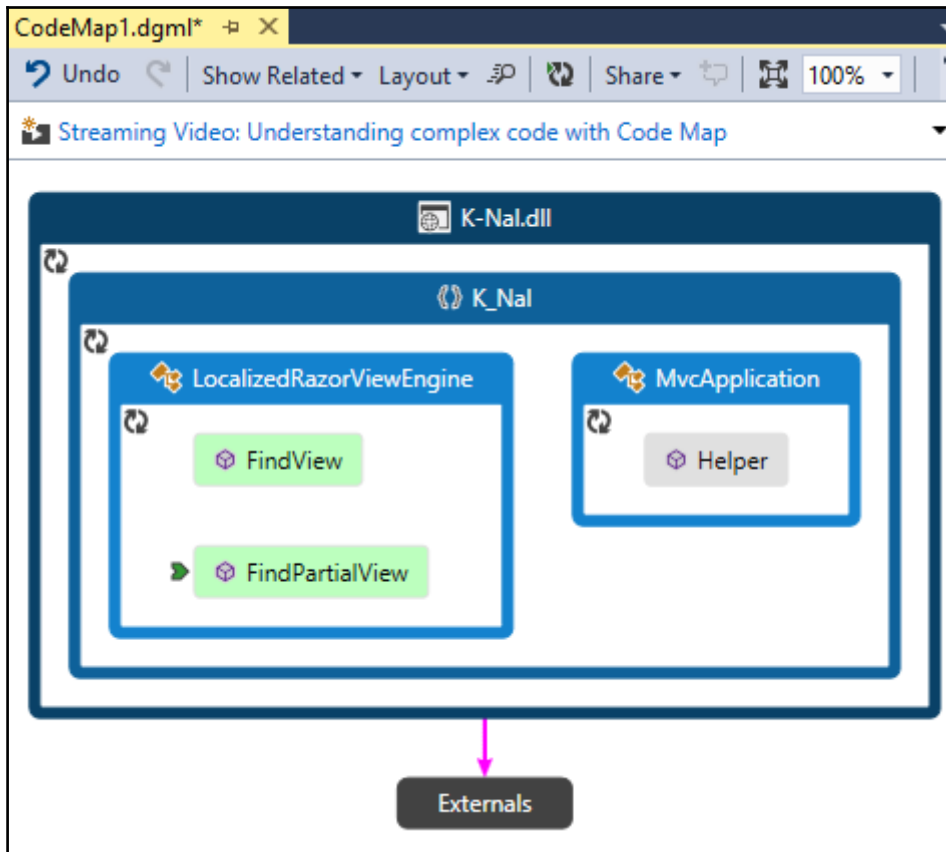
- ASP.NET MVC 4
- NetFX30
- Office Development
- Other
- Test
- Visual C#

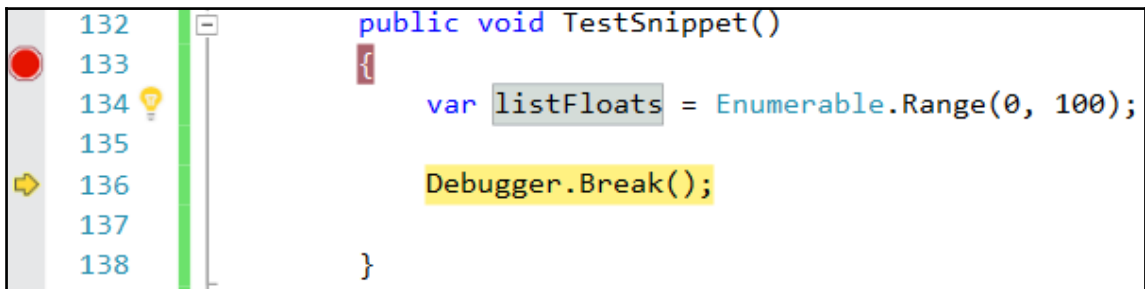
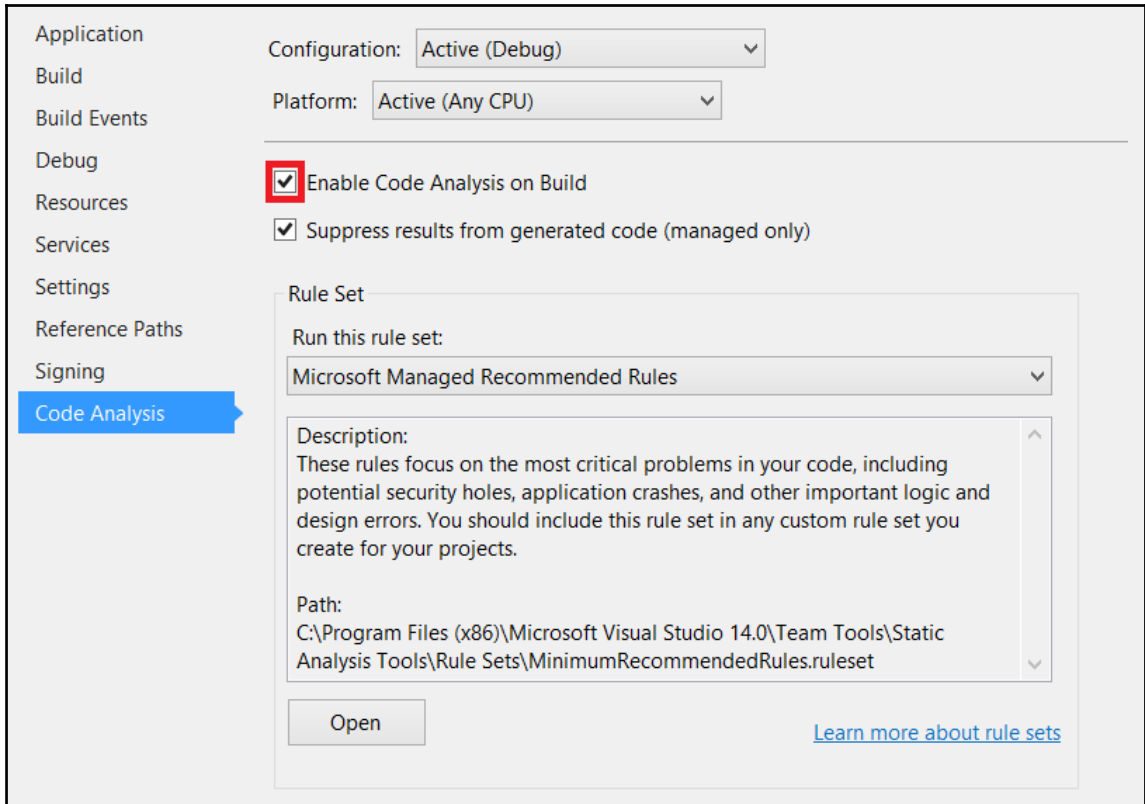
```
public void Helper()  
{  
  Insert Snippet: Visual C#  
}  
}
```

- enum
- equals
- exception
- for
- foreach
- forr
- if
- indexer
- interface





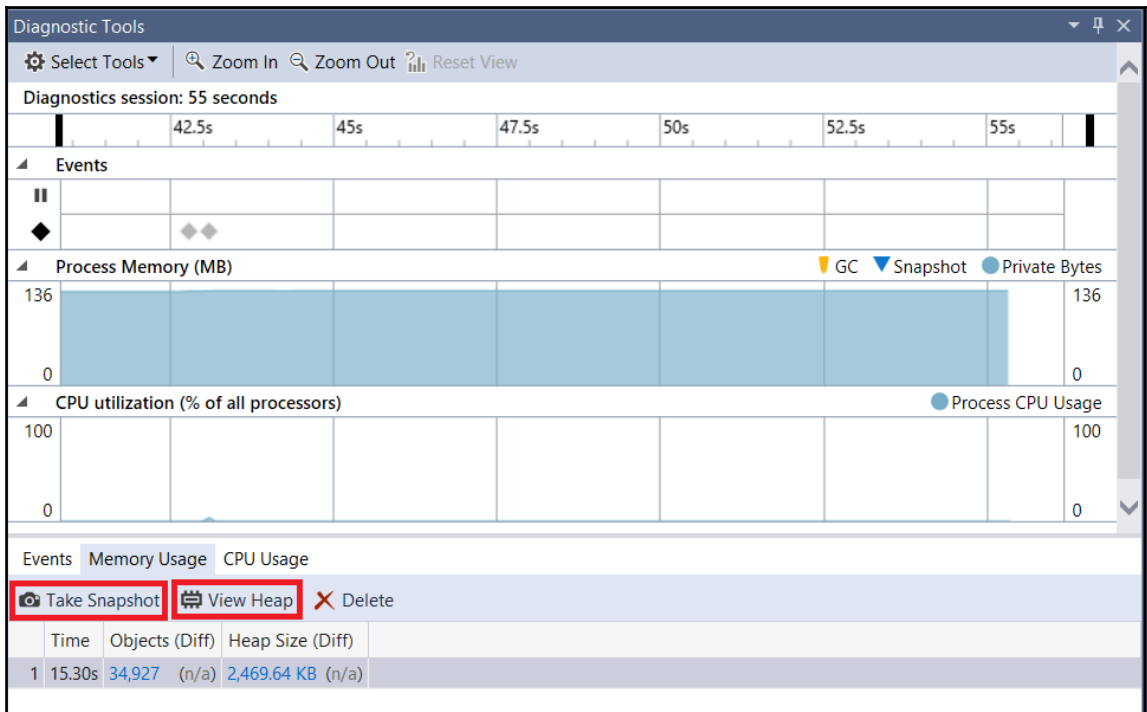




```
Immediate Window
listFloats.Where(x => x < 10).ToList()
Count = 10
[0]: 0
[1]: 1
[2]: 2
[3]: 3
[4]: 4
[5]: 5
[6]: 6
[7]: 7
[8]: 8
[9]: 9
```

```
11 public ActionResult Index()
12 {
13     return View();
14 }
15
16 public ActionResult Index()
17 {
18     //ViewBag.Message = "Up to 2ms elapsed during the previous step.
19     //ViewBag.Message = "Up to 2ms elapsed during the previous step.
20     return View();
21 }
```

Click to open the Diagnostic Tools window.  
Up to 2ms elapsed during the previous step.  
This value is an estimate and includes debug overhead.



Snapshot #1 Heap ii...xpress.exe (15.30s)

Compare to:  Search type names

Object Type	Count	Size (Bytes)	Inclusive Size
BundleResponse	4	628,820	
Hashtable	538	158,132	
CompiledRegexRunnerFactory	19	144,664	
RuntimeType+RuntimeTypeCache	105	140,464	
SectionXmlInfo	48	61,960	
ArrayList	720	61,652	
Dictionary<String, String>	42	50,708	
FactoryRecord	115	39,528	
ConfigurationProperty	453	38,708	
RuntimeType	1,117	36,696	
TplEtwProvider	1	36,636	
ExpiresBucket	240	32,400	

**Paths to Root | Referenced Types**

Object Type	Reference Count
ArrayList	
ConfigurationValues	326
XmlSchemaObjectCollection	51
HttpApplication+AsyncAppEventHandler	45
StringCollection	38
ConfigurationPropertyCollection	35
PropertyInformationCollection	25

```

K:\Na\LocalizedRazorViewEngine.cs (2)
  40: var result = base.FindView(controllerContext, localizedViewName, localizedMasterName, useCache);
  43: result = base.FindView(controllerContext, viewName, masterName, useCache);
Show on Code Map | Collapse All

2 references | Cedric Bellec, 2 days ago | 1 author, 1 change
public override ViewEngineResult FindView(ControllerContext controllerContext, string viewName, string masterName, bool useCache)
{

```



```

namespace K_Nal
{
    This type was last changed by Cedric Bellec on 12/01/2016 05:13. (Alt+5)
    0 references | Cedric Bellec, 1 day ago | 2 authors, 3 changes
    public class MvcApplication : System.Web.HttpApplication
    {
        0 references | Cedric Bellec, 1 day ago | 2 authors, 3 changes
        class K_Nal.MvcApplication
        protected void Application_Start()
    }
}

```

```

0 references | Cedric Bellec, 1 day ago | 2 authors, 3 changes
public class MvcApplication : System.Web.HttpApplication
{
    0 references | Cedric Bellec, 2 days ago | 2 authors, 2 changes
    protected void Application_Start()
}

```

```

1 reference | Cedric Bellec, 2 days ago | 1 author, 1 change
public class LocalizedRazorViewEngine : RazorViewEn
{
    Quick Actions... Ctrl+;
}

```

```

1 using System;
2 using System.Collections.Generic;
3
4 Remove Unnecessary Usings
5 using System.Web.Mvc;
6 using System.Web.Optimization;
7 using System.Web.Routing;
8 using System.Threading;
9 using System.Globalization;
10
11

```

using System;
 using System.Collections.Generic;
 using System.Linq;
 using System.Web;
 using System.Web.Mvc;
 ...
 Preview changes
 Fix all occurrences in: Document | Project | Solution

```

14 public class LocalizedRazorViewEngine : RazorViewEn
15
16 Generate class 'RazorViewEn' in new file
17 Generate class 'RazorViewEn'
18 Generate new type...
19 Generate type
20 if (!string.IsNullOrEmpty(localizedPartialViewName))
21 var result = base.FindPartialView(controllerContext, localizedPartialViewName);
22 if (result.View == null)
23 result = base.FindPartialView(controllerContext, partialViewName);
24 return result;

```

CS0246 The type or namespace name 'RazorViewEn' could not be found (are you missing a using directive or an assembly reference?)
 Adding 'RazorViewEn.cs' to 'K-Nal' with content:
 namespace K\_Nal
 {
 public class RazorViewEn
 {
 }
 }
 Preview changes

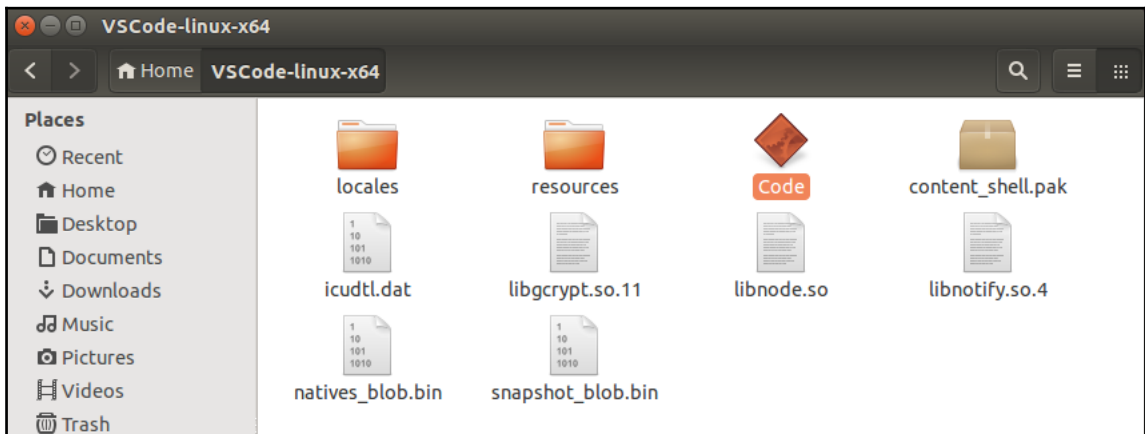
## Linux

1. [Download Visual Studio Code](#) for Linux.
2. Make a new folder and extract `VSCoDe-linux-x64.zip` inside that folder.
3. Double click on `Code` to run Visual Studio Code.

**Tip:** If you want to run VS Code from the terminal, create the following link substituting `/path/to/vscode/Code` with the absolute path to the `Code` executable

```
sudo ln -s /path/to/vscode/Code /usr/local/bin/code
```

Now, you can simply type `code .` in any folder to start editing files in that folder.



The screenshot shows the Visual Studio Code interface with the Explorer view on the left and the Code editor on the right. The Explorer view shows a project structure for a web application with folders like bin, Controllers, Models, obj, Views, and wwwroot, and files like appsettings.json, bundleconfig.json, Program.cs, and Startup.cs. The Code editor displays the Startup.cs file with the following code:

```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Threading.Tasks;
5 using Microsoft.AspNetCore.Builder;
6 using Microsoft.AspNetCore.Hosting;
7 using Microsoft.Extensions.Configuration;
8 using Microsoft.Extensions.DependencyInjection;
9
10 namespace WebApplication
11 {
12     public class Startup
13     {
14         public Startup(IConfiguration configuration)
15         {
16             Configuration = configuration;
17         }
18     }
19 }
```

The status bar at the bottom indicates the current cursor position: Ln 1, Col 1, Spaces: 4, UTF-8 with BOM, CRLF, C#.

The screenshot shows the Visual Studio Code interface with a context menu open over the Startup.cs file in the Explorer view. The context menu options are:

- .NET: Generate Assets for Build and Debug
- .NET: Restore Packages
- Add Cursor Above (Ctrl + Alt + UpArrow)
- Add Cursor Below (Ctrl + Alt + DownArrow)
- Add Cursors to Line Ends (Shift + Alt + I)
- Add Line Comment (Ctrl + K, Ctrl + C)

The Code editor in the background shows the same Startup.cs file as in the previous screenshot. The status bar at the bottom indicates the current cursor position: Ln 1, Col 1, Spaces: 4, UTF-8 with BOM, CRLF, C#.

```
Startup.cs - WebApplication2 - Visual Studio Code

C# Startup.cs x
3 using System.Linq;
4 using System.Threading.Tasks;
5 using Microsoft.AspNetCore.Builder;
6 using Microsoft.AspNetCore.Hosting;
7 using Microsoft.Extensions.Configuration;
8 using Microsoft.Extensions.DependencyInjection;
9
10 namespace WebApplication2
11 {
12     1 reference
13     public class Startup
14     {
15         0 references
16         public Startup(IConfiguration configuration)
17         {
18             Configuration = configuration;
19         }
20
21         1 reference
22         public IConfiguration Configuration { get; }
23
24         // This method gets called by the runtime. Use this method to add services to the container.
25     }
26 }
27 0 references
```

```
Startup.cs - WebApplication - Visual Studio Code - Insiders

C# Startup.cs x
1 using System;
2 using System.Collections.Generic;

PROBLEMS OUTPUT TERMINAL ... 1: powershell + trash up down close

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Copyright (C) Microsoft Corporation. All rights reserved.

PS C:\Users\EnginPolat\Desktop\WebApplication> dotnet restore

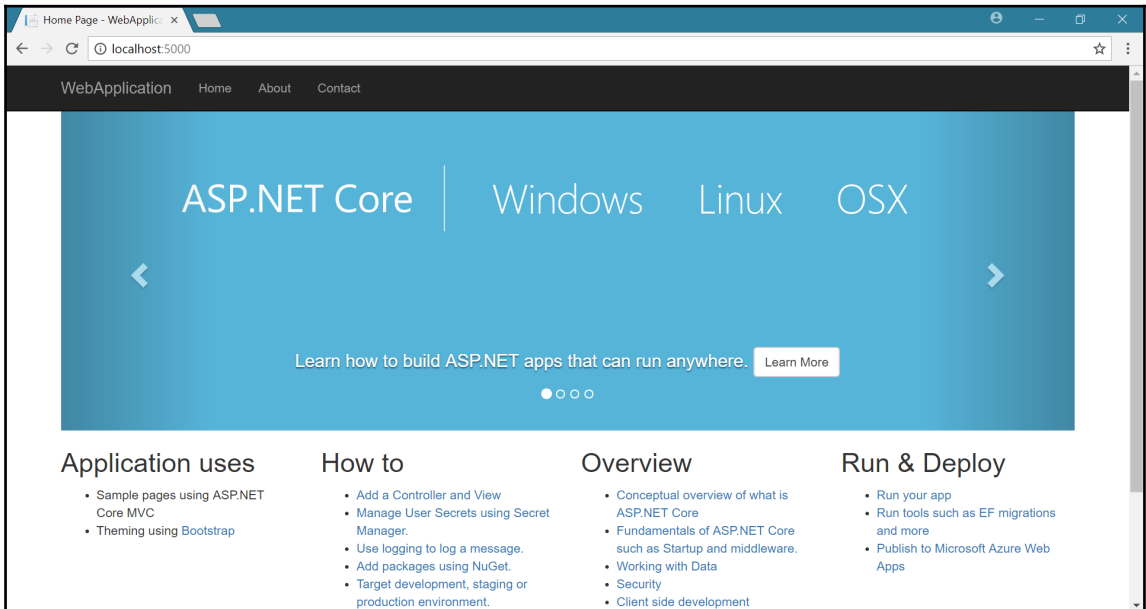
Restore completed in 133.37 ms for C:\Users\EnginPolat\Desktop\WebApplication\WebApplication.csproj.
Restore completed in 95.48 ms for C:\Users\EnginPolat\Desktop\WebApplication\WebApplication.csproj.
PS C:\Users\EnginPolat\Desktop\WebApplication>

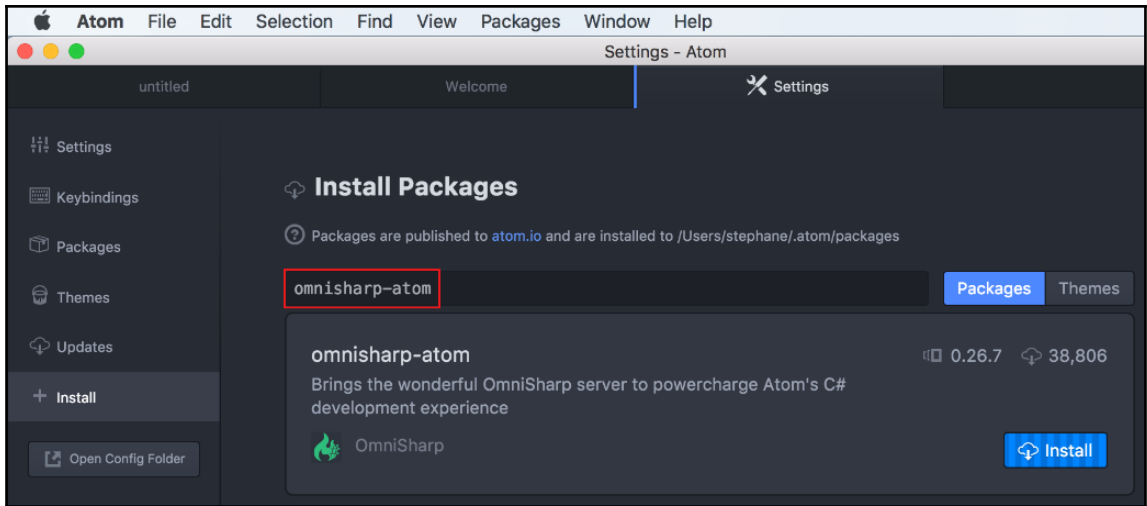
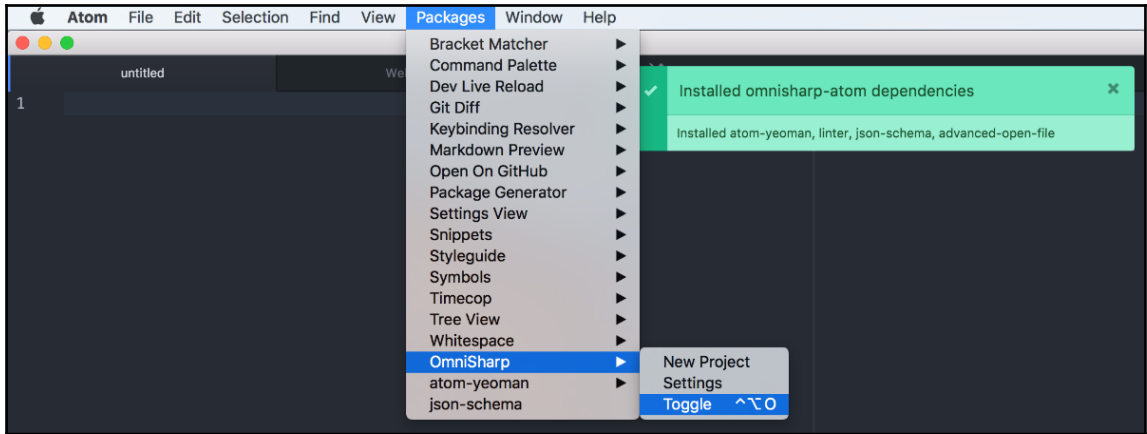
0 0 0 Ln 3, Col 19 Spaces: 4 UTF-8 with BOM CRLF C#
```

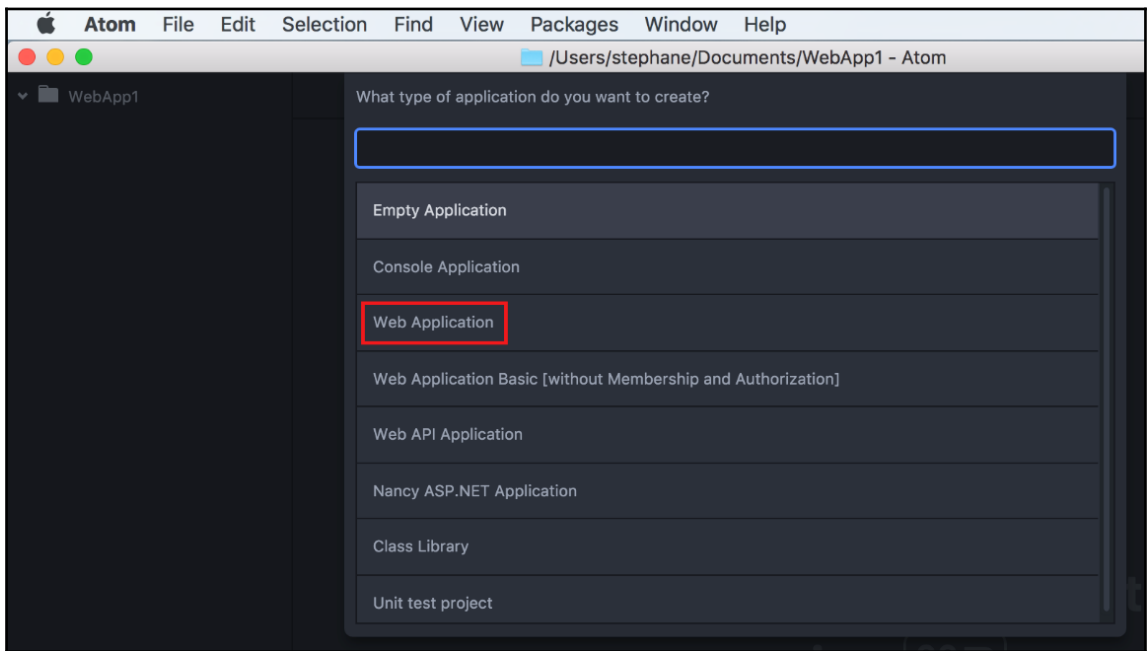
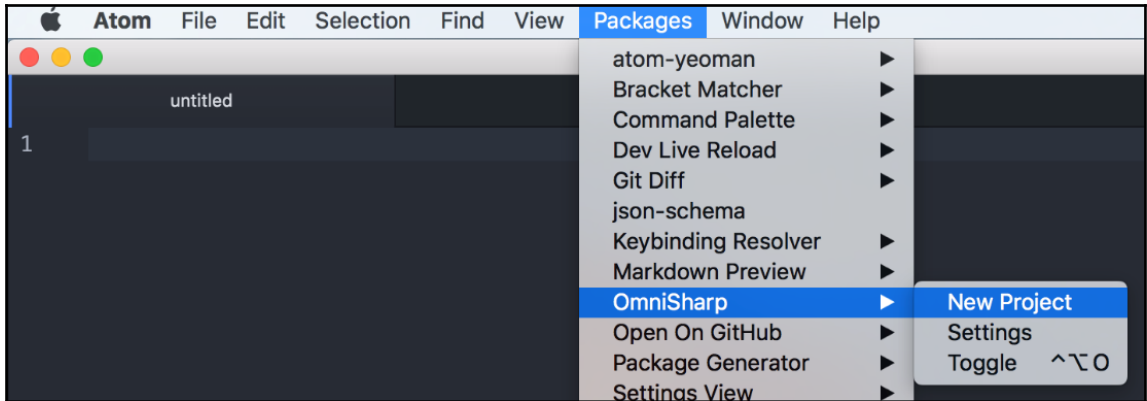
```
Startup.cs - WebApplication - Visual Studio Code - Insiders
C# Startup.cs x
1 using System;
2 using System.Collections.Generic;

PROBLEMS OUTPUT TERMINAL ... 1: dotnet
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

PS C:\Users\EnginPolat\Desktop\WebApplication> dotnet run
Hosting environment: Production
Content root path: C:\Users\EnginPolat\Desktop\WebApplication
Now listening on: http://localhost:5000
Application started. Press Ctrl+C to shut down.
```







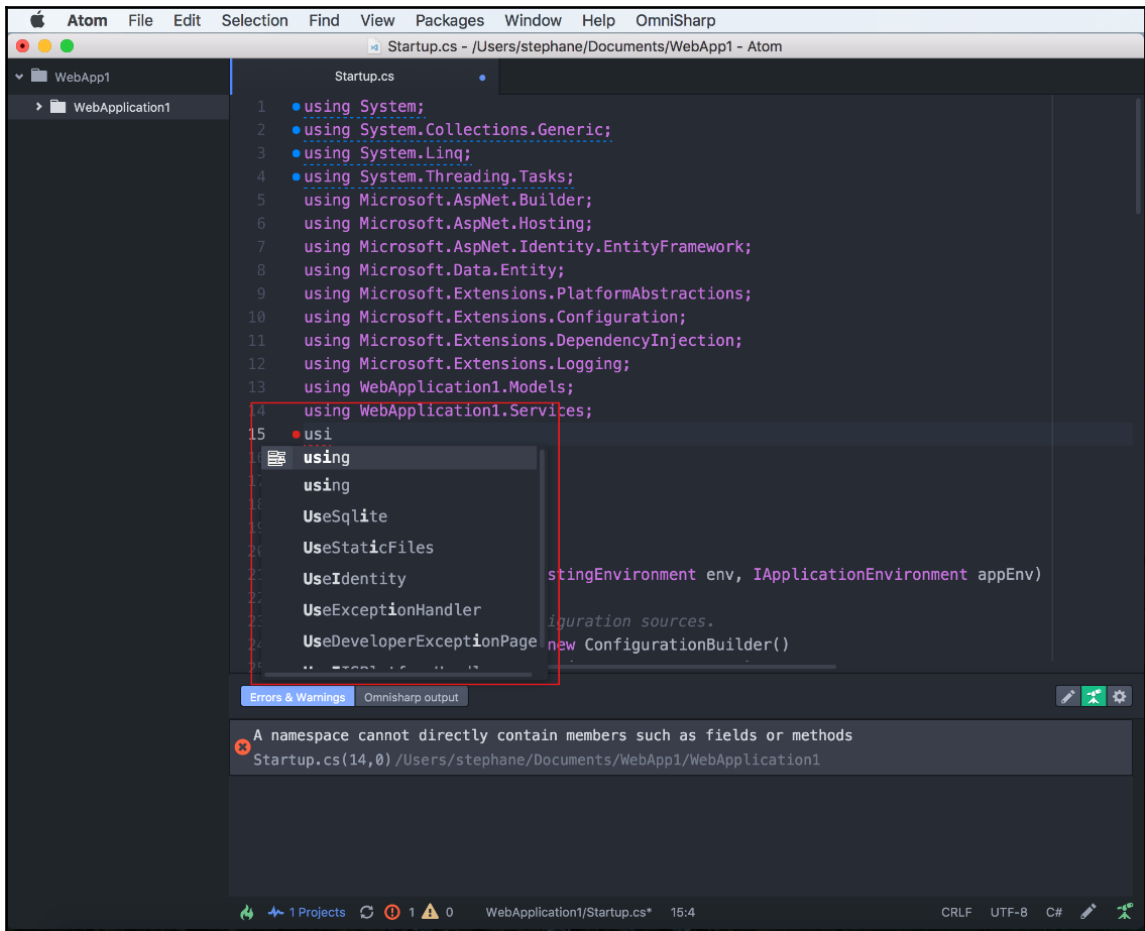
```
Atom File Edit Selection Find View Packages Window Help OmniSharp
Startup.cs - /Users/stephane/Documents/WebApp1 - Atom
WebApp1
  WebApplication1
Startup.cs
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Threading.Tasks;
5 using Microsoft.AspNet.Builder;
6 using Microsoft.AspNet.Hosting;
7 using Microsoft.AspNet.Identity.EntityFramework;
8 using Microsoft.Data.Entity;
9 using Microsoft.Extensions.PlatformAbstractions;
10 using Microsoft.Extensions.Configuration;
11 using Microsoft.Extensions.DependencyInjection;
12 using Microsoft.Extensions.Logging;
13 using WebApplication1.Models;
14 using WebApplication1.Services;
15
16 namespace WebApplication1
17 {
18     public class Startup
19     {
20         public Startup(IHostingEnvironment env, IApplicationEnvironment appEnv)
21         {
22             // Set up configuration sources.
23             var builder = new ConfigurationBuilder()
24                 .AddJsonFile("appsettings.json")
25                 .AddJsonFile($"appsettings.{env.EnvironmentName}.json", optional: true);
26
27             if (env.IsDevelopment())
28             {
29                 // For more details on using the user secret store see http://go.microsof
30                 builder.AddUserSecrets();
31             }
32
33             builder.AddEnvironmentVariables();
34             Configuration = builder.Build();
```



```
13 using WebApplication1.Models;
14 using WebApplication1.Services;
15
16 namespace WebApplication1
17 {
18     public class Startup
19     {
20         public Startup(IHostingEnvironment env, IApplicationEnvironment appEnv)
21         {
22             // Set up configuration sources.
23             var builder = new ConfigurationBuilder()
24                 .AddJsonFile("appsettings.json")
25         }
26     }
27 }
```

Errors & Warnings Omnisharp output

1 Projects 0 0 WebApplication1/Startup.cs 1:1 CRLF UTF-8 C#



```
13 using WebApplication1.Models;
14 using WebApplication1.Services;
15 using System.Collections
16
17 namespace WebApplication1
18 {
19     public class Startup
20     {
21         public Startup(IHostingEnvironment env, IApplicationEnvironment appEnv)
22         {
23             // Set up configuration sources.
24             var builder = new ConfigurationBuilder()
25
```

Errors & Warnings Omnisharp output

```
/typelookup: 200 1ms
/typelookup: 200 59ms
/gotodefinition: 200 2ms
/typelookup: 200 12ms
/gotodefinition: 200 1ms
/gotodefinition: 200 1ms
/typelookup: 200 4ms
/gotodefinition: 200 5ms
/gotodefinition: 200 1ms
```

1 Projects 1 0 WebApplication1/Startup.cs\* 15:25 CRLF UTF-8 C#

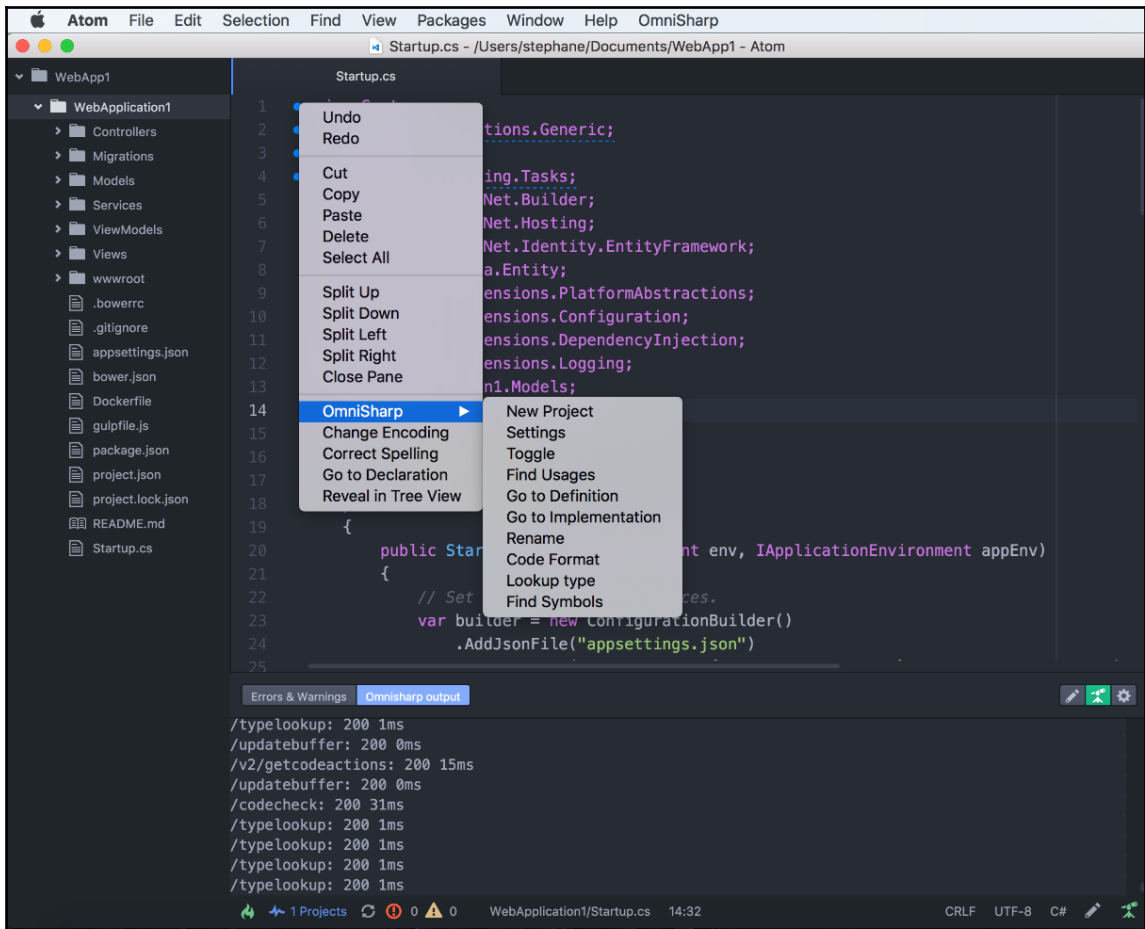
```
13 using WebApplication1.Models;
14 using WebApplication1.Services;
15 • using System.Collections.Generic
16
17 namespace WebApplication1
18 {
19     public class Startup
20     {
21         public Startup(IHostingEnvironment env, IApplicationEnvironment appEnv)
22         {
23             // Set up configuration sources.
24             var builder = new ConfigurationBuilder()
25
```

**Errors & Warnings** Omnisharp output

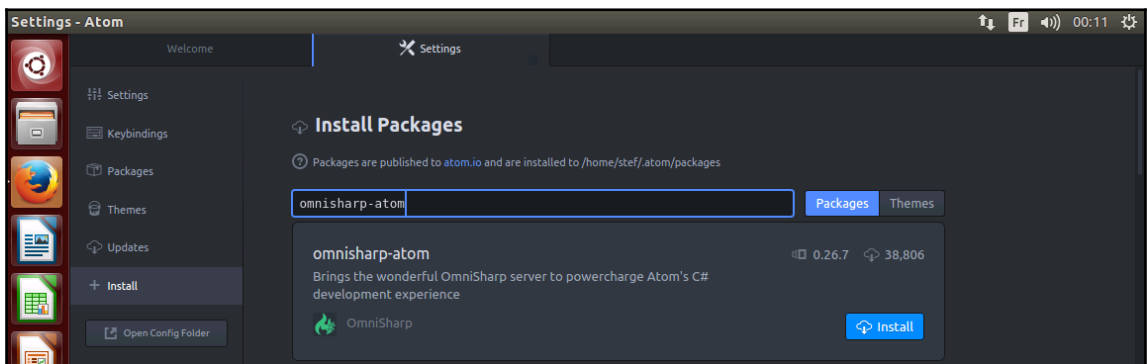
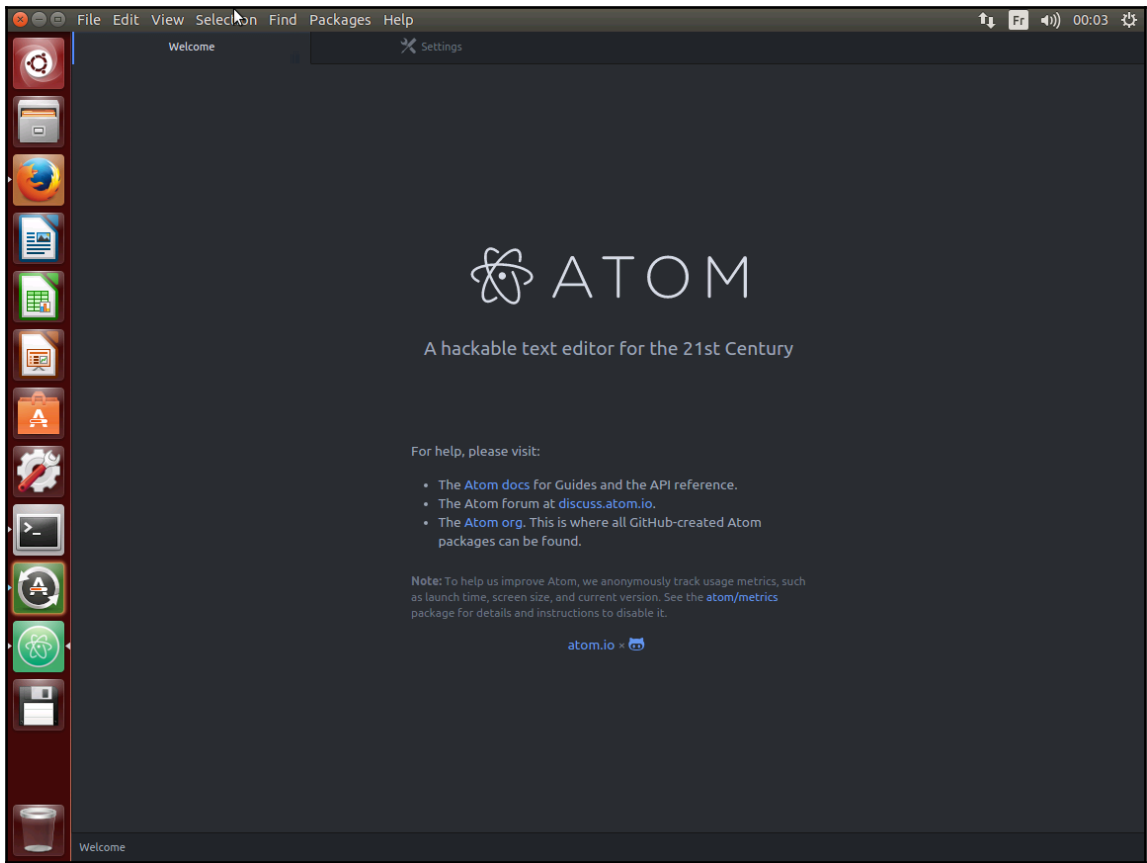
; expected  
Startup.cs(14,32) /Users/stephane/Documents/WebApp1/WebApplication1

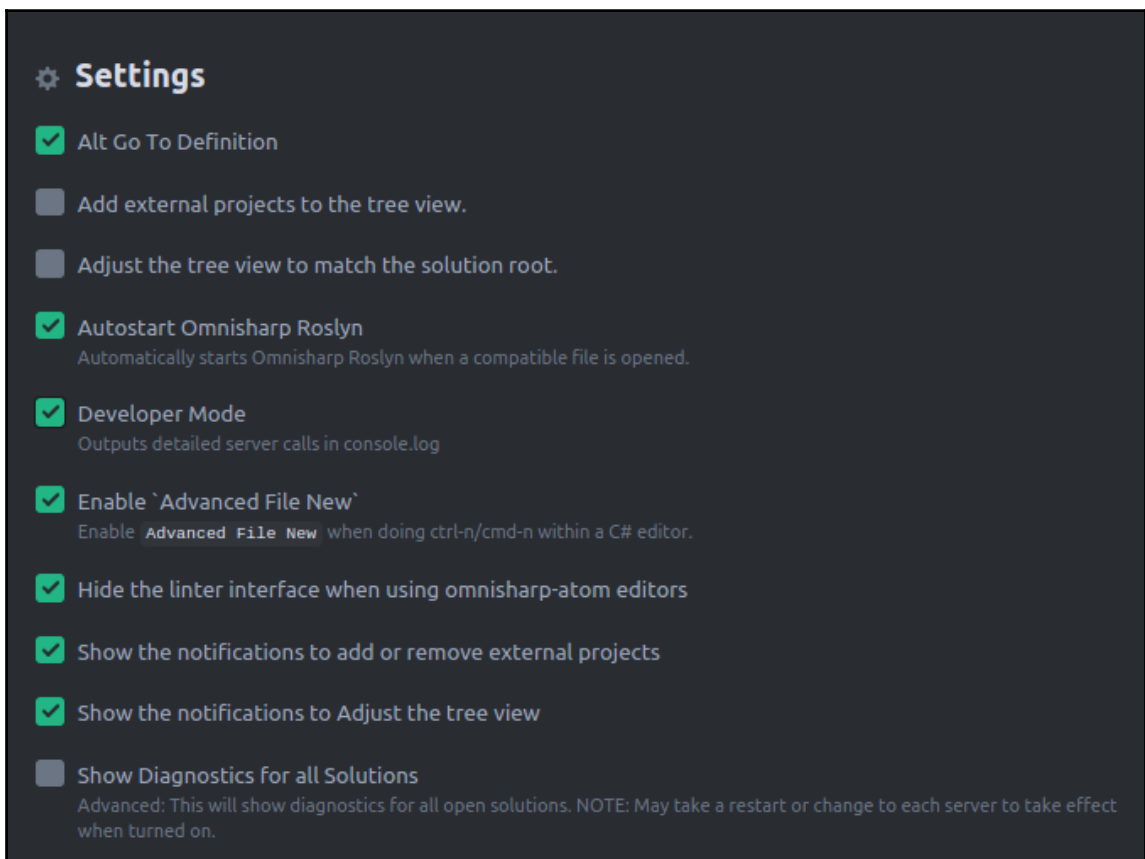
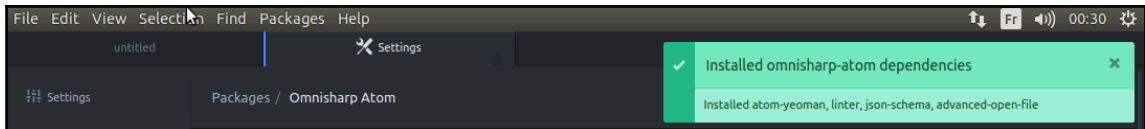
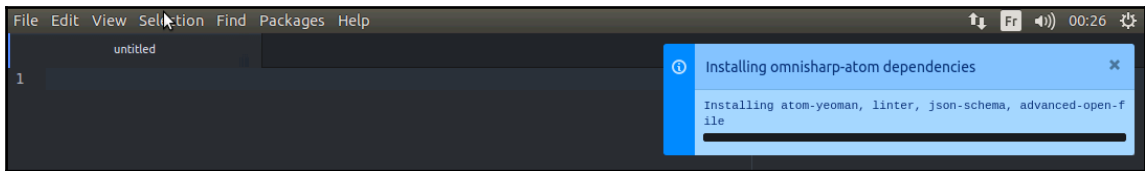
The using directive for 'System.Collections.Generic' appeared previously in this namespace  
Startup.cs(14,6) /Users/stephane/Documents/WebApp1/WebApplication1

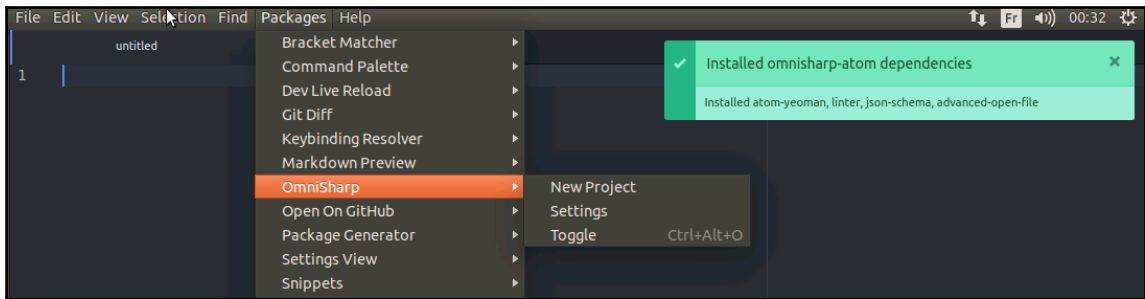
1 Projects 1 1 WebApplication1/Startup.cs\* 15:33 CRLF UTF-8 C#



stef@stef-Virtual-Machine:~\$ **atom**







A screenshot of the Atom editor showing the content of a file named 'Startup.cs'. The code is as follows:

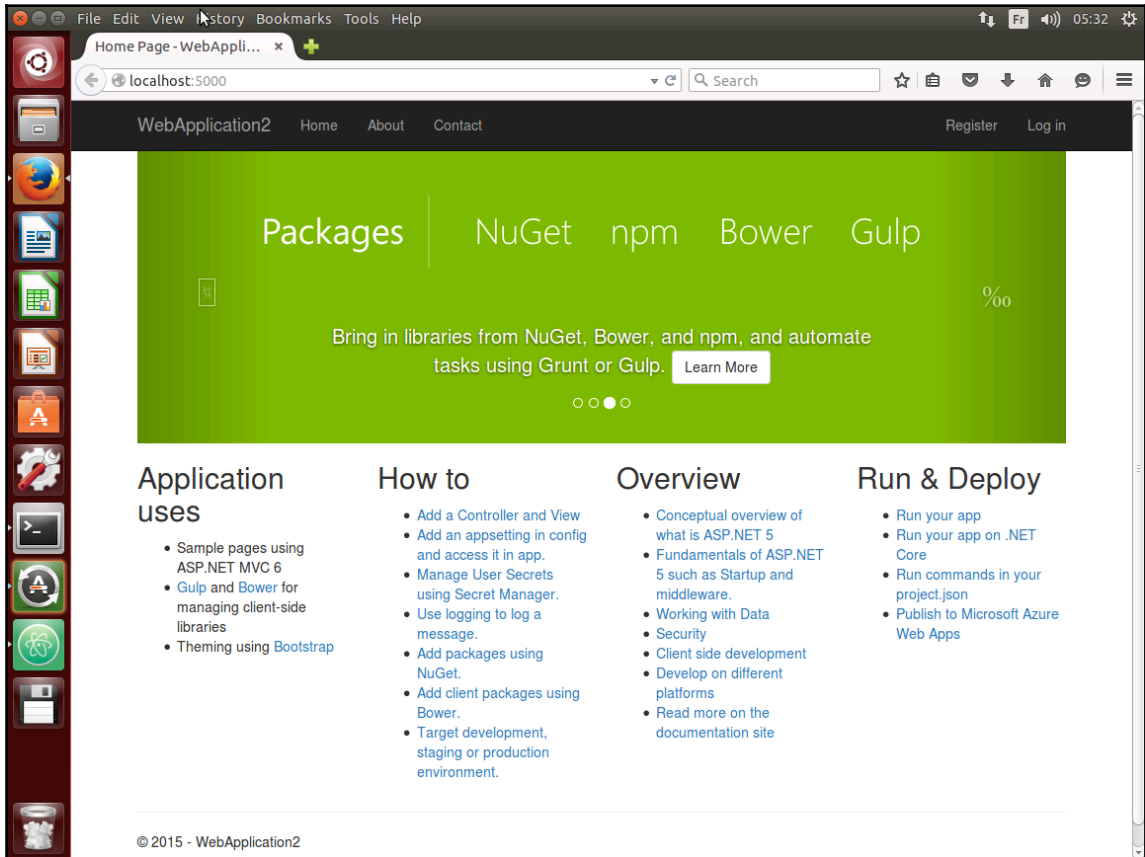
```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Threading.Tasks;
5 using Microsoft.AspNetCore.Builder;
6 using Microsoft.AspNetCore.Hosting;
7 using Microsoft.Extensions.Configuration;
8 using Microsoft.Extensions.DependencyInjection;
9
10 namespace WebApplication
11 {
12     public class Startup
13     {
14         public Startup(IConfiguration configuration)
15         {
16             Configuration = configuration;
17         }
18
19         public IConfiguration Configuration { get; }
```

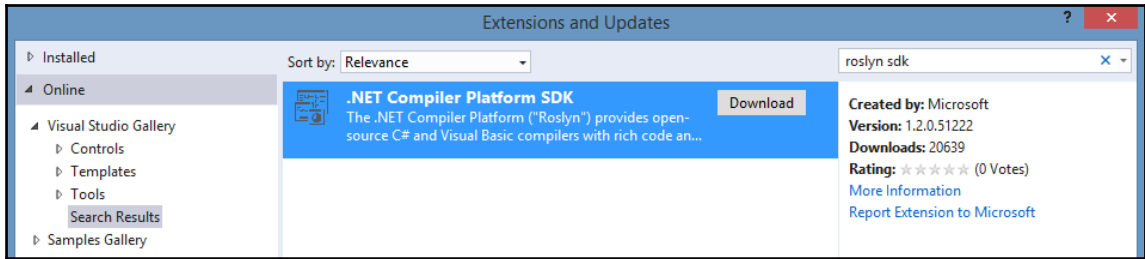
The status bar at the bottom shows 'Startup.cs', encoding 'CRLF', 'UTF-8', 'C#', and '0 files'.



```
stef@stef-Virtual-Machine: ~/new app/WebApplication2
stef@stef-Virtual-Machine:~/new app/WebApplication2$ dnx web
info: Microsoft.Data.Entity.Storage.Internal.RelationalCommandBuilderFactory[1]
       Executed DbCommand (13ms) [Parameters=[], CommandType='Text', CommandTimeou
ut='30']
PRAGMA foreign_keys=ON;
info: Microsoft.Data.Entity.Storage.Internal.RelationalCommandBuilderFactory[1]
       Executed DbCommand (1ms) [Parameters=[], CommandType='Text', CommandTimeou
```

```
34     "commands": {
35         "web": "Microsoft.AspNet.Server.Kestrel",
36         "ef": "EntityFramework.Commands"
37     },
```

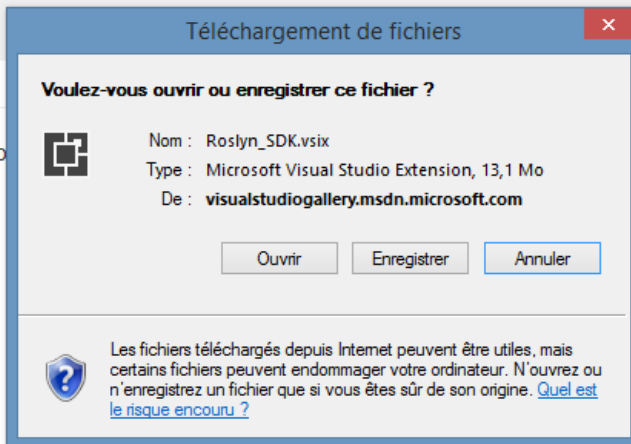


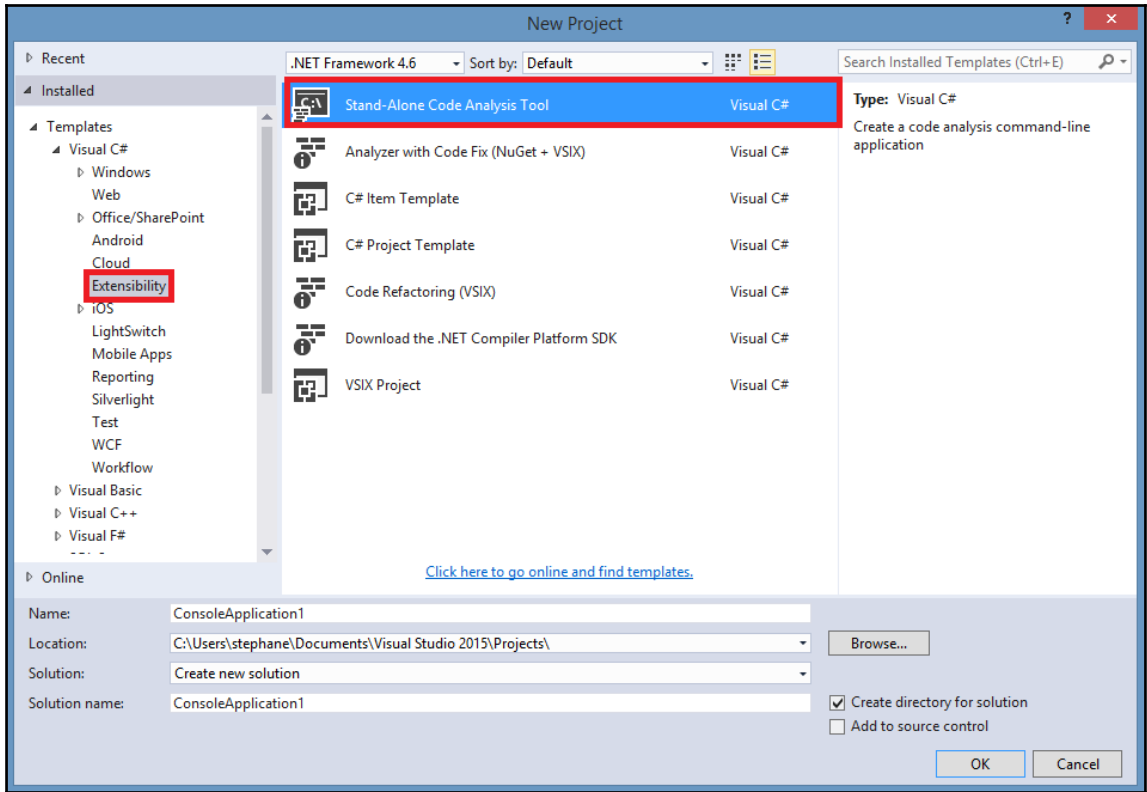


# .NET Compiler Platform SDK Templates

Provides three Visual Studio project templates for both C# and Visual Basic that enable the creation of Analyzers, CodeFixes, and stand-alone analysis tools.

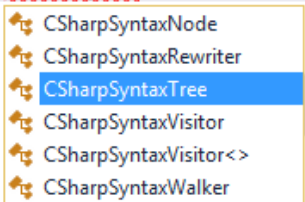
[Download .NET Compiler Platform SDK Templates »](#)





```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using Microsoft.CodeAnalysis;
using Microsoft.CodeAnalysis.CSharp;
using Microsoft.CodeAnalysis.CSharp.Symbols;
using Microsoft.CodeAnalysis.CSharp.Syntax;
using Microsoft.CodeAnalysis.Text;

namespace ConsoleApplication1
{
    0 references
    class Program
    {
        0 references
        static void Main(string[] args)
        {
            var tree = CSharpSynt
        }
    }
}
```

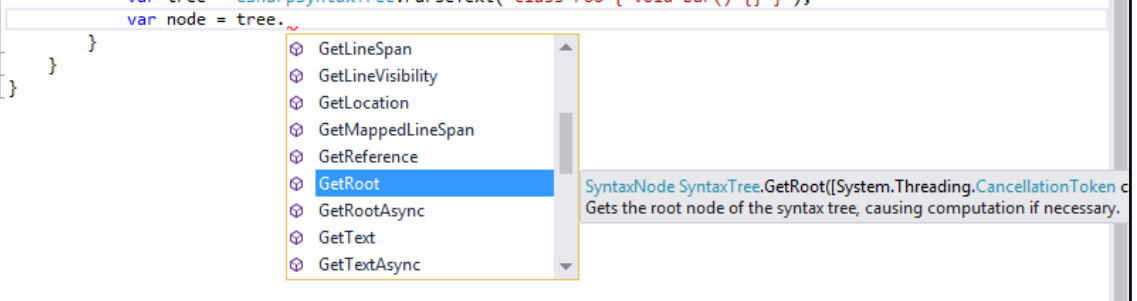


- CSharpSyntaxNode
- CSharpSyntaxRewriter
- CSharpSyntaxTree
- CSharpSyntaxVisitor
- CSharpSyntaxVisitor<>
- CSharpSyntaxWalker

class Microsoft.CodeAnalysis.CSharp.CSharpSyntaxTree  
The parsed representation of a C# source document.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using Microsoft.CodeAnalysis;
using Microsoft.CodeAnalysis.CSharp;
using Microsoft.CodeAnalysis.CSharp.Symbols;
using Microsoft.CodeAnalysis.CSharp.Syntax;
using Microsoft.CodeAnalysis.Text;

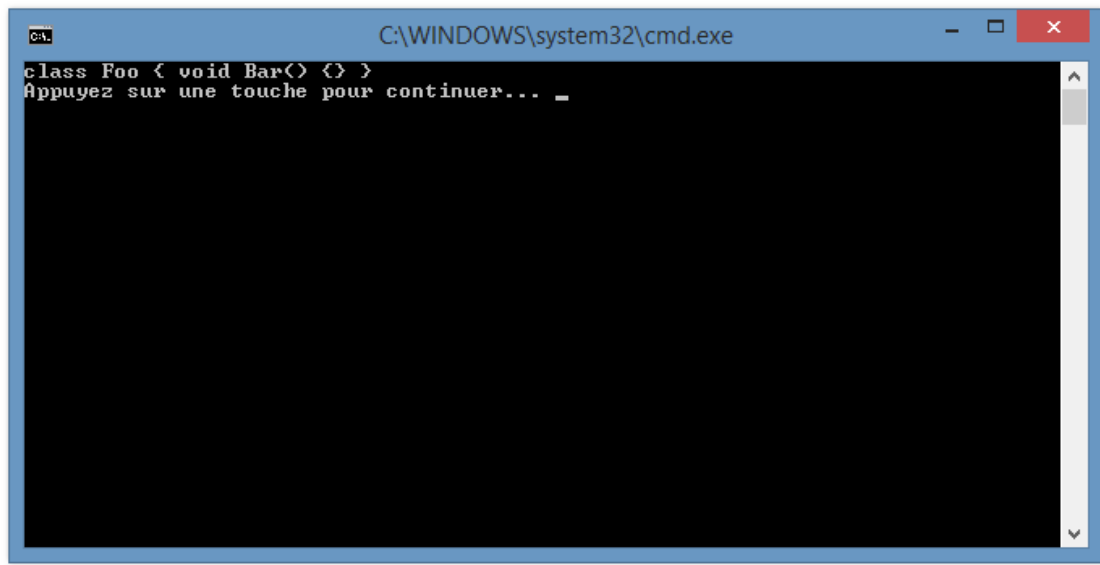
namespace ConsoleApplication1
{
    class Program
    {
        static void Main(string[] args)
        {
            var tree = CSharpSyntaxTree.ParseText("class Foo { void Bar() {} }");
            var node = tree.
        }
    }
}
```



SyntaxNode SyntaxTree.GetRoot([System.Threading.CancellationTokenc Gets the root node of the syntax tree, causing computation if necessary.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using Microsoft.CodeAnalysis;
using Microsoft.CodeAnalysis.CSharp;
using Microsoft.CodeAnalysis.CSharp.Symbols;
using Microsoft.CodeAnalysis.CSharp.Syntax;
using Microsoft.CodeAnalysis.Text;

namespace ConsoleApplication1
{
    0 references
    class Program
    {
        0 references
        static void Main(string[] args)
        {
            var tree = CSharpSyntaxTree.ParseText("class Foo { void Bar() {} }");
            var node = tree.GetRoot();
            Console.WriteLine(node.ToString());
        }
    }
}
```



```
C:\WINDOWS\system32\cmd.exe
class Foo < void Bar() {} >
Appuyez sur une touche pour continuer... _
```

```
namespace ConsoleApplication1
{
    0 references
    class Program
    {
        0 references
        static void Main(string[] args)
        {
            var tree = CSharpSyntaxTree.ParseText("class Foo { void Bar() {} }");
            var node = tree.GetRoot();
            Console.WriteLine(node.ToString());

            var res = SyntaxFact
        }
    }
}
```

SyntaxFactory	class Microsoft.CodeAnalysis.CSharp.SyntaxFactory
SyntaxFacts	A class containing factory methods for constructing syntax nodes, tokens and trivia.

```
class Program
{
    0 references
    static void Main(string[] args)
    {
        var tree = CSharpSyntaxTree.ParseText("class Foo { void Bar() {} }");
        var node = tree.GetRoot();
        Console.WriteLine(node.ToString());

        var res = SyntaxFactory.ClassDeclaration("Foo")
    }
}
```

```
class Program
{
    0 references
    static void Main(string[] args)
    {
        var tree = CSharpSyntaxTree.ParseText("class Foo { void Bar() {} }");
        var node = tree.GetRoot();
        Console.WriteLine(node.ToString());

        var res = SyntaxFactory.ClassDeclaration("Foo")
            .WithMembers(SyntaxFactory.List<MemberDeclarationSyntax>(new[]
            {
                SyntaxFactory.MethodDeclaration(
                    SyntaxFactory.Identifier("Bar"),
                    SyntaxFactory.VoidKeyword(),
                    SyntaxFactory.ParameterList(),
                    SyntaxFactory.Block())
            }));
    }
}
```



```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using Microsoft.CodeAnalysis;
using Microsoft.CodeAnalysis.CSharp;
using Microsoft.CodeAnalysis.CSharp.Symbols;
using Microsoft.CodeAnalysis.CSharp.Syntax;
using Microsoft.CodeAnalysis.Text;

namespace ConsoleApplication1
{
    0 references
    class Program
    {
        0 references
        static void Main(string[] args)
        {
            var tree = CSharpSyntaxTree.ParseText("class Foo { void Bar() {} }");
            var node = tree.GetRoot();
            Console.WriteLine(node.ToString());

            var res = SyntaxFactory.ClassDeclaration("Foo")
                .WithMembers(SyntaxFactory.List<MemberDeclarationSyntax>(new[]
                {
                    SyntaxFactory.MethodDeclaration(
                        SyntaxFactory.PredefinedType(
                            SyntaxFactory.Token(SyntaxKind.VoidKeyword)
                        ), "Bar"
                    )
                })
                .WithBody(SyntaxFactory.Block()
                )
            )))
        }
    }
}

```

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using Microsoft.CodeAnalysis;
using Microsoft.CodeAnalysis.CSharp;
using Microsoft.CodeAnalysis.CSharp.Symbols;
using Microsoft.CodeAnalysis.CSharp.Syntax;
using Microsoft.CodeAnalysis.Text;

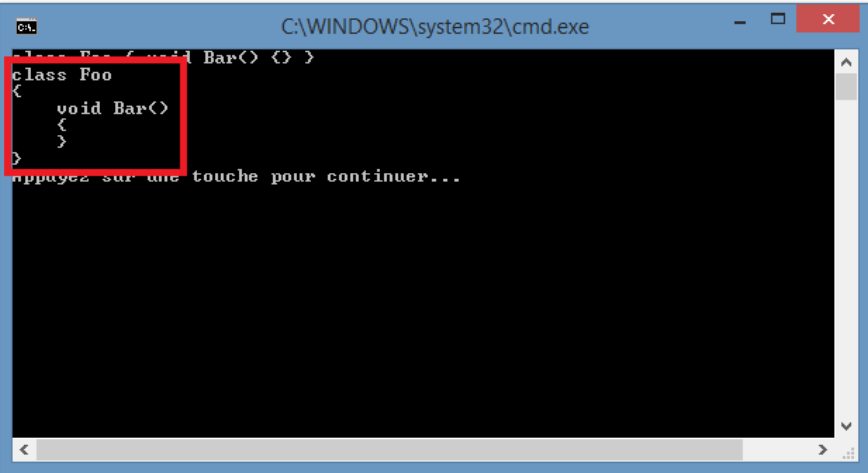
namespace ConsoleApplication1
{
    0 references
    class Program
    {
        0 references
        static void Main(string[] args)
        {
            var tree = CSharpSyntaxTree.ParseText("class Foo { void Bar() {} }");
            var node = tree.GetRoot();
            Console.WriteLine(node.ToString());

            var res = SyntaxFactory.ClassDeclaration("Foo")
                .WithMembers(SyntaxFactory.List<MemberDeclarationSyntax>(new[]
                {
                    SyntaxFactory.MethodDeclaration(
                        SyntaxFactory.PredefinedType(
                            SyntaxFactory.Token(SyntaxKind.VoidKeyword)
                        ), "Bar"
                    )
                })
                .WithBody(SyntaxFactory.Block()
                )
            )))
            .NormalizeWhitespace();
        }
    }
}
```

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using Microsoft.CodeAnalysis;
using Microsoft.CodeAnalysis.CSharp;
using Microsoft.CodeAnalysis.CSharp.Symbols;
using Microsoft.CodeAnalysis.CSharp.Syntax;
using Microsoft.CodeAnalysis.Text;

namespace ConsoleApplication1
{
    class Program
    {
        static void Main(string[] args)
        {
            var tree = CSharpSyntaxTree.ParseText("class Foo { void Bar() {} }");
            var node = tree.GetRoot();
            Console.WriteLine(node.ToString());

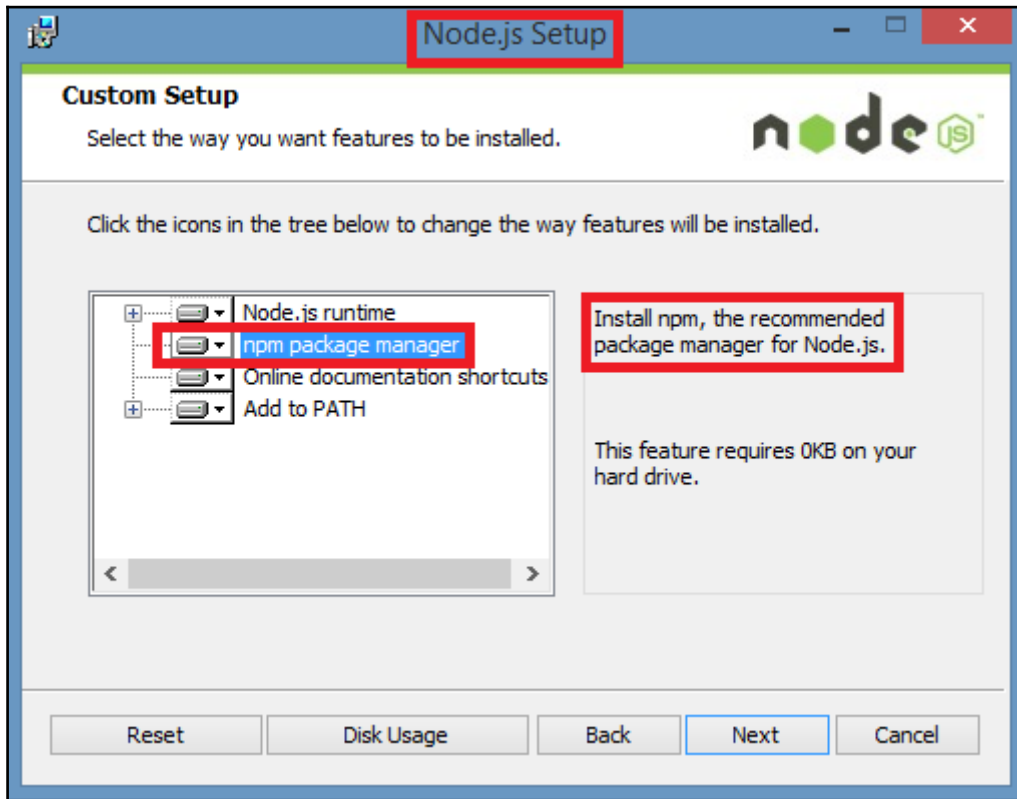
            var res = SyntaxFactory.ClassDeclaration("Foo")
                .WithMembers(SyntaxFactory.List<MemberDeclarationSyntax>(new[]
                {
                    SyntaxFactory.MethodDeclaration(
                        SyntaxFactory.PredefinedType(
                            SyntaxFactory.Token(SyntaxKind.VoidKeyword)
                        ), "Bar"
                    )
                })
                .WithBody(SyntaxFactory.Block())
            );
            res.NormalizeWhitespace();
            Console.WriteLine(res.ToString());
        }
    }
}
```



```
C:\WINDOWS\system32\cmd.exe
class Foo { void Bar() {} }
class Foo
{
    void Bar()
    {
    }
}
Appuyez sur une touche pour continuer...
```

---

## Chapter 3: Working with npm, Frontend Package Managers, and Task Runners



```
C:\dev\DemoNPM>npm init
This utility will walk you through creating a package.json file.
It only covers the most common items, and tries to guess sensible defaults.

See `npm help json` for definitive documentation on these fields
and exactly what they do.

Use `npm install <pkg> --save` afterwards to install a package and
save it as a dependency in the package.json file.

Press ^C at any time to quit.
name: <DemoNPM> demo-npm
version: <1.0.0>
description: my first node package
entry point: <index.js>
test command:
git repository:
keywords: stef
author: stephane
license: <ISC>
About to write to C:\dev\DemoNPM\package.json:
<
  "name": "demo-npm",
  "version": "1.0.0",
  "description": "my first node package",
  "main": "index.js",
  "scripts": {
    "test": "echo `Error: no test specified` && exit 1"
  },
  "keywords": [
    "stef"
  ],
  "author": "stephane",
  "license": "ISC"
}

Is this ok? <yes>
C:\dev\DemoNPM>
```

npm

naturally pacifist marsupials    npm On-Site    npm Private Packages    npm Open Source    documentation    support

find packages    sign up or log in

## create an account

sign all the way up

**username**

must be lowercase and composed of URL-safe characters.

**password**

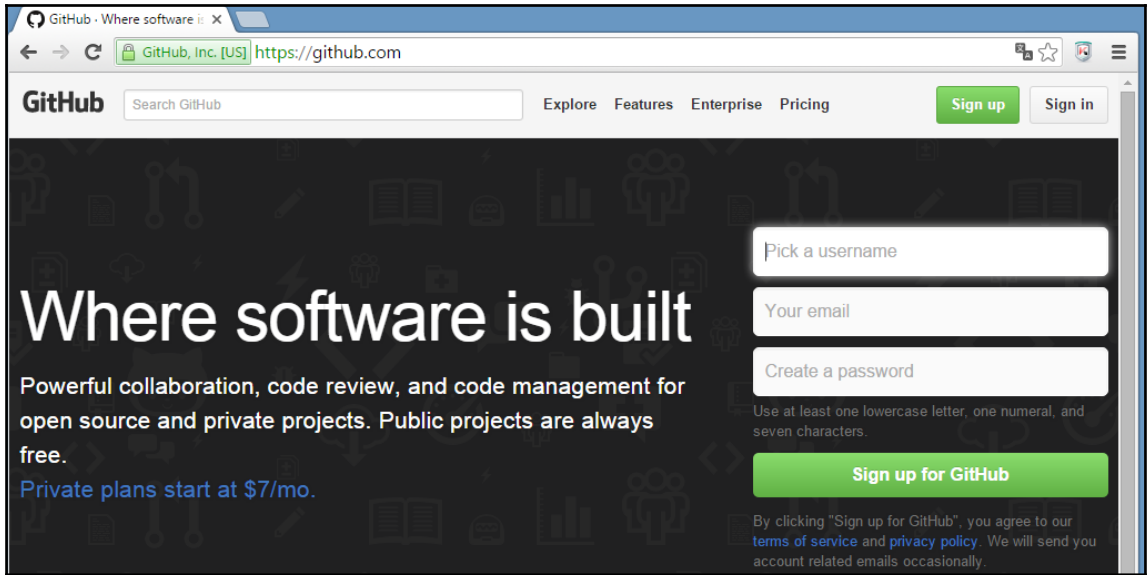
**verify password**

**email address**

This will be public and shown on all the packages you publish. Accounts with invalid emails may be deleted without notice.

sign up for npm weekly emails

**make it so**





Search GitHub

[Pull requests](#) [Issues](#) [Gist](#)

## Create a new repository

A repository contains all the files for your project, including the revision history.

Owner

 stef007 ▾


Repository name

/

Great repository names are short and memorable. Need inspiration? How about **didactic-computing-machine**.

Description (optional)

 **Public**  
Anyone can see this repository. You choose who can commit.

 **Private**  
You choose who can see and commit to this repository.

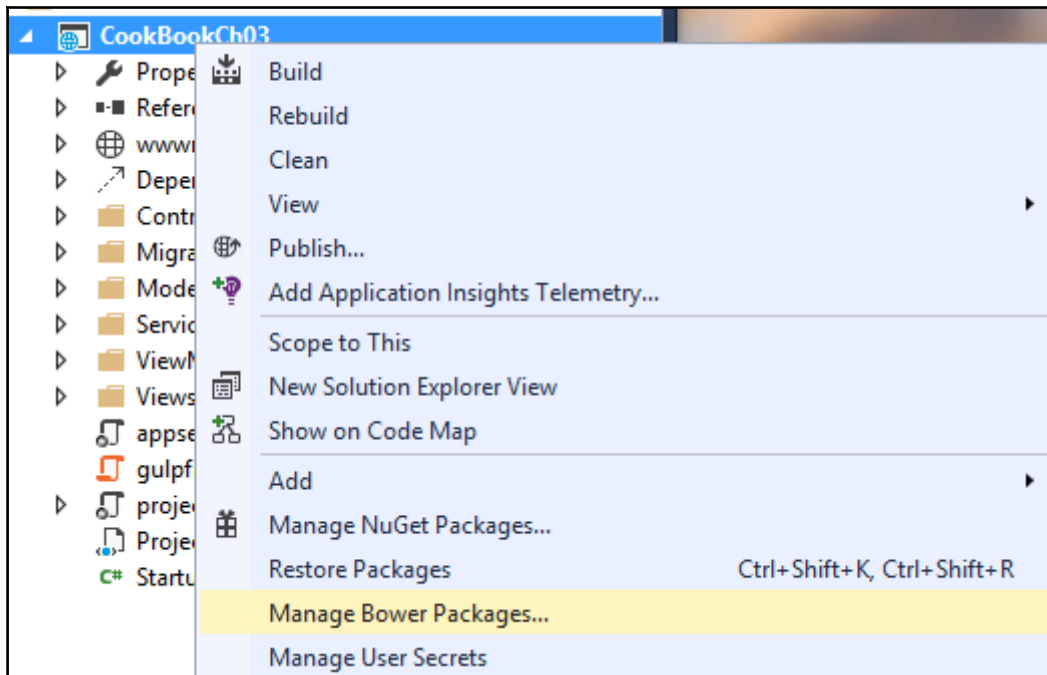
**Initialize this repository with a README**  
This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

Add .gitignore: **None** ▾

Add a license: **None** ▾ ⓘ

**Create repository**











Bower: CookBookCh03 .bower.json

## Manage Bower Packages: 'CookBookCh03' Project

Browse Installed Update Available

lodash  Include Prerelease

- 
**lodash**  
 A JavaScript utility library delivering consistenc... Install
- 
**angular-lodash**  
 Lo-Dash adapter for AngularJS
- 
**lodash-deep**  
 Lodash mixins for (deep) object accessing / manipulation.
- 
**ng-lodash**  
 An Angular wrapper for Lodash
- 
**lodash-template-loader**  
 A Lo-Dash template loader plugin for AMD projects.



**lodash**

Install
3.10.1

---

**Options**

Save changes to bower.json

---

**Description**

A JavaScript utility library delivering consistency, modularity, performance, & extras.

**Author(s):**    lodash

**License:**

**Downloads:**   0

**Project URL:** <https://github.com/lodash/lodash>

**Dependencies**

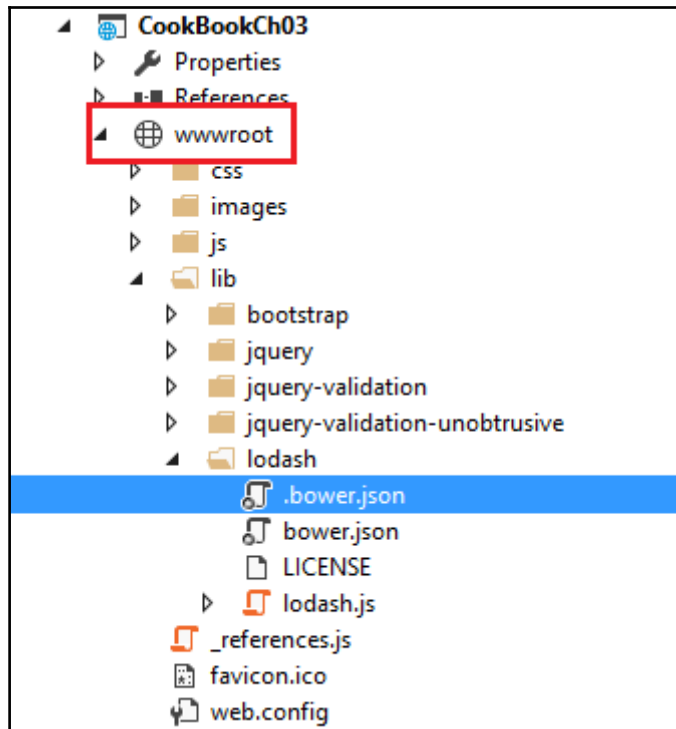
*No dependencies*

Output

Show output from: Bower/npm

```

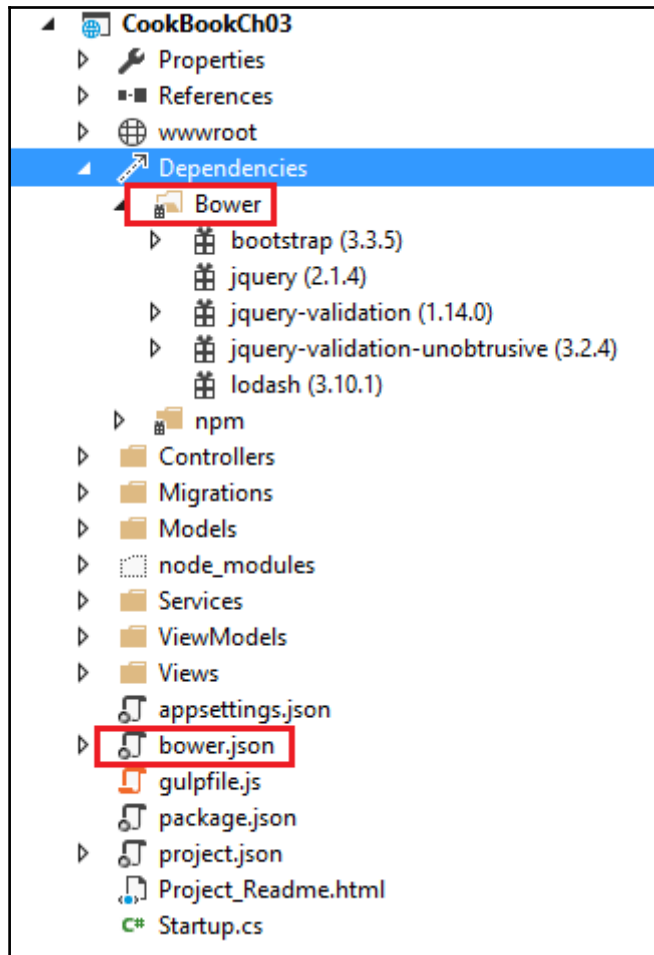
PATH=.\node_modules\.bin;C:\Program Files (x86)\Microsoft Visual Studio 14.0\Common7\IDE\Extensions\Microsoft\Web Tools
\External;%PATH%;C:\Program Files (x86)\Microsoft Visual Studio 14.0\Common7\IDE\Extensions\Microsoft\Web Tools\External
\git
"C:\Program Files (x86)\Microsoft Visual Studio 14.0\Common7\IDE\Extensions\Microsoft\Web Tools\External\Bower.cmd"
install lodash#3.10.1 --production --force-latest --save
bower lodash#3.10.1          cached git://github.com/lodash/lodash.git#3.10.1
bower lodash#3.10.1          validate 3.10.1 against git://github.com/lodash/lodash.git#3.10.1
bower lodash#3.10.1          install lodash#3.10.1
lodash#3.10.1 wwwroot\lib\lodash
  
```

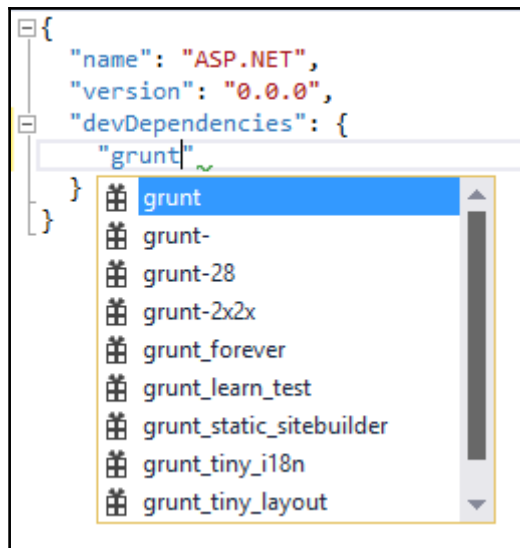
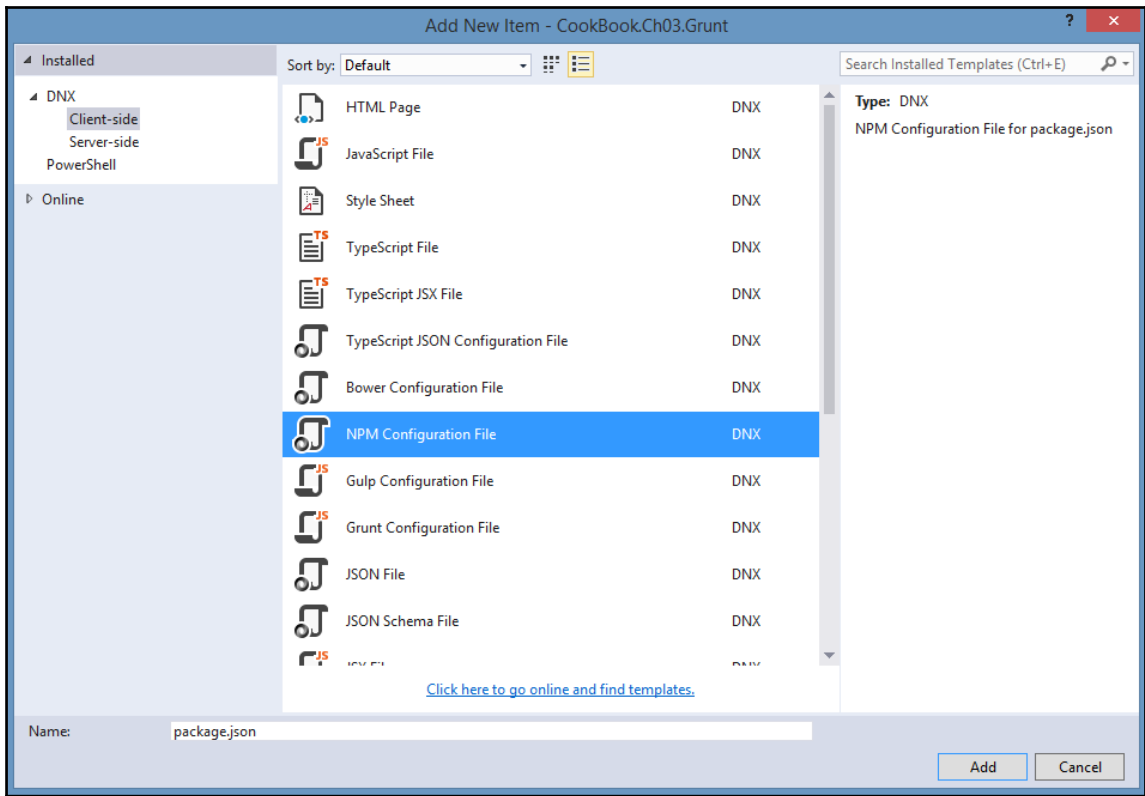


```
Schema: http://json.schemastore.org/bower
1  {
2    "name": "lodash",
3    "main": "lodash.js",
4    "ignore": [...],
19   "homepage": "https://github.com/lodash/lodash",
20   "version": "3.10.1",
21   "_release": "3.10.1",
22   "_resolution": [...],
27   "_source": "git://github.com/lodash/lodash.git",
28   "_target": "3.10.1",
29   "_originalSource": "lodash",
30   "_direct": true
31 }
```

---

```
Schema: http://json.schemastore.org/bower
1  {
2    "name": "ASP.NET",
3    "private": true,
4    "dependencies": {
5      "bootstrap": "3.3.5",
6      "jquery": "2.1.4",
7      "jquery-validation": "1.14.0",
8      "jquery-validation-unobtrusive": "3.2.4",
9      "lodash": "3.10.1"
10   }
11 }
```





```
{
  "name": "ASP.NET",
  "version": "0.0.0",
  "devDependencies": {
    "grunt": ""
  }
}
```

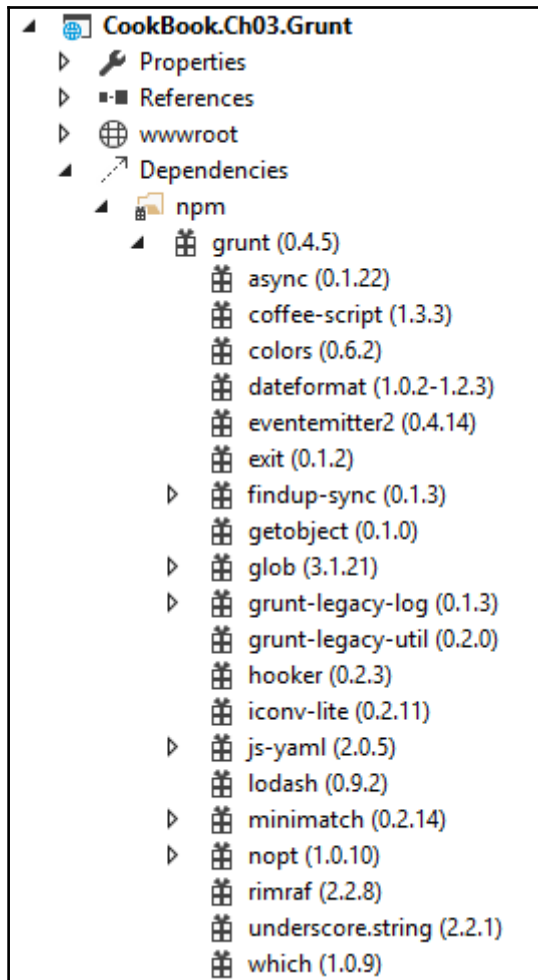
0.4.5 The latest stable version of the package  
^0.4.5  
~0.4.5

Output

Show output from: Bower/npm

PATH=.\node\_modules\.bin;C:\Program Files (x86)\Microsoft Visual Studio\Preview\Enterprise\Web\External;  
"C:\Program Files (x86)\Microsoft Visual Studio\Preview\Enterprise\Web\External\npm.CMD" install  
npm WARN prefer global coffeescript@1.10.0 should be installed with -g  
npm WARN prefer global coffeescript@1.10.0 should be installed with -g  
webapplication@1.0.0 C:\Users\EnginPolat\Desktop\WebApplication

- ├─ grunt@1.0.2
  - ├─ coffeescript@1.10.0
  - ├─ dateFormat@1.0.12
  - ├─ get-stdin@4.0.1
    - ├─ meow@3.7.0
      - ├─ camelcase-keys@2.1.0
        - ├─ camelcase@2.1.1
      - ├─ decamelize@1.2.0
      - ├─ loud-rejection@1.6.0
      - ├─ currently-unhandled@0.4.1
        - ├─ array-find-index@1.0.2
      - ├─ signal-exit@3.0.2
    - ├─ map-obj@1.0.1
    - ├─ minimist@1.2.0
    - ├─ normalize-package-data@2.4.0
      - ├─ hosted-git-info@2.5.0
      - ├─ is-builtin-module@1.0.0
        - ├─ builtin-modules@1.1.1
      - ├─ semver@5.5.0
      - ├─ validate-npm-package-license@3.0.1
        - ├─ spdx-correct@1.0.2
          - ├─ spdx-license-ids@1.2.2
        - ├─ spdx-expression-parse@1.0.4
      - ├─ object-assign@4.1.1
      - ├─ read-pkg-up@1.0.1
        - ├─ find-up@1.1.2
          - ├─ path-exists@2.1.0
        - ├─ pinkie-promise@2.0.1

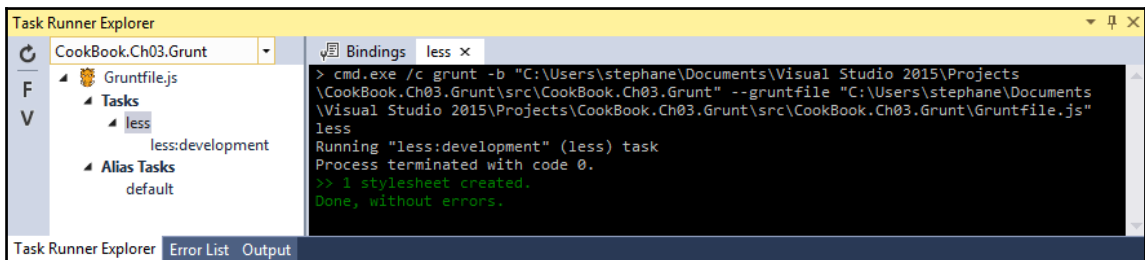
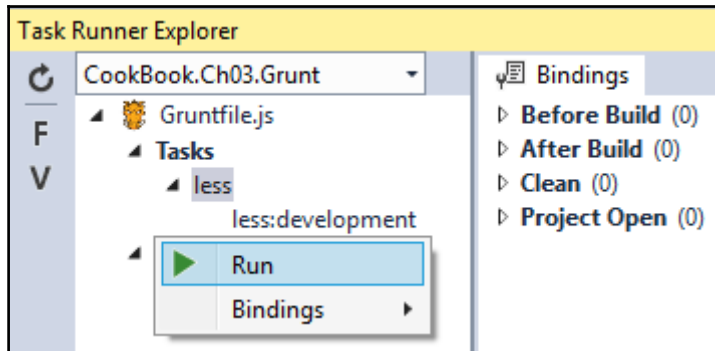
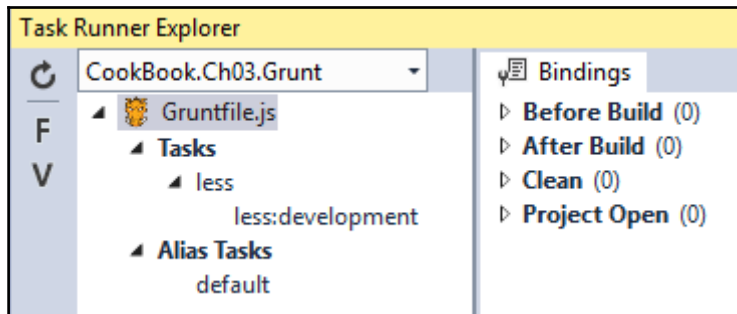
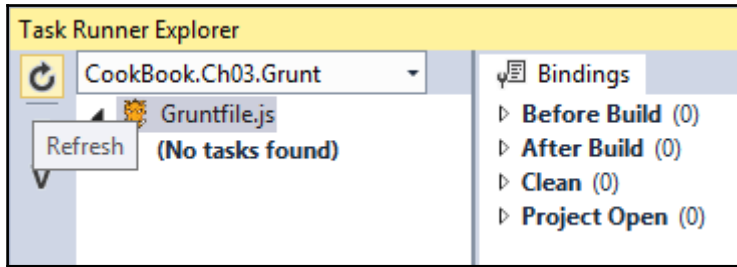


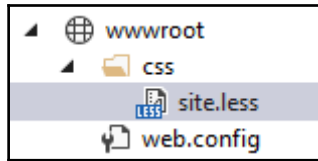
```
"devDependencies": {  
  "grunt": "0.4.5",  
  "grunt-contrib-less": "1.1.0",  
  "grunt-contrib-watch":  
}
```



```
gruntfile.js  package.json
Miscellaneous  <global>
1  module.exports = function (grunt) {
2      grunt.initConfig({
3      });
4  };
```

```
gruntfile.js  exports(grunt)
({) module
1  /*
2  This file in the main entry point for defining grunt tasks and using grunt plugins.
3  Click here to learn more. http://go.microsoft.com/fwlink/?LinkID=513275&clid=0x409
4  */
5  module.exports = function (grunt) {
6      grunt.initConfig({
7          pkg: grunt.file.readJSON('package.json'),
8          less: {
9              // production config is also available
10             development: {
11                 options: {
12                     // Specifies directories to scan for @import directives when parsing.
13                     // Default value is the directory of the source, which is probably what you want.
14                     paths: ["wwwroot/css/"],
15                 },
16                 files: {
17                     // compilation.css : source.less
18                     "wwwroot/css/site.css": "wwwroot/css/site.less"
19                 }
20             }
21         },
22     });
23
24     // Load the plugin that provides the "less" task.
25     grunt.loadNpmTasks('grunt-contrib-less');
26
27     // Default task(s).
28     grunt.registerTask('default', ['less']);
29
30 };
```





```
site.css  + X  
1 body {  
2   background-color: #2d5e8b;  
3 }
```



```
script1.js  + X  
<global>  
1 var Foobar = Foobar || {};  
2 Foobar.Toto = (function (Toto) {  
3   // Modification du namespace  
4   return Toto;  
5 })(Foobar.Toto || {});  
6
```

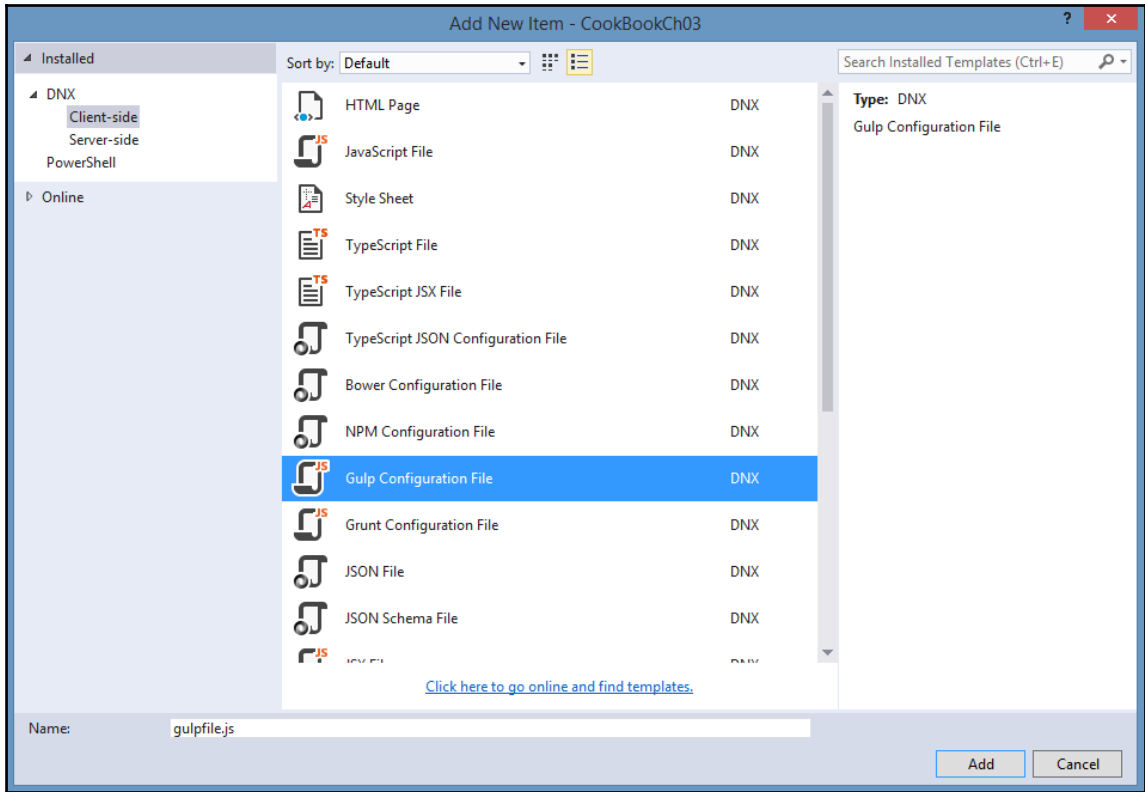
```
script2.js  + X  
<global>  
1 var Foobar2 = (function () {  
2   var visible = function () { };  
3   var notVisible = function () { };  
4  
5   return {  
6     visible: visible  
7   };  
8 })();
```

```
package.json*  + X
Schema: http://json.schemastore.org/package
1  {
2    "name": "ASP.NET",
3    "version": "0.0.0",
4    "devDependencies": {
5      "gulp": ""
6    }
7  }
8

3.9.0 The latest stable version of the package
^3.9.0
~3.9.0
```

```
package.json*  + X
Schema: http://json.schemastore.org/package
1  {
2    "name": "ASP.NET",
3    "version": "0.0.0",
4    "devDependencies": {
5      "gulp": "3.9.0",
6      "gulp-concat": "2.6.0",
7      "gulp-uglify": ""
8    }
9  }
10

1.5.1 The latest stable version of the package
^1.5.1
~1.5.1
```

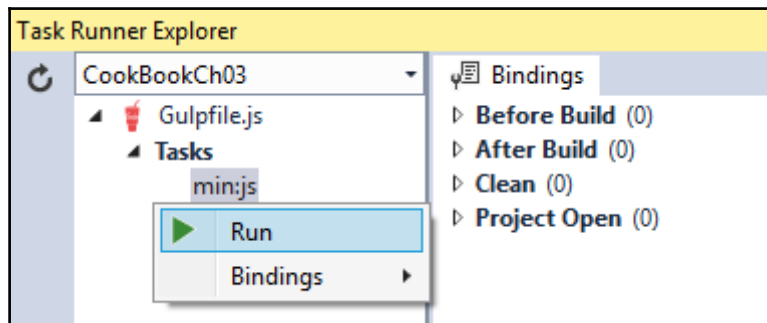


```
gulpfile.js  + X
<global>
1
2  var gulp = require('gulp');
3
4  gulp.task('default', function () {
5    // place code for your default task here
6  });
```

```
gulpfile.js  ▸ ×
<global>
1  "use strict";
2
3  var paths = {
4    webroot: "./wwwroot/"
5  };
6
7  paths.js = paths.webroot + "js/**/*.js";
8  paths.minJs = paths.webroot + "js/**/*.min.js";
9  paths.concatJsDest = paths.webroot + "js/site.min.js";
10
```

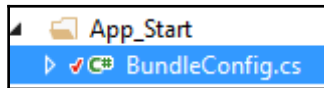
```
var gulp = require('gulp'),
    concat = require("gulp-concat"),
    uglify = require("gulp-uglify");

gulp.task("min:js", function () {
  return gulp.src([paths.js, "!" + paths.minJs], { base: "." })
    .pipe(concat(paths.concatJsDest))
    .pipe(uglify())
    .pipe(gulp.dest("."));
});
```



```
Task Runner Explorer
CookBookCh03
├─ Gulpfile.js
└─ Tasks
   └─ min:js
      > cmd.exe /c gulp -b "C:\Users\stephane\Documents\Visual Studio 2015\Projects\CookBookCh03\src\CookBookCh03" --color --gulpfile "C:\Users\stephane\Documents\Visual Studio 2015\Projects\CookBookCh03\src\CookBookCh03\Gulpfile.js" min:js
      [04:34:04] Using gulpfile ~\Documents\Visual Studio 2015\Projects\CookBookCh03\src\CookBookCh03\Gulpfile.js
      [04:34:04] Starting 'min:js'...
      [04:34:04] Finished 'min:js' after 37 ms
      Process terminated with code 0.
```

```
site.min.js
<global>
function (o)
1 var Foobar=Foobar||{};Foobar.Toto=function(o){return o}(Foobar.Toto||{});var Foobar2=function(){var o=function(){
```



```
public static void RegisterBundles(BundleCollection bundles)
{
    bundles.Add(new ScriptBundle("~/bundles/jquery").Include(
        "~/Scripts/jquery-{version}.js"));

    bundles.Add(new StyleBundle("~/Content/css").Include(
        "~/Content/bootstrap.css",
        "~/Content/site.css"));
}
```



# GENERATORS



[How to add your generator »](#)

Generator	Last Updated	Stars	Installs
<a href="#">aspnetdnx</a> by <a href="#">OmniSharp</a> ASP.NET 5 apps	8 months ago	427	44
<a href="#">aspnet</a> by <a href="#">OmniSharp</a> ASP.NET 5 apps	13 days ago	427	11375
<a href="#">aspnetdnx2</a> by <a href="#">OmniSharp</a> ASP.NET 5 apps	8 months ago	427	38
<a href="#">aspnet-xtianus</a> by <a href="#">Christian Matthias</a> ASP.NET 5 apps	9 months ago	8	118

```
C:\> yo
Microsoft Windows [version 6.3.9600]
(c) 2013 Microsoft Corporation. Tous droits réservés.

C:\WINDOWS\system32>yo
? 'Allo stephane! What would you like to do? (Use arrow keys)
  Run a generator
> Install a generator
  Find some help
  Get me out of here!
```



```
yo
Microsoft Windows [version 6.3.9600]
(c) 2013 Microsoft Corporation. Tous droits réservés.
C:\WINDOWS\system32>yo
? 'Allo stephane! What would you like to do? Install a generator
? Search npm for generators:
```

```
yo
Microsoft Windows [version 6.3.9600]
(c) 2013 Microsoft Corporation. Tous droits réservés.
C:\WINDOWS\system32>yo
? 'Allo stephane! What would you like to do? Install a generator
? Search npm for generators: aspnet
? Here's what I found. Official generator →
? Install one? (Use arrow keys)
> aspnet Yeoman generator for ASP.NET 5 apps
  aspnet-basic A yeoman generator for a basic Asp.Net vNext website
  aspnet-item Yeoman generator for ASP.NET vNext items
  aspnet-oauth Yeoman generator for OAuth Providers for ASP.NET 5
  aspnet-proj Generate ASP.NET 5 project
  aspnet-tiny Yeoman generator
  aspnet-xtianus Yeoman generator for ASP.NET 5 apps
(Move up and down to reveal more choices)
```

```
npm
Microsoft Windows [version 6.3.9600]
(c) 2013 Microsoft Corporation. Tous droits réservés.
C:\WINDOWS\system32>yo
? 'Allo stephane! What would you like to do? Install a generator
? Search npm for generators: aspnet
? Here's what I found. Official generator →
? Install one? aspnet Yeoman generator for ASP.NET 5 apps
loadDep:validate-npm-pack
```

```
npm
? 'Allo stephane! What would you like to do? (Use arrow keys)
  Run a generator
> Aspnet
  Update your generators
  Install a generator
  Find some help
  Get me out of here!
```

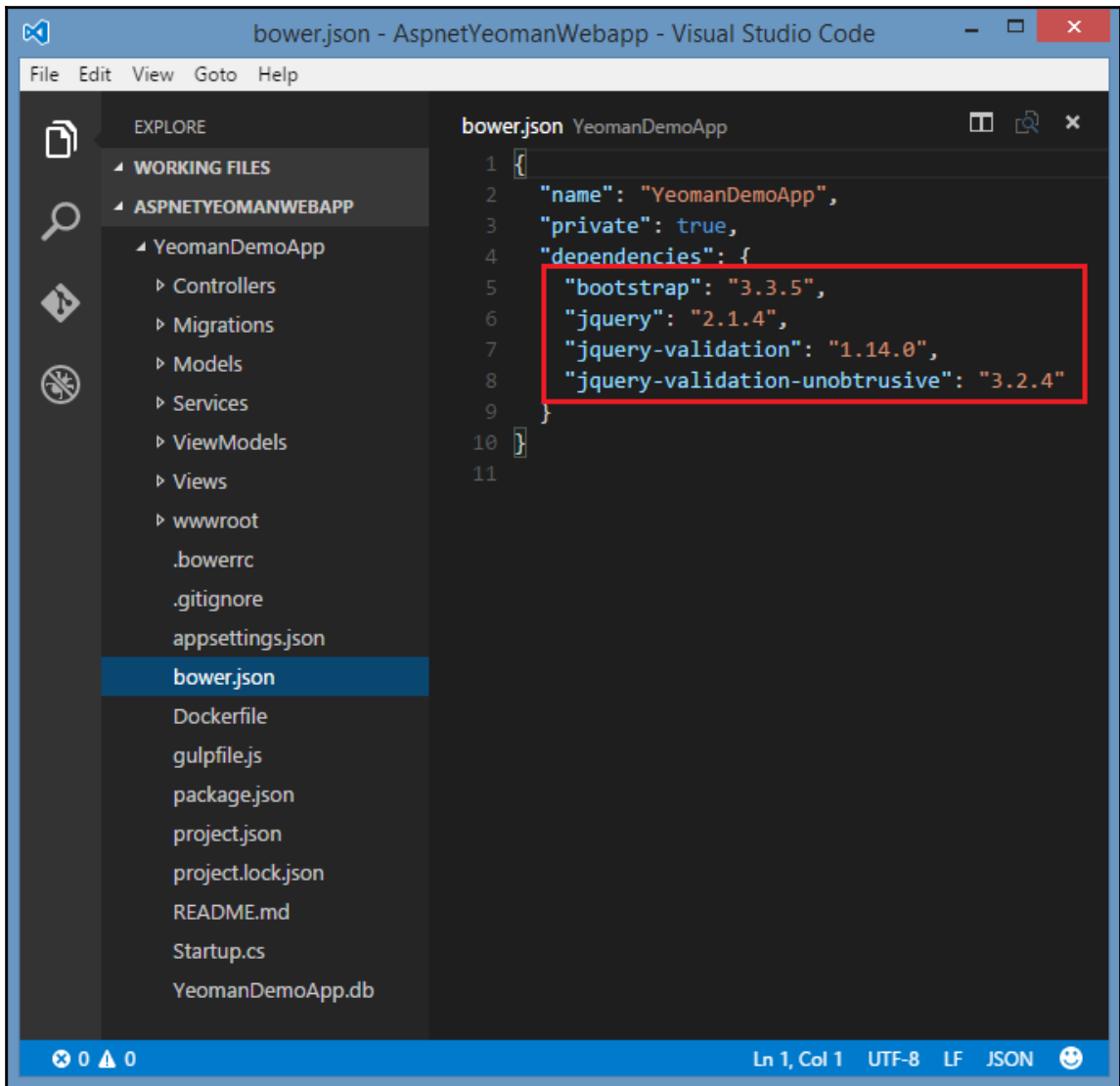
```
C:\>cd dev
C:\dev>mkdir AspnetYeomanWebapp
C:\dev>cd AspnetYeomanWebapp
C:\dev\AspnetYeomanWebapp>code .
C:\dev\AspnetYeomanWebapp>yo aspnet

  _____
  |-----<o>-----|
  |                   |
  |  <-'U'->         |
  |   ~  A          |
  |   ~  o          |
  |-----'V'-----|

Welcome to the
marvellous ASP.NET 5
generator!

? What type of application do you want to create?
Empty Application
Console Application
> Web Application
Web Application Basic [without Membership and Authorization]
Web API Application
Nancy ASP.NET Application
Class Library
Unit test project
```





```
gulpfile.js - AspnetYeomanWebapp - Visual Studio Code
File Edit View Goto Help

EXPLORE
WORKING FILES
ASPNETYEOMANWEBAPP
  YeomanDemoApp
    Controllers
    Migrations
    Models
    Services
    ViewModels
    Views
    wwwroot
    .bowerrc
    .gitignore
    appsettings.json
    bower.json
    Dockerfile
    gulpfile.js
    package.json
    project.json
    project.lock.json
    README.md
    Startup.cs
    YeomanDemoApp.db

gulpfile.js YeomanDemoApp
1  /// <binding Clean='clean' />
2  "use strict";
3
4  var gulp = require("gulp"),
5      rimraf = require("rimraf"),
6      concat = require("gulp-concat"),
7      cssmin = require("gulp-cssmin"),
8      uglify = require("gulp-uglify");
9
10 var webroot = "../wwwroot/";
11
12 var paths = {
13   js: webroot + "js/**/*.js",
14   minJs: webroot + "js/**/*.min.js",
15   css: webroot + "css/**/*.css",
16   minCss: webroot + "css/**/*.min.css",
17   concatJsDest: webroot + "js/site.min.js",
18   concatCssDest: webroot + "css/site.min.css"
19 };
20
21 gulp.task("clean:js", function (cb) {
22   rimraf(paths.concatJsDest, cb);
23 });
24
25 gulp.task("clean:css", function (cb) {
26   rimraf(paths.concatCssDest, cb);
27 });
28
29 gulp.task("clean", ["clean:js", "clean:css"]);
30
31 gulp.task("min:js", function () {
32   return gulp.src([paths.js, "!" + paths.minJs], {
33     base: "."
34   })
35     .pipe(concat(paths.concatJsDest))
36     .pipe(uglify())
37     .pipe(gulp.dest("."));
38 });
39
40 gulp.task("min:css", function () {
41   return gulp.src([paths.css, "!" + paths.minCss])
42     .pipe(concat(paths.concatCssDest))
43     .pipe(cssmin())
44     .pipe(gulp.dest("."));
45 });
46
47 gulp.task("min", ["min:js", "min:css"]);
48
```

```
Administrator : Invite de commandes - dnx web
C:\dev\AspNetYeomanWebapp>cd YeomanDemoApp
C:\dev\AspNetYeomanWebapp\YeomanDemoApp>dnx restore
Microsoft .NET Development Utility CoreCLR-x64-1.0.0-rc1-16231

  CACHE https://www.nuget.org/api/v2/
Restoring packages for C:\dev\AspNetYeomanWebapp\YeomanDemoApp\project.json
  GET https://www.nuget.org/api/v2/FindPackagesById()?id='EntityFramework.Sqlite'
  OK https://www.nuget.org/api/v2/FindPackagesById()?id='EntityFramework.Sqlite'
1520ms
  GET https://www.nuget.org/api/v2/package/EntityFramework.Sqlite/7.0.0-rc1-final
1
  OK https://www.nuget.org/api/v2/package/EntityFramework.Sqlite/7.0.0-rc1-final
514ms
  GET https://www.nuget.org/api/v2/FindPackagesById()?id='Microsoft.Data.Sqlite'
  OK https://www.nuget.org/api/v2/FindPackagesById()?id='Microsoft.Data.Sqlite'
305ms
  GET https://www.nuget.org/api/v2/package/Microsoft.Data.Sqlite/1.0.0-rc1-final
  GET https://www.nuget.org/api/v2/FindPackagesById()?id='Microsoft.Dnx.Runtime'
  OK https://www.nuget.org/api/v2/FindPackagesById()?id='Microsoft.Dnx.Runtime'
263ms
  GET https://www.nuget.org/api/v2/package/Microsoft.Dnx.Runtime/1.0.0-rc1-final
  OK https://www.nuget.org/api/v2/package/Microsoft.Dnx.Runtime/1.0.0-rc1-final
890ms
  GET https://www.nuget.org/api/v2/FindPackagesById()?id='Microsoft.Dnx.Loader'
  OK https://www.nuget.org/api/v2/FindPackagesById()?id='Microsoft.Dnx.Loader' 2
11ms
  GET https://www.nuget.org/api/v2/package/Microsoft.Dnx.Loader/1.0.0-rc1-final
  OK https://www.nuget.org/api/v2/package/Microsoft.Dnx.Loader/1.0.0-rc1-final 2
96ms
  OK https://www.nuget.org/api/v2/package/Microsoft.Data.Sqlite/1.0.0-rc1-final
2612ms
  GET https://www.nuget.org/api/v2/FindPackagesById()?id='System.AppContext'
  GET https://www.nuget.org/api/v2/FindPackagesById()?id='System.Xml.ReaderWriter'
  OK https://www.nuget.org/api/v2/FindPackagesById()?id='System.AppContext' 201m
s
  GET https://www.nuget.org/api/v2/package/System.AppContext/4.0.1-beta-23516
  OK https://www.nuget.org/api/v2/package/System.AppContext/4.0.1-beta-23516 301
ms
  OK https://www.nuget.org/api/v2/FindPackagesById()?id='System.Xml.ReaderWriter'
831ms
  GET https://www.nuget.org/api/v2/package/System.Xml.ReaderWriter/4.0.11-beta-2
3516
  OK https://www.nuget.org/api/v2/package/System.Xml.ReaderWriter/4.0.11-beta-23
516 1323ms
  GET https://www.nuget.org/api/v2/FindPackagesById()?id='System.Net.Sockets'
  OK https://www.nuget.org/api/v2/FindPackagesById()?id='System.Net.Sockets' 278
ms
Installing Microsoft.Dnx.Runtime.1.0.0-rc1-final
Installing Microsoft.Dnx.Loader.1.0.0-rc1-final
Installing EntityFramework.Sqlite.7.0.0-rc1-final
Installing Microsoft.Data.Sqlite.1.0.0-rc1-final
Installing System.AppContext.4.0.1-beta-23516
Installing System.Xml.ReaderWriter.4.0.11-beta-23516
Writing lock file C:\dev\AspNetYeomanWebapp\YeomanDemoApp\project.lock.json
Restore complete, 33930ms elapsed

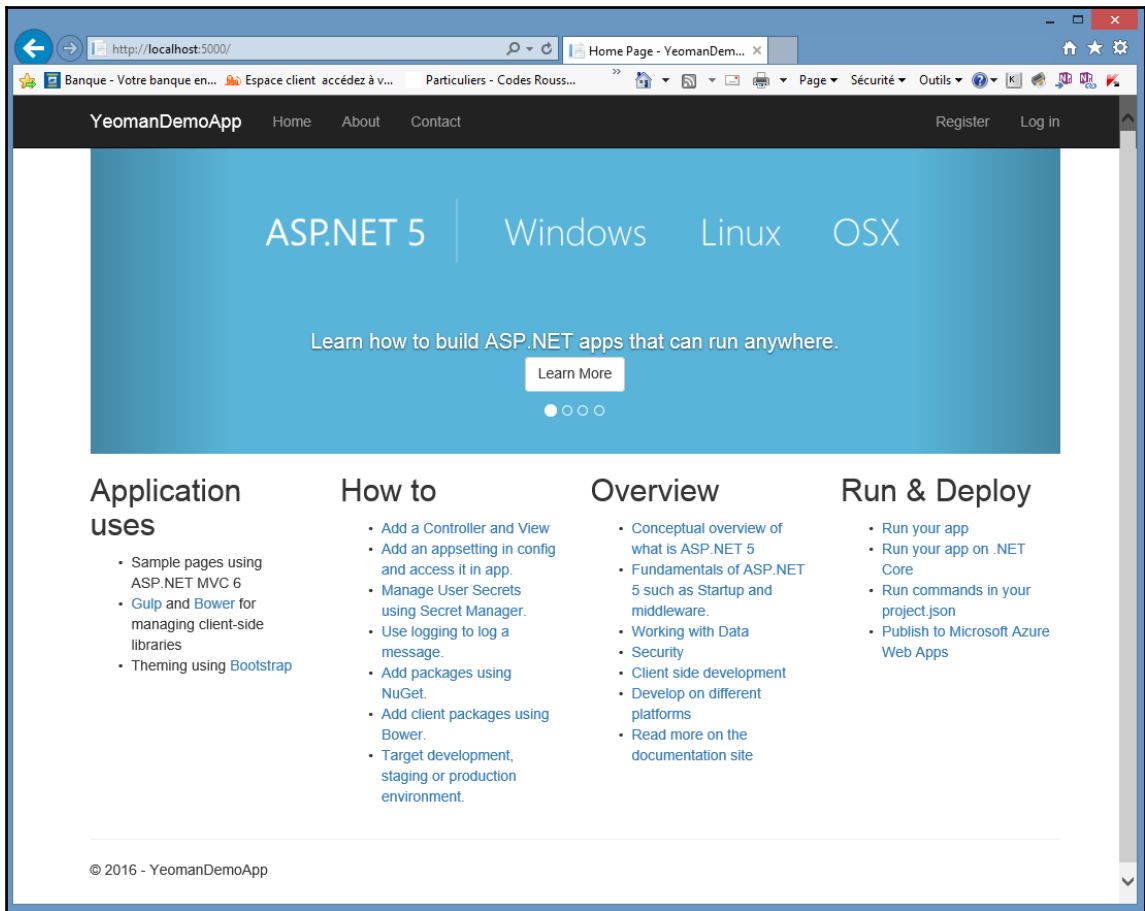
NuGet Config files used:
  C:\Users\stephane\AppData\Roaming\NuGet\nuget.config

Feeds used:
  https://www.nuget.org/api/v2/

Installed:
  6 package(s) to C:\Users\stephane\.dnx\packages

C:\dev\AspNetYeomanWebapp\YeomanDemoApp>dnx web
```

```
project.json - AspnetYeomanWebapp - Visual Studio Code
File Edit View Goto Help
EXPLORE
WORKING FILES
ASPNETYEOMANWEBAPP
  YeomanDemoApp
    Controllers
    Migrations
    Models
    Services
    ViewModels
    Views
  wwwroot
  .bowerrc
  .gitignore
  appsettings.json
  bower.json
  Dockerfile
  gulpfile.js
  package.json
  project.json
  project.lock.json
  README.md
  Startup.cs
  YeomanDemoApp.db
project.json YeomanDemoApp
1 {
2   "version": "1.0.0-*",
3   "userSecretsId": "aspnet5-YeomanDemoApp-e7d4ff6e-d3ff-434d-ae97-18d31658dac5",
4   "compilationOptions": {
5     "emitEntryPoint": true
6   },
7   "tooling": {
8     "defaultNamespace": "YeomanDemoApp"
9   },
10
11  "dependencies": {
12    "EntityFramework.Commands": "7.0.0-rc1-final",
13    "EntityFramework.Sqlite": "7.0.0-rc1-final",
14    "EntityFramework.MicrosoftSqlServer": "7.0.0-rc1-final",
15    "Microsoft.AspNet.Authentication.Cookies": "1.0.0-rc1-final",
16    "Microsoft.AspNet.Diagnostics.Entity": "7.0.0-rc1-final",
17    "Microsoft.AspNet.Identity.EntityFramework": "3.0.0-rc1-final",
18    "Microsoft.AspNet.IISPlatformHandler": "1.0.0-rc1-final",
19    "Microsoft.AspNet.Mvc": "6.0.0-rc1-final",
20    "Microsoft.AspNet.Mvc.TagHelpers": "6.0.0-rc1-final",
21    "Microsoft.AspNet.Server.Kestrel": "1.0.0-rc1-final",
22    "Microsoft.AspNet.StaticFiles": "1.0.0-rc1-final",
23    "Microsoft.AspNet.Tooling.Razor": "1.0.0-rc1-final",
24    "Microsoft.Dnx.Runtime": "1.0.0-rc1-final",
25    "Microsoft.Extensions.CodeGenerators.Mvc": "1.0.0-rc1-final",
26    "Microsoft.Extensions.Configuration.FileProviderExtensions": "1.0.0-rc1-final",
27    "Microsoft.Extensions.Configuration.Json": "1.0.0-rc1-final",
28    "Microsoft.Extensions.Configuration.UserSecrets": "1.0.0-rc1-final",
29    "Microsoft.Extensions.Logging": "1.0.0-rc1-final",
30    "Microsoft.Extensions.Logging.Console": "1.0.0-rc1-final",
31    "Microsoft.Extensions.Logging.Debug": "1.0.0-rc1-final"
32  },
33
34  "commands": {
35    "web": "Microsoft.AspNet.Server.Kestrel",
36    "ef": "EntityFramework.Commands"
37  },
38 }
```





```
Administrator : Invite de commandes
C:\dev\AspnetYeomanWebapp\YeomanDemoApp>yo aspnet --help
Usage:
  yo aspnet:app [options]

Options:
  -h, --help          # Print the generator's options and usage
  --skip-cache        # Do not remember prompt answers
                      Default: false
  --grunt             # Use the Grunt JavaScript task runner instead of Gulp in
                      web projects. Default: false

Description:
  Creates a basic ASP.NET 5 application

Subgenerators:
  yo aspnet:AngularController [options] <name>
  yo aspnet:AngularControllerAs [options] <name>
  yo aspnet:AngularDirective [options] <name>
  yo aspnet:AngularFactory [options] <name>
  yo aspnet:AngularModule [options] <name>
  yo aspnet:AppSettings [options]
  yo aspnet:BowerJson [options]
  yo aspnet:Class [options] <name>
  yo aspnet:CoffeeScript [options] <name>
  yo aspnet:Dockfile [options]
  yo aspnet:gitignore [options]
  yo aspnet:Gruntfile [options]
  yo aspnet:Gulpfile [options] <name>
  yo aspnet:HTMLPage [options] <name>
  yo aspnet:Interface [options] <name>
  yo aspnet:JavaScript [options] <name>
  yo aspnet:JScript [options] <name>
  yo aspnet:JSON [options] <name>
  yo aspnet:JSONSchema [options] <name>
  yo aspnet:Middleware [options] <name>
  yo aspnet:MvcController [options] <name>
  yo aspnet:MvcView [options] <name>
  yo aspnet:nuget [options]
  yo aspnet:PackageJson [options]
  yo aspnet:StartupClass [options]
  yo aspnet:StyleSheet [options] <name>
  yo aspnet:StyleSheetLess [options] <name>
  yo aspnet:StyleSheetScss [options] <name>
  yo aspnet:TagHelper [options] <name>
  yo aspnet:TextFile [options] <name>
  yo aspnet:tfignore [options]
  yo aspnet:TypeScript [options] <name>
  yo aspnet:TypeScriptConfig [options] <name>
  yo aspnet:TypeScriptJSX [options] <name>
  yo aspnet:WebApiController [options] <name>

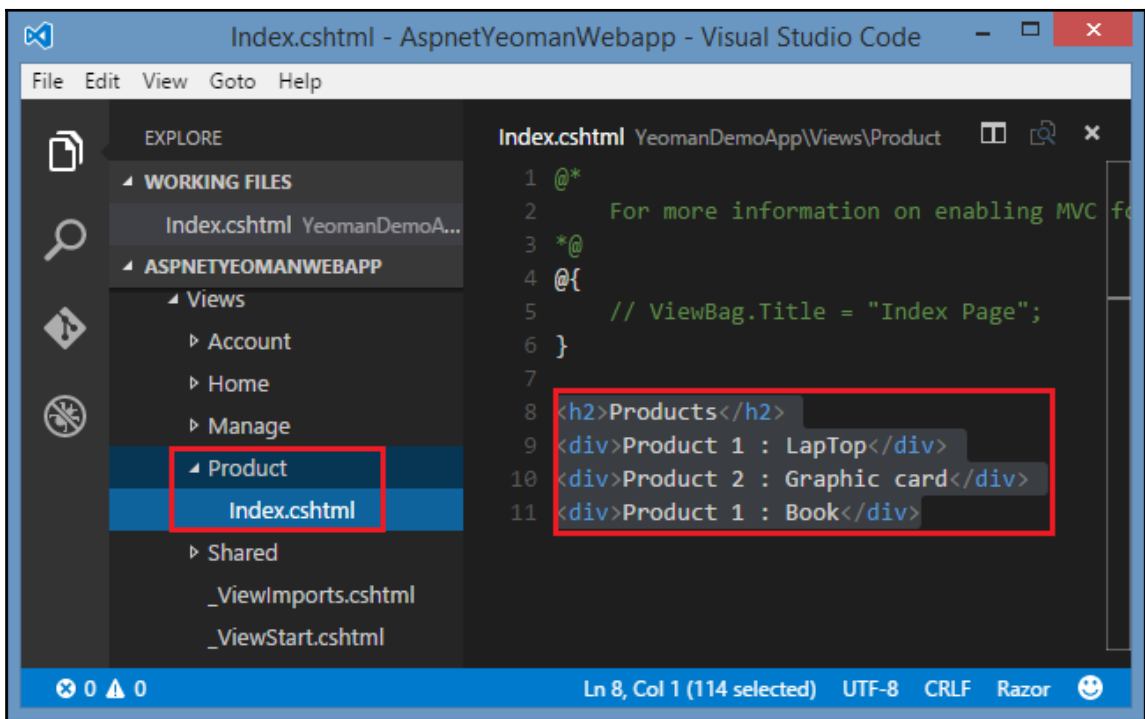
C:\dev\AspnetYeomanWebapp\YeomanDemoApp>
```

```
Administrateur : Invite de commandes
C:\dev\AspnetYeomanWebapp\YeomanDemoApp>yo aspnet:MvcController ProductController
You called the aspnet subgenerator with the arg ProductController
ProductController.cs created.
create ProductController.cs
C:\dev\AspnetYeomanWebapp\YeomanDemoApp>
```

```
ProductController.cs - AspnetYeomanWebapp - Visual Studio Code
File Edit View Goto Help
EXPLORE
WORKING FILES
ASPNETYEOMANWEBAPP
  YeomanDemoApp
    Controllers
      AccountController.cs
      HomeController.cs
      ManageController.cs
      ProductController.cs
    Migrations
    Models
    Services
    ViewModels
    Views
    wwwroot
    .bowerrc
    .gitignore
ProductController.cs YeomanDemoApp\Controllers
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Threading.Tasks;
5 using Microsoft.AspNet.Mvc;
6
7 // For more information on enabling MVC for empty
8
9 namespace YeomanDemoApp.Controllers
10 {
11     public class ProductController : Controller
12     {
13         // GET: /<controller>/
14         public IActionResult Index()
15         {
16             return View();
17         }
18     }
19 }
20
Ln 1, Col 1 UTF-8 LF C# Select project
```

```
Administrateur : Invite de commandes

C:\dev\AspNetYeomanWebapp\YeomanDemoApp>cd Views
C:\dev\AspNetYeomanWebapp\YeomanDemoApp\Views>mkdir Product
C:\dev\AspNetYeomanWebapp\YeomanDemoApp\Views>cd Product
C:\dev\AspNetYeomanWebapp\YeomanDemoApp\Views\Product>yo aspnet:MvcView Index
You called the aspnet subgenerator with the arg Index
Index.cshtml created.
create Index.cshtml
C:\dev\AspNetYeomanWebapp\YeomanDemoApp\Views\Product>
```

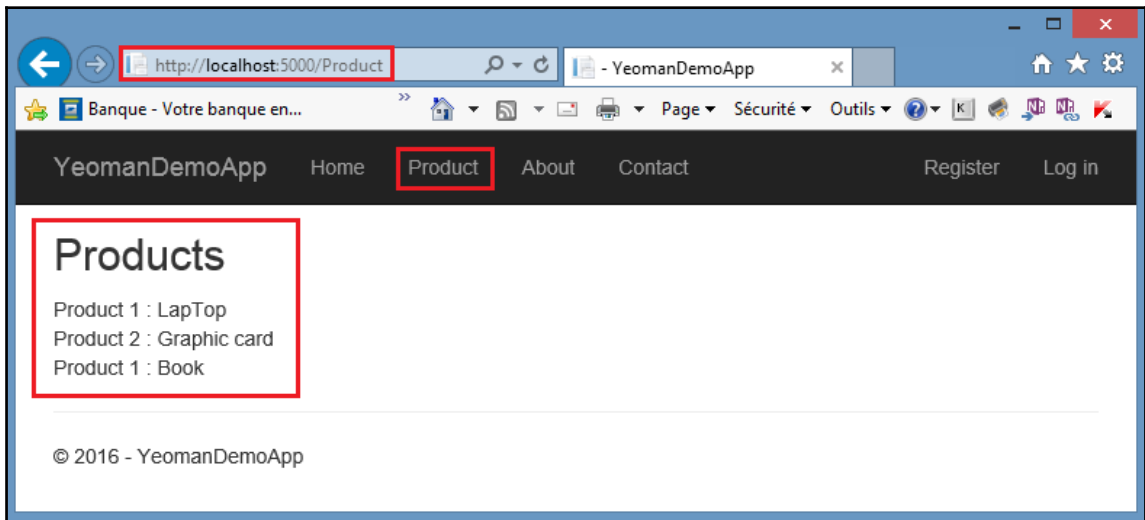


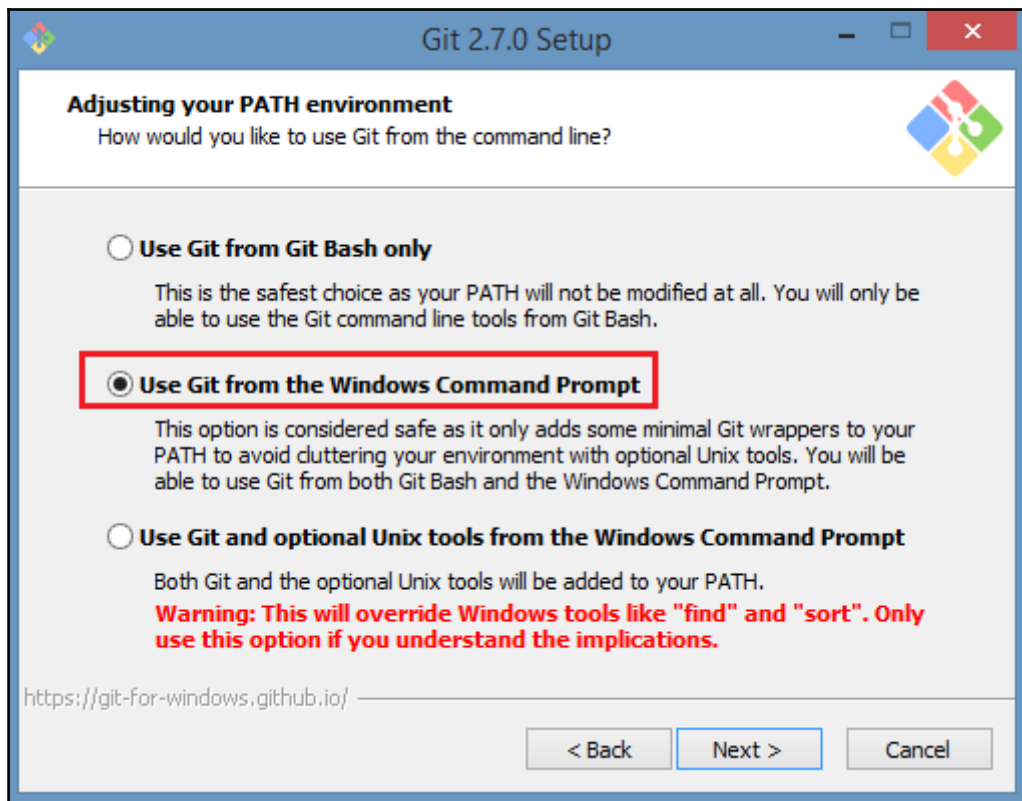
```
Index.cshtml - AspNetYeomanWebapp - Visual Studio Code
File Edit View Goto Help

EXPLORE
WORKING FILES
  Index.cshtml YeomanDemoA...
ASPNETYEOMANWEBAPP
  Views
    Account
    Home
    Manage
    Product
      Index.cshtml
    Shared
  _ViewImports.cshtml
  _ViewStart.cshtml

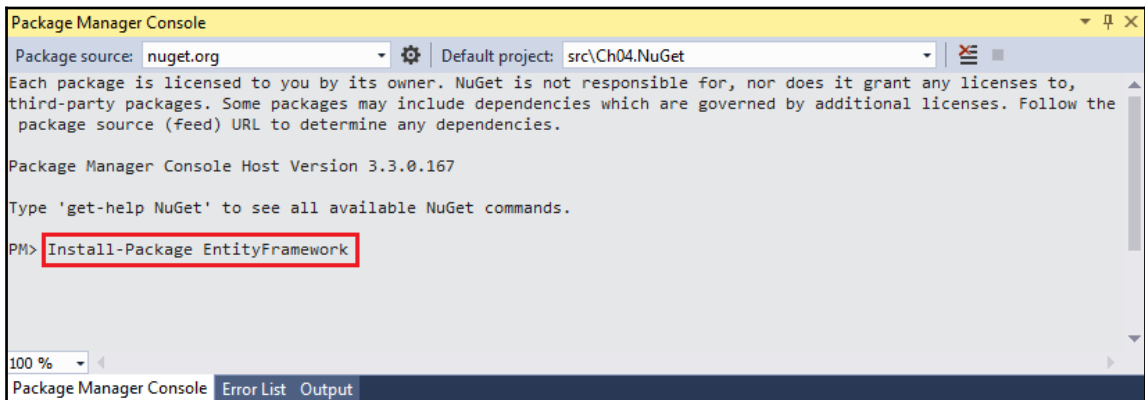
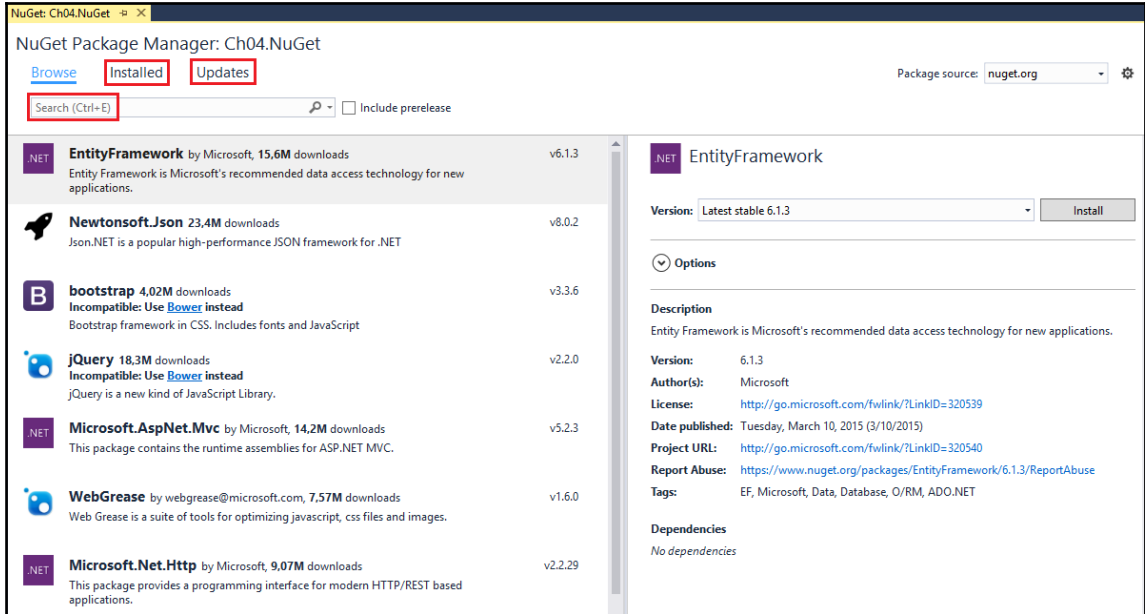
Index.cshtml YeomanDemoApp\Views\Product
1 @*
2 For more information on enabling MVC fo
3 *@
4 @{
5 // ViewBag.Title = "Index Page";
6 }
7
8 <h2>Products</h2>
9 <div>Product 1 : LapTop</div>
10 <div>Product 2 : Graphic card</div>
11 <div>Product 1 : Book</div>
```

```
19 <body>
20 <div class="navbar navbar-inverse navbar-fixed-top">
21 <div class="container">
22 <div class="navbar-header">
23 <button type="button" class="navbar-toggle" data-toggle="collapse" data-target="#navbar" >
24 <span class="sr-only">Toggle navigation</span>
25 <span class="icon-bar"></span>
26 <span class="icon-bar"></span>
27 <span class="icon-bar"></span>
28 </button>
29 <a asp-controller="Home" asp-action="Index" class="navbar-brand">YeomanDemoApp</a>
30 </div>
31 <div class="navbar-collapse collapse">
32 <ul class="nav navbar-nav">
33 <li><a asp-controller="Home" asp-action="Index">Home</a></li>
34 <li><a asp-controller="Product" asp-action="Index">Product</a></li>
35 <li><a asp-controller="Home" asp-action="About">About</a></li>
36 <li><a asp-controller="Home" asp-action="Contact">Contact</a></li>
37 </ul>
38 @await Html.PartialAsync("_LoginPartial")
39 </div>
40 </div>
41 </div>
42 <div class="container body-content">
43 @RenderBody()
```





# Chapter 4: Reusing Code with NuGet



**.NET****15,605,886**

Downloads

**2,441,407**

Downloads of v 6.1.3

**2015-03-10**

Last published

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## EntityFramework 6.1.3

Entity Framework is Microsoft's recommended data access technology for new applications.

To install EntityFramework, run the following command in the [Package Manager Console](#)

```
PM> Install-Package EntityFramework
```



### Owners

[microsoft](#)[aspnet](#)[EntityFramework](#)

### Authors

[Microsoft](#)

### Tags

[Microsoft](#) [EF](#) [Database](#) [Data](#) [O/RM](#) [ADO.NET](#)

### Dependencies

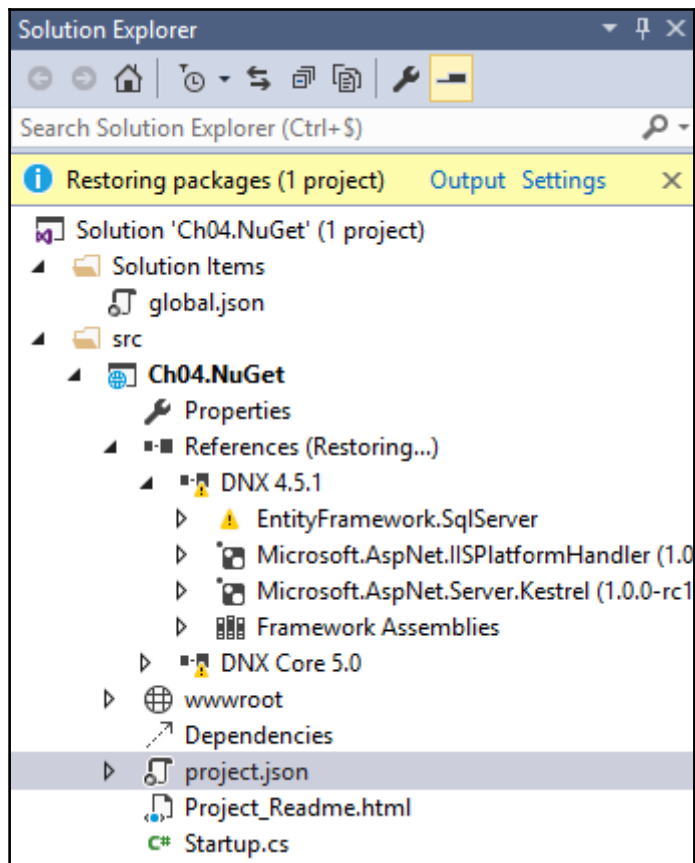
This package has no dependencies.

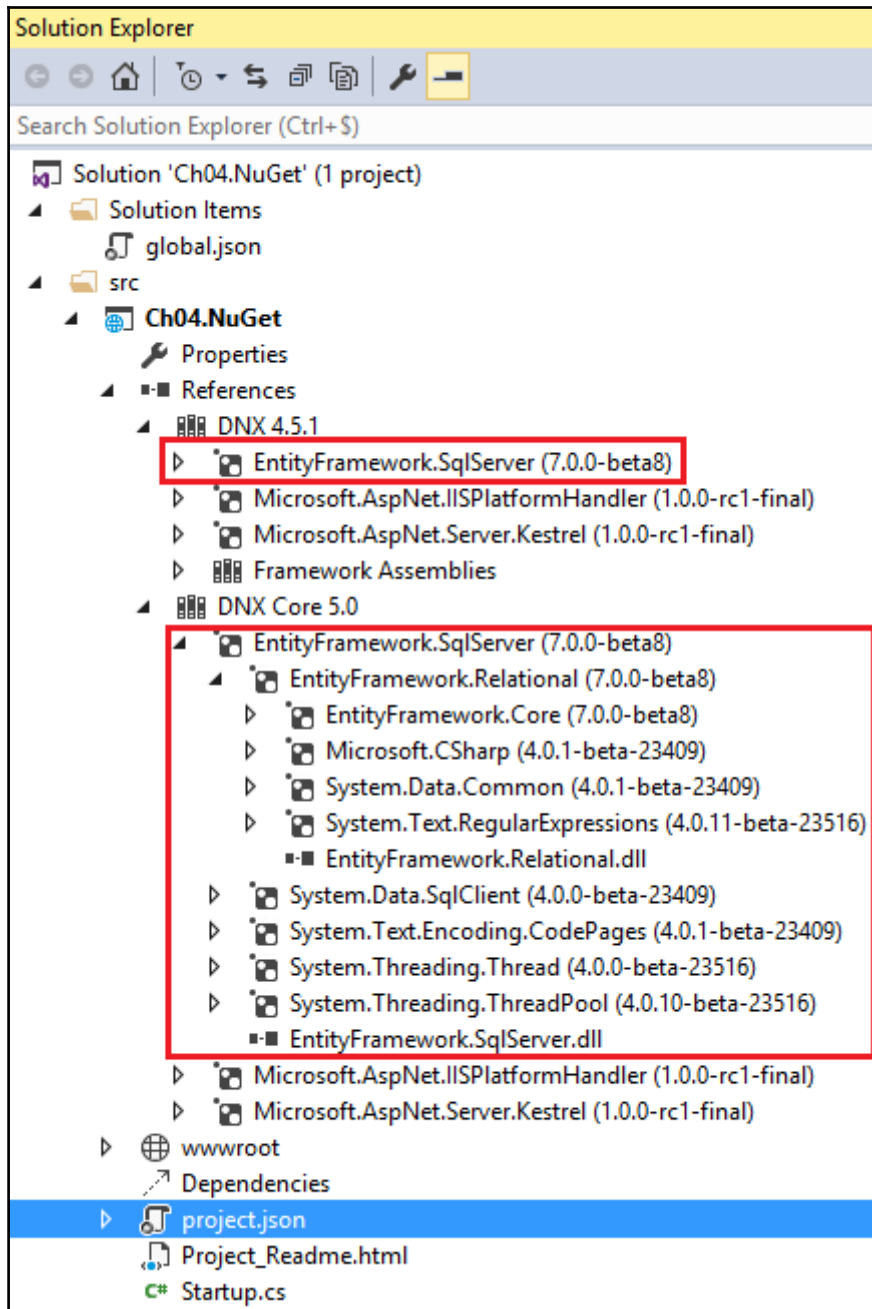
### Version History

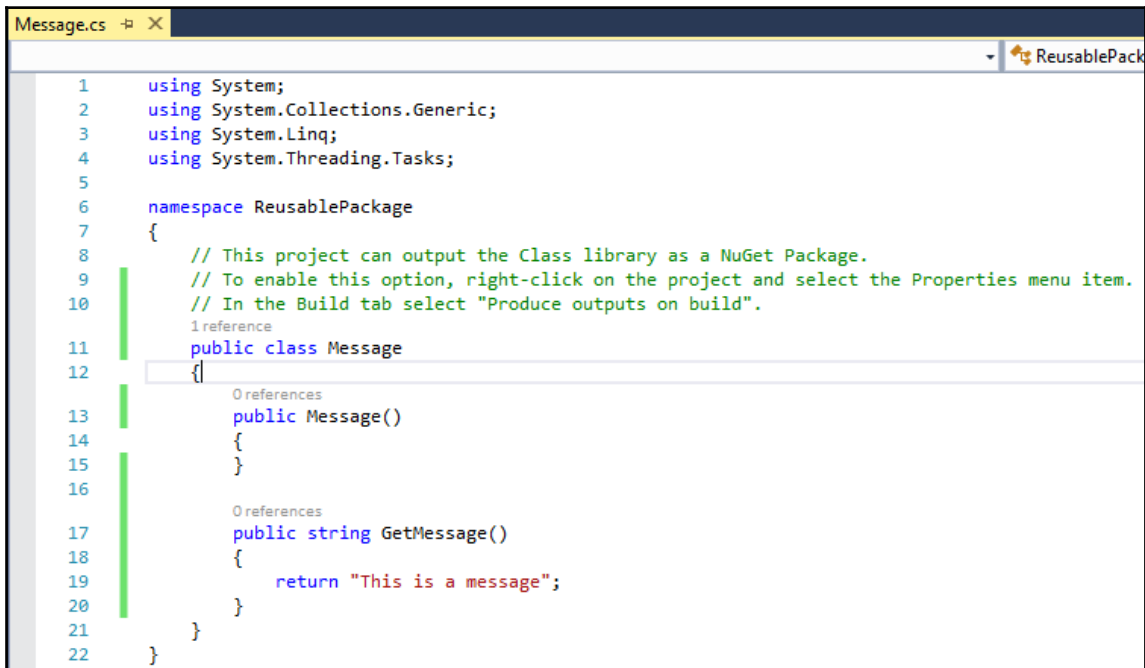
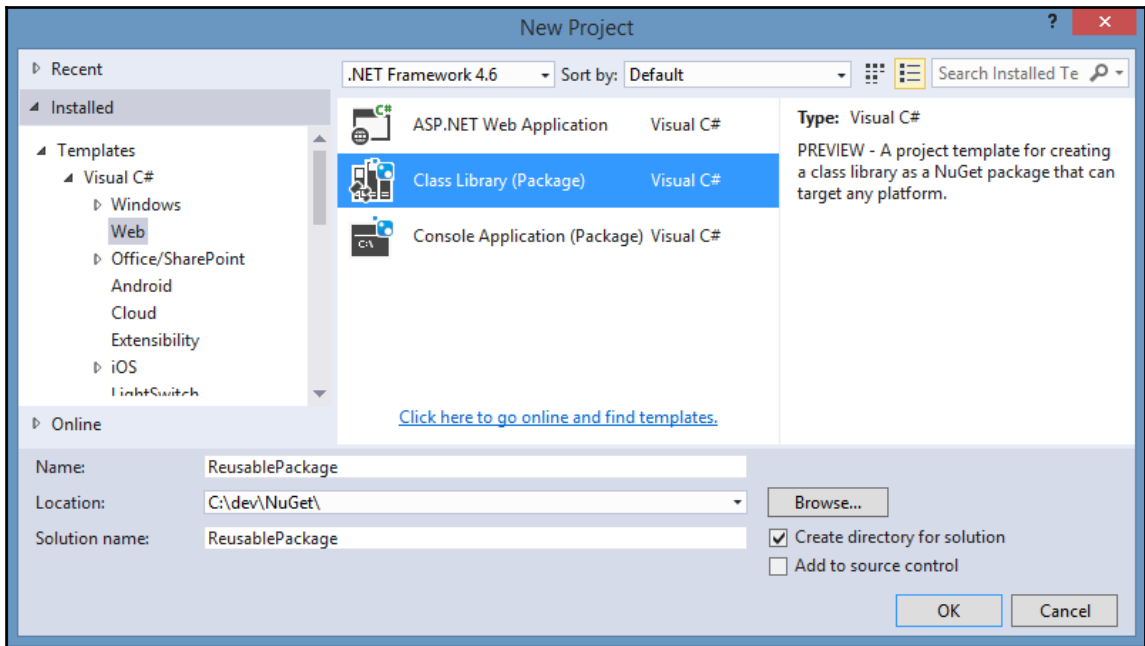
Version	Downloads	Last updated
<b>EntityFramework 6.1.3 (this version)</b>	<b>2,441,407</b>	<b>Tuesday, March 10, 2015</b>
<a href="#">EntityFramework 6.1.3-beta1</a>	28,304	Wednesday, February 11, 2015
<a href="#">EntityFramework 6.1.2</a>	917,360	Monday, December 22, 2014

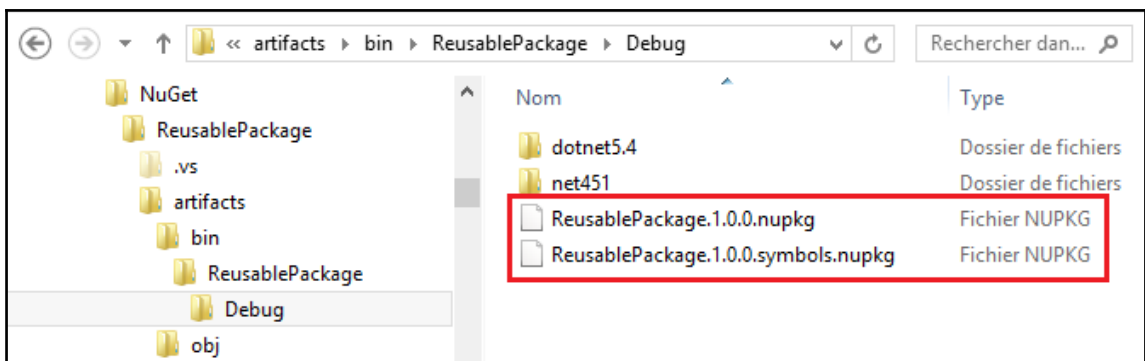
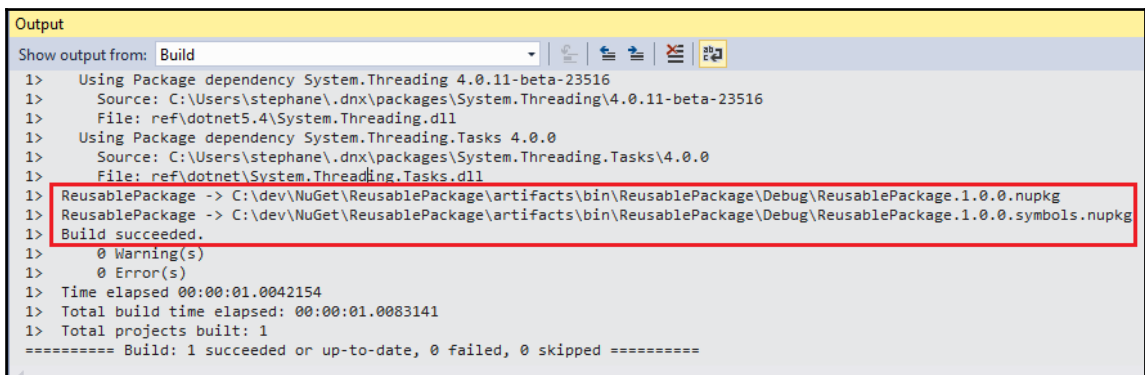
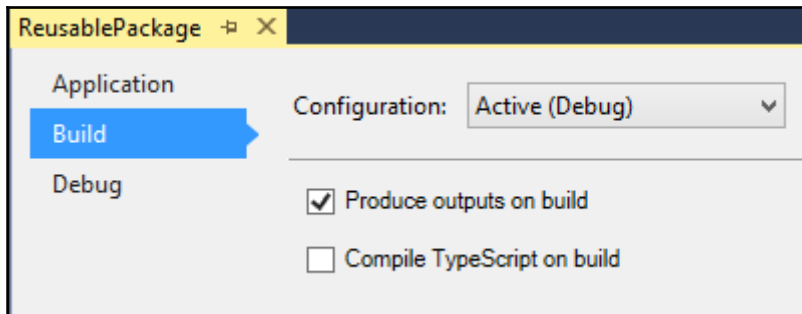
```
project.json*  X
Schema: http://json.schemastore.org/project
1  {
2    "version": "1.0.0-*",
3    "compilationOptions": {
4      "emitEntryPoint": true
5    },
6
7    "dependencies": {
8      "Microsoft.AspNet.IISPlatformHandler": "1.0.0-rc1-final",
9      "Microsoft.AspNet.Server.Kestrel": "1.0.0-rc1-final",
10     "EntityFramework"
11   },
12   "c": {
13     "Microsoft.AspNet.Identity.EntityFramework",
14     "Microsoft.Extensions",
15     "Microsoft.AspNet.Authentication",
16     "EntityFramework",
17   "f": {
18     "WCFRIA.EntityFramework",
19     "Dino.EntityFramework",
20     "XAct.EntityLibrary5",
21     "EnumUtilities"
22   },
23   "exclude": [
24     "wwwroot",
25     "node_modules"
26   ],
27   "publishExclude": [
28     "**.user",
29     "**.vspscc"
30   ]
31 }
```

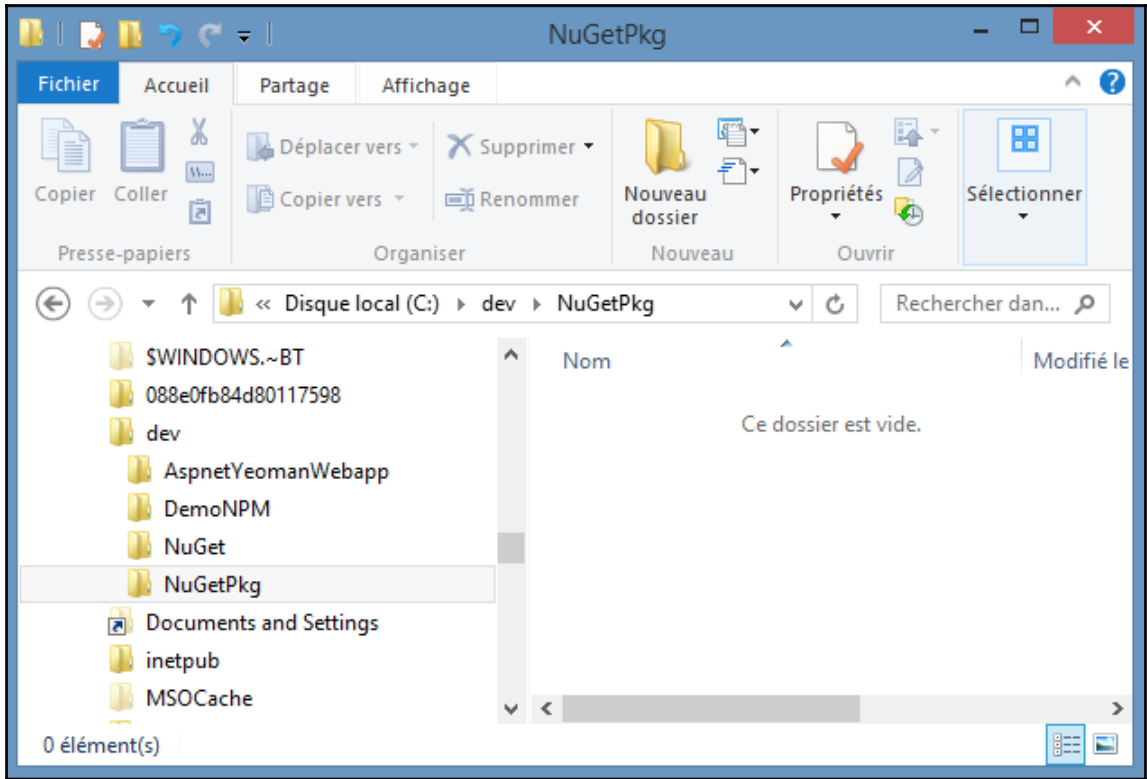


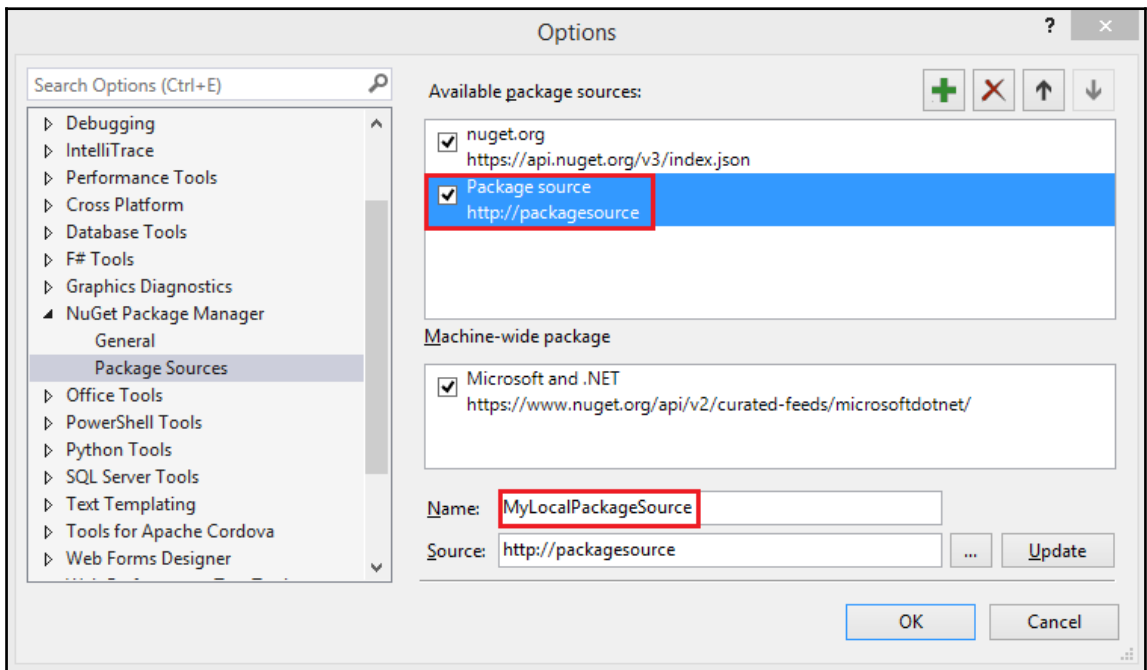
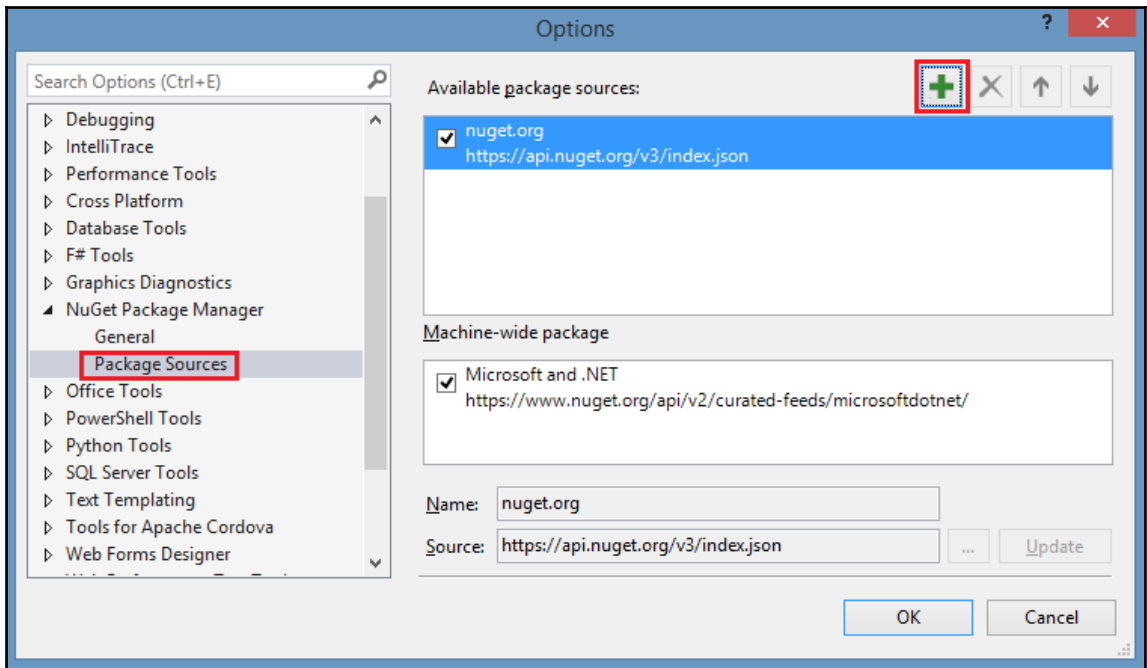


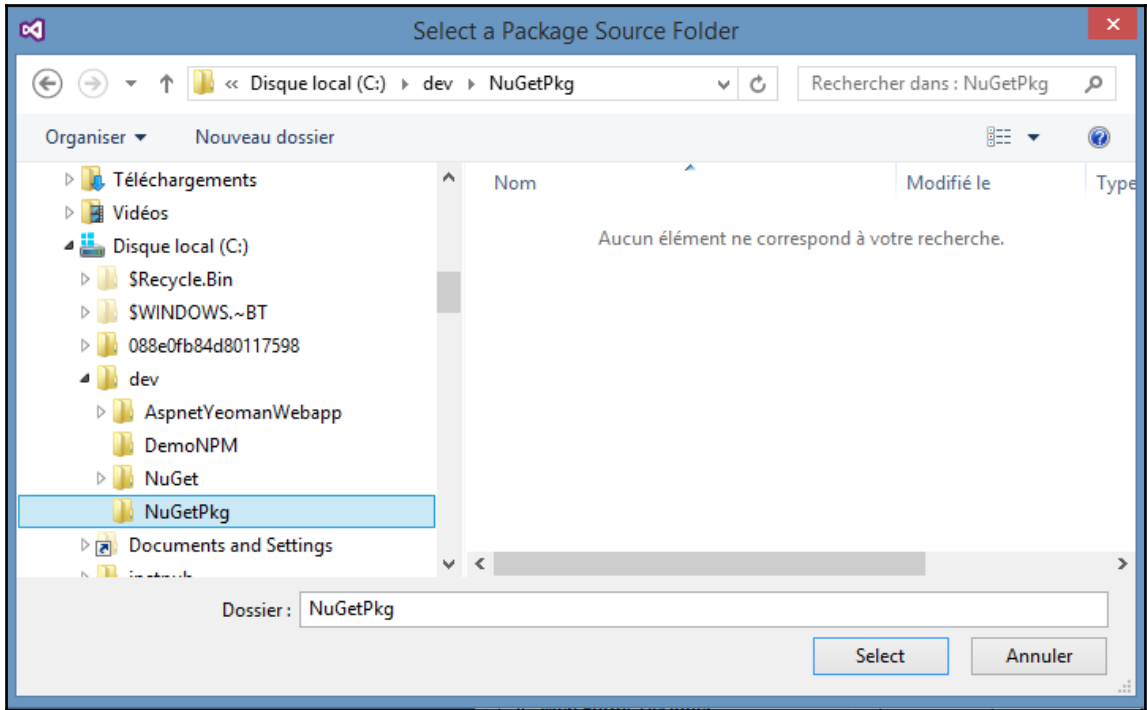


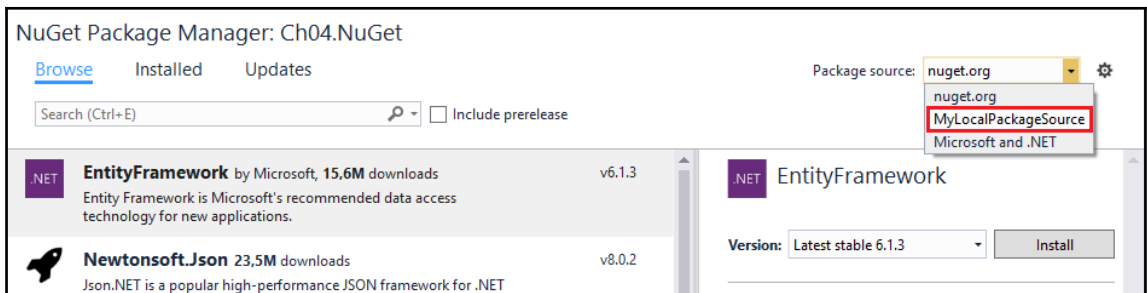
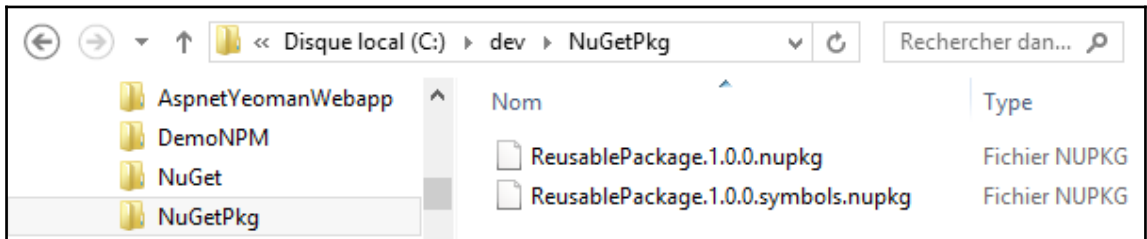
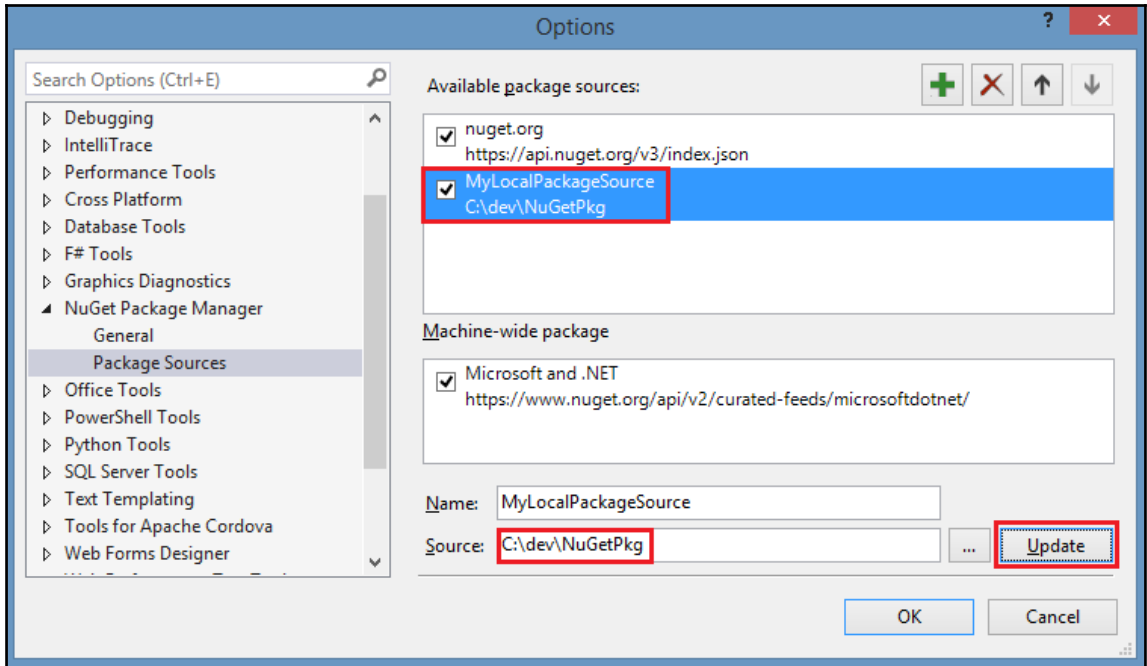




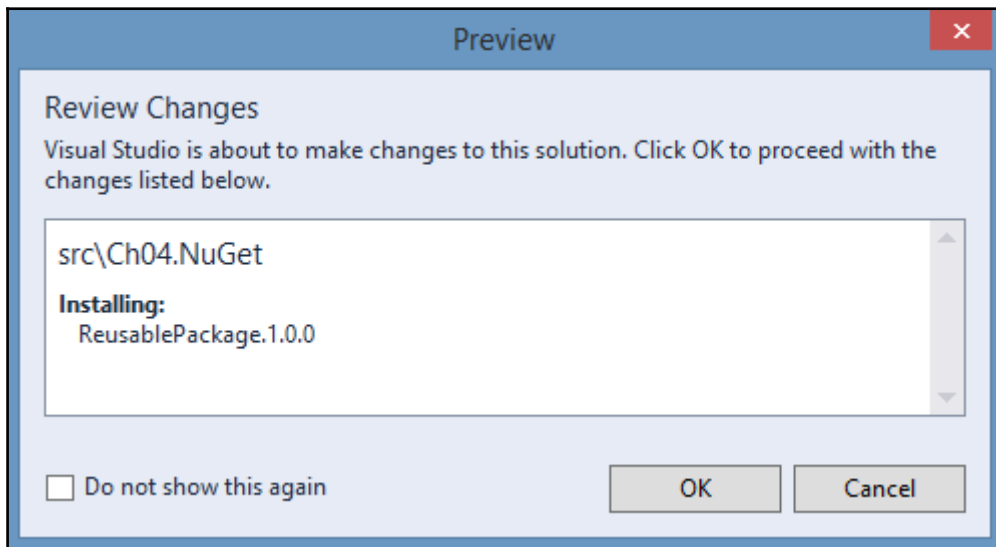
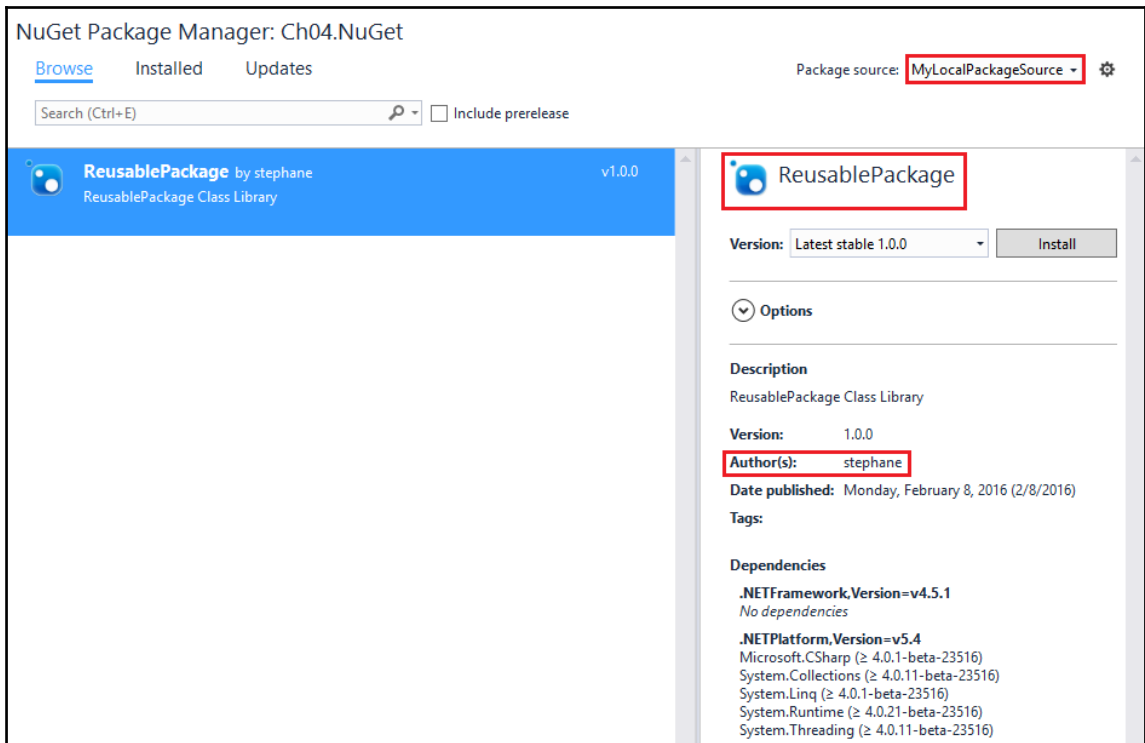


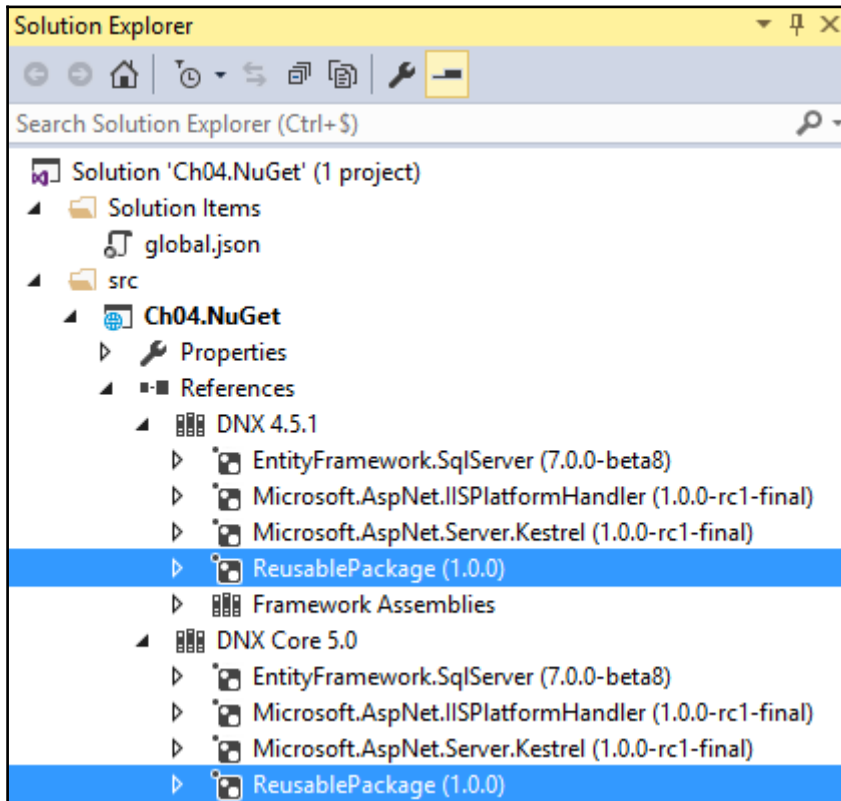
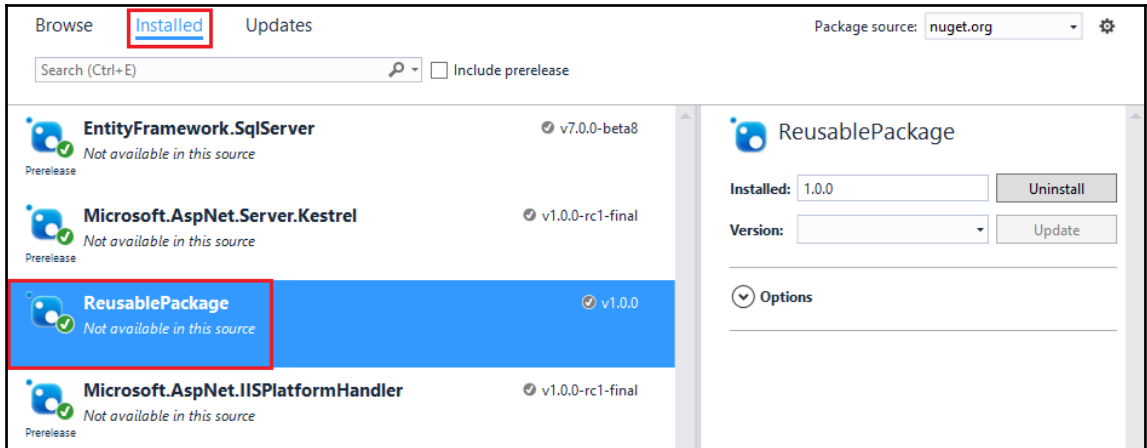


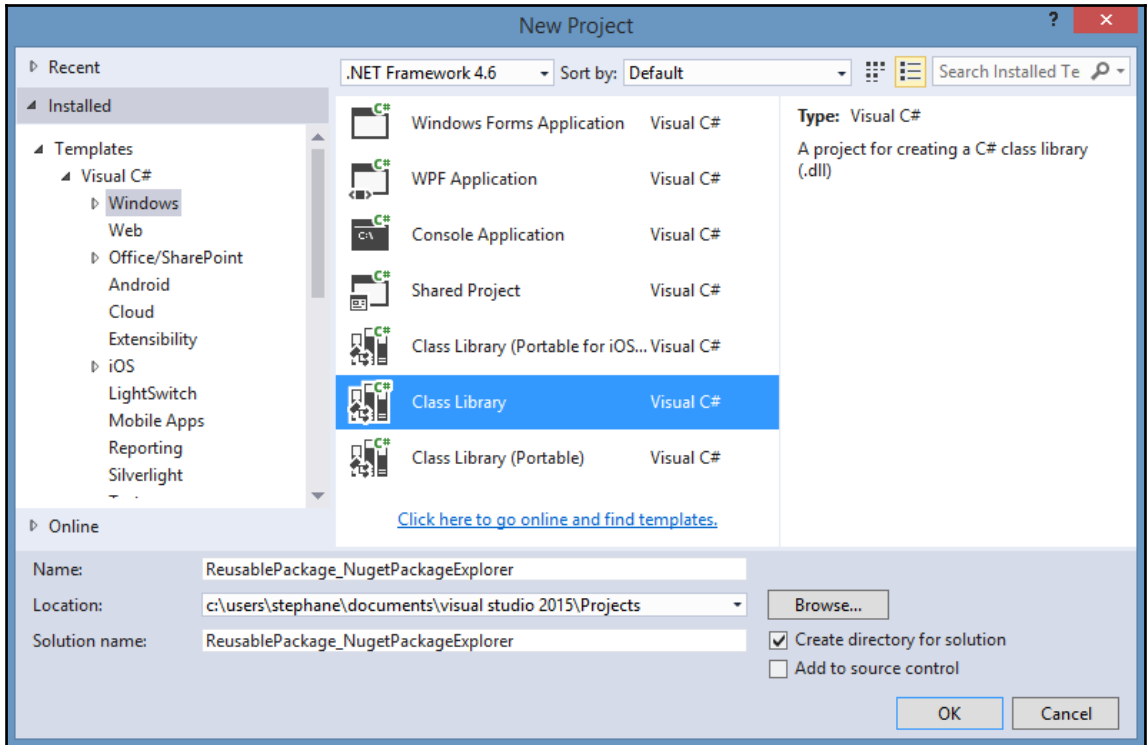


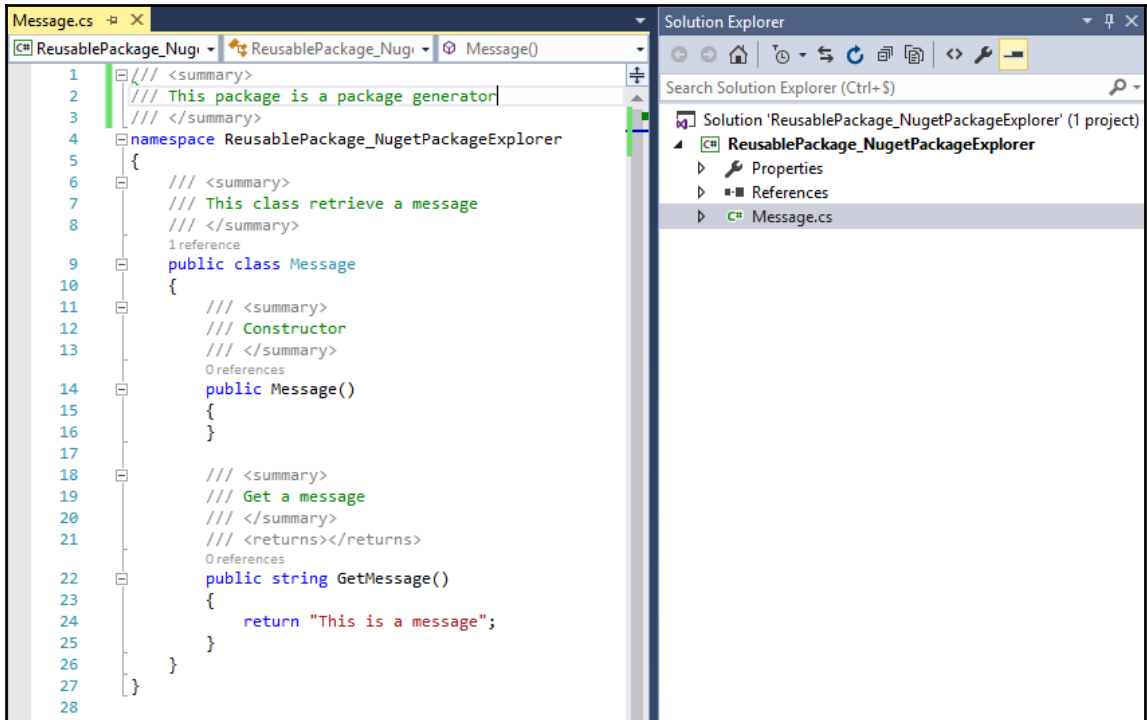


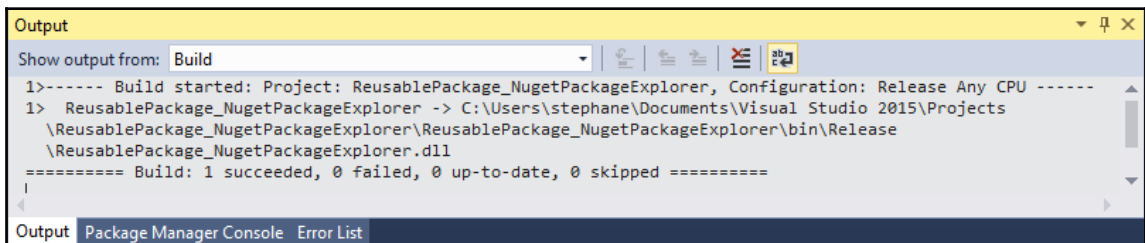
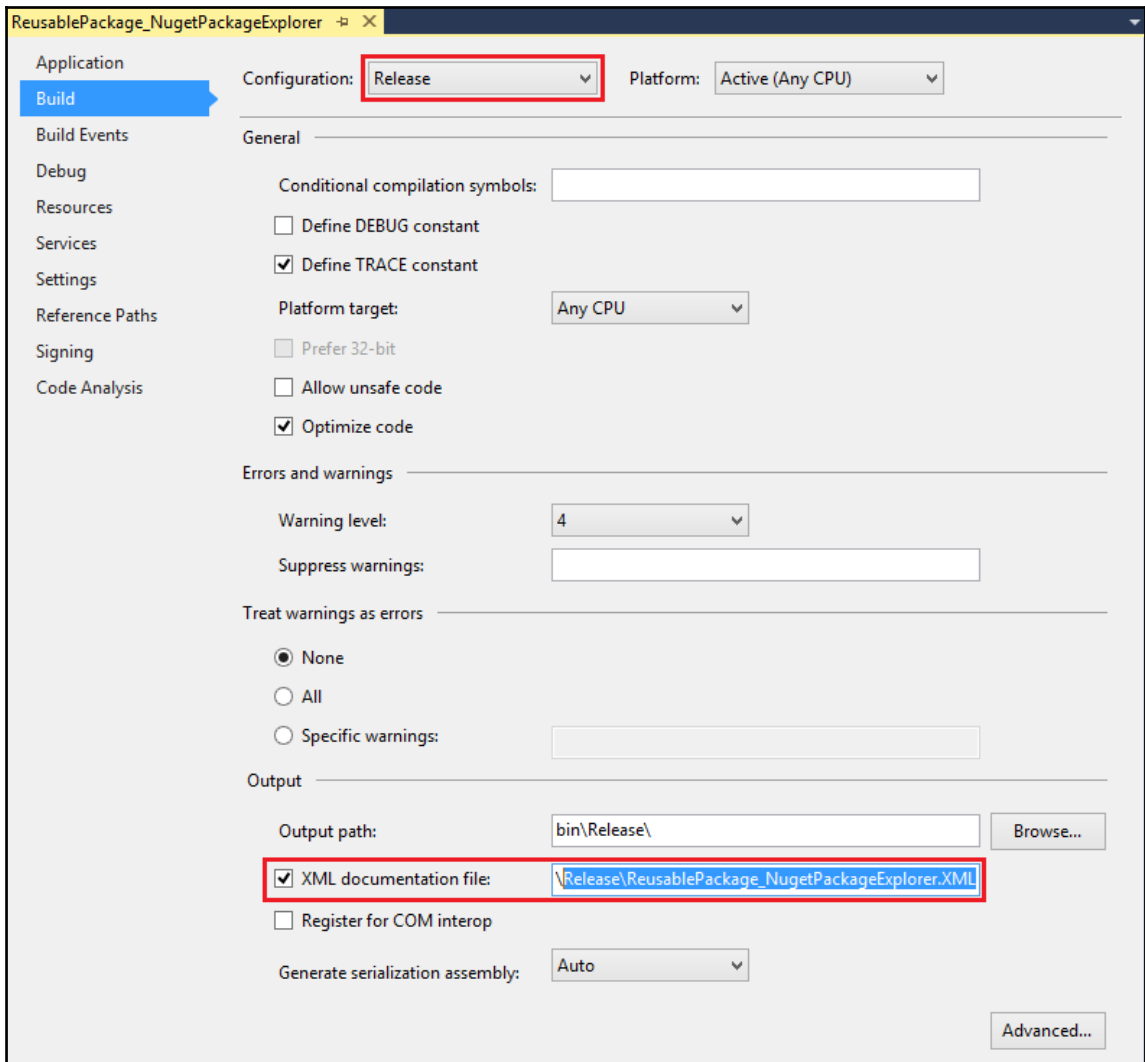


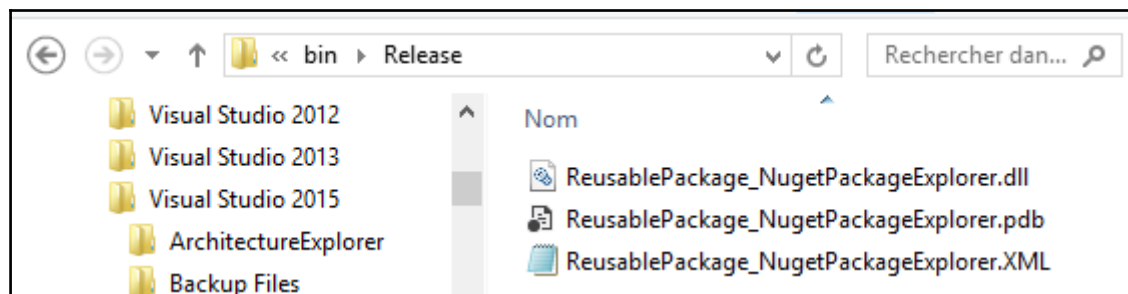












# NuGet Package Explorer

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## Project Description

NuGet Package Explorer is a ClickOnce application which allows creating and exploring NuGet packages easily. After installing it, you can double click on a .nupkg file to view the package content. You can also load packages directly from the official NuGet feed.

**This is a side project of mine and it is NOT an official product from Microsoft.**

The screenshot shows the NuGet Package Explorer application window for the package EntityFramework.4.1.10331.0. The window is split into two main panes: Package metadata and Package contents.

**Package metadata:**

- Id:** EntityFramework
- Version:** 4.1.10331.0
- Created by:** Microsoft
- Owners:** Microsoft
- Language:** en-US
- Requires License Acceptance:** Yes
- [View License Terms](#)
- Summary:** DbContext API and Code First workflow for ADO.NET Entity Framework.
- Description:** DbContext API and Code First workflow for ADO.NET Entity Framework.
- Dependencies:** No Dependencies

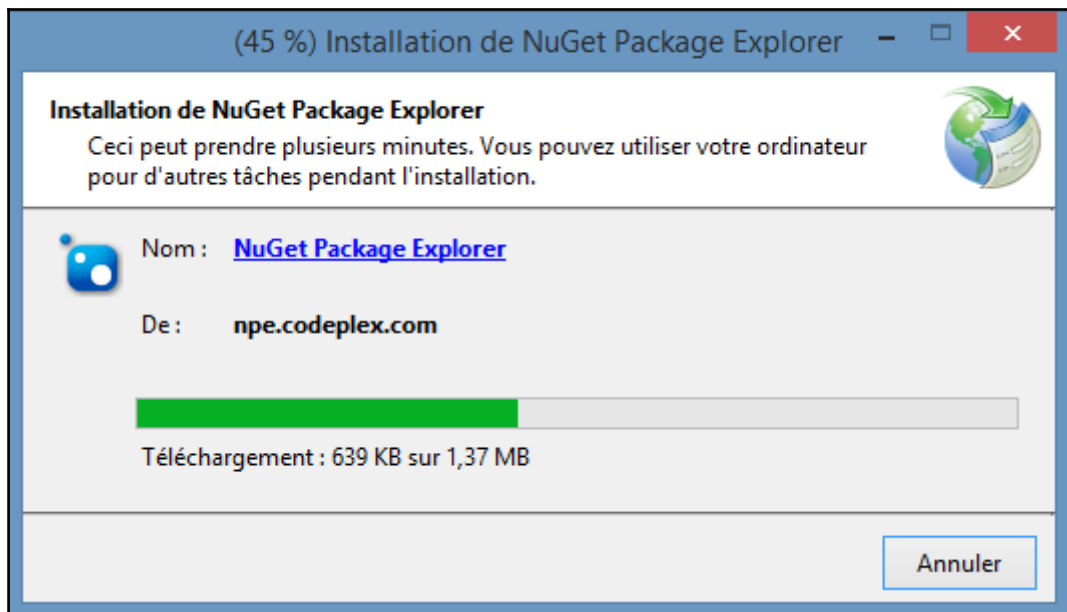
**Package contents:**

- lib
  - EntityFramework.dll
  - EntityFramework.xml
- tools
  - install.ps1

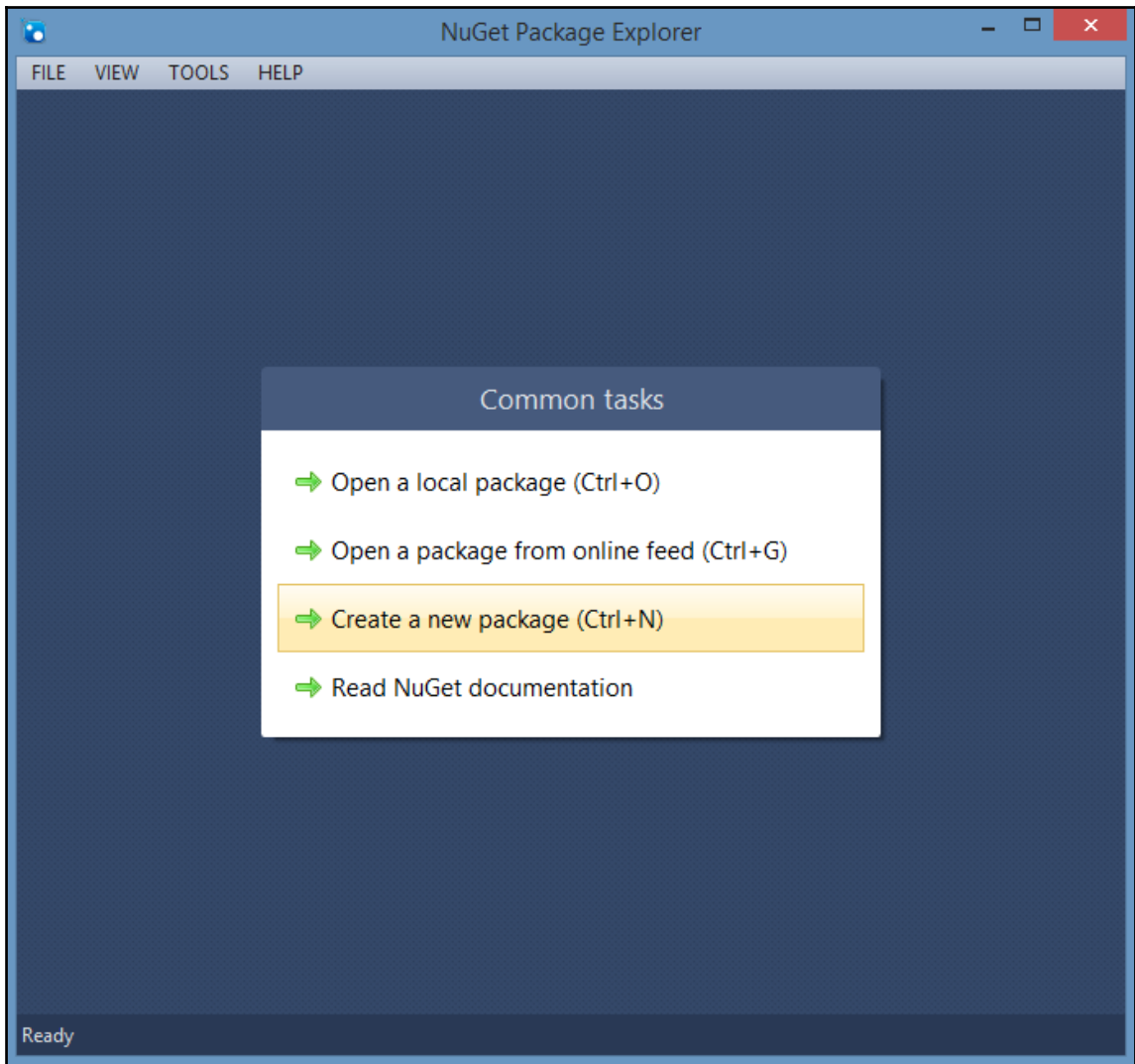
The `tools\install.ps1` file is selected, and a preview window shows the following PowerShell script:

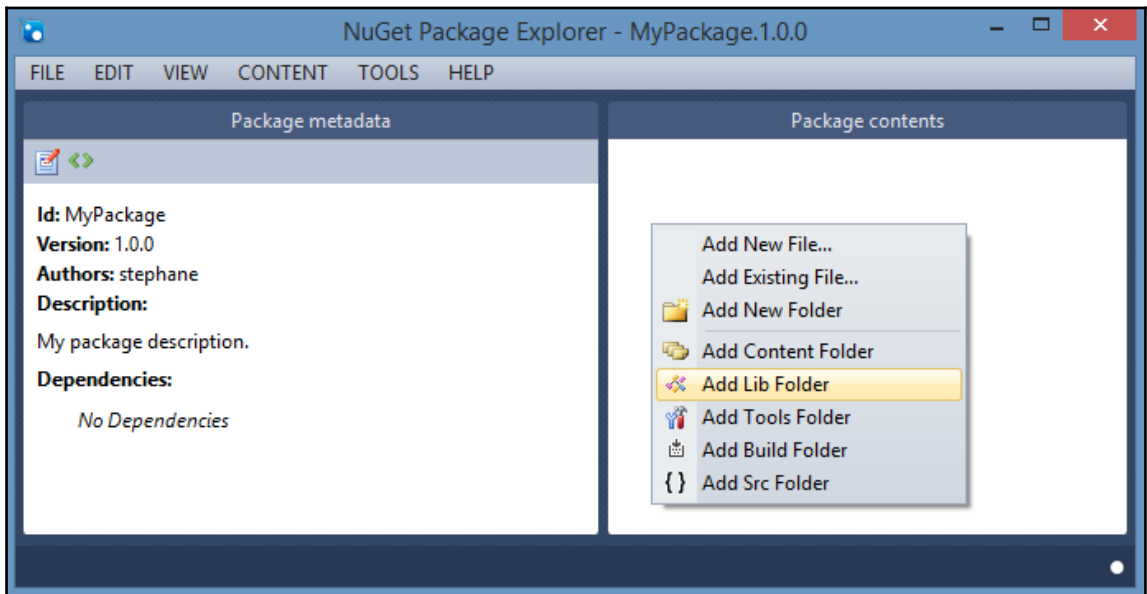
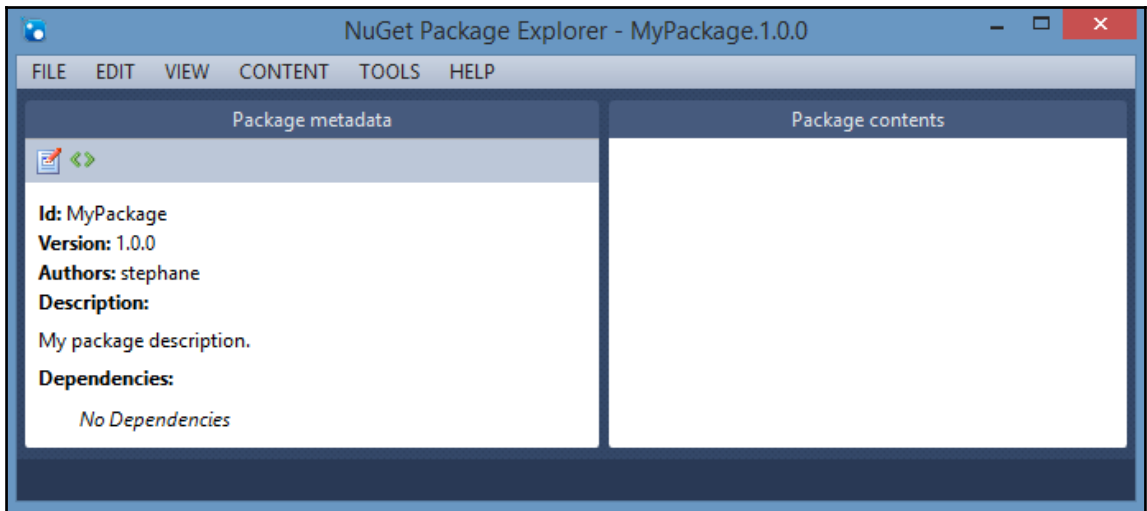
```
param($installPath, $toolsPath, $package, $project)
$project.Object.References.Add("System.Data.Entity") | out-null
$project.Object.References.Add("System.ComponentModel.DataAnnotations") | out-null
```

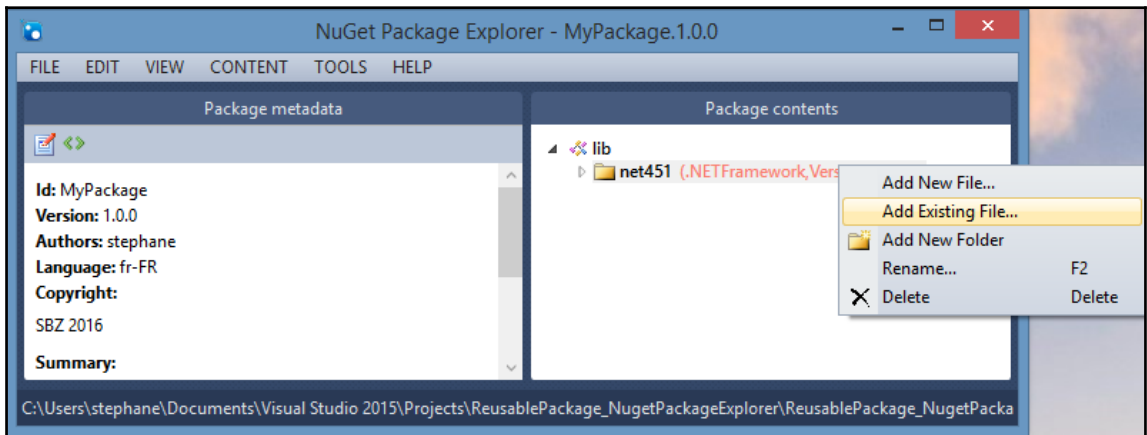
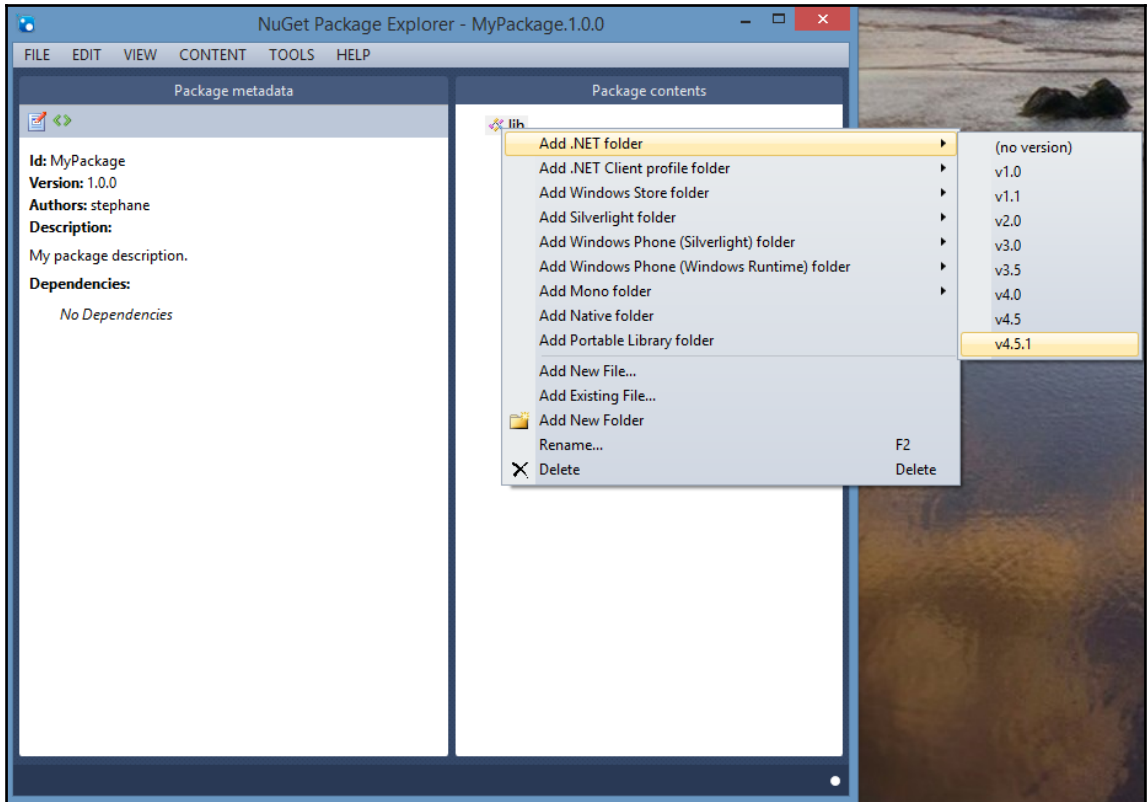
The URL at the bottom of the window is <http://packages.nuget.org/v1/Package/Download/EntityFramework/4.1.10331.0>

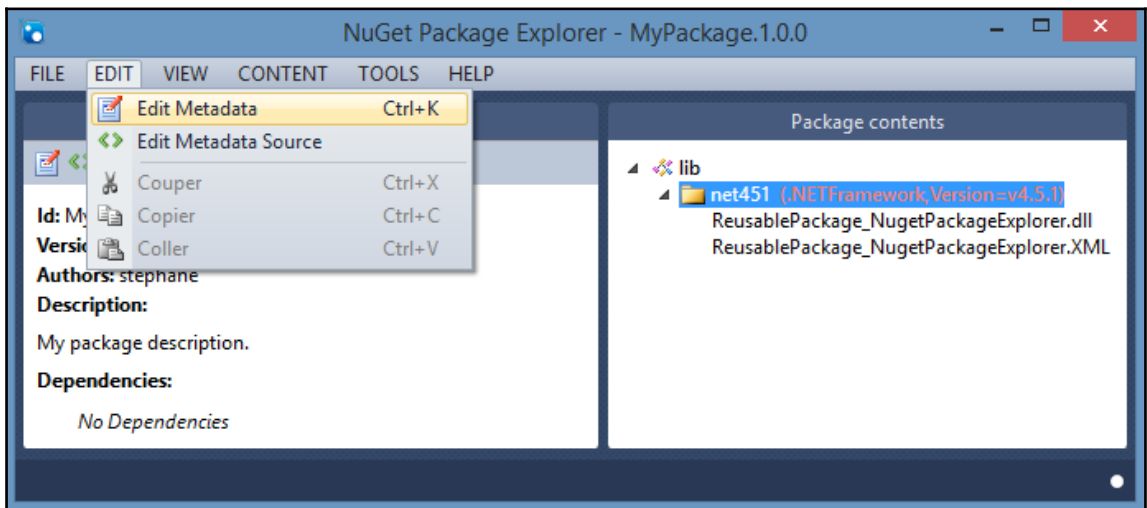
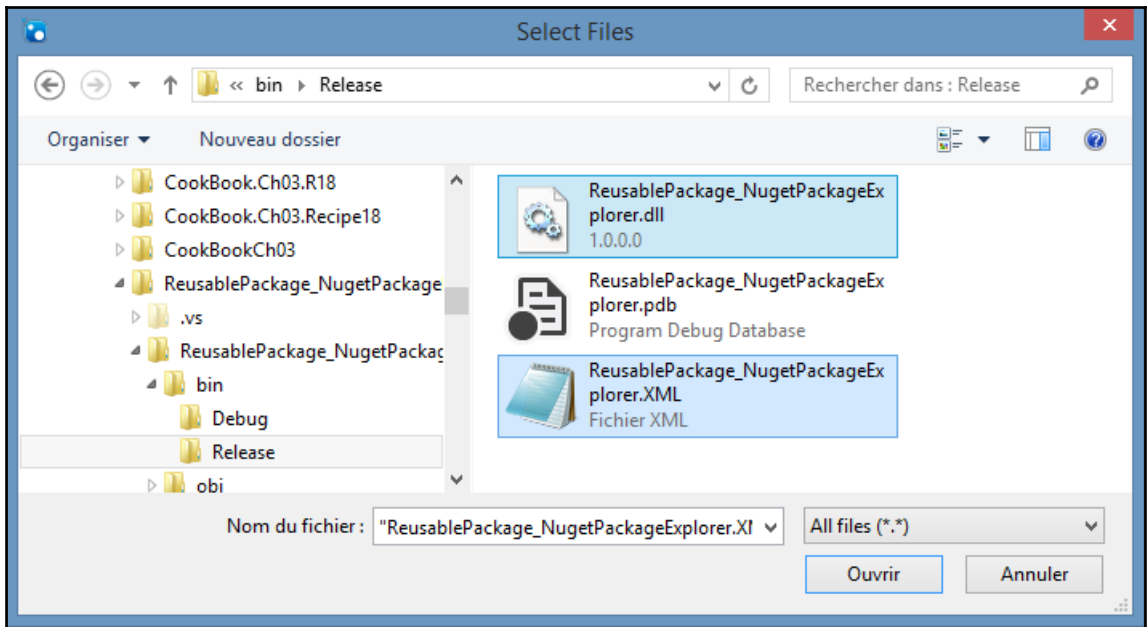


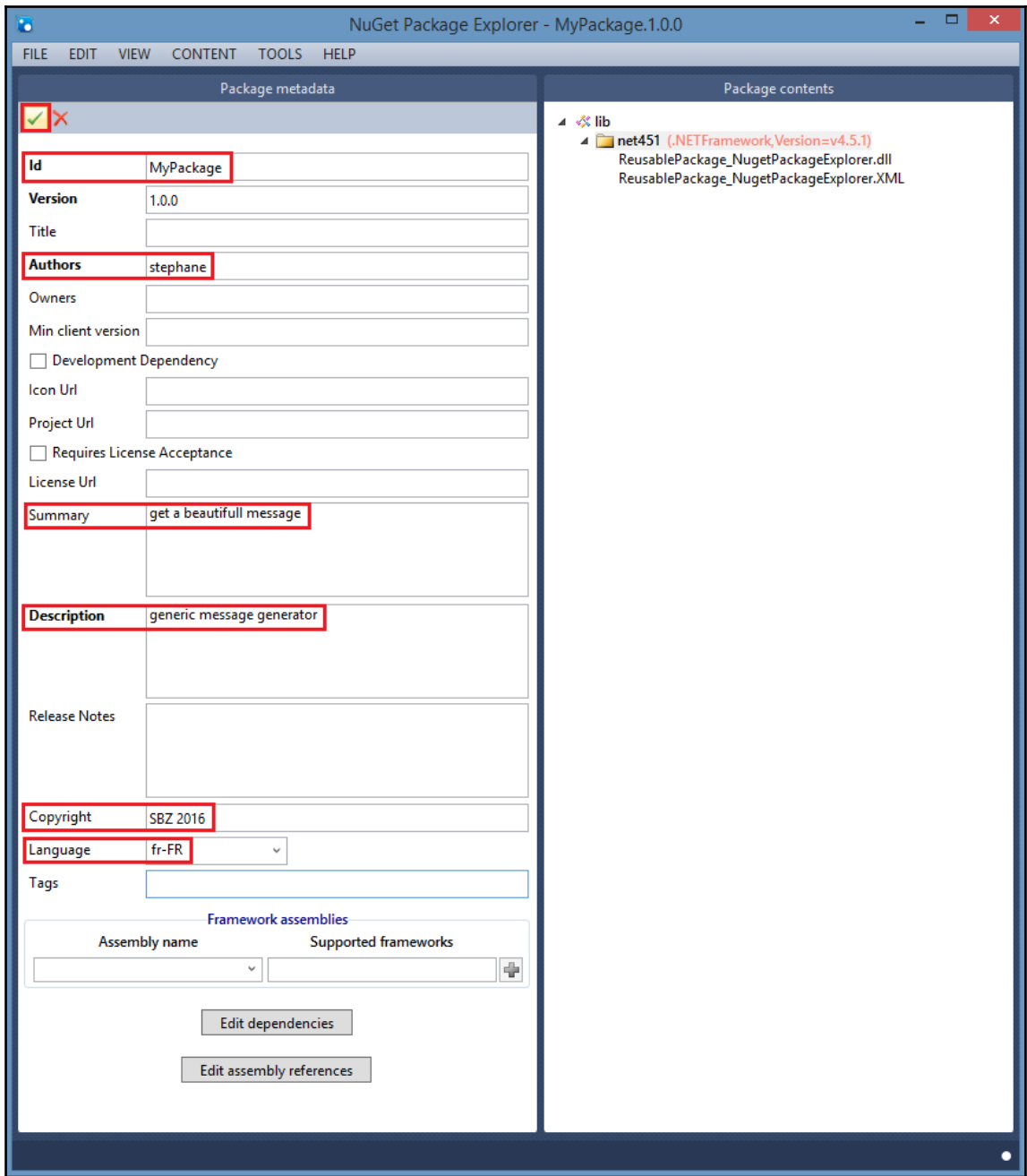


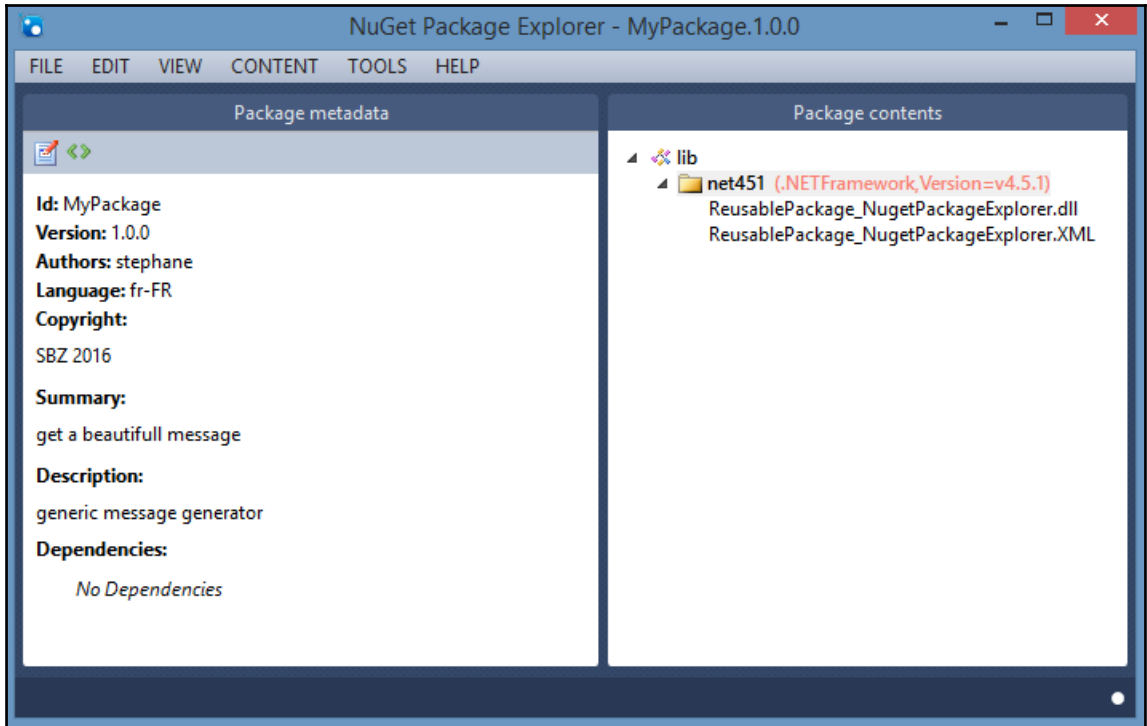


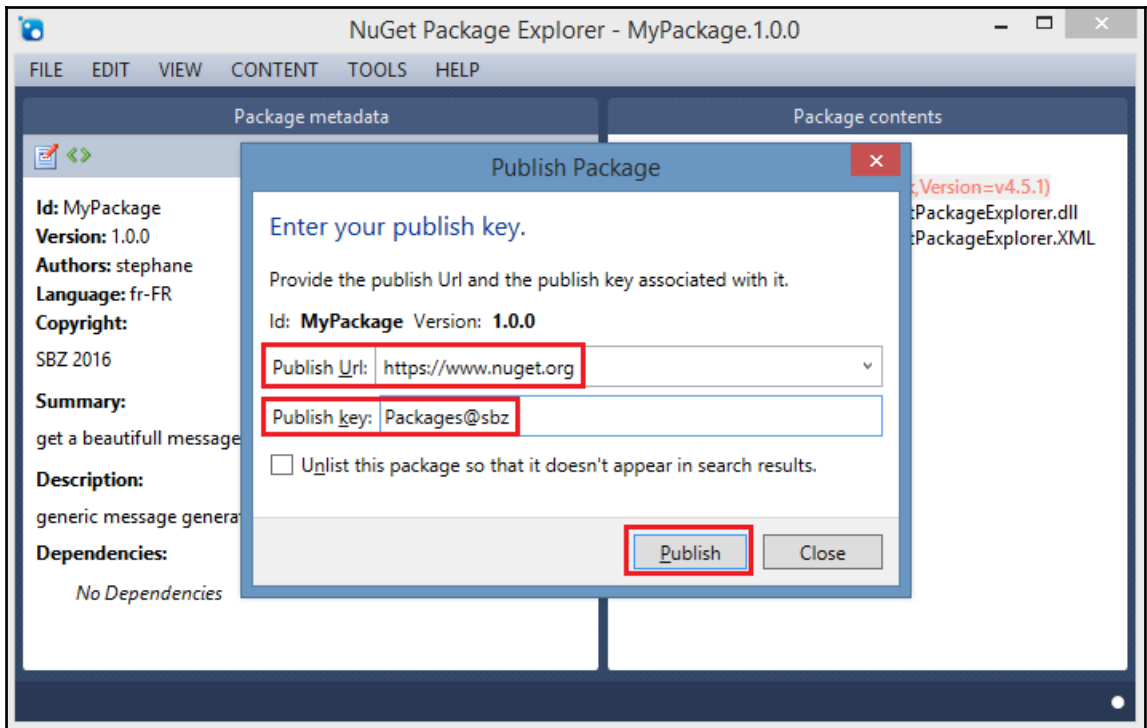


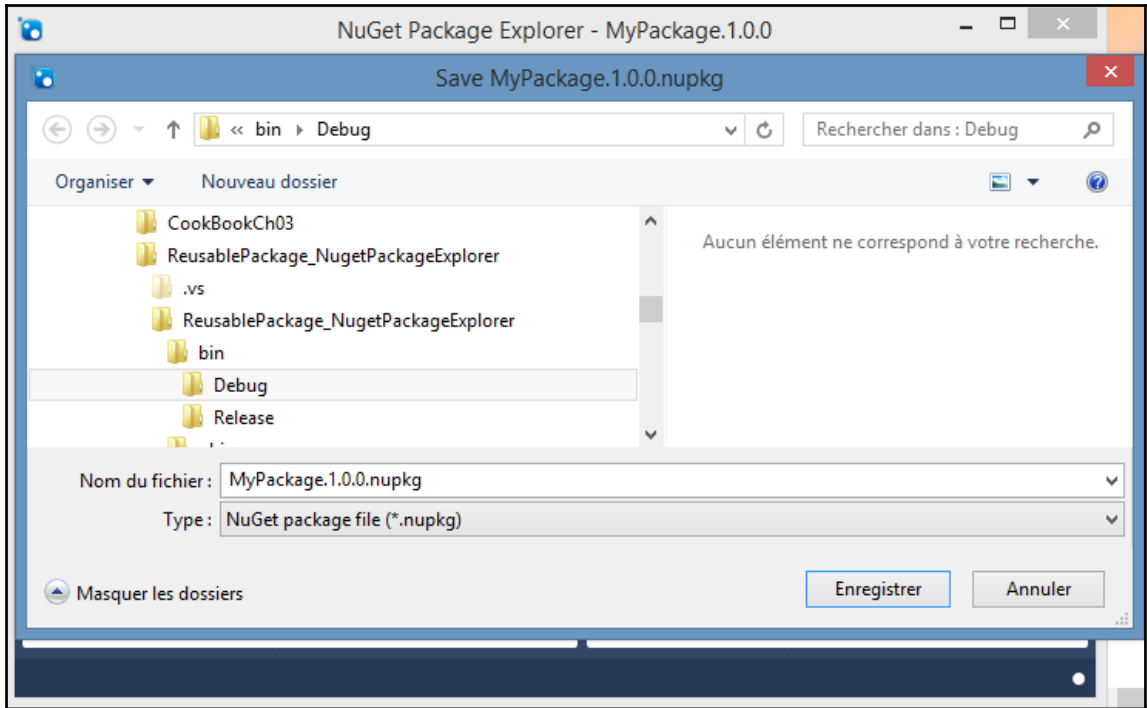




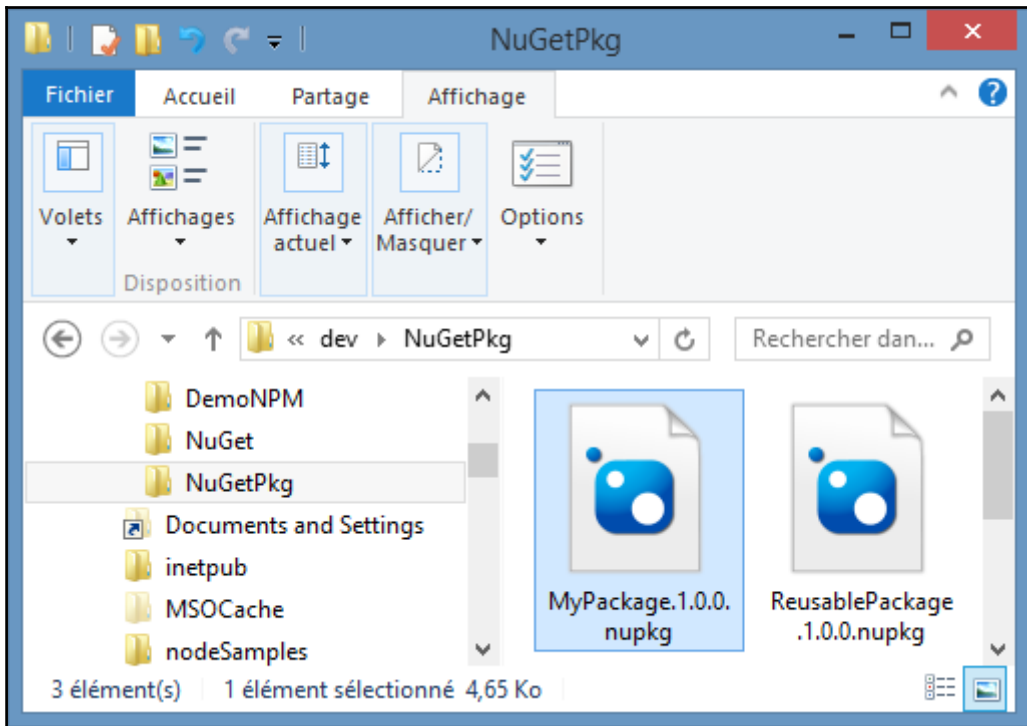












## Sign in with a Microsoft account

We recommend using a Microsoft account to log in to NuGet.org. If you already have a NuGet.org account, click the button to the right to associate it with your Microsoft account. If not, click the button anyway and we'll create a new NuGet.org account for you!

 [Sign in with a Microsoft account](#)

— or —

## Sign in or register with a username and password

### Register

Username

Password

Email (Gravatar, notifications, and password recovery)

\* REQUIRED

By clicking Register you agree that you have read and accept our [Terms of Use](#) and [Privacy Policy](#)

[Register](#)

### Sign in

Username or Email

Password

[Lost your Password?](#)

\* REQUIRED

 [Sign in with a NuGet.org account](#)

---

# Do we know you?

It looks like we haven't seen the Microsoft account 'stephane belkheraz' before.

## I don't have a NuGet.org account

Don't have a NuGet.org account yet? That's OK! We love meeting new people! Please fill in the information below and we'll start a new account for you. You'll be pushing packages in no time!

Username

Email (Gravatar, notifications, and password recovery)

= REQUIRED

By clicking Register you agree that you have read and accept our [Terms of Use](#) and [Privacy Policy](#)

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Your account is now registered!

## Manage My Packages

### No Packages!

You don't have any packages. Maybe now is a good time to [upload a package](#).

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## My NuGet.org Account

[Upload a Package](#)  
Upload and publish your package for other NuGet users to download and enjoy. You can upload multiple revisions of the same package, as long as the version is different.

[Manage my Packages](#)  
Edit package details or Remove packages that you have previously uploaded.

Email Address `stephane.belkheraz@hotmail.fr` [Change](#)

Subscribed to Email Notifications [More Info](#) [Unsubscribe](#)

Profile Picture  [More Info](#)

### Credentials

Microsoft account `stephane.belkheraz <stephane.belkheraz@hotmail.fr>` [More Info](#)

Password Login Disabled [Enable](#)

API Key: `13d0a7f2-4293-4c56-8f90-11081196a4fa` [More Info](#) [Reset](#)



Search Packages



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## Verify Details & Submit

1. Upload

2. Verify Details

### Verify Details

You have successfully uploaded a package. But you have not yet published it in the gallery. The package metadata is shown below. Please verify the details and make any necessary changes. Then click submit.

Note: The package ID, version, and license URL can only be changed by canceling and uploading a corrected package file.

Package ID

ReusablePackage

The screenshot shows the NuGet Gallery page for the package **Newtonsoft.Json**, version **11.0.1-beta3**. The page is viewed in a browser window with the URL `https://www.nuget.org/packages/Newtonsoft.Json`. The navigation bar includes links for **Packages**, **Upload**, **Statistics**, **Documentation**, **Downloads**, and **Blog**. A search bar is located below the navigation bar.

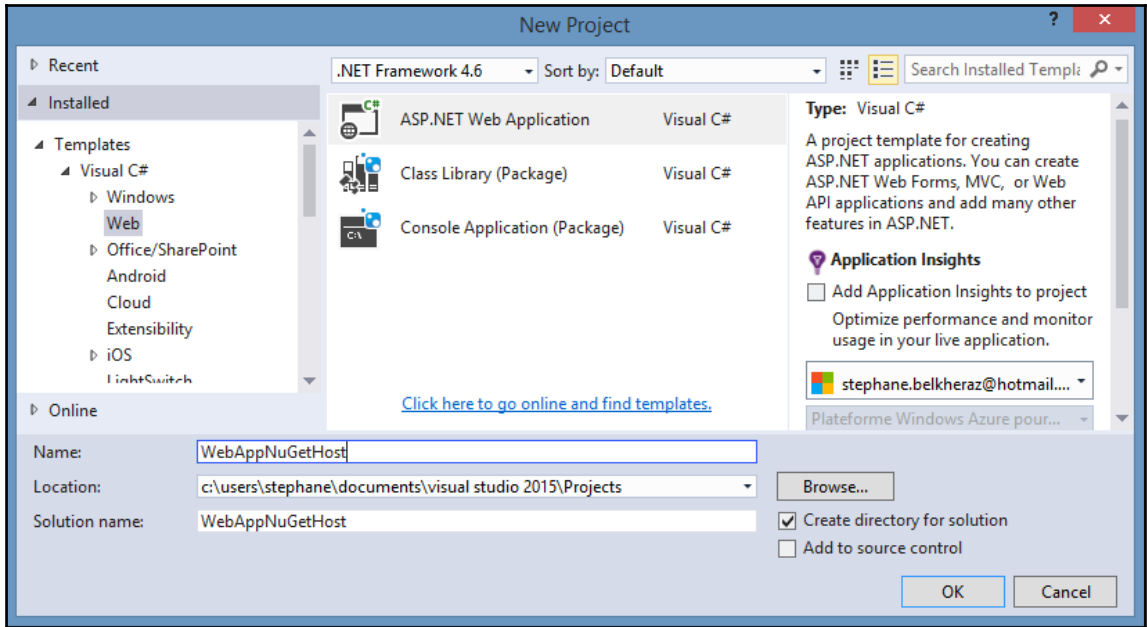
The main content area displays the package name **Newtonsoft.Json** and version **11.0.1-beta3** with a checkmark icon. Below this, it identifies the package as **Json.NET** and provides a description: "Json.NET is a popular high-performance JSON framework for .NET". A note indicates that this is a prerelease version. The page also states that it requires NuGet 2.12 or higher.

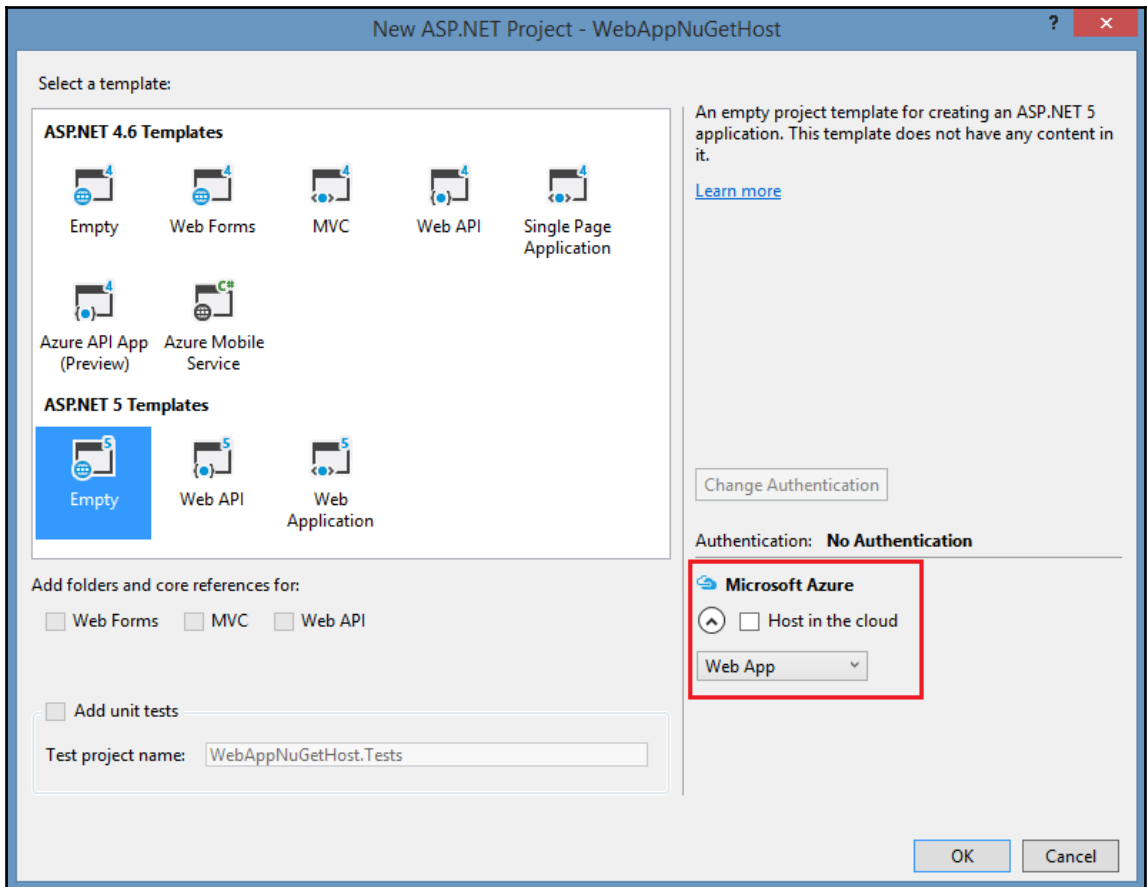
Installation instructions are provided for three methods: **Package Manager**, **.NET CLI**, and **Paket CLI**. The **Package Manager** method is selected, showing the command: `PM> Install-Package Newtonsoft.Json -Version 11.0.1-beta3`.

On the right side, the **Info** section includes: "last updated a month ago", [Project Site](#), [License Info](#), [Contact owners](#), [Report](#), and [Manual download](#).

The **Statistics** section shows: 103,866,213 total downloads and 50,301 downloads of the latest version.


At the bottom left, there are expandable sections for **Dependencies** and **Version History**.









Configure Microsoft Azure Web App

 Configure Microsoft Azure Web App Settings

 Microsoft account  
stephane.belkheraz@hotmail.fr

Web App name:    
.azurewebsites.net

Subscription:

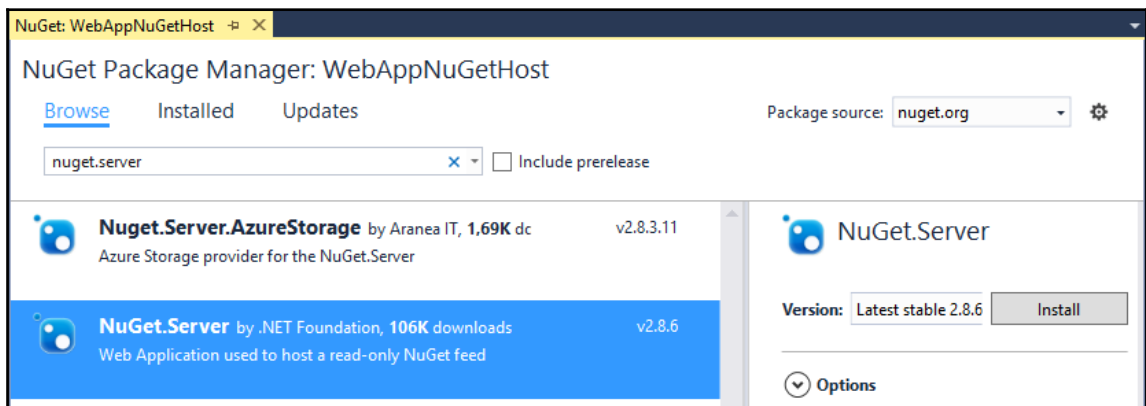
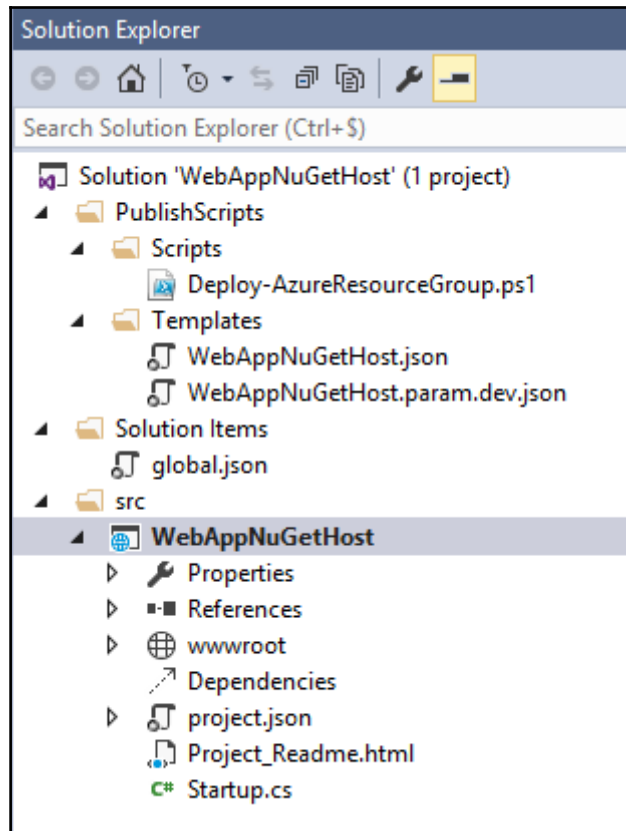
App Service plan:

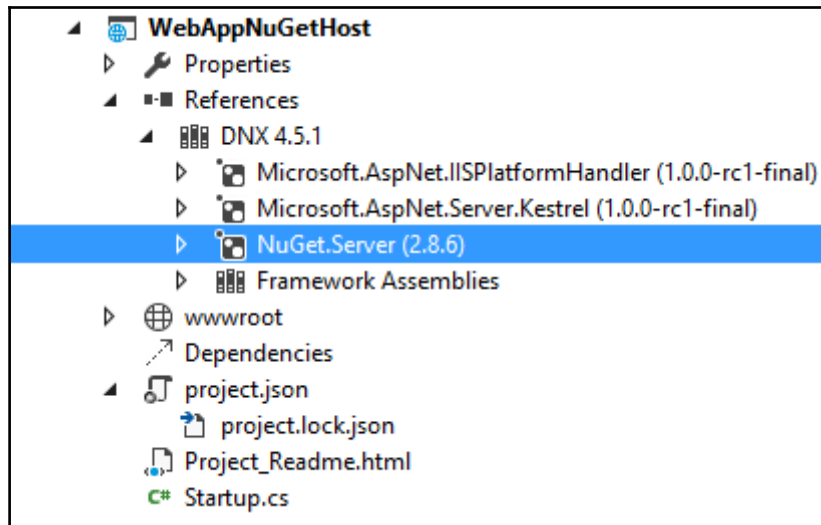
Resource group:

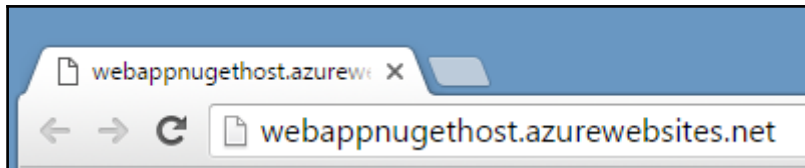
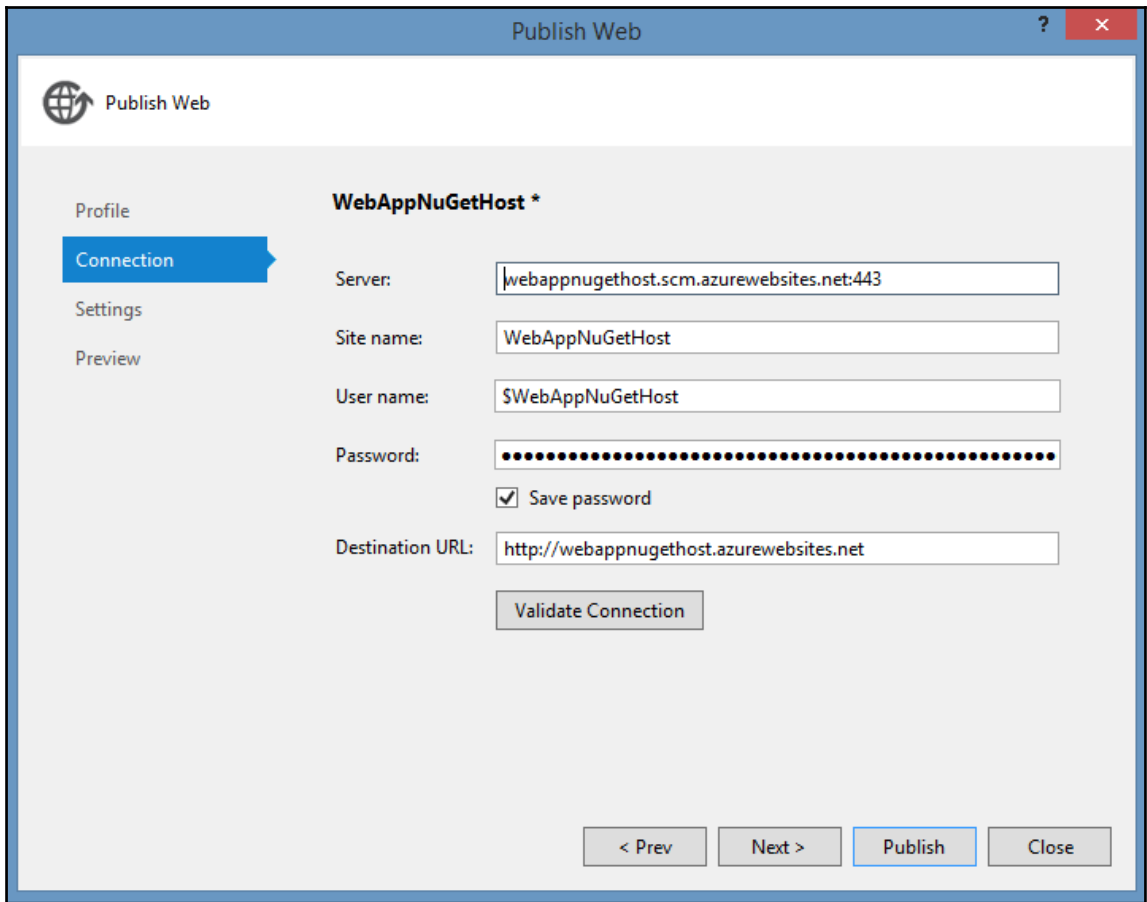
Region:

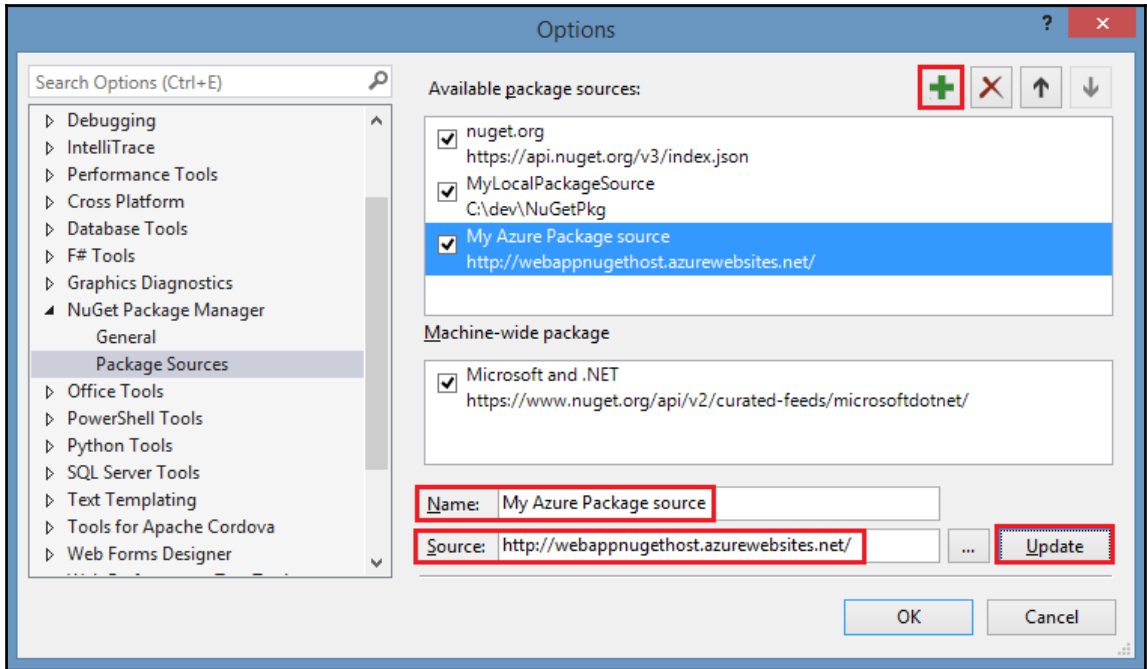
Database server:

If you have removed your spending limit or you are using Pay As You Go, there may be monetary impact if you provision additional resources. [legal terms](#)  
[Learn more](#)









---

## Chapter 5: SOLID Principles, Inversion of Control, and Dependency Injection

```
5 references
public class Product
{
    2 references
    public int ID { get; set; }
    2 references
    public string Name { get; set; }
    2 references
    public double Price { get; set; }
}
```

```
1 reference
public interface IProductService
{
    1 reference
    List<Product> GetSomeProducts();
}
```

---

0 references

```
public class ProductService : IProductService
{
    1 reference
    public List<Product> GetSomeProducts()
    {
        return new List<Product>
        {
            new Product
            {
                ID = 1,
                Name="Laptop",
                Price = 320.00
            },
            new Product
            {
                ID = 2,
                Name="Smartphone",
                Price = 206.00
            }
        };
    }
}
```

---

4 references

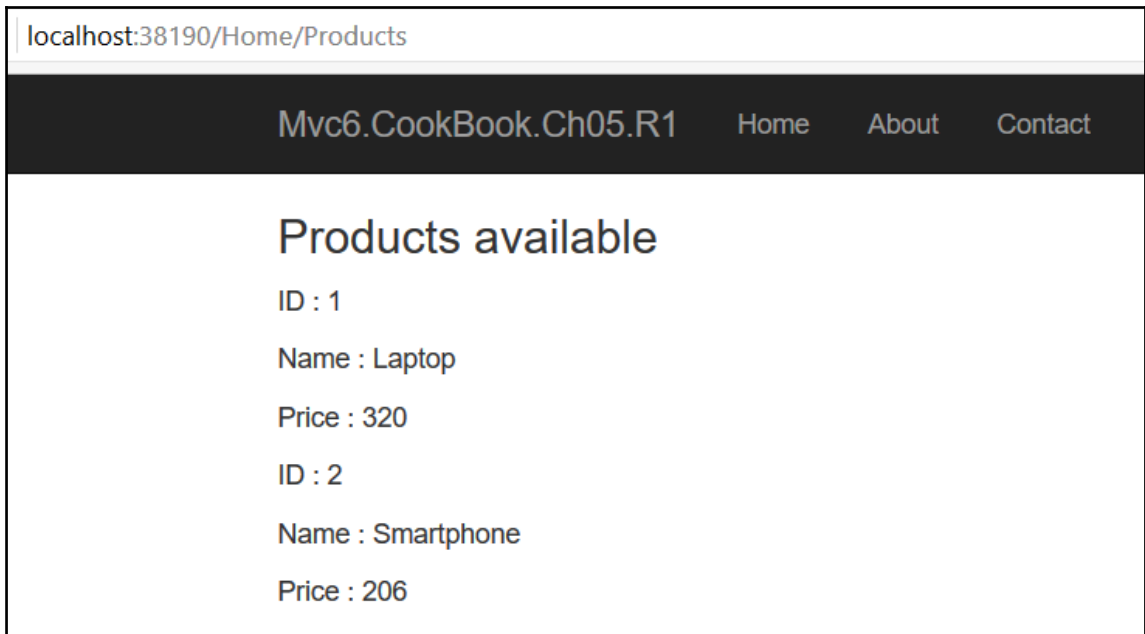
```
public class HomeController : Controller
{
    private readonly IProductService _service;
    0 references
    public HomeController(IProductService service)
    {
        _service = service;
    }

    3 references
    public IActionResult Index()
    {
        var model = _service.GetSomeProducts();
        return View(model);
    }
}
```

```
Products.cshtml  + X
1  @model List<Mvc6.CookBook.Ch05.R1.Services.Product>
2
3  <h3>Products available</h3>
4
5  @foreach (var product in Model)
6  {
7      <p>ID : @product.ID</p>
8      <p>Name : @product.Name</p>
9      <p>Price : @product.Price</p>
10 }
```

```
services.AddTransient<IProductService, ProductService>();
```





```
services.AddSingleton<ProductManager>();
```

---

5 references

```
public interface IOperation
{
    5 references
    Guid OperationId { get; }
}
```

6 references

```
public interface IOperationTransient : IOperation
{
}
```

6 references

```
public interface IOperationScoped : IOperation
{
}
```

6 references

```
public interface IOperationSingleton : IOperation
{
}
```

6 references

```
public interface IOperationInstance : IOperation
{
}
```

---

6 references

```
public class Operation : IOperationTransient,  
    IOperationScoped, IOperationSingleton, IOperationInstance
```

```
{
```

```
    private Guid? empty;
```

0 references

```
public Operation()
```

```
{  
}
```

1 reference

```
public Operation(Guid empty)
```

```
{  
    this.empty = empty;  
}
```

5 references

```
Guid IOperation.OperationId
```

```
{
```

```
    get
```

```
    {
```

```
        if (!empty.HasValue)  
            empty = Guid.NewGuid();
```

```
        return empty.Value;
```

```
    }
```

```
}
```

```
}
```

---

```
services.AddTransient<IOperationTransient, Operation>();
services.AddScoped<IOperationScoped, Operation>();
services.AddSingleton<IOperationSingleton, Operation>();
services.AddInstance<IOperationInstance>(new Operation(Guid.Empty));
```

2 references

```
public class OperationService
{
    1 reference
    public IOperationTransient TransientOperation { get; private set; }
    1 reference
    public IOperationScoped ScopedOperation { get; private set; }
    1 reference
    public IOperationSingleton SingletonOperation { get; private set; }
    1 reference
    public IOperationInstance InstanceOperation { get; private set; }

    0 references
    public OperationService(IOperationTransient transientOperation,
        IOperationScoped scopedOperation,
        IOperationSingleton singletonOperation,
        IOperationInstance instanceOperation)
    {
        TransientOperation = transientOperation;
        ScopedOperation = scopedOperation;
        SingletonOperation = singletonOperation;
        InstanceOperation = instanceOperation;
    }
}
```

---

```
public class HomeController : Controller
{
    private readonly IOperationTransient _transientOperation;
    private readonly IOperationScoped _scopedOperation;
    private readonly IOperationSingleton _singletonOperation;
    private readonly IOperationInstance _instanceOperation;

    0 references
    public HomeController(
        IOperationTransient transientOperation,
        IOperationScoped scopedOperation,
        IOperationSingleton singletonOperation,
        IOperationInstance instanceOperation)
    {
        _transientOperation = transientOperation;
        _scopedOperation = scopedOperation;
        _singletonOperation = singletonOperation;
        _instanceOperation = instanceOperation;
    }

    3 references
    public IActionResult Index()
    {
        ViewBag.Transient = _transientOperation.OperationId;
        ViewBag.Scoped = _scopedOperation.OperationId;
        ViewBag.Singleton = _singletonOperation.OperationId;
        ViewBag.Instance = _instanceOperation.OperationId;
        return View();
    }
}
```

```
<h2> Transient @ViewBag.Transient</h2>  
<h2> Scoped @ViewBag.Scoped</h2>  
<h2> Singleton @ViewBag.Singleton</h2>  
<h2> Instance @ViewBag.Instance</h2>
```

Mvc6.CookBook.Ch05.R2   Home   About   Contact   CountPage

Transient 90145932-a2bd-4cc5-a366-8bd0d2ca2d5b

Scoped 64ebd936-f7a3-4649-a8f1-e4b58a07231f

Singleton bee2de1f-5ed0-4d4b-8d54-7b1f9e49eac3

Instance 00000000-0000-0000-0000-000000000000

Mvc6.CookBook.Ch05.R2   Home   About   Contact   CountPage

Transient d2485a6d-3d05-46e9-931c-324e428f533b

Scoped 392ccd29-64de-4a5f-a30c-881b34acdce

Singleton bee2de1f-5ed0-4d4b-8d54-7b1f9e49eac3

Instance 00000000-0000-0000-0000-000000000000

```
"Autofac": "4.0.0-rc1-177",  
"Autofac.Extensions.DependencyInjection": "4.0.0-rc1-177"
```

---

1 reference

```
public class AutofacModule : Module
{
    0 references
    protected override void Load(ContainerBuilder builder)
    {
        builder.Register(c => new ProductService())
            .As<IProductService>()
            .InstancePerLifetimeScope();
    }
}
```

0 references

```
public IServiceProvider ConfigureServices(IServiceCollection services)
{
    // We add MVC here instead of in ConfigureServices.
    services.AddMvc();

    // Create the Autofac container builder.
    var builder = new ContainerBuilder();

    // Add any Autofac modules or registrations.
    builder.RegisterModule(new AutofacModule());

    // Populate the services.
    builder.Populate(services);

    // Build the container.
    var container = builder.Build();

    // Resolve and return the service provider.
    return container.Resolve<IServiceProvider>();
}
```

---

localhost:38369/home/products

Mvc6.CookBook.Ch05.R3

[Home](#)

[About](#)

[Contact](#)

## Products available

ID : 1

Name : Laptop

Price : 320

ID : 2

Name : Smartphone

Price : 206

```
"structuremap": "4.1.1.372",  
"structuremap.Dnx": "0.4.0-rc1-final"
```



---

0 references

```
public IServiceCollection ConfigureServices(IServiceCollection services)
{
    // Add framework services.

    services.AddMvc();

    services.AddTransient<IProductService, ProductService>();

    var container = new Container();

    // This will register all services from the collection
    // into the container with the appropriate lifetime.
    container.Populate(services);

    // Finally, make sure we return an IServiceCollection. This makes
    // DNX use the StructureMap container to resolve its services.
    return container.GetInstance<IServiceCollection>();
}
```

---

localhost:31695/Home/Products

Mvc6.CookBook.Ch05.R4

Home

About

Contact

## Products available

ID : 1

Name : Laptop

Price : 320

ID : 2

Name : Smartphone

Price : 206

```
"DryIoc": "2.2.2",
```

```
"DryIoc.Dnx.DependencyInjection": "1.4.0-rc1"
```

```
1 reference
```

```
public static class Bootstrap
```

```
{
```

```
1 reference
```

```
public static void RegisterServices(IRegistrar registrar)
```

```
{
```

```
    registrar.Register<IProductService, ProductService>(Reuse.Singleton);
```

```
}
```

```
}
```

---

0 references

```
public static class IocDiExtensions
{
    1 reference
    public static IServiceProvider ConfigureDI(
        this IServiceCollection services,
        Action<IRegistrar> configureServices)
    {
        var container = new Container()
            .WithDependencyInjectionAdapter(services);

        configureServices(container);

        return container.Resolve<IServiceProvider>();
    }
}
```

0 references

```
public IServiceProvider ConfigureServices(IServiceCollection services)
{
    // Add framework services.

    services.AddMvc();
    return services.ConfigureDI(Bootstrap.RegisterServices);
}
```

---

localhost:38369/home/products

Mvc6.CookBook.Ch05.R5

[Home](#)

[About](#)

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## Products available

ID : 1

Name : Laptop

Price : 320

ID : 2

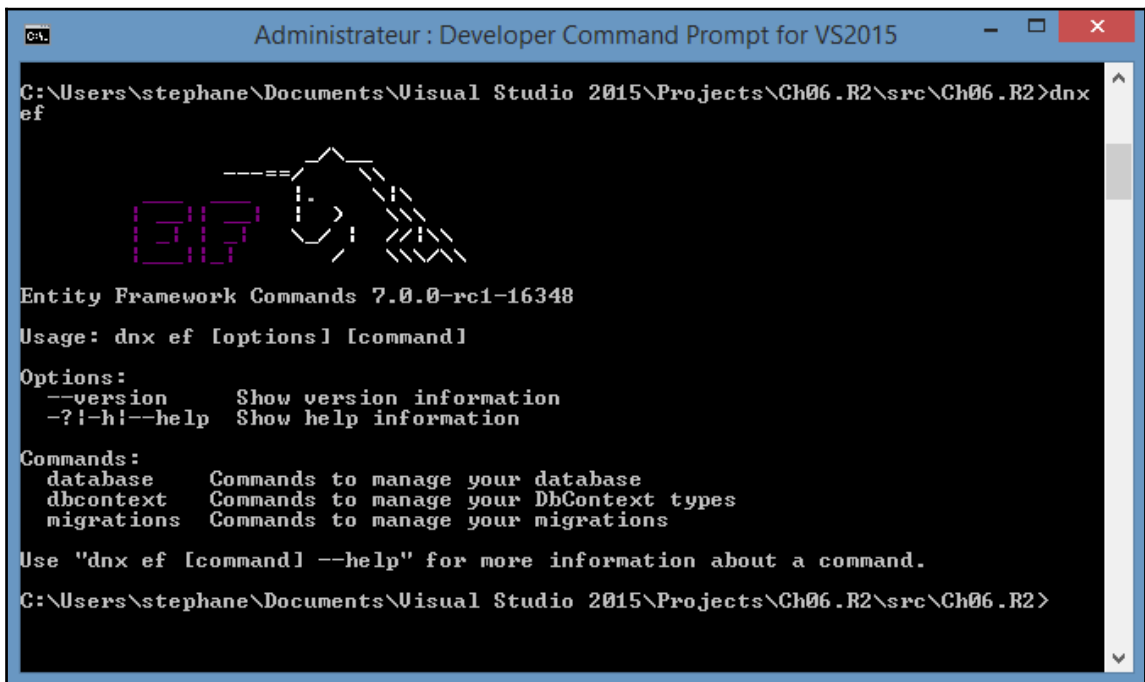
Name : Smartphone


Price : 206

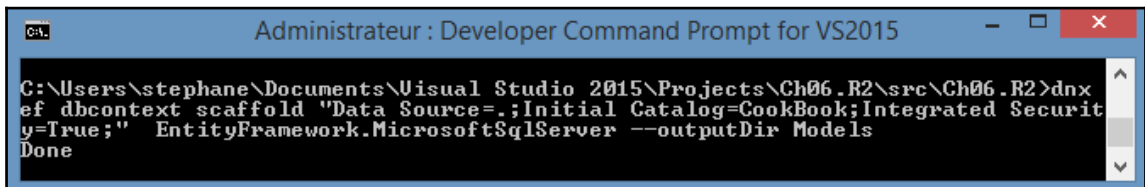
---

# Chapter 6: Data Access - EF7 with Repository, SQL Server, and Stored Procedures

```
"dependencies": {  
  "EntityFramework.Commands": "7.0.0-rc1-final",  
  "EntityFramework.MicrosoftSqlServer": "7.0.0-rc1-final",  
  "EntityFramework.Core": "7.0.0-rc1-final",  
  "EntityFramework.MicrosoftSqlServer.Design": "7.0.0-rc1-final",
```



```
Administrator : Developer Command Prompt for VS2015  
C:\Users\stephane\Documents\Visual Studio 2015\Projects\Ch06.R2\src\Ch06.R2>dnx ef  
  
Entity Framework Commands 7.0.0-rc1-16348  
Usage: dnx ef [options] [command]  
Options:  
  --version      Show version information  
  -?|-h|--help  Show help information  
Commands:  
  database      Commands to manage your database  
  dbcontext     Commands to manage your DbContext types  
  migrations    Commands to manage your migrations  
Use "dnx ef [command] --help" for more information about a command.  
C:\Users\stephane\Documents\Visual Studio 2015\Projects\Ch06.R2\src\Ch06.R2>
```



```
Administrator : Developer Command Prompt for VS2015  
C:\Users\stephane\Documents\Visual Studio 2015\Projects\Ch06.R2\src\Ch06.R2>dnx ef dbcontext scaffold "Data Source=.;Initial Catalog=CookBook;Integrated Security=True;" EntityFramework.MicrosoftSqlServer --outputDir Models  
Done
```

- 
- ▶ C# Book.cs
  - ▶ C# CookBookContext.cs
  - ▶ C# Recipe.cs

---

0 references

```
public partial class CookBookContext : DbContext
{
    1 reference
    protected override void OnConfiguring(DbContextOptionsBuilder options)
    {
        options.UseSqlServer(@"Data Source=PC-HOME\SQLEXPRESS;
                               Initial Catalog=CookBook;Integrated Security=True");
    }

    3 references
    protected override void OnModelCreating(ModelBuilder modelBuilder)
    {
        modelBuilder.Entity<Book>(entity =>
        {
            entity.Property(e => e.Name)
                .IsRequired()
                .HasMaxLength(50)
                .HasColumnType("varchar");
        });

        modelBuilder.Entity<Recipe>(entity =>
        {
            entity.Property(e => e.Name)
                .IsRequired()
                .HasMaxLength(50)
                .HasColumnType("varchar");

            entity.HasOne(d => d.IdBookNavigation)
                .WithMany(p => p.Recipe)
                .HasForeignKey(d => d.IdBook)
                .OnDelete(DeleteBehavior.Restrict);
        });
    }

    0 references
    public virtual DbSet<Book> Book { get; set; }
    0 references
    public virtual DbSet<Recipe> Recipe { get; set; }
}
```

```

7 references
public partial class Book
{
    2 references | 1/1 passing
    public Book()
    {
        Recipes = new HashSet<Recipe>();
    }

    2 references | 1/1 passing
    public int Id { get; set; }
    3 references | 1/1 passing
    public string Name { get; set; }

    4 references | 1/1 passing
    public virtual ICollection<Recipe> Recipes { get; set; }
}

```

```

6 references
public partial class Recipe
{
    0 references
    public int Id { get; set; }
    1 reference
    public int IdBook { get; set; }
    1 reference
    public string Name { get; set; }

    1 reference
    public virtual Book IdBookNavigation { get; set; }
}

```

dbo.Book [Data] - X		
		Max Rows: 1000
	Id	Name
	1	ASP.NET MVC 6
	2	Entity Framework 7



```

1 reference
public class CookbookContext : DbContext
{
    2 references
    public DbSet<Book> Book { get; set; }
    0 references
    public DbSet<Recipe> Recipe { get; set; }

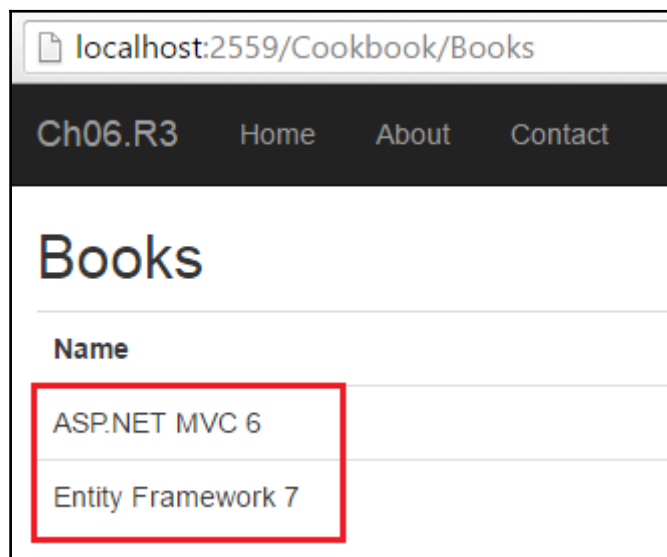
    0 references
    protected override void OnConfiguring(DbContextOptionsBuilder options)
    {
        options.UseSqlServer(@"Data Source=PC-HOME\SQLEXPRESS;Initial Catalog=CookBook;Integrated Security=True;");
    }
}

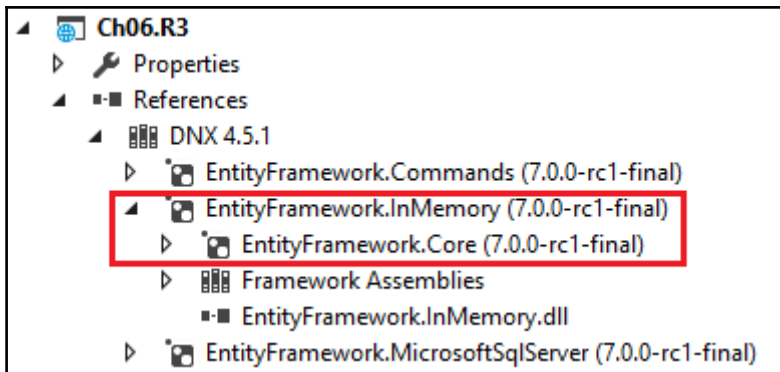
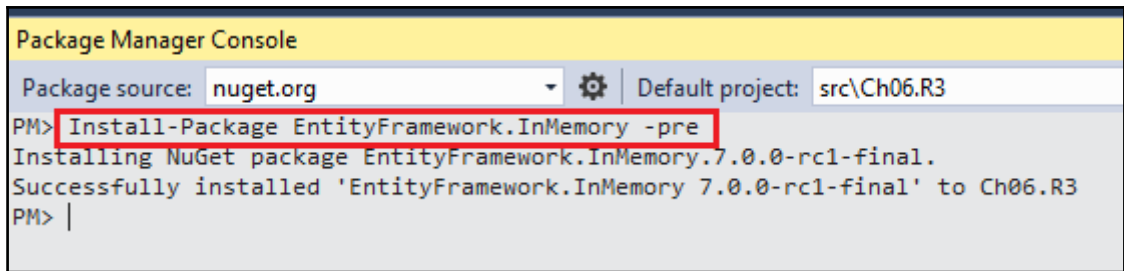
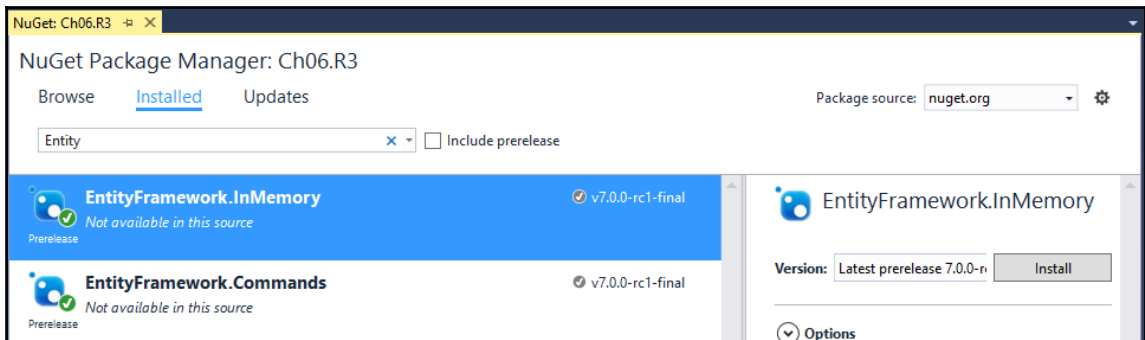
```

```

0 references
public class CookbookController : Controller
{
    0 references
    public IActionResult Books()
    {
        List<Book> books = new List<Book>();
        using (var context = new CookbookContext())
        {
            books = context.Book.ToList();
        }
        return View(books);
    }
}

```





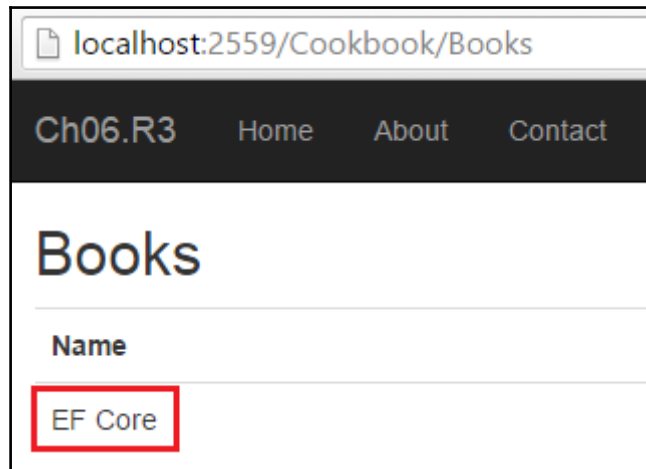
```
"dependencies": {
  "EntityFramework.Commands": "7.0.0-rc1-final",
  "EntityFramework.MicrosoftSqlServer": "7.0.0-rc1-final",
  "EntityFramework.Core": "7.0.0-rc1-final",
  "Microsoft.AspNet.Authentication": "7.0.0-rc1-final",
  "Microsoft.AspNet.Diagnostics": "7.0.0-rc1-final",
  "Microsoft.AspNet.Identity.Core": "3.0.0-rc1-final",
  "Microsoft.AspNet.Identity.EntityFramework": "3.0.0-rc1-final",
  "Microsoft.AspNet.Mvc": "7.0.0-rc1-final",
  "Microsoft.AspNet.Mvc.TagHelpers": "7.0.0-rc1-final",
  "Microsoft.AspNet.Server.Kestrel": "7.0.0-rc1-final",
  "Microsoft.AspNet.StaticFiles": "7.0.0-rc1-final",
  "Microsoft.AspNet.Tooling.SvcFactory": "7.0.0-rc1-final",
  "Microsoft.Extensions.Configuration": "7.0.0-rc1-final",
  "Microsoft.Extensions.Configuration.Abstractions": "7.0.0-rc1-final",
  "Microsoft.Extensions.Configuration.Json": "1.0.0-rc1-final",
  "Microsoft.Extensions.Configuration.UserSecrets": "1.0.0-rc1-final",
  "Microsoft.Extensions.Logging": "1.0.0-rc1-final",
  "Microsoft.Extensions.Logging.Console": "1.0.0-rc1-final",
  "Microsoft.Extensions.Logging.Debug": "1.0.0-rc1-final",
  "Microsoft.VisualStudio.Web.BrowserLink.Loader": "14.0.0-rc1-final"
},
```

```
0 references
protected override void OnConfiguring(DbContextOptionsBuilder options)
{
  options.UseInMemoryDatabase();
}
```

---

0 references

```
public IActionResult Books()
{
    Book EF7_book = new Book() { Id = 3, Name = "EF Core" };
    List<Book> books = new List<Book>();
    using (var context = new CookbookContext())
    {
        context.Book.Add(EF7_book);
        context.SaveChanges();
        books = context.Book.ToList();
    }
    return View(books);
}
```



```

"dependencies": {
  "EntityFramework.Core": "7.0.0-rc1-final",
  "EntityFramework.Commands": "7.0.0-rc1-final",
  "EntityFramework.InMemory": "7.0.0-rc1-final",
  "EntityFramework.MicrosoftSqlServer": "7.0.0-rc1-final",
  "EntityFramework.MicrosoftSqlServer.Design": "7.0.0-rc1-final",
  "xunit": "2.1.0",
  "xunit.runner.dnx": "2.1.0-rc1-build204"
},

"commands": {
  "ef": "EntityFramework.Commands",
  "test": "xunit.runner.dnx"
}

```

```

[Fact]
0 references
public void TestInMemoryProvider()
{
  var contextBuilderInMemory = new DbContextOptionsBuilder<CookBookContext>();
  contextBuilderInMemory.UseInMemoryDatabase();
  var optionsInMemory = contextBuilderInMemory.Options;

  using (var context = new CookBookContext(optionsInMemory))
  {
    var books = new List<Book>
    {
      new Book { Id = 3, Name = "EF Core InMemory", Recipes = new List<Recipe>() },
      new Book { Id = 4, Name = "EF Core Tests", Recipes = new List<Recipe>() },
    };
    context.Book.AddRange(books);
    context.SaveChanges();
    Assert.Equal(2, context.Book.ToList().Count()); <31ms elapsed
  }
}

```

context.Book	{Microsoft.Data.Entity.Internal.InternalDbSet< Tests.Models.Book>}
Non-Public members	
Results View	Expanding the Results View will enumerate the IEnumerable
[0]	{Tests.Models.Book}
Id	4
Name	"EF Core Tests"
Recipes	Count = 0
[1]	{Tests.Models.Book}
Id	3
Name	"EF Core InMemory"
Recipes	Count = 0

```
[Fact]
0 references
public void TestBatchSQLProvider()
{
    var contextBuilderSqlServer = new DbContextOptionsBuilder<CookBookContext>();
    contextBuilderSqlServer
        .UseSqlServer(@"Data Source=PC-HOME\SQLEXPRESS;Initial Catalog=CookBook;Integrated Security=True")
        .MaxBatchSize(10)
        .CommandTimeout(CommandTimeout);

    var options = contextBuilderSqlServer.Options;

    using (var context = new CookBookContext(options))
    {
```

```
using (var context = new CookBookContext(options))
{
    var bookAzureSQL = new Book { Name = "Azure SQL", Recipes = new List<Recipe>() };
    var bookAzureRedis = new Book { Name = "Azure Redis", Recipes = new List<Recipe>() };
    var bookSqlBatch = new Book { Name = "SQL Batch", Recipes = new List<Recipe>() };
    var bookSqlBatch2 = new Book { Name = "SQL Batch", Recipes = new List<Recipe>() };
    var bookSqlBatch3 = new Book { Name = "SQL Batch", Recipes = new List<Recipe>() };
    var bookSqlBatch4 = new Book { Name = "SQL Batch", Recipes = new List<Recipe>() };

    context.Book.AddRange(bookAzureSQL, bookAzureRedis,
        bookSqlBatch, bookSqlBatch2, bookSqlBatch3, bookSqlBatch4);

    context.SaveChanges();
}
```

```

exec sp_executesql N'SET NOCOUNT OFF;
INSERT INTO [Book] ([Name])
OUTPUT INSERTED.[Id]
VALUES (@p0),
(@p1),
(@p2),
(@p3),
(@p4),
(@p5);
',N'@p0 varchar(8000),@p1 varchar(8000),@p2 varchar(8000),@p3 varchar(8000),@p4 varchar(8000),@p5 varchar(8000)',@p0='Azure
SQL',@p1='Azure Redis',@p2='SQL Batch',@p3='SQL Batch',@p4='SQL Batch',@p5='SQL Batch'

```

```

using (var context = new CookBookContext(options))
{
    var bookAzureSQLToUpdate = context.Book.Where(b => b.Name == "Azure SQL").FirstOrDefault();
    bookAzureSQLToUpdate.Name = "Azure SQL to update";
    var bookAzureRedisToUpdate = context.Book.Where(b => b.Name == "Azure Redis").FirstOrDefault();
    bookAzureRedisToUpdate.Name = "Azure Redis to update";

    context.Update(bookAzureSQLToUpdate);
    context.Update(bookAzureRedisToUpdate);
    context.SaveChanges();
}

```

```

exec sp_executesql N'SET NOCOUNT OFF;
UPDATE [Book] SET [Name] = @p1
WHERE [Id] = @p0;
SELECT @@ROWCOUNT;
UPDATE [Book] SET [Name] = @p3
WHERE [Id] = @p2;
SELECT @@ROWCOUNT;
',N'@p0 int,@p1 varchar(8000),@p2 int,@p3 varchar(8000)',@p0=15,@p1='Azure SQL to update',@p2=16,@p3='Azure Redis to update'

```

---

```
select * from book
```

Résultats Messages

Id	Name
1	ASP.NET MVC 6
2	Entity Framework 7
3	Azure SQL to update
4	Azure Redis to update
6	SQL Batch
7	SQL Batch
8	SQL Batch
9	Azure SQL to update
10	Azure Redis to update
11	SQL Batch
12	SQL Batch
13	SQL Batch
14	SQL Batch
15	Azure SQL to update
16	Azure Redis to update
17	SQL Batch
18	SQL Batch
19	SQL Batch
20	SQL Batch
21	Azure SQL
22	Azure Redis
23	SQL Batch
24	SQL Batch
25	SQL Batch
26	SQL Batch
27	Azure SQL
28	Azure Redis
29	SQL Batch
30	SQL Batch
31	SQL Batch
32	SQL Batch



```

using (var context = new CookBookContext(options))
{
    var books = context.Book.ToList();
    context.RemoveRange(books.Where(b => b.Name == "SQL Batch").ToArray());
    context.SaveChanges();
}

```

```

EXEC sp_executesql N'SET NOCOUNT OFF;
DELETE FROM [Book]
WHERE [Id] = @p0;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p1;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p2;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p3;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p4;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p5;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p6;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p7;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p8;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p9;
SELECT @@ROWCOUNT;
',N'@p0 int,@p1 int,@p2 int,@p3 int,@p4 int,@p5 int,@p6 int,@p7 int,@p8 int,@p9 int',@p0=6,@p1=30,@p2=29,@p3=26,@p4=25,@p5=24,@p6=23,@p7=20,@p8=31,@p9=19

```

```

EXEC sp_executesql N'SET NOCOUNT OFF;
DELETE FROM [Book]
WHERE [Id] = @p10;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p11;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p12;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p13;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p14;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p15;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p16;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p17;
SELECT @@ROWCOUNT;
DELETE FROM [Book]
WHERE [Id] = @p18;
SELECT @@ROWCOUNT;
',N'@p10 int,@p11 int,@p12 int,@p13 int,@p14 int,@p15 int,@p16 int,@p17 int,@p18 int',@p10=17,@p11=14,@p12=13,@p13=12,@p14=11,@p15=8,@p16=7,@p17=18,@p18=32

```

```
select * from book
```

Id	Name
1	ASP.NET MVC 6
2	Entity Framework 7
3	Azure SQL to update
4	Azure Redis to update
9	Azure SQL to update
10	Azure Redis to update
15	Azure SQL to update
16	Azure Redis to update
21	Azure SQL
22	Azure Redis
27	Azure SQL
28	Azure Redis

```
1 reference | 1/1 passing  
public virtual IQueryable<Book> GetBooks()  
{  
    return Set<Book>().FromSql("dbo.GetBooks");  
}
```

```
1 reference | 1/1 passing  
public virtual void InsertBook(string name)  
{  
    string sqlRequest = string.Format("InsertBook @name = '{0}'", name);  
    Database.ExecuteSqlCommand(sqlRequest);  
}
```

```
using (var context = new CookBookContext(options))  
{  
    List<Book> booksFromStoredProcedure = new List<Book>();  
    booksFromStoredProcedure = context.GetBooks().ToList();  
}
```

---

# Chapter 7: Accessing data with Micro ORMs, NoSQL, and Azure

This screenshot shows the Visual Studio 'Add New Item' dialog. The 'Web Pages' category is selected, and the 'MVC View Page' template is highlighted. The 'Name' field contains '\_Layout.cshtml'. A link to find templates online is visible below the list.

Item Name	Framework
MVC View Page	DNX
MVC View Layout Page	DNX
MVC View Start Page	DNX

Name:

[Click here to go online and find templates.](#)

This screenshot shows the Visual Studio 'Add New Item' dialog. The 'MVC View Start Page' template is highlighted. The 'Name' field contains '\_ViewStart.cshtml'.

Item Name	Framework
MVC View Layout Page	DNX
MVC View Start Page	DNX
MVC View Imports Page	DNX

Name:

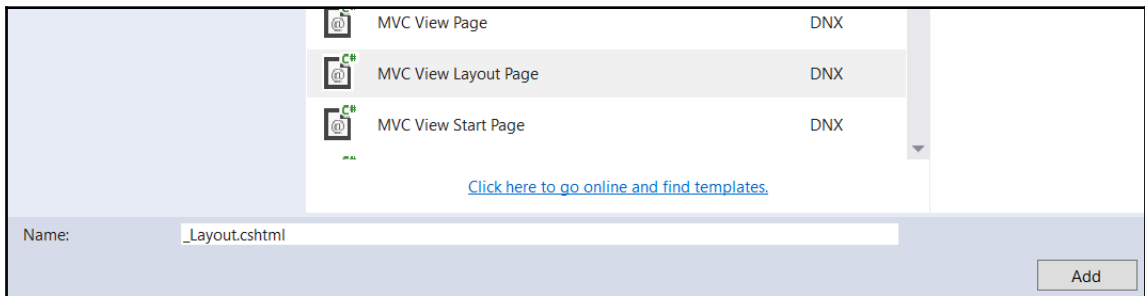
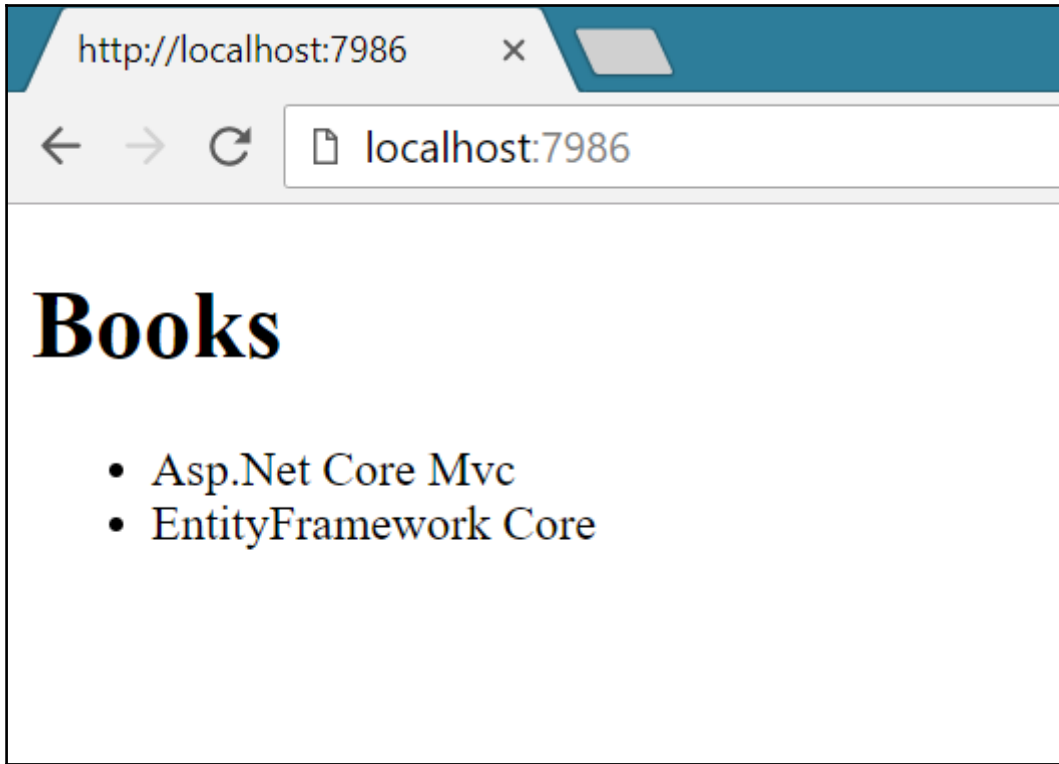
[Click here to go online and find templates.](#)

This screenshot shows the Visual Studio 'Add New Item' dialog. The 'MVC View Page' template is highlighted. The 'Name' field contains 'Index.cshtml'.




Item Name	Framework
Web API Controller Class	DNX
MVC View Page	DNX
MVC View Layout Page	DNX
MVC View Start Page	DNX

Name:

[Click here to go online and find templates.](#)







---

	MVC View Layout Page	DNX
	MVC View Start Page	DNX
	MVC View Imports Page	DNX

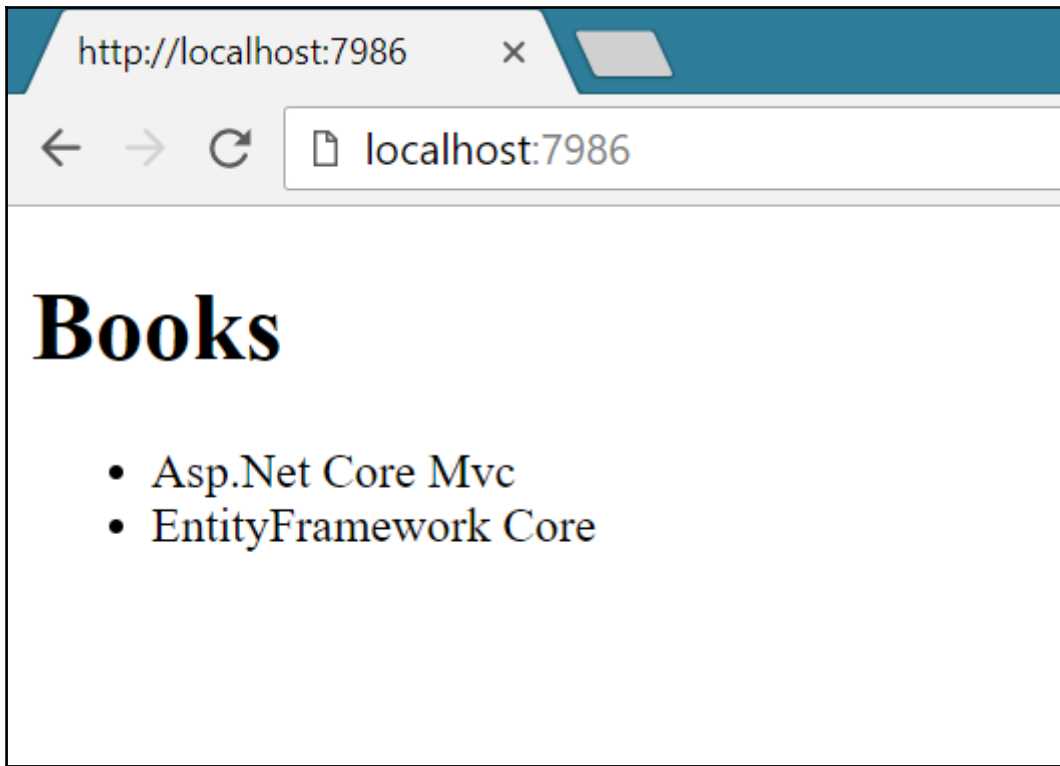
[Click here to go online and find templates.](#)

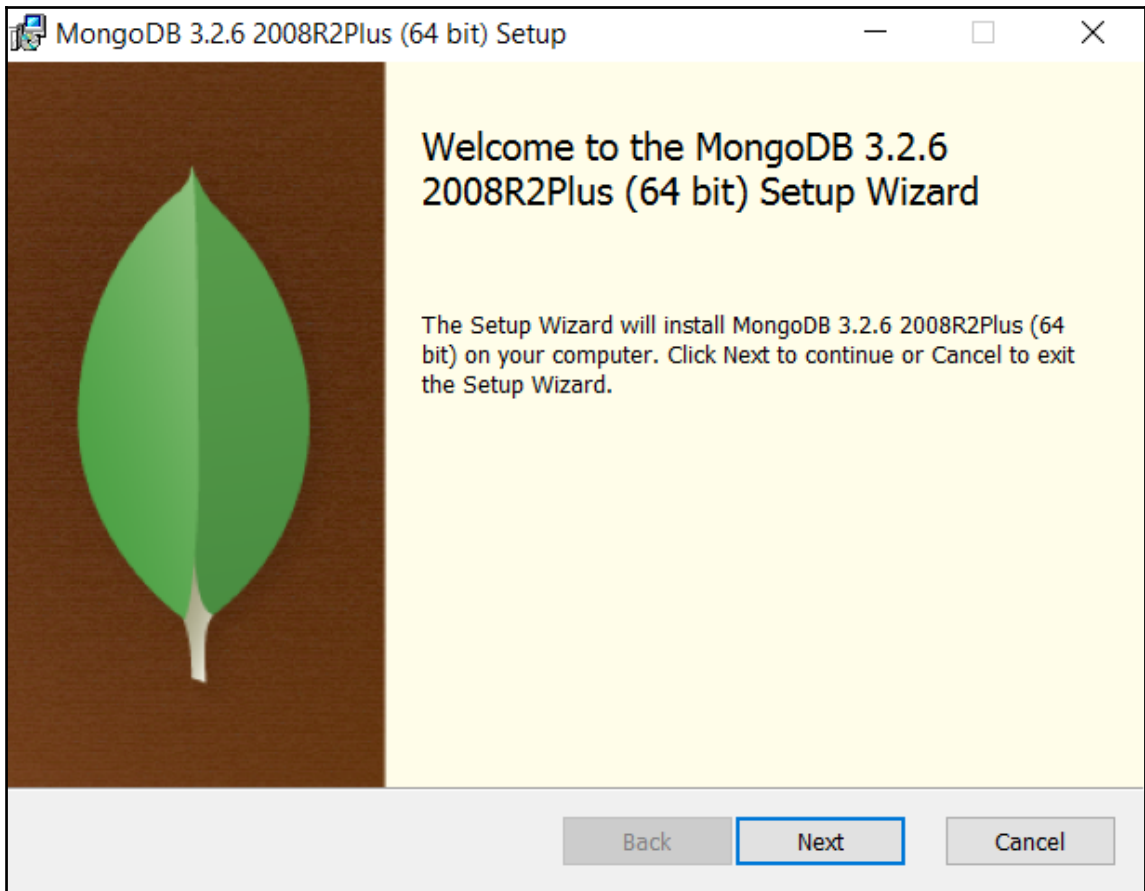
Name:

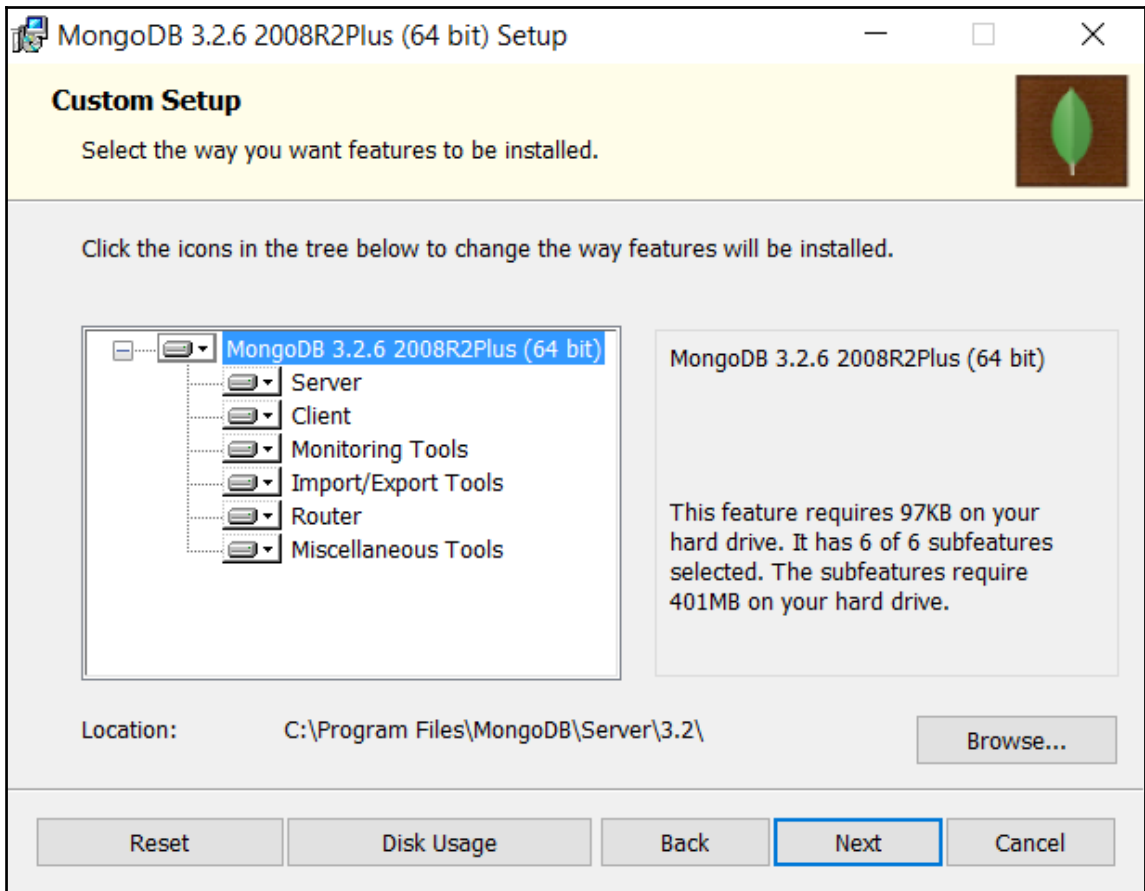
	Web API Controller Class	DNX
	MVC View Page	DNX
	MVC View Layout Page	DNX
	MVC View Start Page	DNX

[Click here to go online and find templates.](#)

Name:

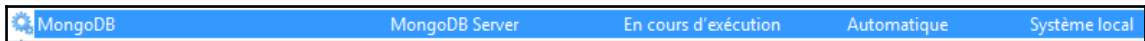






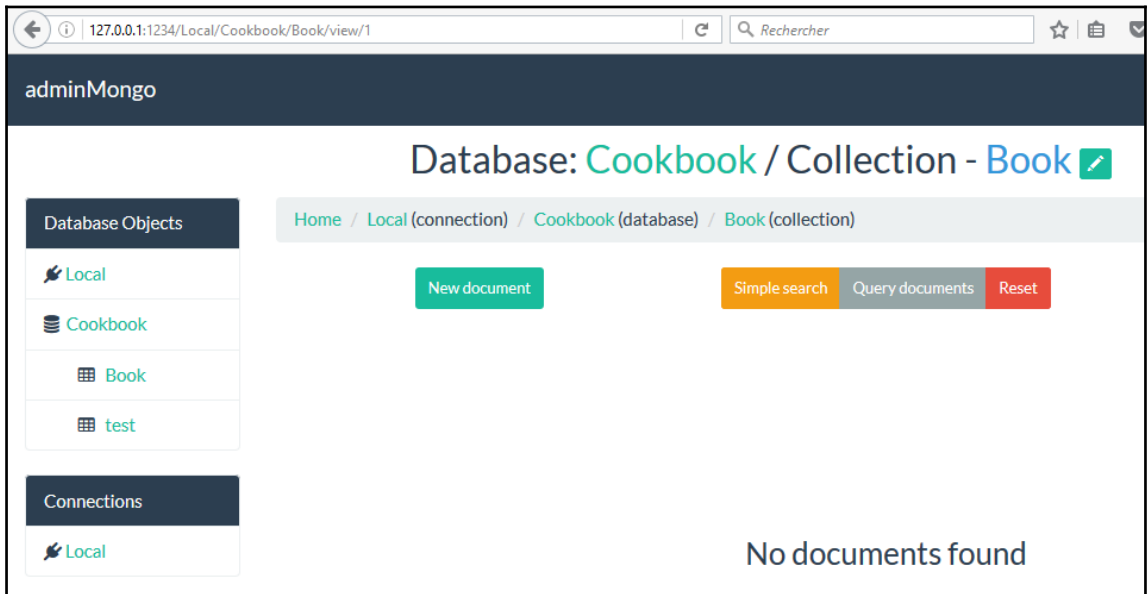
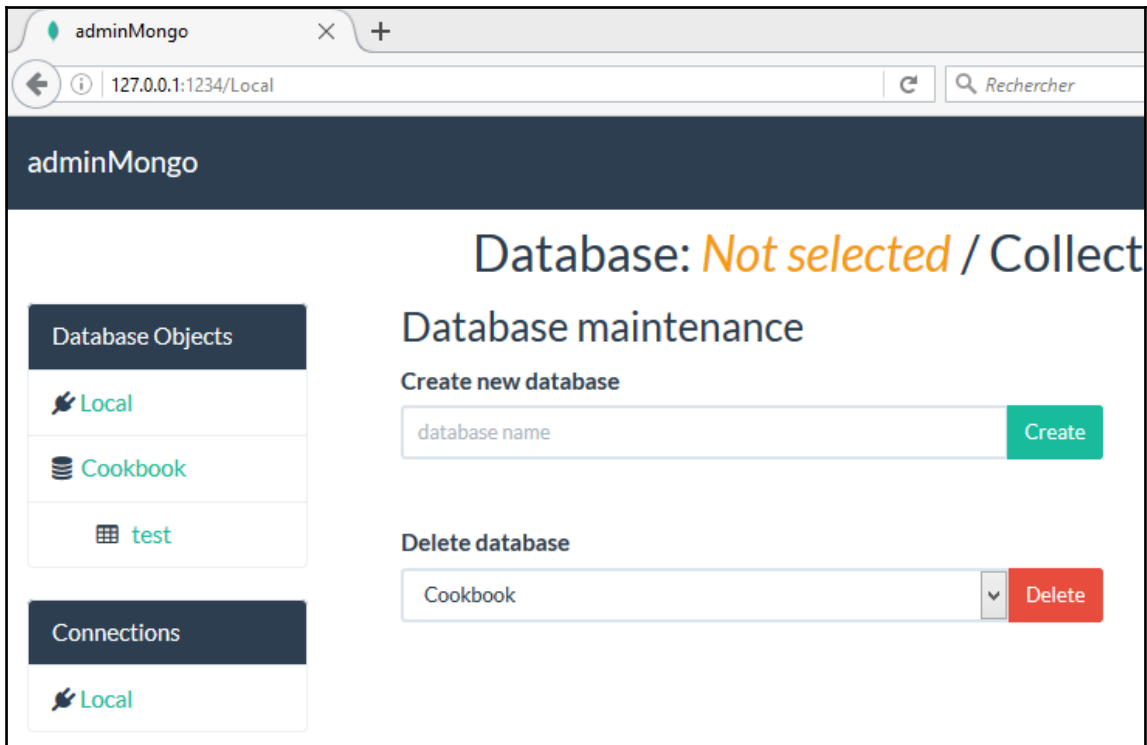
```
C:\WINDOWS\system32>C:\mongodb\bin\mongod.exe --config c:\mongodb\mongod.cfg --ninstall
2016-06-13T13:37:58.706+0200 I CONTROL [main] log file "C:\mongodb\log\mongo-server.log" exists; moved to "C:\mongodb\log\mongo-server.log.2016-06-13T11-37-58"
```

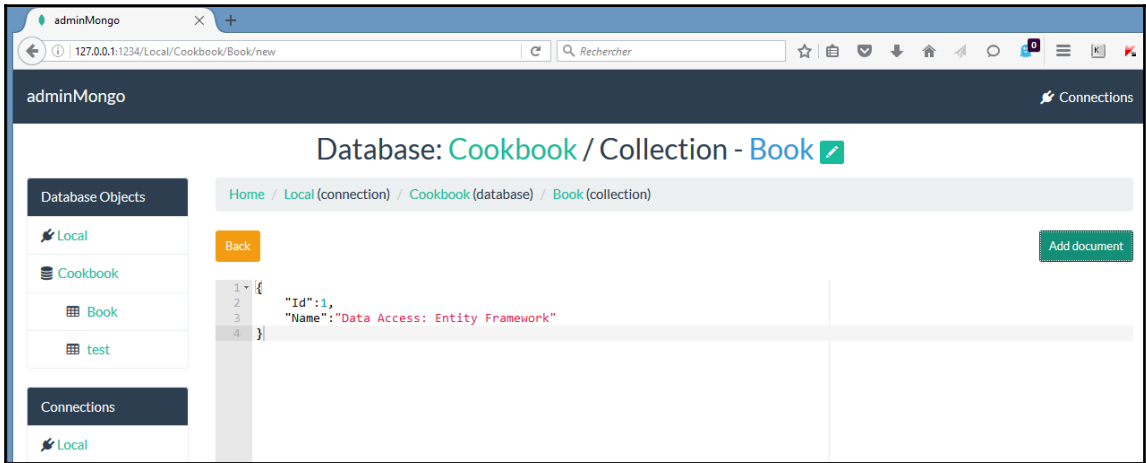
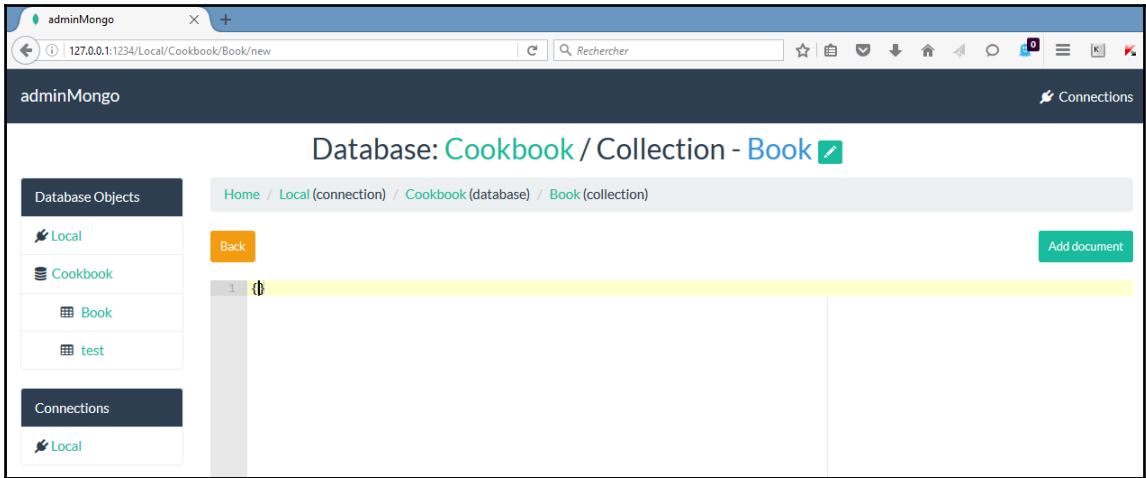
```
C:\WINDOWS\system32>net start mongodb
Le service MongoDB a démarré.
```

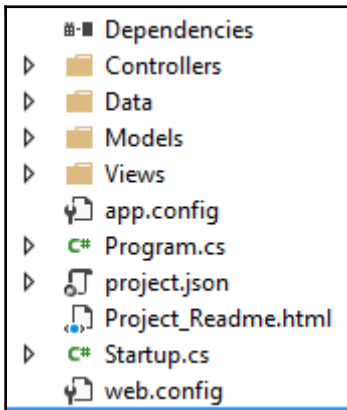
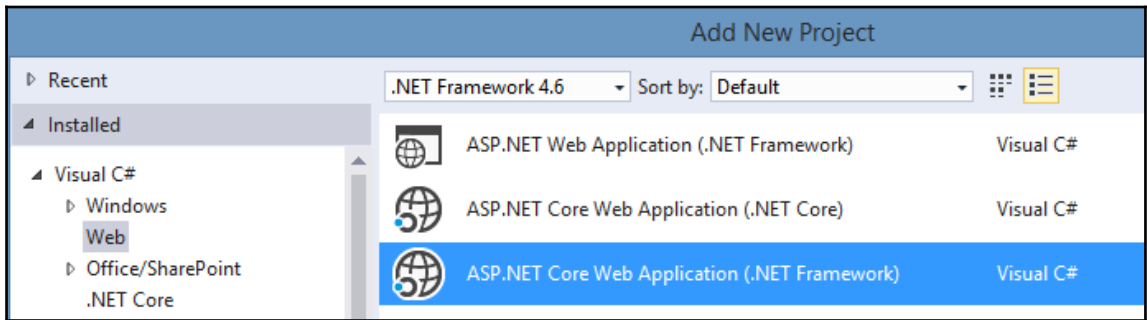
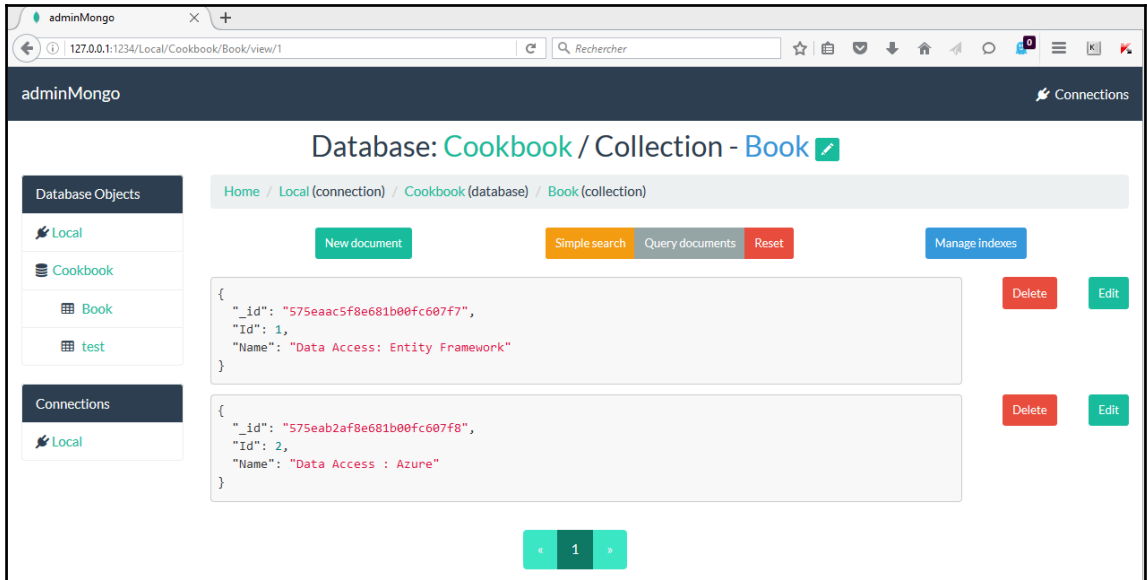


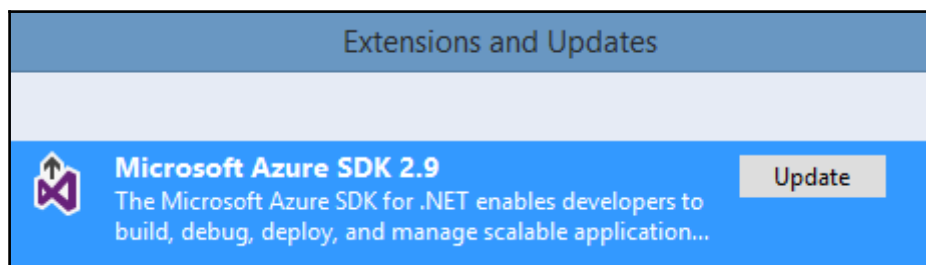
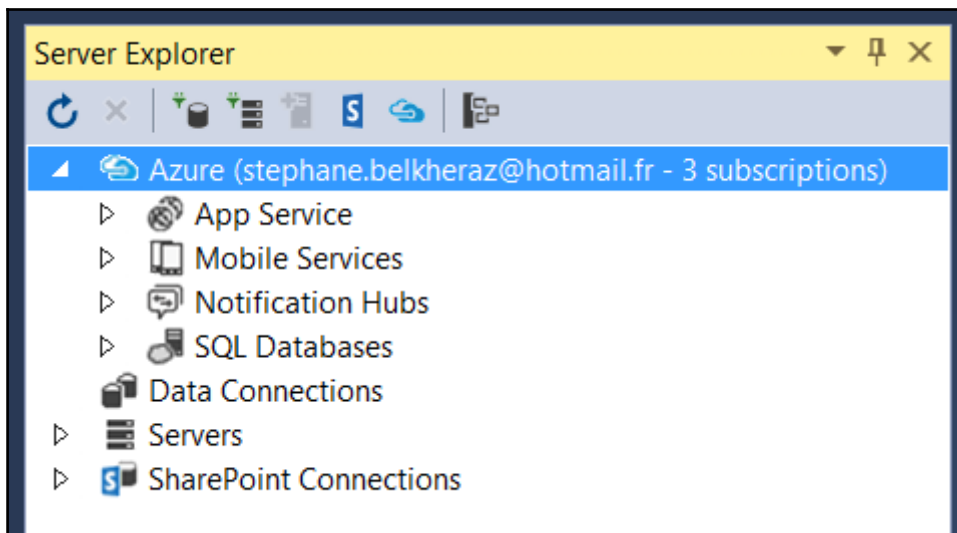
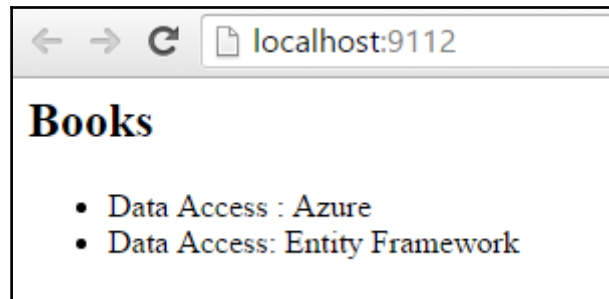


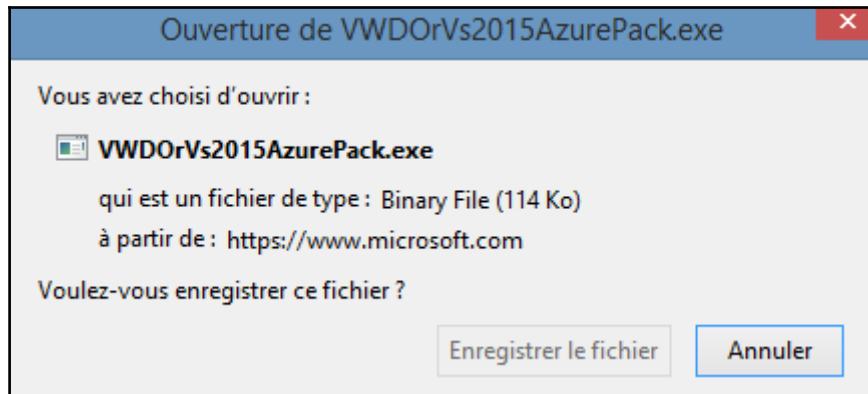




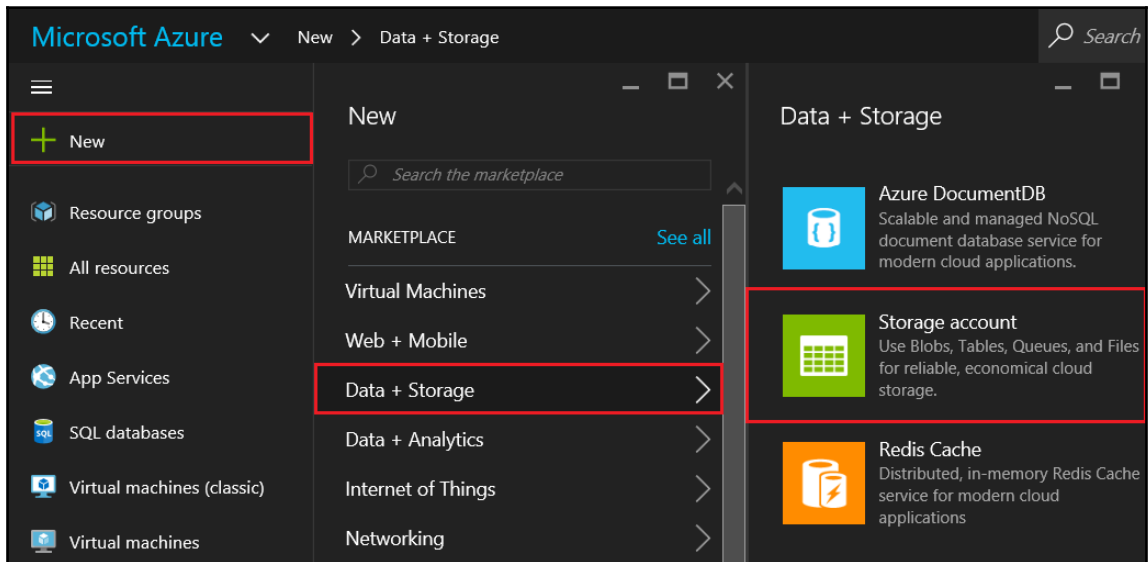
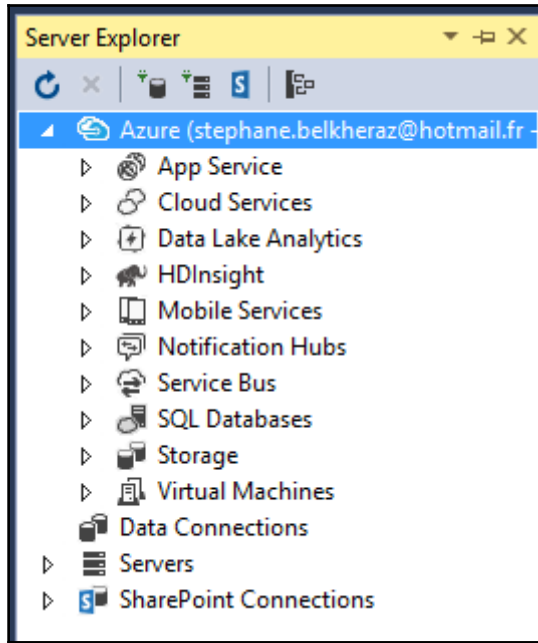








Microsoft Azure Storage Emulator - 4.4  
Microsoft Azure Storage Tools - v5.0.0  
Microsoft Azure Authoring Tools - 2.9.1  
Microsoft Azure Emulator - 2.9.1  
Microsoft Hive ODBC Driver 32 bit  
Microsoft Hive ODBC Driver 64 bit  
Microsoft Azure Libraries for .NET - 2.9.1  
Microsoft Azure Mobile App SDK V2.0  
Microsoft Azure PowerShell  
Microsoft Azure PowerShell - Azure Stack Technical Preview for Visual Studio Tools  
Microsoft Azure Tools 2.9 for Microsoft Visual Studio 2015  
Microsoft Azure HDInsight Tools for Visual Studio 2015  
Microsoft Azure App Service Tools v2.9 - Visual Studio 2015  
Microsoft Azure Data Lake Tools for Visual Studio 2015



Microsoft Azure > New > Data + Storage > Create storage account

### Create storage account

The cost of your storage account depends on the usage and the options you choose below. [Learn more](#)

\* Name  .core.windows.net

Deployment model  Resource manager  Classic

Account kind

Performance  Standard  Premium

Replication

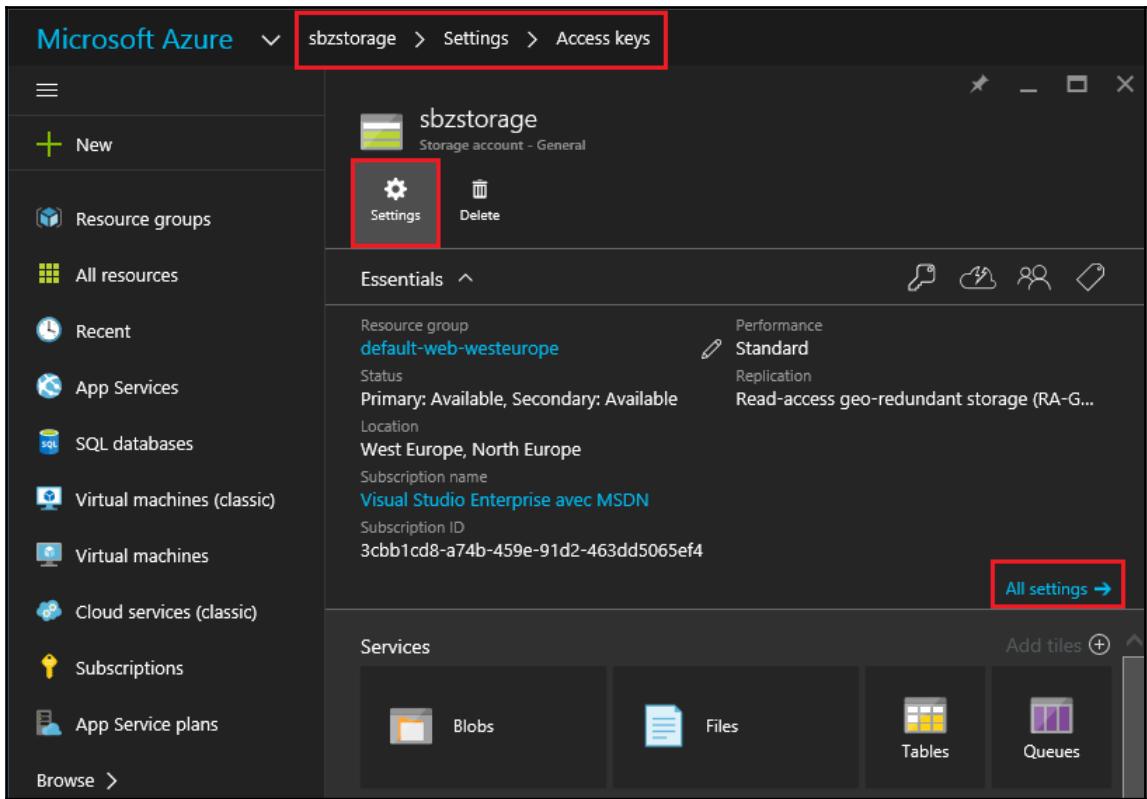
\* Subscription

\* Resource group  Create new  Use existing

Pin to dashboard

**Create**





The screenshot shows the Azure portal interface for a storage account named 'sbzstorage'. The left-hand navigation pane is open, with 'Settings' and 'Access keys' highlighted with red boxes. The main content area displays the 'Access keys' configuration page. It includes a search bar for settings, a 'SUPPORT + TROUBLESHOOTING' section with links for 'Troubleshoot', 'Audit logs', and 'New support request', and a 'GENERAL' section with links for 'Properties', 'Access keys', 'Configuration', 'Custom domain', and 'Encryption'. The 'Access keys' section contains a text block explaining the purpose of access keys, a 'Storage account name' field with the value 'sbzstorage', and a table listing two keys: 'key1' and 'key2'. The 'key1' row is highlighted with a red box.

**Settings**  
sbzstorage

**Access keys**  
sbzstorage

Filter settings

SUPPORT + TROUBLESHOOTING

- Troubleshoot
- Audit logs
- New support request

GENERAL

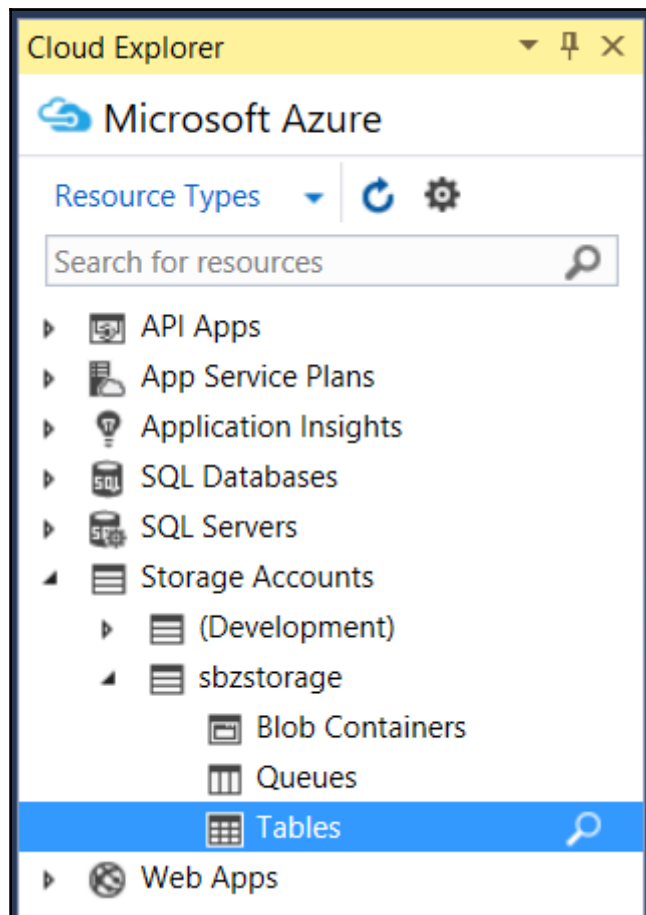
- Properties
- Access keys**
- Configuration
- Custom domain
- Encryption

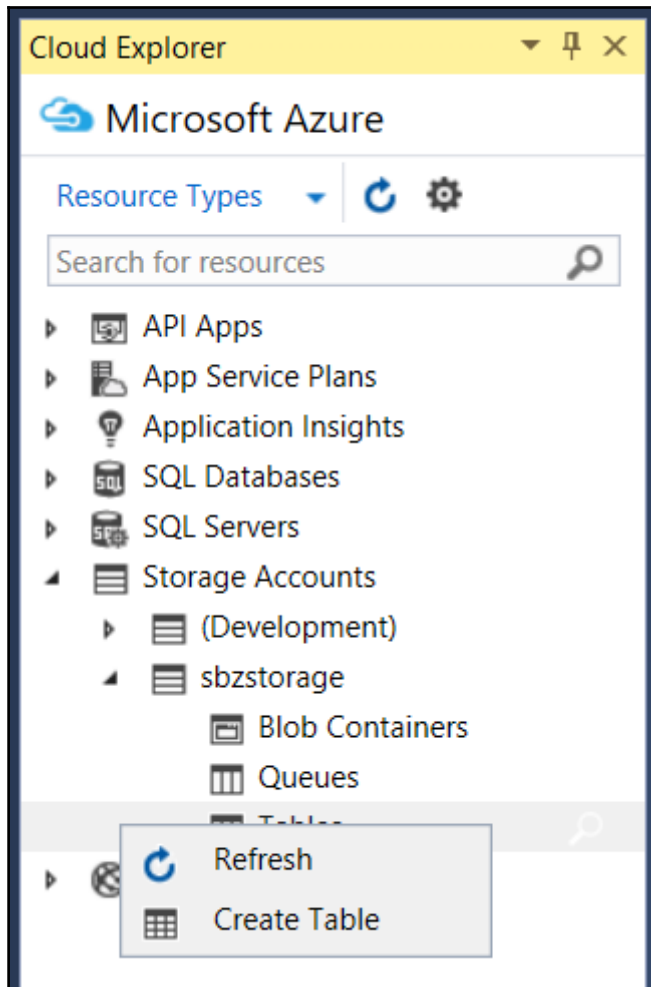
Use access keys to authenticate your applications when making requests to this Azure storage account. Store your access keys securely - for example, using Azure Key Vault - and don't share them. We recommend regenerating your access keys regularly. You are provided two access keys so that you can maintain connections using one key while regenerating the other.

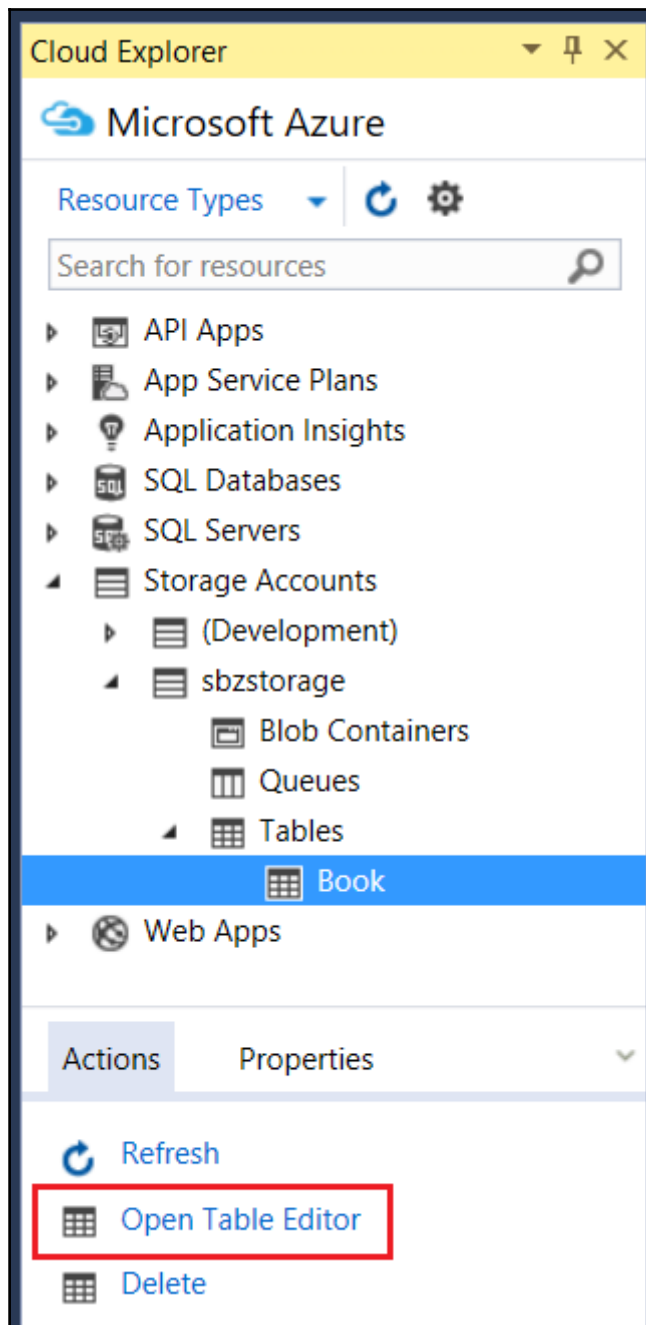
When you regenerate your access keys, you must update any Azure resources and applications that access this storage account to use the new keys. This action will not interrupt access to disks from your virtual machines. [Learn more](#)

Storage account name: sbzstorage

NAME	KEY		
key1	IFIEbSvi7CppXalu8Z/89yFuvFLGYWzm5PJcH3Lzx5FvlO7esTagt		...
key2	9BYDHjGUU+BVbbDscXHC04tPceZY0QYGMbz+d138MGtqvJll		...







Add Entity

Use the grid below to create an entity and add it to your table.

Name	Type	Value
PartitionKey	String	
RowKey	String	

Add property

OK Cancel

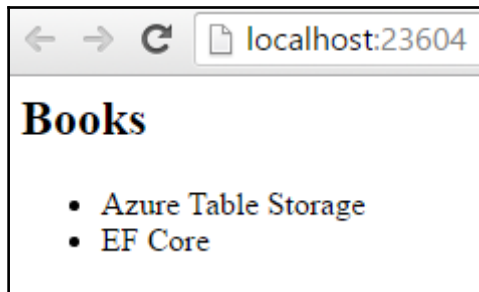
Book [Table]

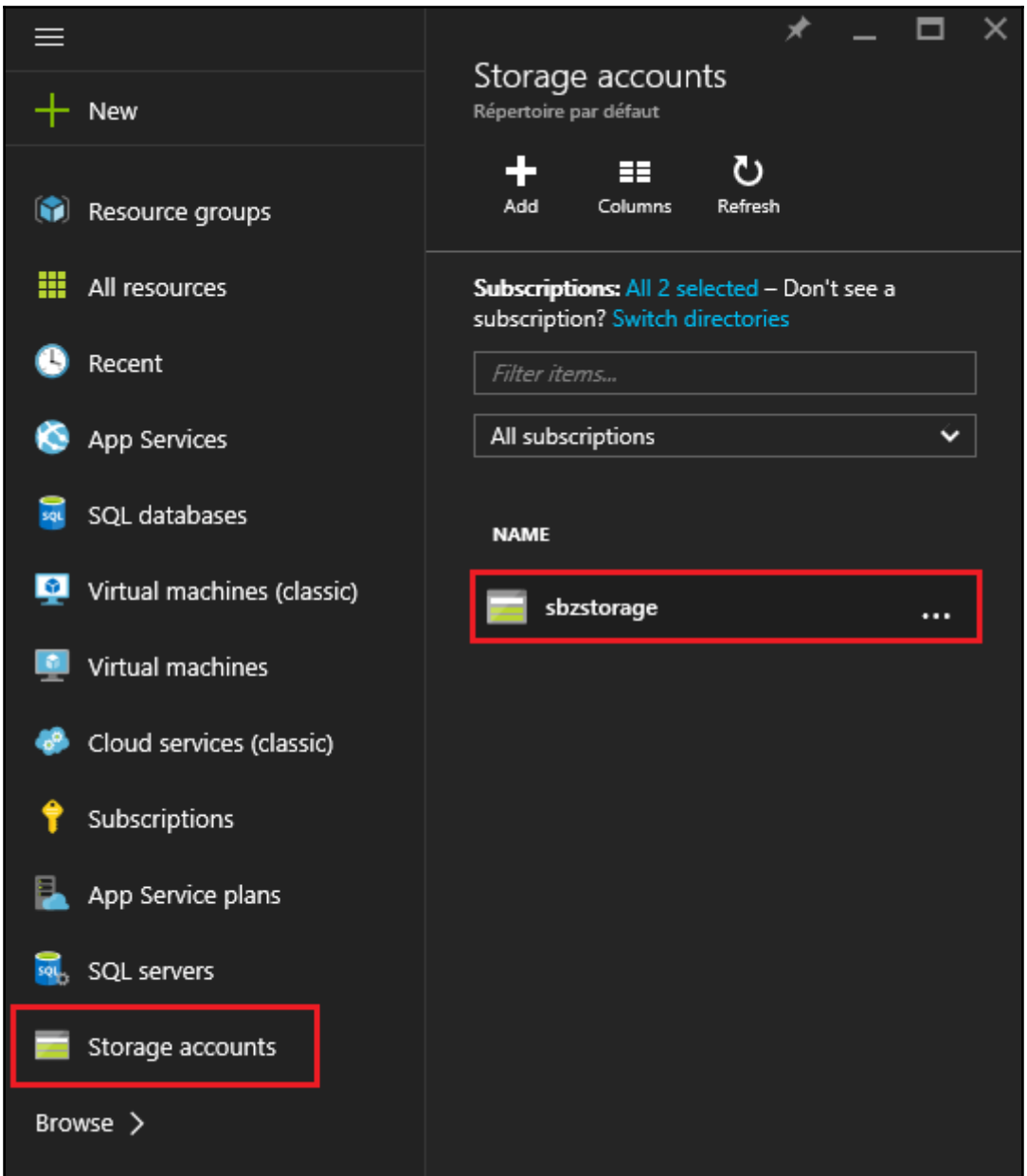
PartitionKey	RowKey	Timestamp
1	EF Core	07/06/2016 16:52:12

Book [Table]

Enter a WCF Data Services filter to limit the entities returned

PartitionKey	RowKey	Timestamp
1	EF Core	07/06/2016 16:52:12
2	Azure Table Sto...	07/06/2016 16:54:07







The screenshot shows the Azure Storage Explorer interface. On the left, the 'sbzstorage' account overview is displayed, including details like Resource group (Default-Web-WestEurope), Status (Primary: Available, Secondary: Available), Location (West Europe, North Europe), and Subscription name (Visual Studio Enterprise avec MSDN). The 'Services' section at the bottom has the 'Blobs' tile highlighted with a red box. On the right, the 'Blob service' view is shown, with the 'Container' button in the top navigation bar highlighted with a red box. Below it, a table lists existing containers:

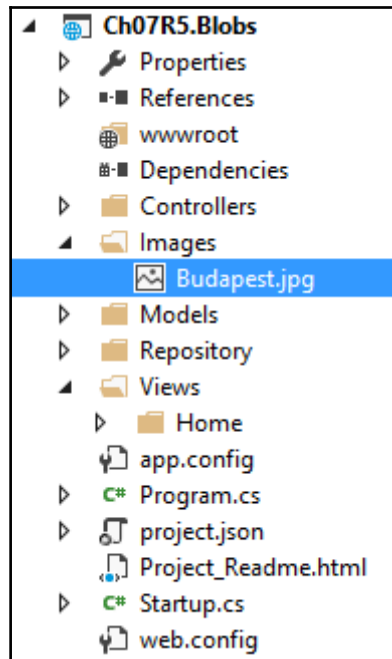
NAME	URL	LAST MODIFIED
cookbookblob	https://sbzstorage.blob.core...	6/20/2016 5:39:11 PM
cookbookconnstringcontainer	https://sbzstorage.blob.core...	6/20/2016 5:41:10 PM

The screenshot shows the 'New container' dialog box. The 'Name' field is set to 'imagescontainer' and the 'Access type' is set to 'Container'. The 'Create' button is highlighted with a red box. The background shows the 'Blob service' view with the 'Container' button highlighted in the top navigation bar.

\* Name: imagescontainer ✓

Access type: Container

Create

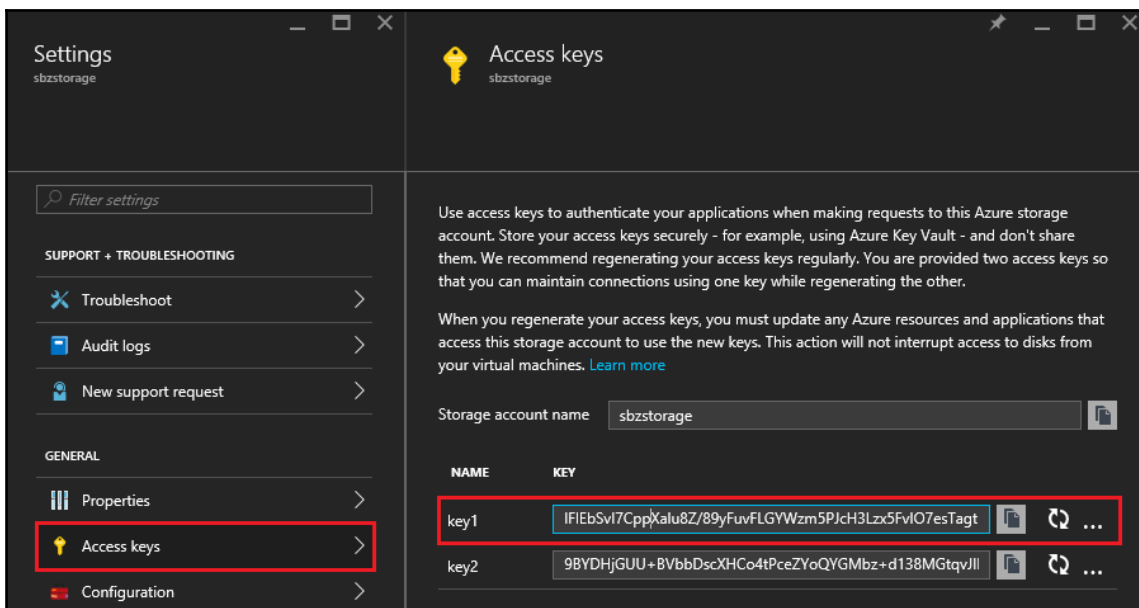


```
{  
  "dependencies": {  
    "Microsoft.AspNetCore.Server.IISIntegration": "1.0.0-rc2-final",  
    "Microsoft.AspNetCore.Server.Kestrel": "1.0.0-rc2-final",  
    "Microsoft.WindowsAzure.ConfigurationManager": "3.1.0",  
    "WindowsAzure.Storage": "7.0.0"  
  },  
}
```

```
5 references  
public class ImageViewModel  
{  
  2 references  
  public string Url { get; set; }  
}
```

```
4 references
public interface IAzureStorageRepository
{
    2 references
    string GetImageFromAzureBlobStorage();
}
```

```
2 references
public class AzureStorageRepository : IAzureStorageRepository
{
    private const string _name = "sbzstorage";
    private const string _key = "1f1EbSvI7CppXalu8Z/89yFuvFLGYWzm5PJcH3Lzx5FvIO
```



```

1 reference
public class AzureStorageRepository
{
    private const string _name = "sbzstorage";
    private const string _key = "1f1EbSvI7CppXalu8Z/89yFuvFLGYWzm5PJcH3Lz
    private readonly CloudStorageAccount _account;

    0 references
    public AzureStorageRepository()
    {
        StorageCredentials creds = new StorageCredentials(_name, _key);
        _account = new CloudStorageAccount(creds, false);
    }
}

```

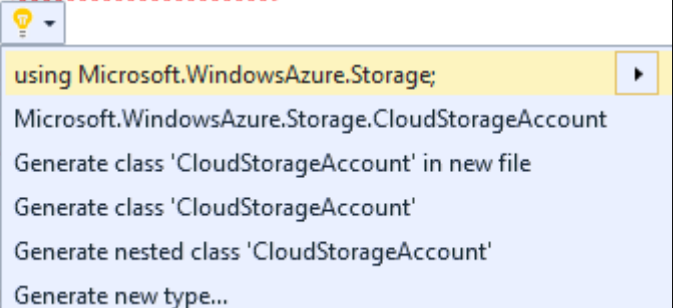
```

public class AzureStorageRepository
{
    private const string _name = "sbzstorage";
    private const string _key = "1f1EbSvI7CppXalu8Z/89yFuvFLGYWzm5PJ
    private readonly CloudStorageAccount _account;

    0 references
    public AzureStor
    {
        StorageCreden
        _account = n
    }

    0 references
    public List<Dyna

```



- using Microsoft.WindowsAzure.Storage;
- Microsoft.WindowsAzure.Storage.CloudStorageAccount
- Generate class 'CloudStorageAccount' in new file
- Generate class 'CloudStorageAccount'
- Generate nested class 'CloudStorageAccount'
- Generate new type...

```

1 reference
public class AzureStorageRepository
{
    private string _key;
    private string _name;
    private CloudStorageAccount account;

    0 references
    public AzureStorageRepository()
    {
        StorageCredentials creds = new StorageCredentials(_name, _key);
    }
}

```

using Microsoft.WindowsAzure.Storage.Auth;    **CS0246** The type or namespace name 'StorageCredentials' could not be found (are you missing a using directive or an assembly reference?)

Microsoft.WindowsAzure.Storage.Auth.StorageCredentials

Generate type 'StorageCredentials'

- using Microsoft.WindowsAzure.Storage;
- using Microsoft.WindowsAzure.Storage.Auth;
- using System;
- ...

Preview changes

```

2 references
public string GetImageFromAzureBlobStorage()
{
    // Create a blob client.
    CloudBlobClient blobClient = _account.CreateCloudBlobClient();

    // Get a reference to a blob container.
    CloudBlobContainer imageContainer = blobClient.GetContainerReference("imagescontainer");

    // Create a blob and upload a file.
    CloudBlockBlob blob = imageContainer.GetBlockBlobReference("Budapest.jpg");
    blob.UploadFromFile(@"C:\Users\stephane\Documents\Visual Studio 2015\Projects\Ch07RC2\src\Ch07

    string urlBudapestImage = null;
    foreach (IListBlobItem blobItem in imageContainer.ListBlobs())
    {
        urlBudapestImage = blobItem.Uri.AbsoluteUri;
    }

    return urlBudapestImage;
}

```

---

```
1 reference
public class HomeController : Controller
{
    private readonly IAzureStorageRepository _repository;

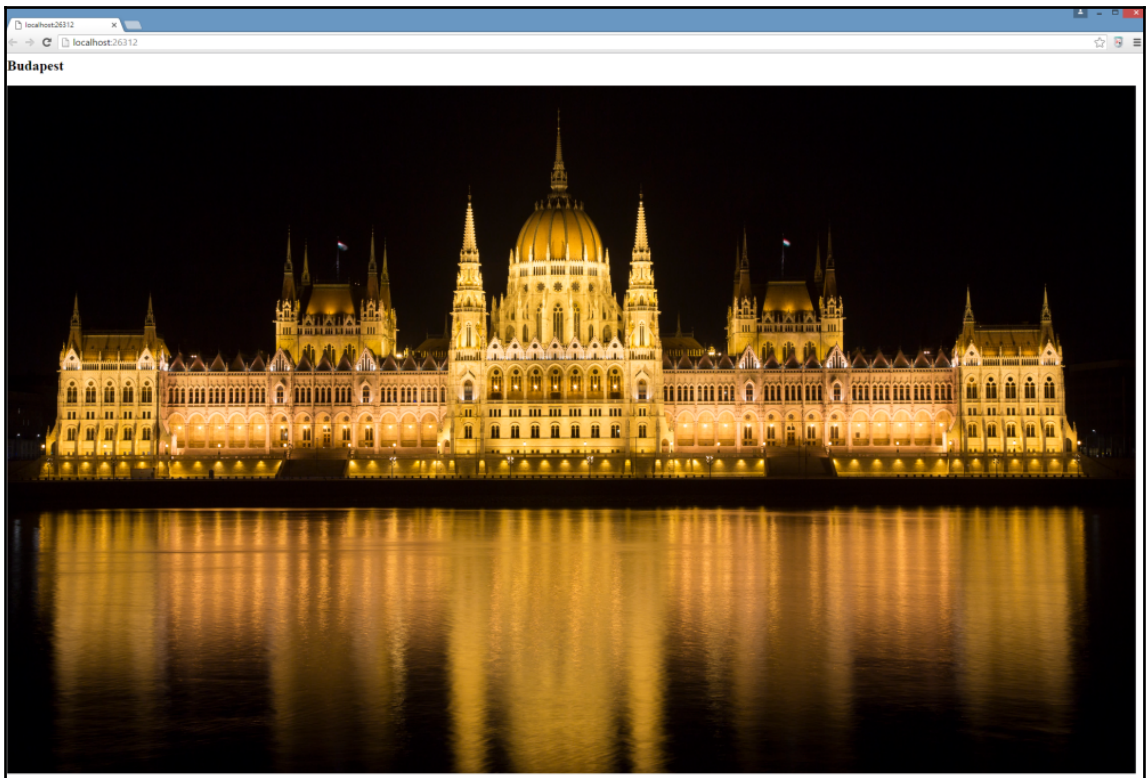
    0 references
    public HomeController(IAzureStorageRepository repository)
    {
        _repository = repository;
    }

    0 references
    public IActionResult Index()
    {
        ImageViewModel model = new ImageViewModel();
        model.Url = _repository.GetImageFromAzureBlobStorage();
        return View(model);
    }
}
```

```
1 reference
public class Startup
{
    0 references
    public void ConfigureServices(IServiceCollection services)
    {
        services.AddScoped<IAzureStorageRepository, AzureStorageRepository>();
        services.AddMvc();
    }

    0 references
    public void Configure(IApplicationBuilder app)
    {
        app.UseMvc(routes =>
        {
            routes.MapRoute(
                name: "default",
                template: "{controller=Home}/{action=Index}/{id?}");
        });
    }
}
```

```
Index.cshtml  X
1  @model Ch07R5.Blobs.Models.ImageViewModel
2
3  <h2>Budapest</h2>
4
5  
6
```



The screenshot displays the Azure Storage Explorer interface. On the left, the 'Blob service' pane shows a list of containers. The 'imagescontainer' is highlighted with a red box. On the right, the 'imagescontainer' pane shows a list of blobs. The 'Budapest.jpg' blob is highlighted with a red box.

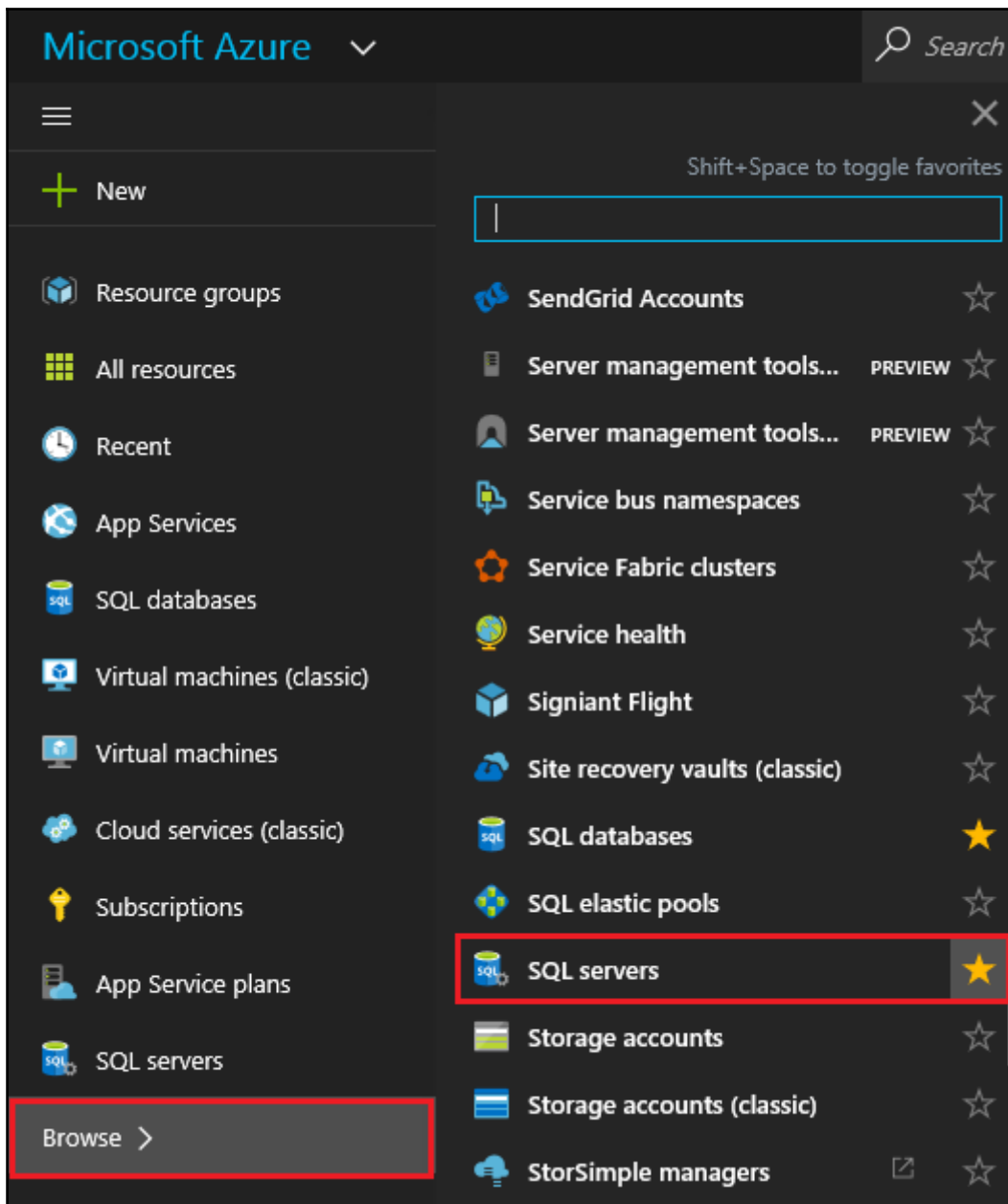
**Blob service containers:**

NAME	URL	LAST MODIFIED
cookbookblob	https://sbzstorage.blob.core...	6/20/2016 5:39:11 PM
cookbookconstringcontainer	https://sbzstorage.blob.core...	6/20/2016 5:41:10 PM
imagescontainer	https://sbzstorage.blob.core...	7/1/2016 3:11:55 AM

**imagescontainer blobs:**

NAME	MODIFIED	BLOB TYPE	SIZE
Budapest.jpg	7/1/2016 3:48:06 AM	Block blob	1019.59 KB





**SQL servers**  
Répertoire par défaut

**Add** Columns Refresh

**Subscriptions:** All 2 selected – Don't see a subscription? [Switch directories](#)

Filter items...

All subscriptions

NAME
azuretourdb
cookbookmvc6
pm6p8apaw5

**SQL Server (logical server only)**

- \* Server name: dbcookbook ✓
- \* Server admin login: cookbookmvc6 ✓
- \* Password: [masked] ✓
- \* Confirm password: [masked] ✓
- \* Subscription: Visual Studio Enterprise avec MSDN
- \* Resource group: Create new (selected), Use existing (unselected)  
Default-SQL-WestEurope
- \* Location: West Europe
- Allow azure services to access server
- Pin to dashboard

**Create**

The screenshot displays the Azure portal interface for managing SQL servers. On the left, the 'SQL servers' overview page shows a list of servers: 'azuretourdb', 'cookbookmvc6', 'dbcookbook', and 'pm6p8apaw5'. The 'dbcookbook' server is highlighted with a red box, and its 'Refresh' button in the top navigation bar is also highlighted. On the right, the 'dbcookbook' server details page is shown, including its resource group, status, location, and subscription information. The 'Databases' section at the bottom indicates that no databases are currently found for this server.

**SQL servers**  
Répertoire par défaut

Buttons: Add, Columns, Refresh

Subscriptions: All 2 selected – Don't see a subscription? Switch directories

Filter items...

All subscriptions

NAME
azuretourdb
cookbookmvc6
<b>dbcookbook</b>
pm6p8apaw5

**dbcookbook** SQL server

Buttons: Settings, Reset password, Import database, Delete, Move, New pool

Essentials

Resource group: Default-SQL-WestEurope

Status: Available

Location: West Europe

Subscription name: Visual Studio Enterprise avec MSDN

Subscription ID: 3cbb1cd8-a74b-459e-91d2-463dd5065ef4

Server version: V12

Auditing: Not configured

Server admin: cookbookmvc6

Active Directory admin: Not configured

Firewall: Show firewall settings

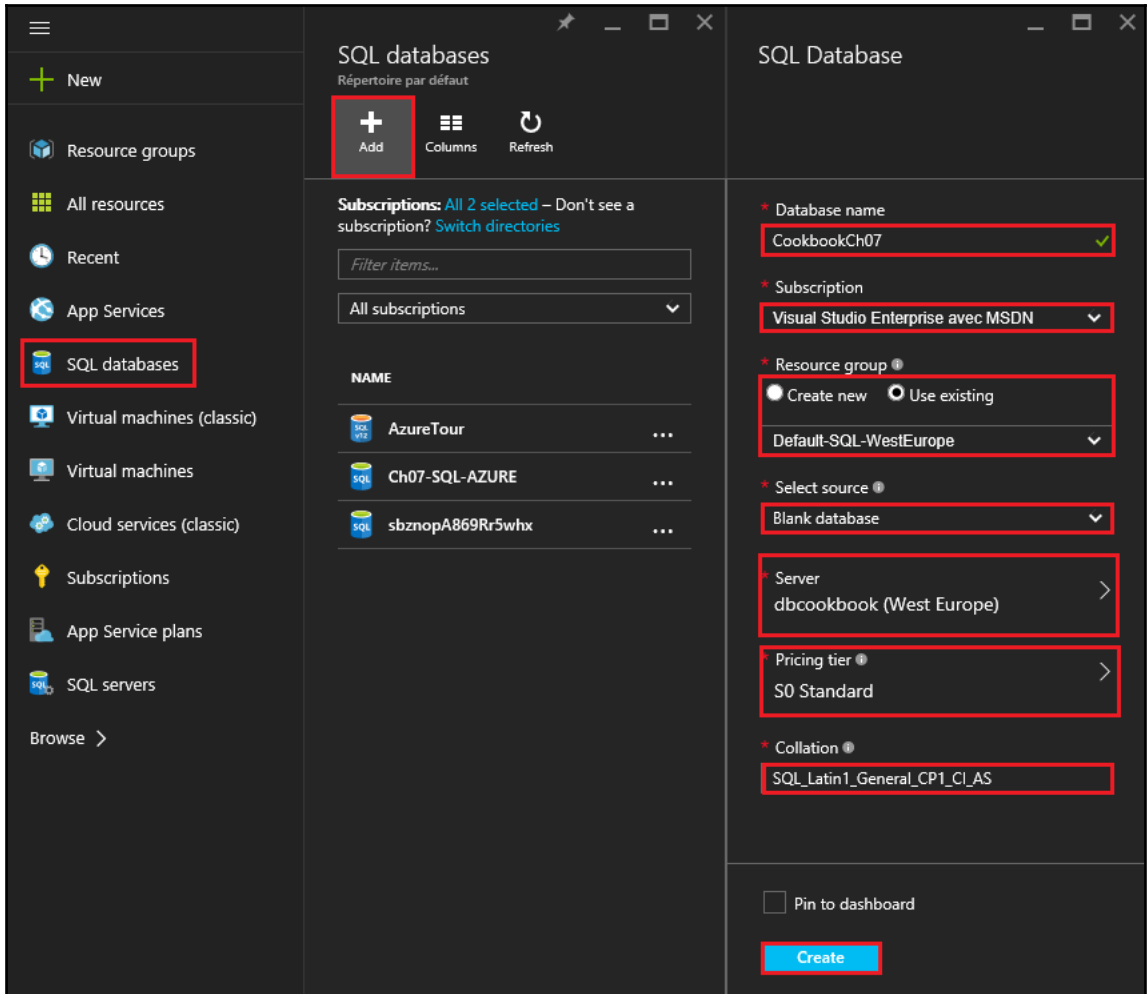
All settings

Databases

SQL databases

0 Databases

DATABASE	STATUS	PRICING TIER
No databases found		



### Choose your pricing tier

Browse the available plans and their features

Database Transaction Units (DTUs) describe the relative capacity of the performance level of Basic, Standard, and Premium databases. They are based on a blended measure of CPU, memory, reads, and writes. [Learn more](#)

★ Recommended | View all

<p><b>P1 Premium</b> ★</p> <p>125 DTUs</p> <ul style="list-style-type: none"> <li>Up to 500 GB</li> <li>Geo-Replication</li> <li>Point In Time Resto...</li> <li>Auditing</li> </ul> <p><b>392,13</b> EUR/MONTH (ESTIMATED 31 P1 D...)</p>	<p><b>P2 Premium</b></p> <p>250 DTUs</p> <ul style="list-style-type: none"> <li>Up to 500 GB</li> <li>Geo-Replication</li> <li>Point In Time Resto...</li> <li>Auditing</li> </ul> <p><b>784,27</b> EUR/MONTH (ESTIMATED 31 P2 D...)</p>	<p><b>P4 Premium</b></p> <p>500 DTUs</p> <ul style="list-style-type: none"> <li>Up to 500 GB</li> <li>Geo-Replication</li> <li>Point In Time Resto...</li> <li>Auditing</li> </ul> <p><b>1 568,54</b> EUR/MONTH (ESTIMATED 31 P4 D...)</p>
<p><b>P6 Premium</b></p> <p>1000 DTUs</p> <ul style="list-style-type: none"> <li>Up to 500 GB</li> <li>Geo-Replication</li> <li>Point In Time Resto...</li> <li>Auditing</li> </ul> <p><b>3 137,08</b> EUR/MONTH (ESTIMATED 31 P6 D...)</p>	<p><b>P11 Premium</b></p> <p>1750 DTUs</p> <ul style="list-style-type: none"> <li>Up to 1024 GB</li> <li>Geo-Replication</li> <li>Point In Time Resto...</li> <li>Auditing</li> </ul> <p><b>5 903,19</b> EUR/MONTH (ESTIMATED 31 P11 D...)</p>	<p><b>S0 Standard</b> ★</p> <p>10 DTUs</p> <ul style="list-style-type: none"> <li>Up to 250 GB</li> <li>Geo-Replication</li> <li>Point In Time Resto...</li> <li>Auditing</li> </ul> <p><b>12,65</b> EUR/MONTH (ESTIMATED 31 S0 D...)</p>
<p><b>S1 Standard</b></p> <p>20 DTUs</p> <ul style="list-style-type: none"> <li>Up to 250 GB</li> <li>Geo-Replication</li> <li>Point In Time Resto...</li> <li>Auditing</li> </ul> <p><b>25,30</b> EUR/MONTH (ESTIMATED 31 S1 D...)</p>	<p><b>S2 Standard</b></p> <p>50 DTUs</p> <ul style="list-style-type: none"> <li>Up to 250 GB</li> <li>Geo-Replication</li> <li>Point In Time Resto...</li> <li>Auditing</li> </ul> <p><b>63,26</b> EUR/MONTH (ESTIMATED 31 S2 D...)</p>	<p><b>S3 Standard</b></p> <p>100 DTUs</p> <ul style="list-style-type: none"> <li>Up to 250 GB</li> <li>Geo-Replication</li> <li>Point In Time Resto...</li> <li>Auditing</li> <li>Available only for la...</li> </ul> <p><b>126,49</b> EUR/MONTH (ESTIMATED 31 S3 D...)</p>

## SQL databases

Répertoire par défaut



Add







Columns



Refresh

**Subscriptions:** All 2 selected – Don't see a subscription? [Switch directories](#)



All subscriptions

NAME	STATUS	REPLICATION ROLE	SERVER	PRICING TIER	LOCATION
 AzureTour	Online	None	azuretourdb	Basic	West Europe
 Ch07-SQL-AZURE	Online	None	cookbookmvc6	Standard: S0	West Europe
 CookbookCh07	Online	None	dbcookbook	Standard: S0	West Europe
 sbznopA869Rr5whx	Online	None	pm6p8apaw5	Web	West Europe

---

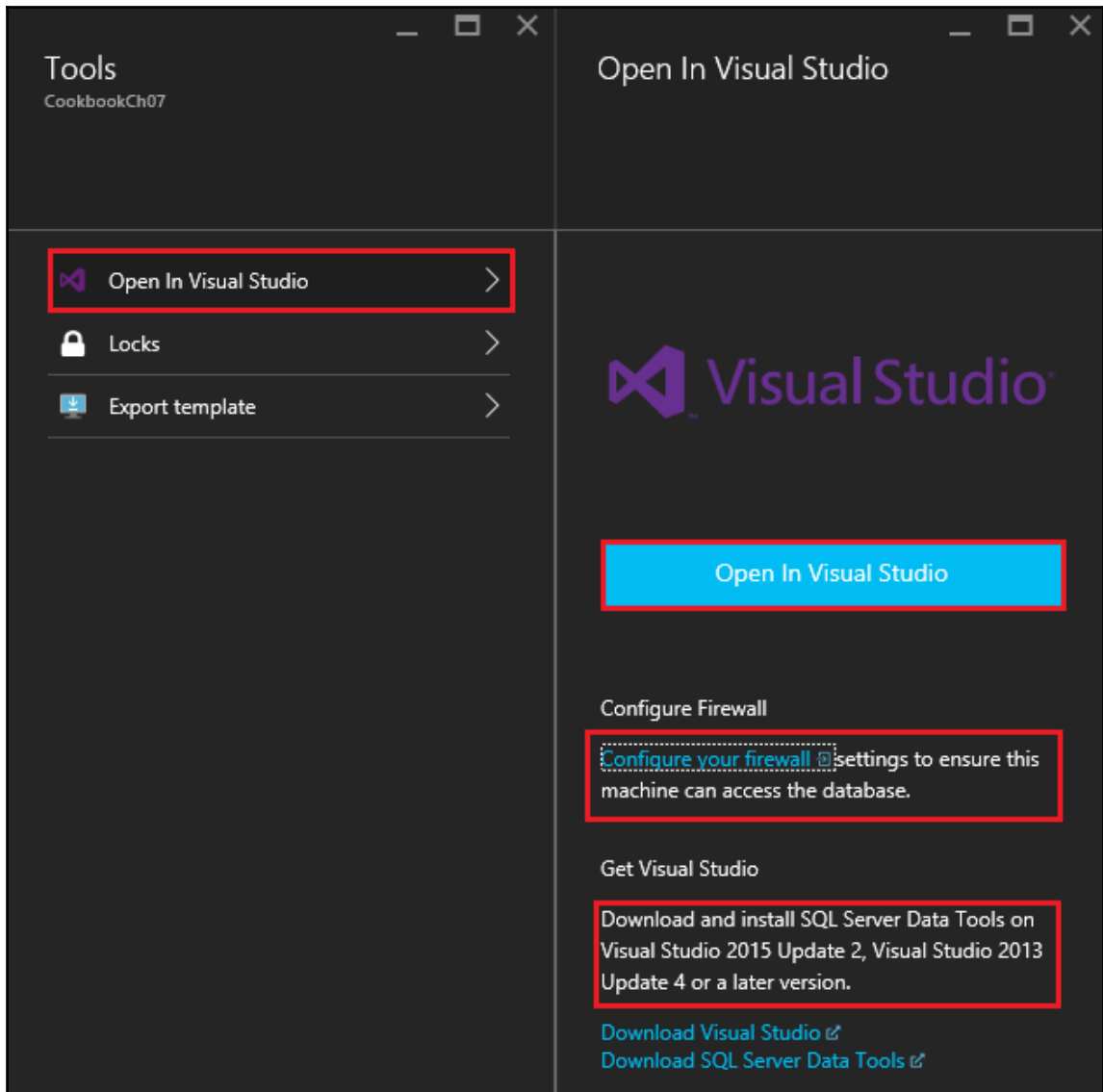
**CookbookCh07**  
SQL database

Settings **Tools** Copy Restore Export Set server firewall Delete

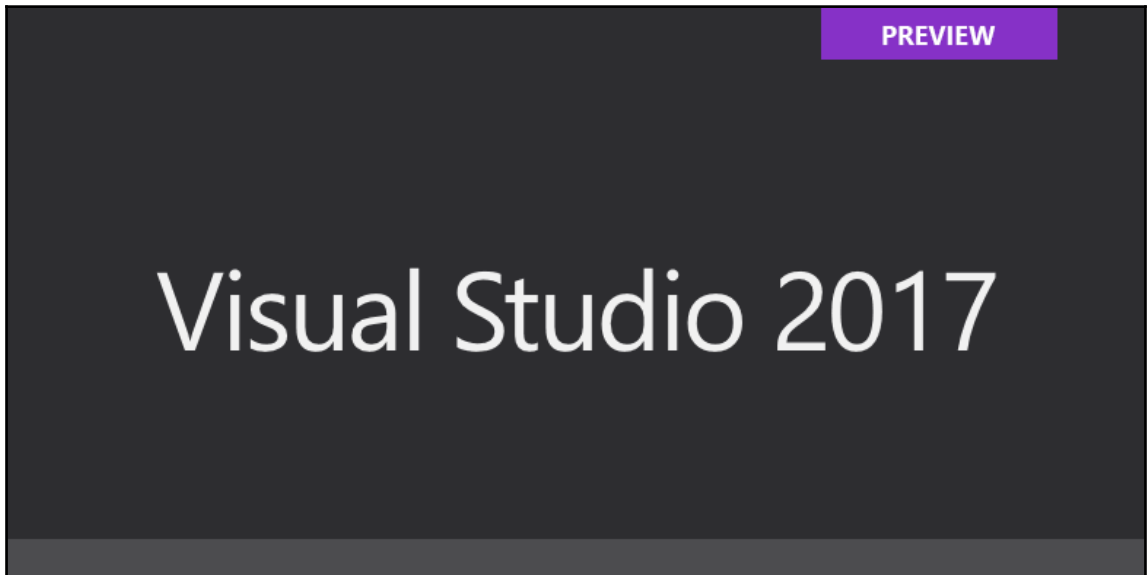
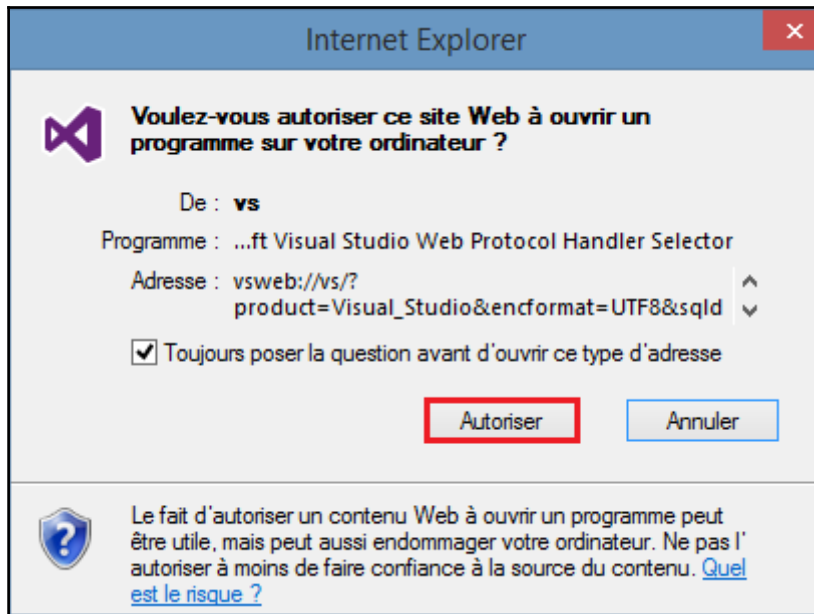
Essentials ^  

Resource group	Server name
<a href="#">Default-SQL-WestEurope</a>	<a href="#">dbcookbook.database.windows.net</a>
Status	Server version
<b>Online</b>	<b>V12</b>
Location	Connection strings
<b>West Europe</b>	<a href="#">Show database connection strings</a>
Subscription name	Pricing tier
<a href="#">Visual Studio Enterprise avec MSDN</a>	<b>S0 Standard (10 DTUs)</b>
Subscription ID	Geo-Replication role
<b>3cbb1cd8-a74b-459e-91d2-463dd5065ef4</b>	<b>Not configured</b>

[All settings](#) →







---

Connect

History **Browse**

- ▶ Local
- ▶ Network
- ▶ Azure

Server Name: dbcookbook.database.windows.net

Authentication: Sql Server Authentication

User Name: cookbookmvc6

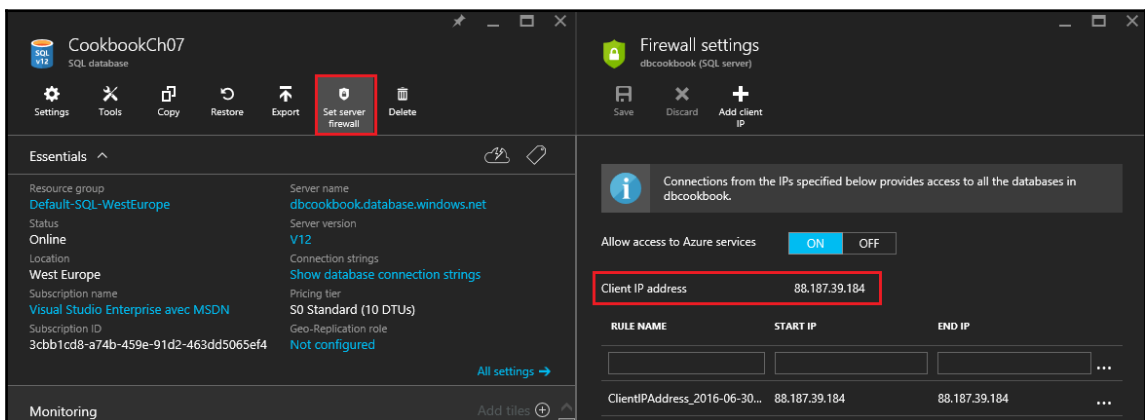
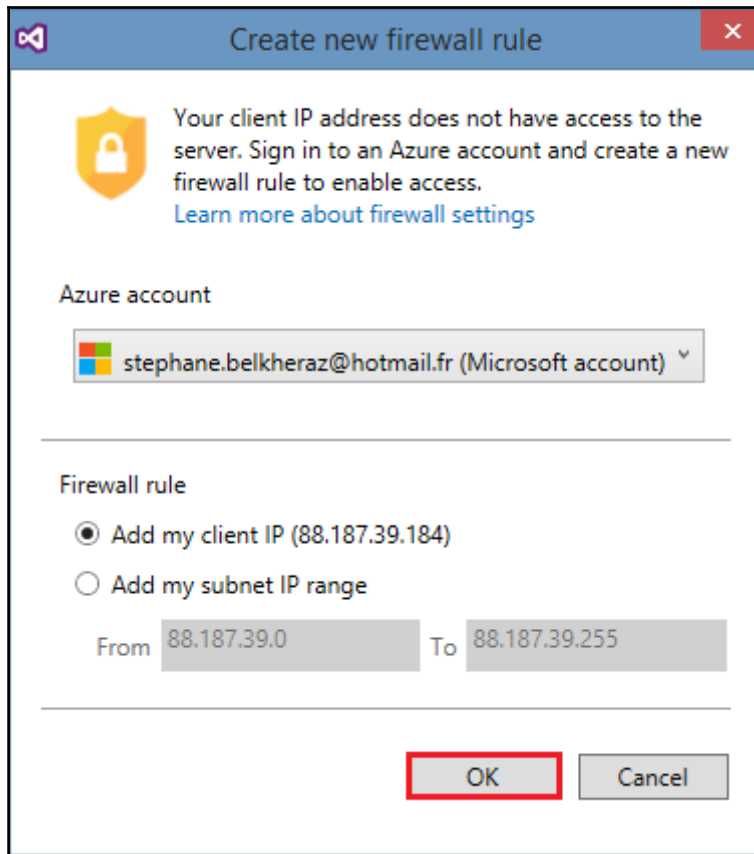
Password:

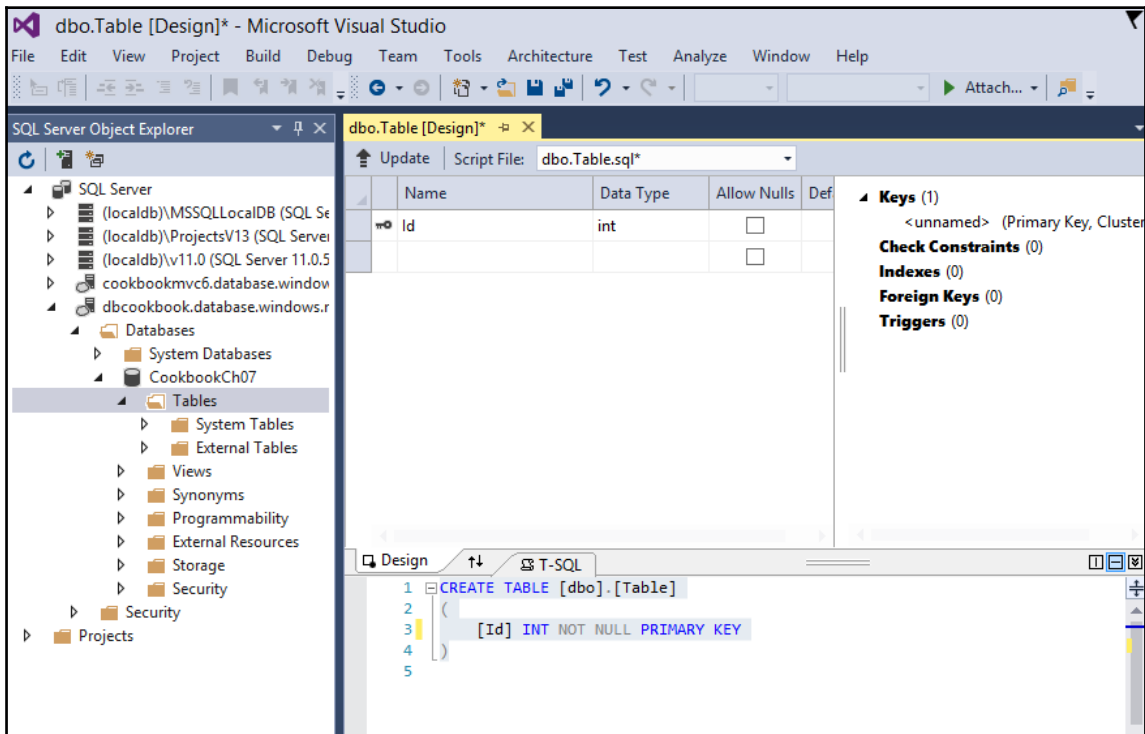
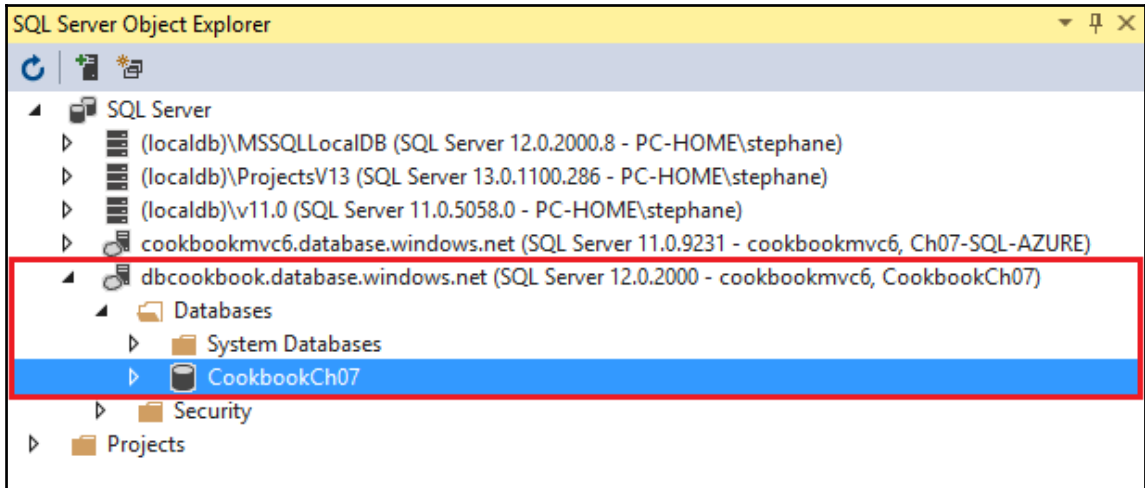
Remember Password

Database Name: CookbookCh07

[Details...](#)

**Connect** Cancel





Add New Table...  
Refresh

dbo.Book [Design]\* - Microsoft Visual Studio

File Edit View Project Build Debug Team Tools Architecture Test Analyze Window Help

SQL Server Object Explorer

- SQL Server
  - (localdb)\MSSQLLocalDB (SQL Server 11.0.5000.1)
  - (localdb)\ProjectsV13 (SQL Server 11.0.5000.1)
  - (localdb)\v11.0 (SQL Server 11.0.5000.1)
  - cookbookmvc6.database.windows.r
  - dbcookbook.database.windows.r
    - Databases
      - System Databases
      - CookbookCh07
        - Tables
        - System Tables
        - External Tables
        - Views
        - Synonyms
        - Programmability
        - External Resources
        - Storage
        - Security
      - Security
    - Projects

dbo.Book [Design]\*

Update Script File: dbo.Table.sql\*

Name	Data Type	Allow Nulls	Def
Id	int	<input type="checkbox"/>	
Name	varchar(50)	<input type="checkbox"/>	

Keys (1)  
<unnamed> (Primary Key, Clustered)

Check Constraints (0)

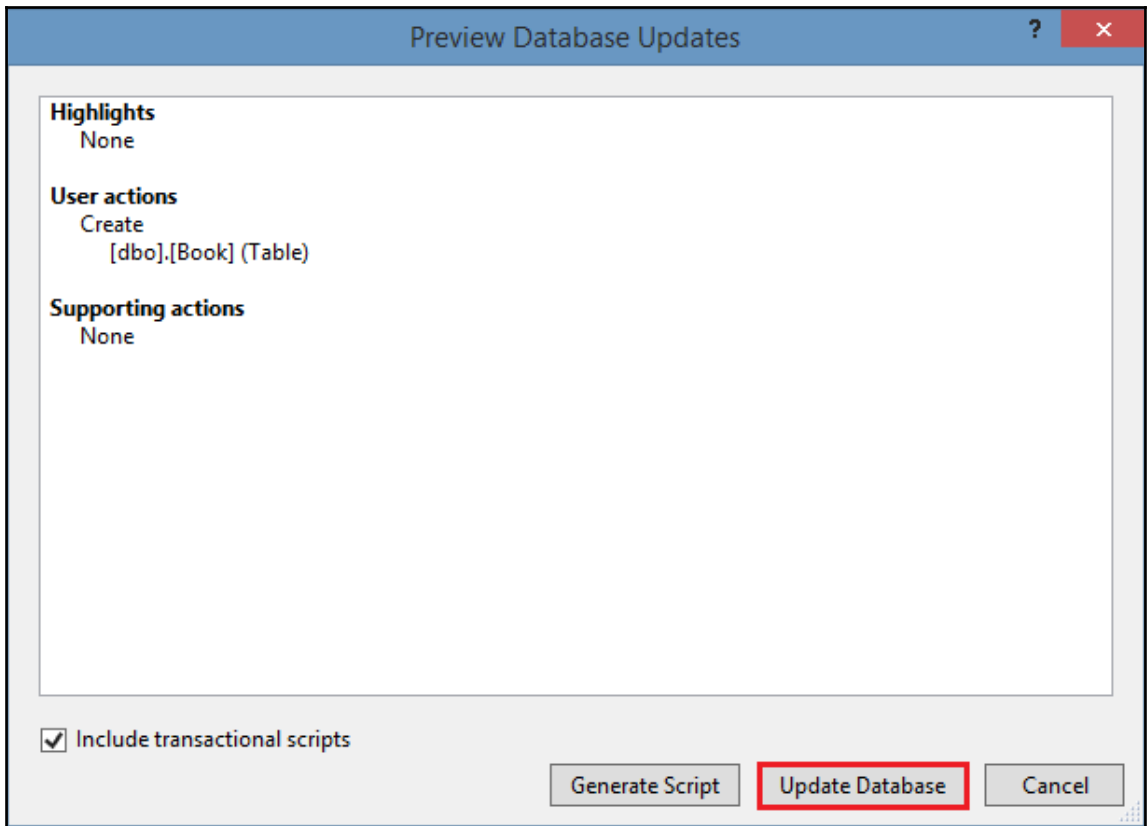
Indexes (0)

Foreign Keys (0)

Triggers (0)

Design T-SQL

```
1 CREATE TABLE [dbo].[Book]
2 (
3     [Id] INT NOT NULL IDENTITY(1, 1) PRIMARY KEY,
4     [Name] VARCHAR(50) NOT NULL
5 )
6
```



SQL Server Object Explorer

- SQL Server
  - (localdb)\MSSQLLocalDB (SQL Se
  - (localdb)\ProjectsV13 (SQL Server
  - (localdb)\v11.0 (SQL Server 11.0.5
  - cookbookmvc6.database.window
  - dbcookbook.database.windows.r
    - Databases
      - System Databases
      - CookbookCh07
        - Tables
          - dbo.Book
        - Views
        - Synonyms
        - Programmability
        - External Resources
        - Storage
        - Security
      - Security
      - Projects

dbo.Book [Design] - X

Update | Script File: dbo.Table.sql

Name	Data Type	Allow Nulls	Def
Id	int	<input type="checkbox"/>	
Name	varchar(50)	<input type="checkbox"/>	

Keys (1)  
 <unnamed> (Primary Key, Clu  
 Check Constraints (0)  
 Indexes (0)  
 Foreign Keys (0)

Design | T-SQL

```

1 CREATE TABLE [dbo].[Book]
2 (
3     [Id] INT NOT NULL IDENTITY(1, 1) PRIMARY KEY,
4     [Name] VARCHAR(50) NOT NULL
5 )
6
  
```

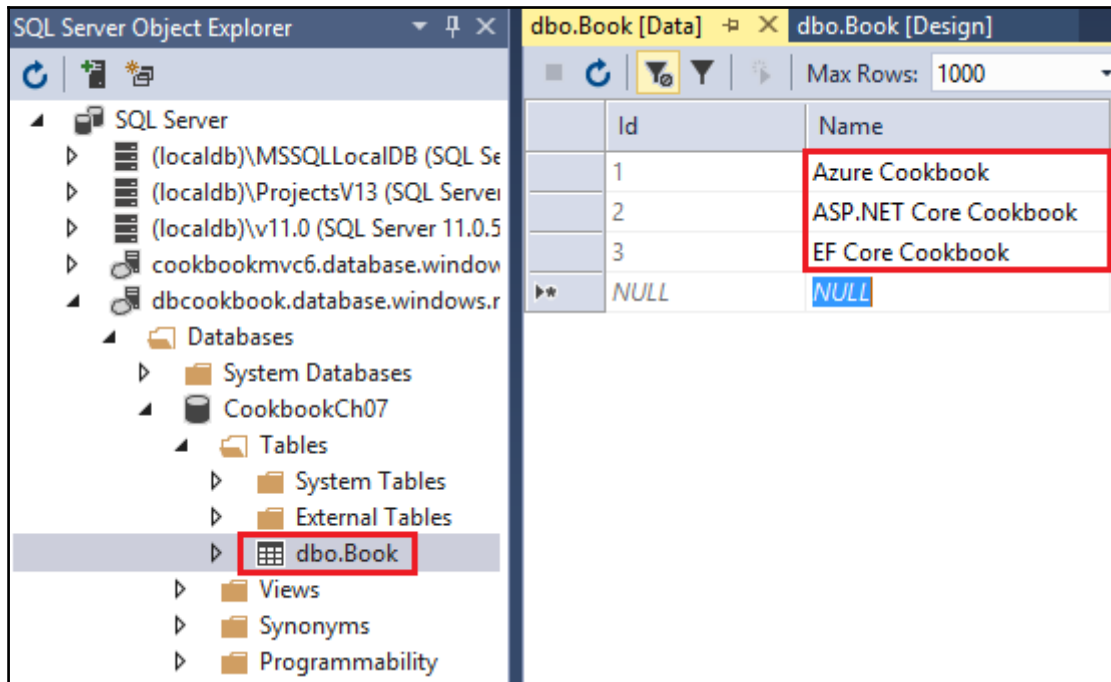
100 %

Connection Ready | dbcookbook.database.windows... | cookbookmvc6 | CookbookCh07

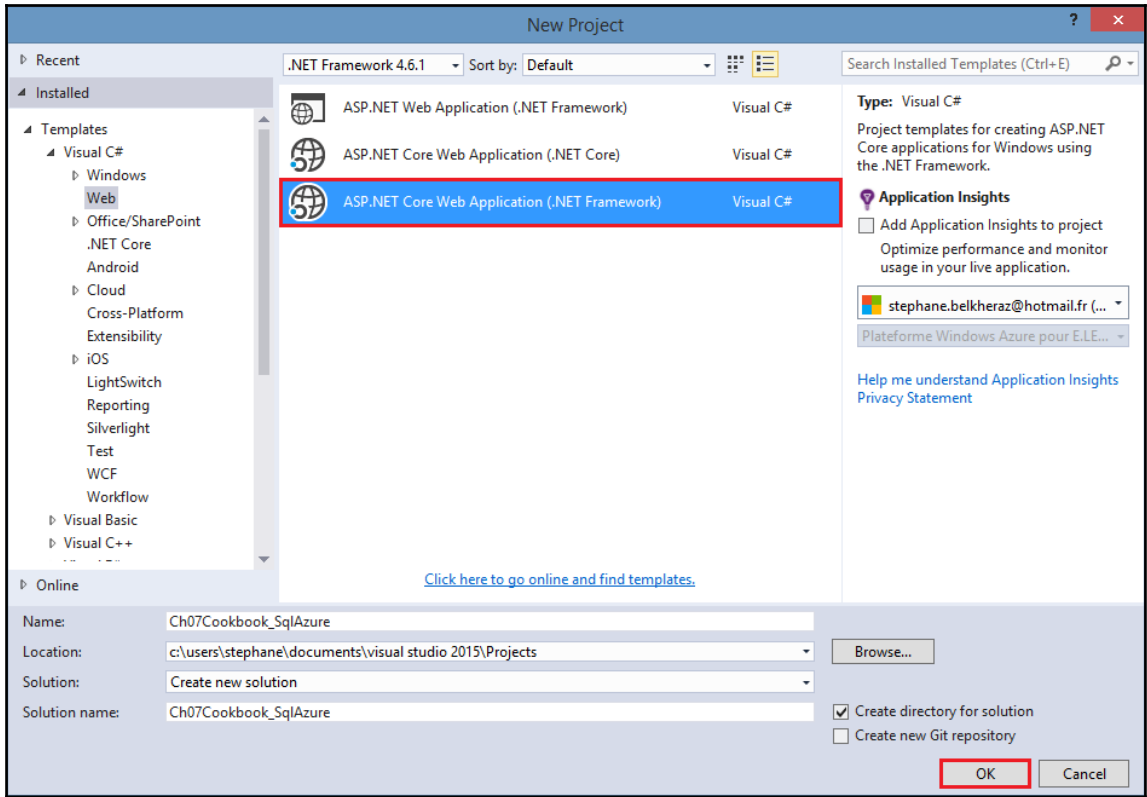
Data Tools Operations

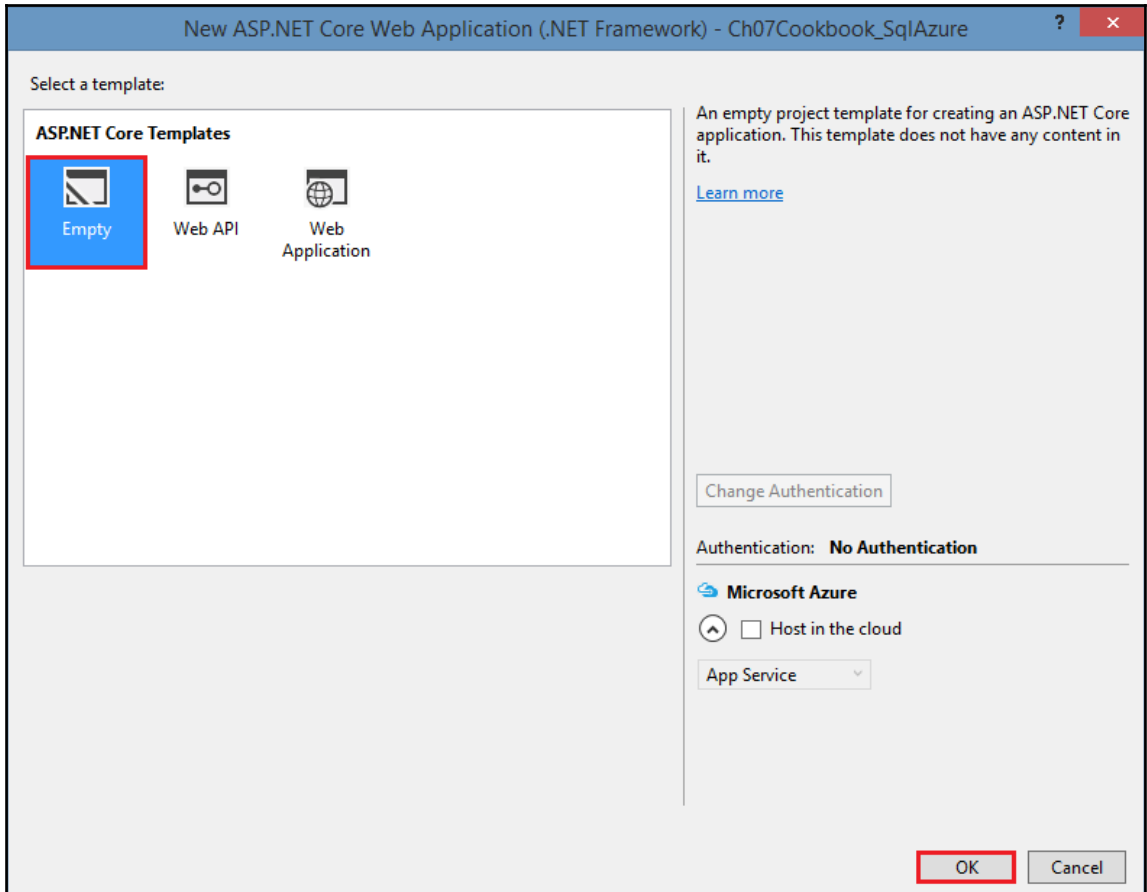
- Update for dbcookbook.database.windows.net.CookbookCh07 21:57:11 - 21:58:33 (0:01:21)
  - Creating update preview... [View Preview](#)
  - Displaying update preview... [View Script](#)
  - Creating master script... [View Script](#)
  - Creating database script... [View Results](#)
  - Executing update script on database 'CookbookCh07'... [View Results](#)
- Update completed successfully

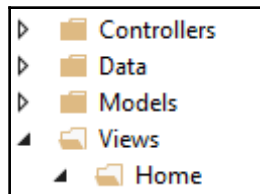
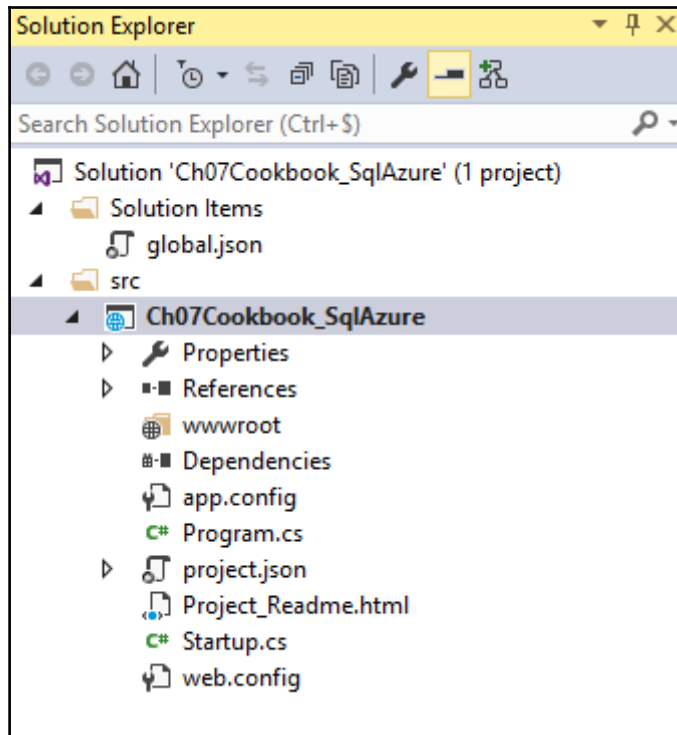
- Data Comparison...
- Script As
- View Code
- View Designer
- View Permissions
- View Data
- Delete Del
- Rename
- Refresh
- Properties











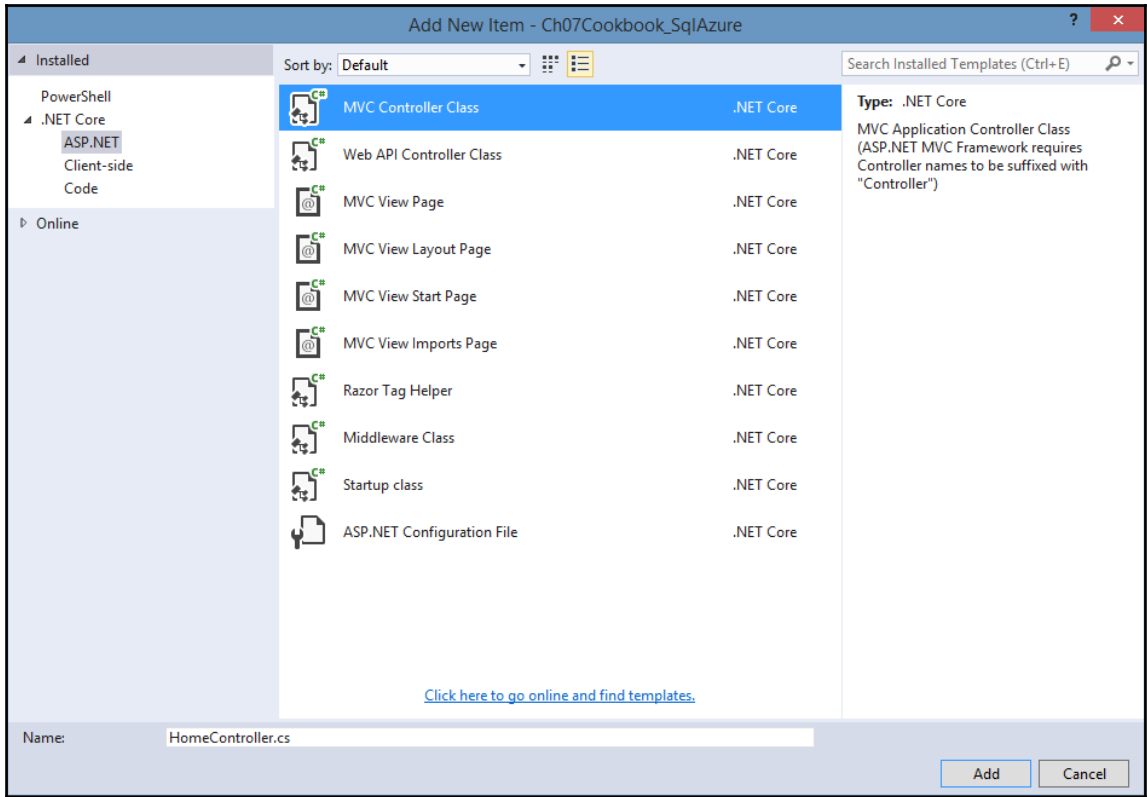
```
Book.cs  [X]
Ch07Cookbook_SqlAzure..NET f  Ch07Cookbook_SqlAzure.Mode
1 namespace Ch07Cookbook_SqlAzure.Models
2 {
3     0 references
4     public class Book
5     {
6         0 references
7         public int Id { get; set; }
8         0 references
9         public string Name { get; set; }
10    }
11 }
```

```
CookbookContext.cs*  [X]
Ch07Cookbook_SqlAzure..NET Fra  Ch07Cookbook_SqlAzure.Data.Co  CookbookContext(DbConte
1
2 namespace Ch07Cookbook_SqlAzure.Data
3 {
4     1 reference
5     public class CookbookContext : DbContext
6     {
7         0 references
8         public CookbookContext(DbContextOptions<CookBookContext> options)
9             : base(options)
10    {
11    }
12
13     0 references
14     public DbSet<Book> Book { get; set; }
15 }
```

```
5 references
public class CookbookContext : DbContext
{
0 references
public CookbookContext(DbContextOptions<CookBookContext> options)
: base(options)
{
}
1 reference
public DbSet<Book> Book { get; set; }
}
using Microsoft.EntityFrameworkCore;
Microsoft.EntityFrameworkCore.DbContext
Generate type
Add package Microsoft.EntityFrameworkCore 1.0.0-rc2-final
Add package EntityFrameworkCore 7.0.0-rc1-final
CS0246 The type or namespace name 'DbContext' could not be found
(are you missing a using directive or an assembly reference?)
using Ch07Cookbook_SqlAzure.Models;
using Microsoft.EntityFrameworkCore;
...
Add package Microsoft.EntityFrameworkCore 1.0.0-rc2-final
Preview changes
```

```
CookbookContext.cs  X
Ch07Cookbook_SqlAzure..NET Framework  Ch07Cookbook_SqlAzure.Data.Cookboo  CookbookCont

1  using Ch07Cookbook_SqlAzure.Models;
2  using Microsoft.EntityFrameworkCore;
3
4  namespace Ch07Cookbook_SqlAzure.Data
5  {
6      public class CookbookContext : DbContext
7      {
8          public CookbookContext(DbContextOptions<CookbookContext> options)
9              : base(options)
10         {
11         }
12
13         public DbSet<Book> Book { get; set; }
14     }
15 }
```

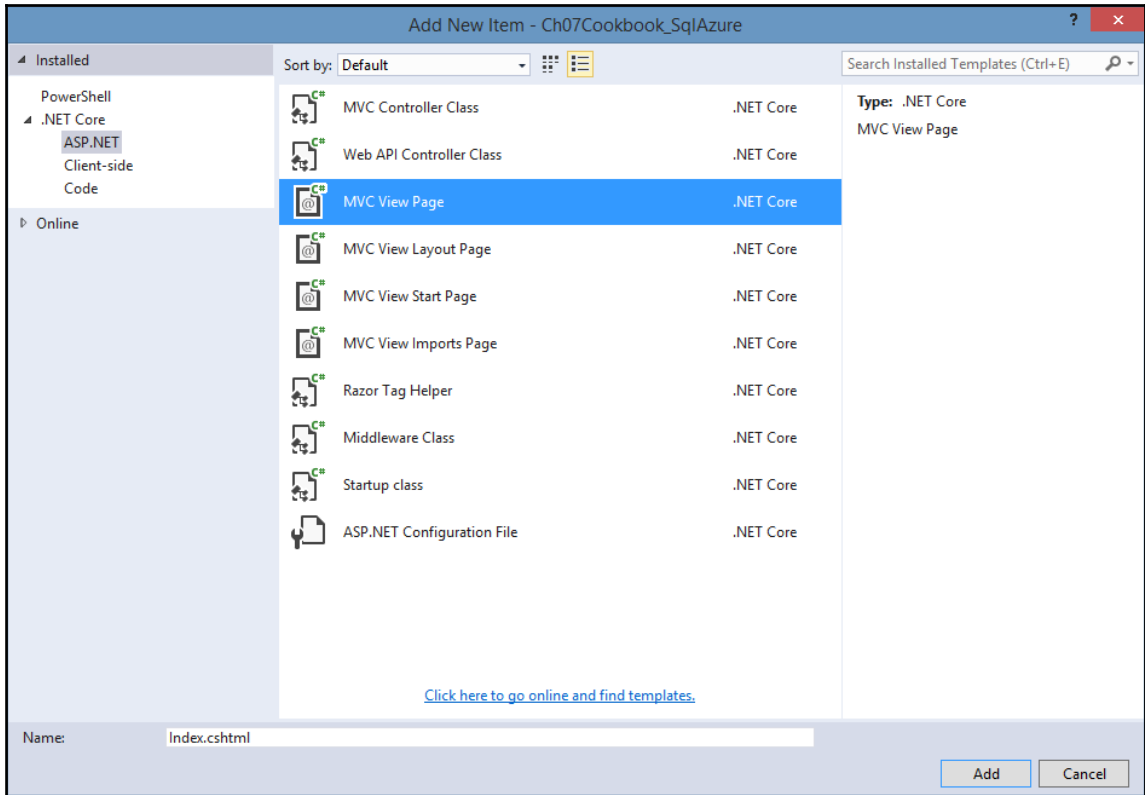


```
1  using Microsoft.AspNetCore.Mvc;  
2  
3  namespace Ch07Cookbook_SqlAzure.Controllers  
4  {  
5      0 references  
6      public class HomeController : Controller  
7      {  
8          //GET: /<controller>/  
9          0 references  
10         public IActionResult Index()  
11         {  
12             return View();  
13         }  
14     }
```

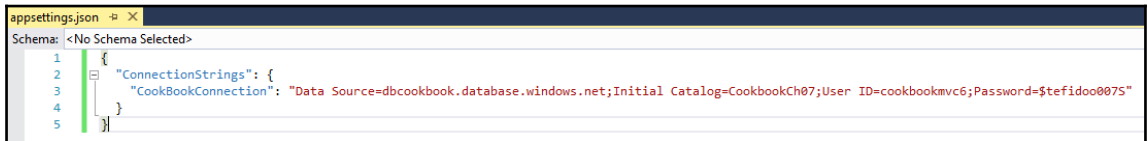
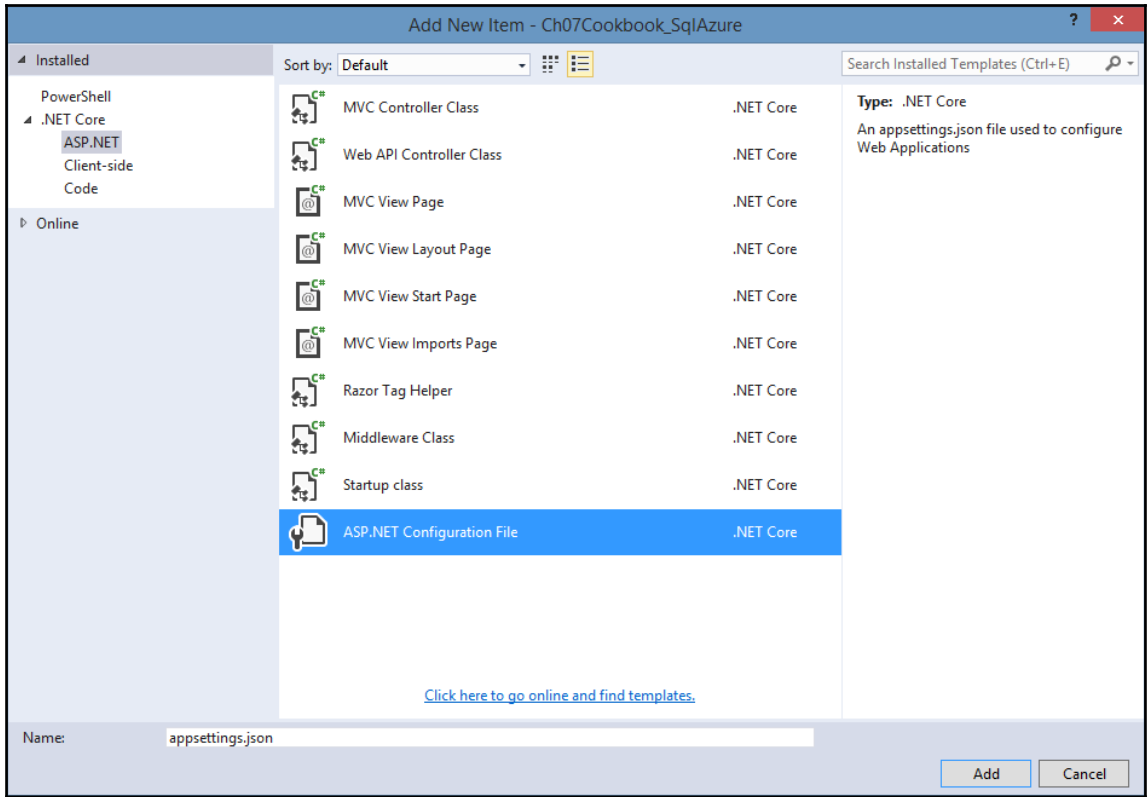
```
HomeController.cs  X
Ch07Cookbook_SqlAzure..NET Framework  Ch07Cookbook_SqlAzure.Controllers.Ho

1  using Ch07Cookbook_SqlAzure.Data;
2  using Ch07Cookbook_SqlAzure.Models;
3  using Microsoft.AspNetCore.Mvc;
4  using System.Collections.Generic;
5  using System.Linq;
6
7  // For more information on enabling MVC for empty projects,
8
9  namespace Ch07Cookbook_SqlAzure.Controllers
10 {
11     1 reference
12     public class HomeController : Controller
13     {
14         0 references
15         private readonly CookbookContext _context;
16         public HomeController(CookbookContext context)
17         {
18             _context = context;
19         }
20
21         0 references
22         public IActionResult Index()
23         {
24             List<Book> listBook = _context.Book.ToList();
25
26             return View(listBook);
27         }
28     }
29 }
```





```
Index.cshtml  X
1  @model List<Ch07Cookbook_SqlAzure.Models.Book>
2
3  <h2>Books</h2>
4  <ul>
5      @foreach (var b in Model)
6      {
7          <li>@b.Name</li>
8      }
9  </ul>
10
```



```
1
2 namespace Ch07Cookbook_SqlAzure
3 {
4     0 references
5     public class Startup
6     {
7         0 references
8         public void ConfigureServices(IServiceCollection services)
9         {
10        }
11
12        0 references
13        public void Configure(IApplicationBuilder app)
14        {
15            app.Run(async (context) => {
16                await context.Response.WriteAsync("Hello World!");
17            });
18        }
19    }
20 }
```

```
0 references
public Startup(IHostingEnvironment env)
{
    var builder = new ConfigurationBuilder()
        .SetBasePath(env.ContentRootPath)
        .AddJsonFile("appsettings.json", optional: true, reloadOnChange: true);

    Configuration = builder.Build();
}

1 reference
public IConfiguration Configuration { get; }
```

```

0 references
public Startup(IHostingEnvironment env)
{
    var builder = new ConfigurationBuilder()
        .SetBasePath(env.ContentRootPath)
        .AddJsonFile("appsettings.json", optional: true, reloadOnChange: true);
    Configuration = builder.Build();
}

1 reference
public IConfigurationRoot Configuration { get; }

```

using Microsoft.Extensions.Configuration;  
Microsoft.Extensions.Configuration.ConfigurationBuilder  
Generate type  
**Add package Microsoft.Extensions.Configuration 1.0.0-rc2-final**  
Add package Microsoft.Framework.Configuration 1.0.0-beta8

```

13     var builder = new ConfigurationBuilder()
14         .SetBasePath(env.ContentRootPath)
15         .AddJsonFile("appsettings.json", optional: true, reloadOnChange: true);
16     Configuration = builder.Build();
17 }
18
19
20 public IConfigurationRoot Configuration { get; }

```

Add package Microsoft.Extensions.Configuration.FileExtensions 1.0.0-rc2-final

CS1061 'ConfigurationBuilder' does not contain a definition for 'SetBasePath' and no extension method 'SetBasePath' accepting a first argument of type 'ConfigurationBuilder' could be found (are you missing...  
Add package Microsoft.Extensions.Configuration.FileExtensions 1.0.0-rc2-final

```

13     var builder = new ConfigurationBuilder()
14         .SetBasePath(env.ContentRootPath)
15         .AddJsonFile("appsettings.json", optional: true, reloadOnChange: true);
16     Configuration = builder.Build();
17 }
18
19
20 public IConfigurationRoot Configuration { get; }

```

Add package Microsoft.Extensions.Configuration.Json 1.0.0-rc2-final  
Add package Microsoft.Framework.ConfigurationModel.Json 1.0.0-beta4  
Add package Microsoft.Framework.Configuration.Json 1.0.0-beta5

CS1061 'IConfigurationBuilder' does not contain a definition for 'AddJsonFile' and no extension method 'AddJsonFile' accepting a first argument of type 'IConfigurationBuilder' could be found (are you missi...  
Add package Microsoft.Extensions.Configuration.Json 1.0.0-rc2-final

```

{
  "dependencies": {
    "Microsoft.AspNetCore.Mvc": "1.0.0-rc2-final",
    "Microsoft.AspNetCore.Server.IISIntegration": "1.0.0-rc2-final",
    "Microsoft.AspNetCore.Server.Kestrel": "1.0.0-rc2-final",
    "Microsoft.EntityFrameworkCore": "1.0.0-rc2-final",
    "Microsoft.Extensions.Configuration": "1.0.0-rc2-final",
    "Microsoft.Extensions.Configuration.FileExtensions": "1.0.0-rc2-final",
    "Microsoft.Extensions.Configuration.Json": "1.0.0-rc2-final"
  },
}

```

---

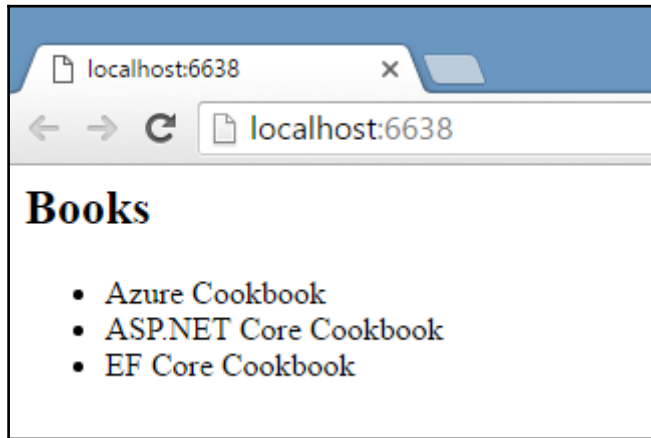
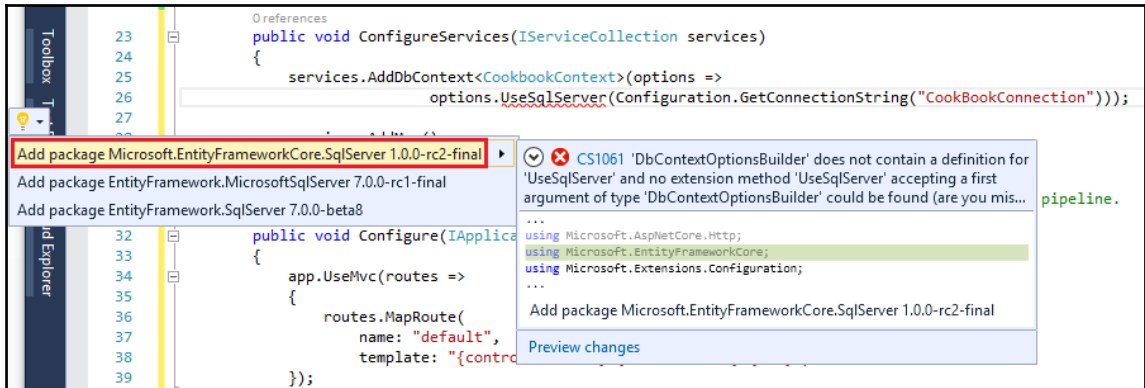
```
0 references
public void ConfigureServices(IServiceCollection services)
{
}

// This method gets called by the runtime. Use this method
0 references
public void Configure(IApplicationBuilder app)
{
    app.Run(async (context) =>
    {
        await context.Response.WriteAsync("Hello World!");
    });
}
```

```
0 references
public void ConfigureServices(IServiceCollection services)
{
    services.AddDbContext<CookBookContext>(options =>
        options.UseSqlServer(Configuration.GetConnectionString("CookBookConnection")));

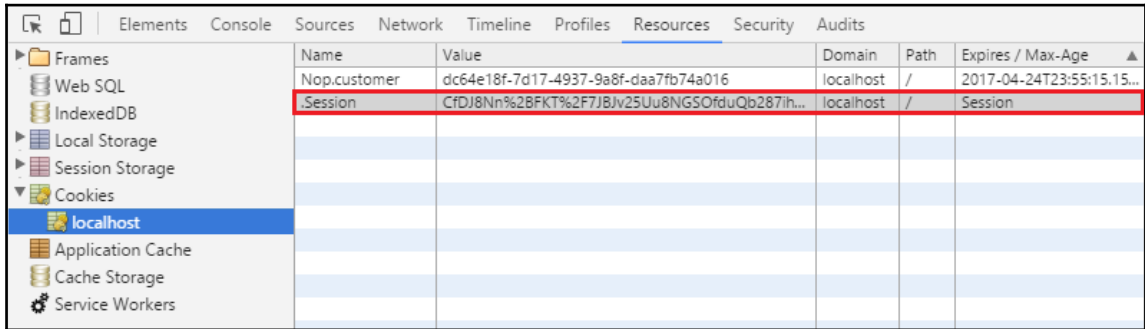
    services.AddMvc();
}

// This method gets called by the runtime. Use this method to configure the HTTP request pipeline.
0 references
public void Configure(IApplicationBuilder app)
{
    app.UseMvc(routes =>
    {
        routes.MapRoute(
            name: "default",
            template: "{controller=Home}/{action=Index}/{id?}");
    });
}
```



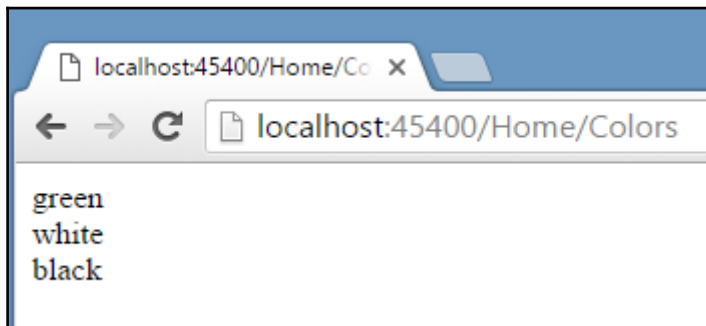
---

# Chapter 8: Cache and Session - Distributed, Server, and Client



The screenshot shows the Chrome DevTools Resources tab with the 'Session Storage' folder expanded. A table lists the stored items:

Name	Value	Domain	Path	Expires / Max-Age
Nop.customer	dc64e18f-7d17-4937-9a8f-daa7fb74a016	localhost	/	2017-04-24T23:55:15:15...
.Session	CfDJ8Nn%2BFKT%2F7JBjv25Uu8NGSOfdUQb287ih...	localhost	/	Session





Redis is an open source (BSD licensed), in-memory **data structure store**, used as database, cache and message broker. It supports data structures such as [strings](#), [hashes](#), [lists](#), [sets](#), [sorted sets](#) with range queries, [bitmaps](#), [hyperloglogs](#) and [geospatial indexes](#) with radius queries. Redis has built-in [replication](#), [Lua scripting](#), [LRU eviction](#), [transactions](#) and different levels of [on-disk persistence](#), and provides high availability via [Redis Sentinel](#) and automatic partitioning with [Redis Cluster](#).

[Learn more](#) →

### Try it

Ready for a test drive? Check this [interactive tutorial](#) that will walk you through the most important features of Redis.

### Download it

[Redis 3.2.1 is the latest stable version](#). Interested in release candidates or unstable versions? [Check the downloads page](#).

### Quick links

Follow day-to-day Redis on [Twitter](#) and [GitHub](#). Get help or help others by subscribing to [our mailing list](#), we are 5,000 and counting!

## Windows

The Redis project does not officially support Windows. However, the Microsoft Open Tech group develops and maintains this Windows port targeting Win64. [Learn more](#)

The screenshot shows the GitHub repository page for MSOpenTech / redis. At the top, there are navigation links for Personal, Open source, Business, and Explore, along with Pricing, Blog, and Support. A search bar and buttons for Sign in and Sign up are also visible. The repository name is MSOpenTech / redis, forked from antirez/redis. It shows 655 Watchers, 4,365 Stars, and 6,908 Forks. Below this, there are tabs for Code, Issues (64), Pull requests (2), Wiki, Pulse, and Graphs. The main content area contains a description: "Redis is an in-memory database that persists on disk. The data model is key-value, but many different kind of values are supported: Strings, Lists, Sets, Sorted Sets, Hashes <http://redis.io>". At the bottom, there are statistics for 5,056 commits, 20 branches, 37 releases, and 182 contributors. A progress bar is shown below these statistics. At the very bottom, there are buttons for Branch: 3.0, New pull request, Find file, and Clone or download.



## Redis on Windows

- This is a port for Windows based on [Redis](#).
- We officially support the 64-bit version only. Although you can build the 32-bit version from source if desired.
- You can download the latest unsigned binaries and the unsigned **MSI installer from the [release page](#)**.
- For releases prior to 2.8.17.1, the binaries can be found in a zip file inside the source archive, under the bin/release folder.
- Signed binaries are available through [NuGet](#) and [Chocolatey](#).
- Redis can be installed as a Windows Service.

The screenshot shows the GitHub repository page for MSOpenTech/redis. The repository is forked from antirez/redis. It has 655 watches, 4,365 stars, and 6,908 forks. The page is currently on the 'Releases' tab, showing the latest release, 3.2.100, which was released 23 days ago by enricogior. The release description states that this is the first stable release of Redis on Windows 3.2, based on antirez/redis/3.2.1 with Windows-specific fixes. It includes a warning to test the release in a production environment before using it. Below the description, there is a 'Downloads' section with four items: Redis-x64-3.2.100.msi (5.8 MB), Redis-x64-3.2.100.zip (4.98 MB), Source code (zip), and Source code (tar.gz). The MSI installer link is highlighted with a red box.

MSOpenTech / **redis**  
forked from antirez/redis

Watch 655 Star 4,365 Fork 6,908

Code Issues 64 Pull requests 2 Wiki Pulse Graphs

Releases Tags

**Latest release**

win-3.2.100  
def0757

### 3.2.100

enricogior released this 23 days ago · 1208 commits to 3.0 since this release

This is the first stable release of Redis on Windows 3.2.

This release is based on antirez/redis/3.2.1 plus some Windows specific fixes. It has passed all the standard tests but it hasn't been tested in a production environment.

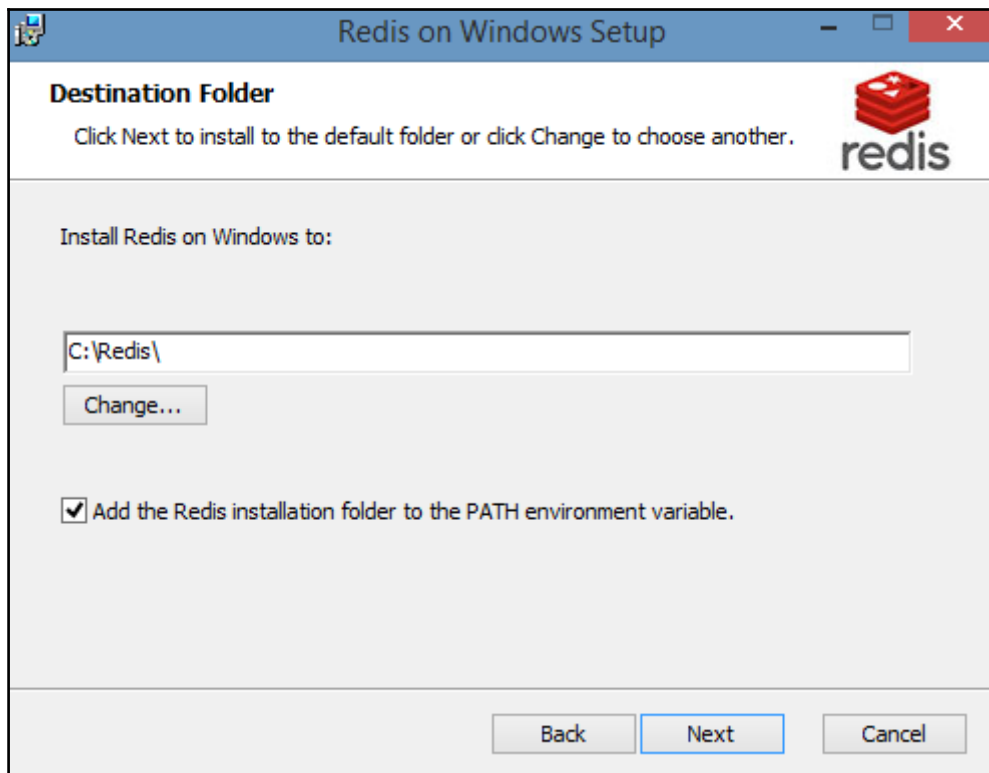
Therefore, **before considering using this release in production, make sure to test it thoroughly in your own test environment.**

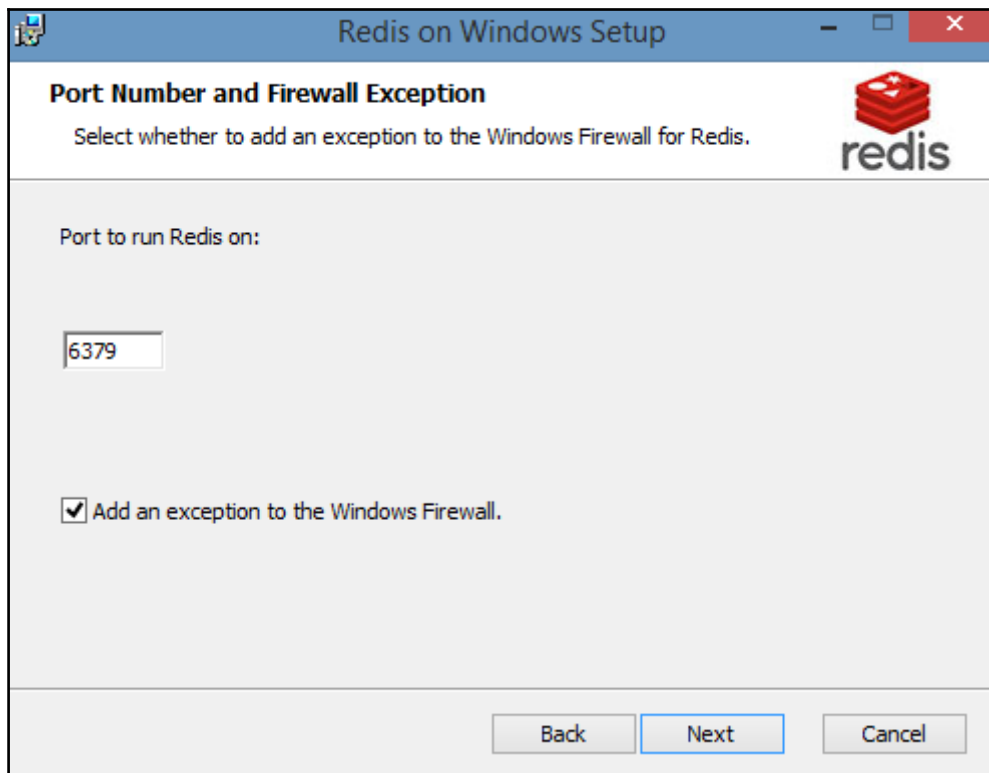
See the [release notes](#) for details.

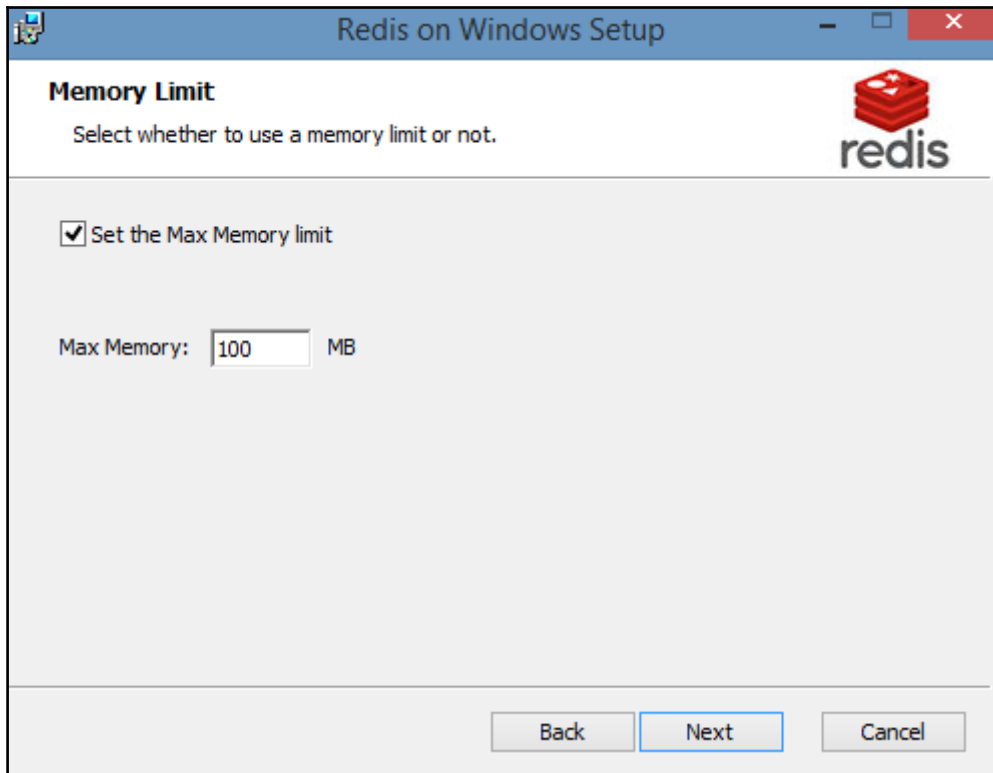
### Downloads

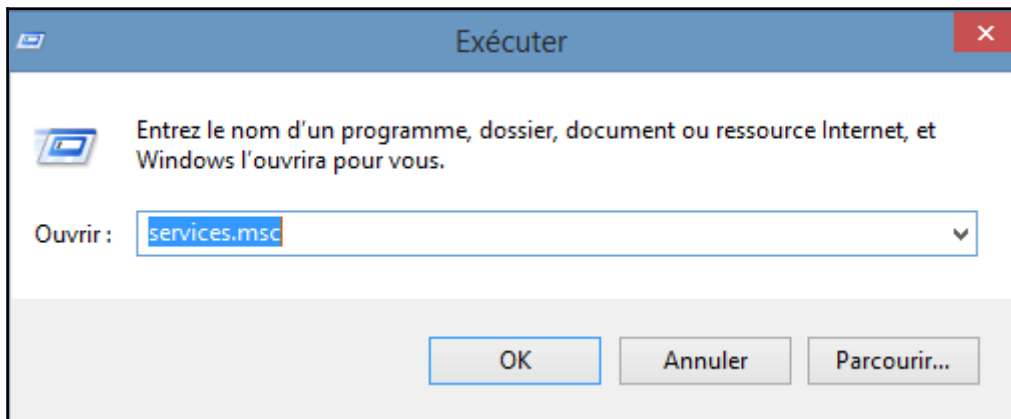
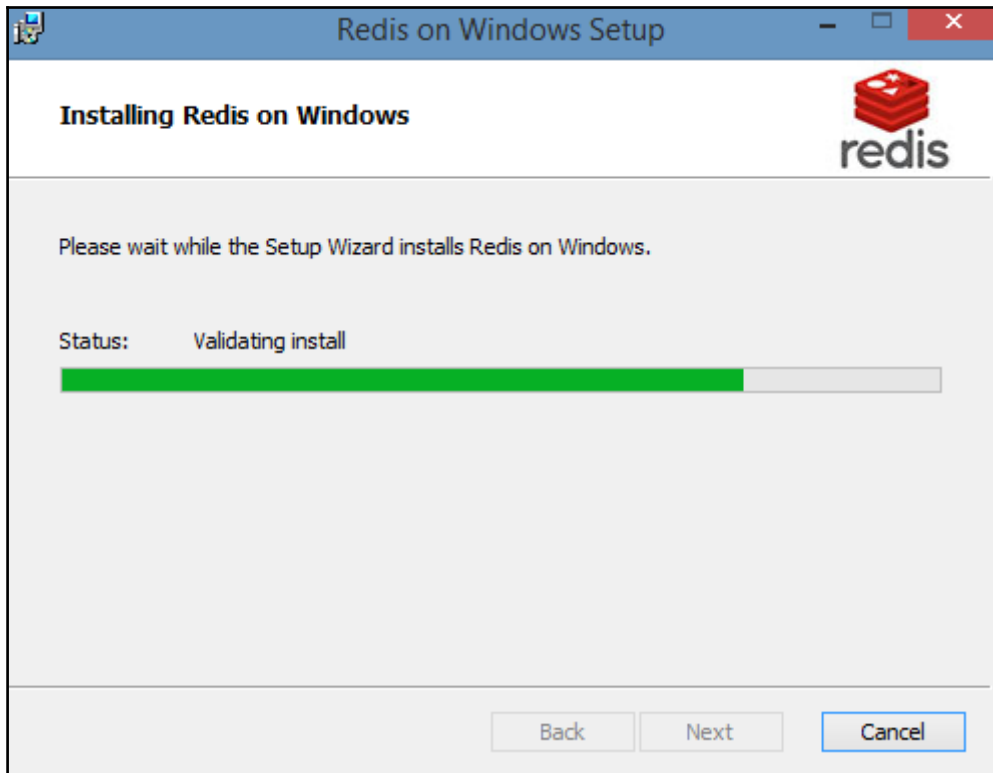
<a href="#">Redis-x64-3.2.100.msi</a>	5.8 MB
<a href="#">Redis-x64-3.2.100.zip</a>	4.98 MB
<a href="#">Source code (zip)</a>	
<a href="#">Source code (tar.gz)</a>	

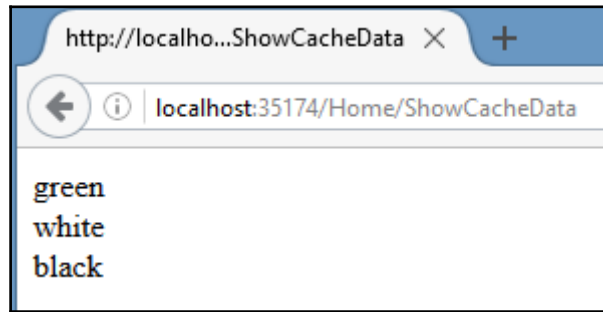
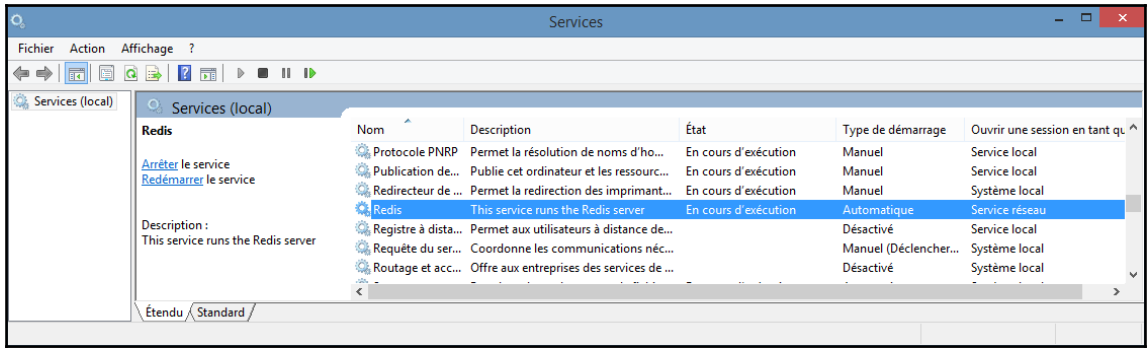












Microsoft Azure | Redis Caches > New Redis Cache

Redis Caches  
Répertoire par défaut

+ Add Columns Refresh

Subscriptions: All 2 selected – Don't see a subscription? [Switch directories](#)

Filter items...

All subscriptions

NAME

No redis caches to display

New Redis Cache

\* DNS name  
enter a name .redis.cache.windows.net

\* Subscription  
Visual Studio Enterprise avec MSDN

\* Resource group  
 Create new  Use existing

\* Location  
Central US

\* Pricing tier  
Standard: 1 GB

Redis Cluster  
Requires Premium tier

Redis data persistence  
Requires Premium tier

Virtual Network  
Requires Premium tier



### New Redis Cache

**\* DNS name**  
CookbookMvc6 ✓  
.redis.cache.windows.net

**\* Subscription**  
Visual Studio Enterprise avec MSDN

**\* Resource group**  
 Create new  Use existing  
Default-Web-WestEurope

**\* Location**  
West Europe

**\* Pricing tier**  
Standard: 1 GB

Redis Cluster ⓘ  
Requires Premium tier

Redis data persistence ⓘ  
Requires Premium tier

Virtual Network ⓘ  
Requires Premium tier

### Choose your pricing tier

Browse the available plans and their features

★ Recommended | [View all](#)

C0 Basic	C1 Standard	P1 Premium
250 MB Cache	1 GB Cache	6 GB Cache
Replication	Replication	Replication
Low network bandwi...	Low network bandwi...	Moderate network ba...
Shared infrastructure	Dedicated service	All Standard features
SSL	SSL	Data Persistence
Up to 256 connections	Up to 1 000 connectio...	Virtual Network
	Configure Redis (key...	Redis Cluster
	99.9% SLA	99.9% SLA
<b>13,80</b> EUR/MONTH (ESTIMATED)	<b>86,58</b> EUR/MONTH (ESTIMATED)	<b>348,22</b> EUR/MONTH (ESTIMATED) PER SH...

## Redis Caches

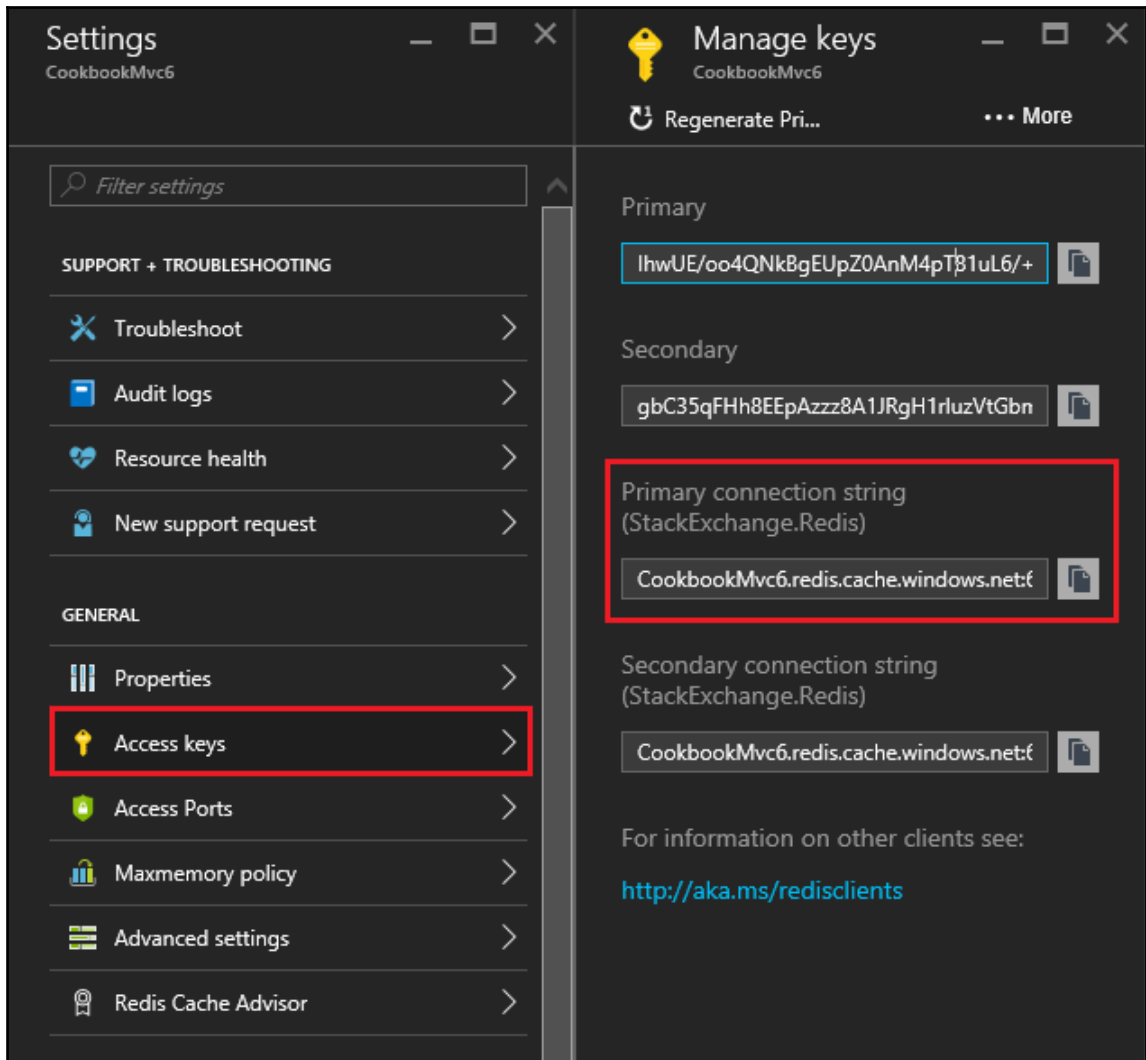
Répertoire par défaut

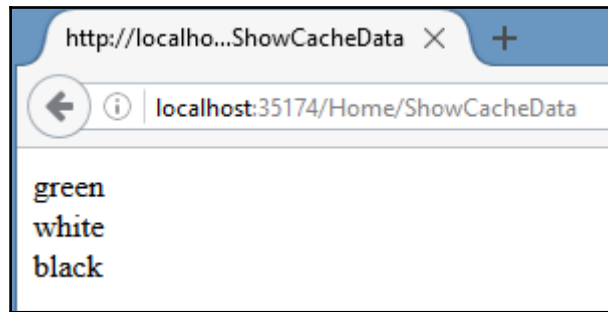
+ Add    ≡ Columns    ↻ Refresh

**Subscriptions:** All 2 selected – Don't see a subscription? [Switch directories](#)

Filter items...    All subscriptions

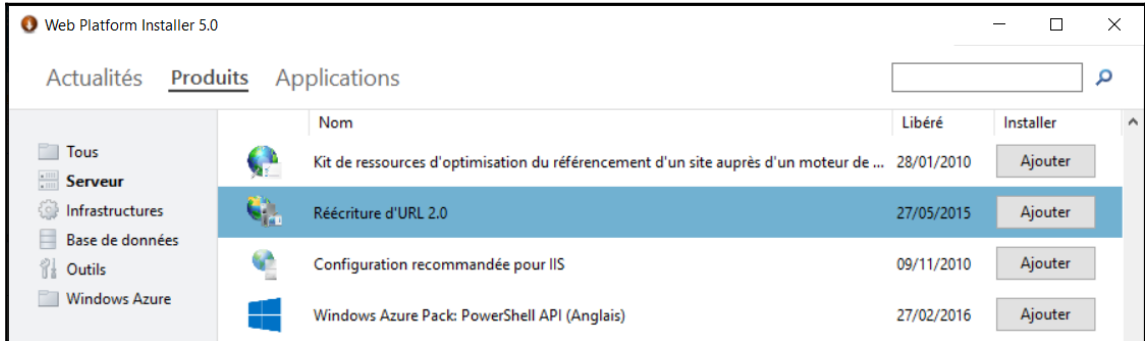
NAME	LOCATION	STATUS	SIZE	SKU
CookbookMvc6	West Europe	Running	250 MB	Basic





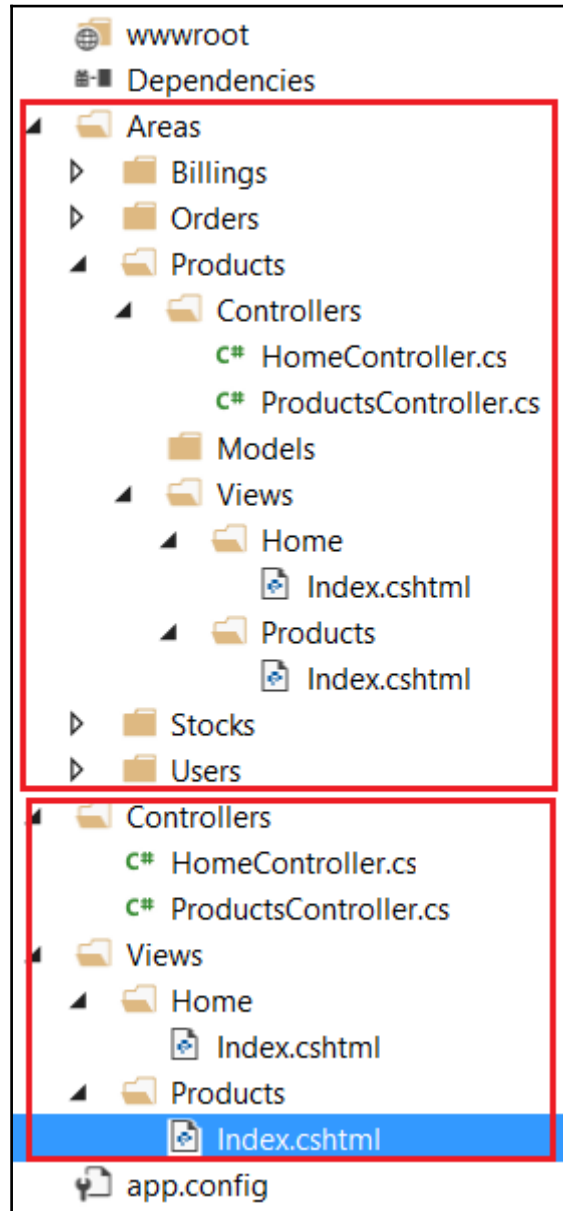
---

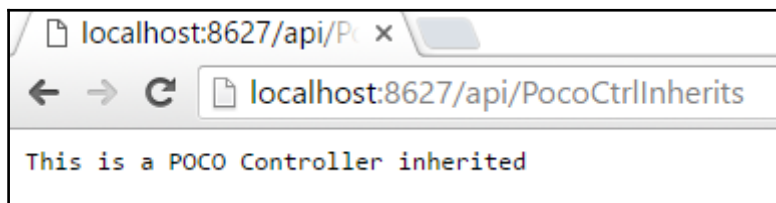
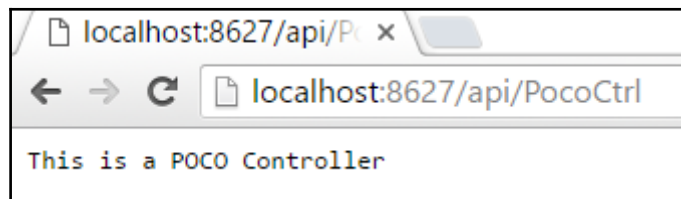
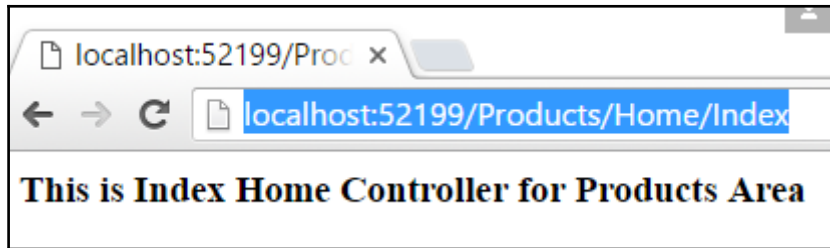
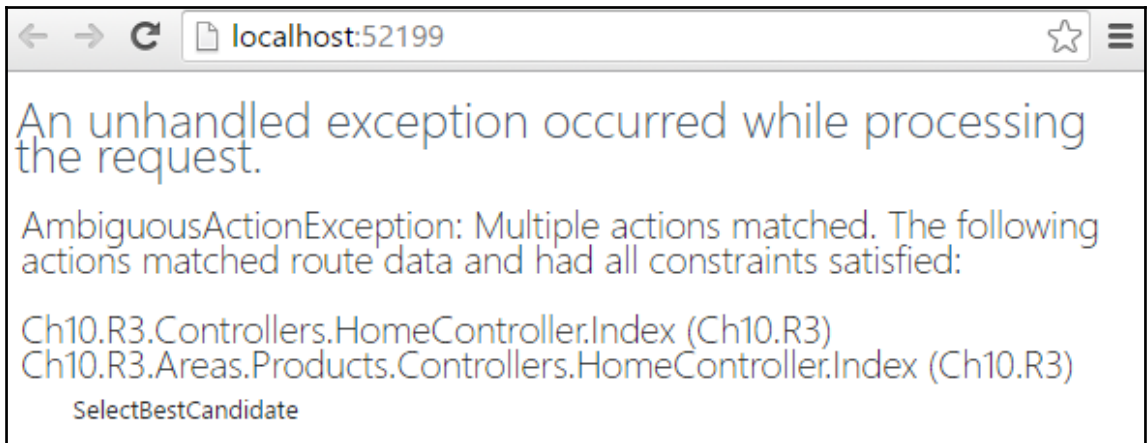
# Chapter 9: Routing

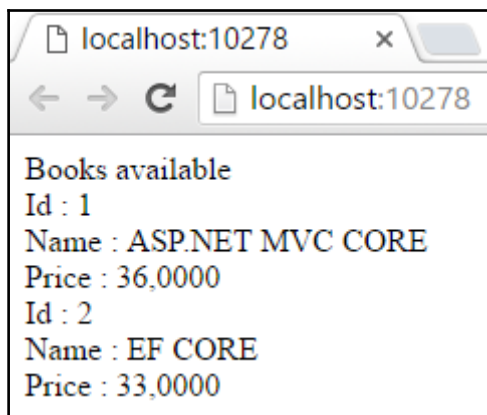


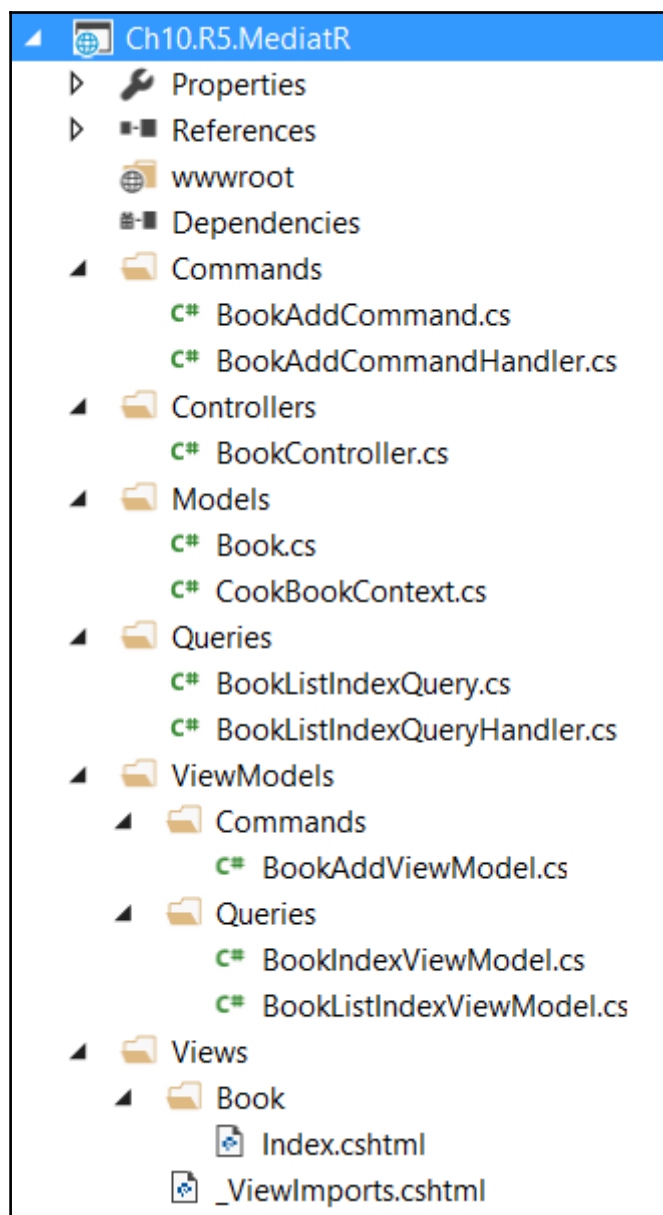
---

## Chapter 10: ASP.NET Core MVC



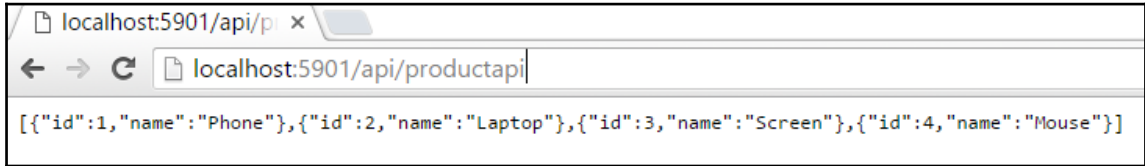




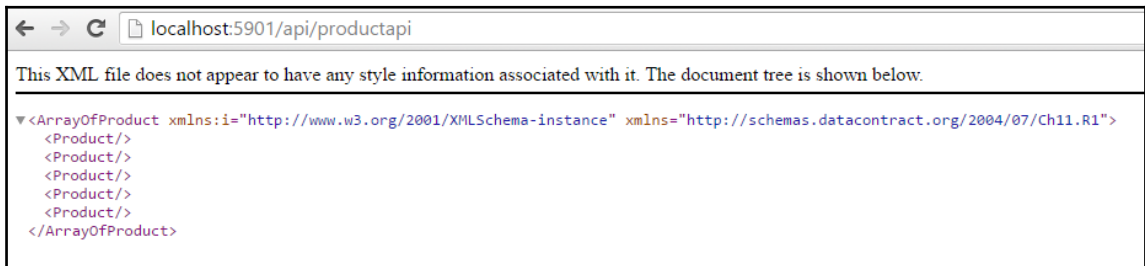




# Chapter 11: Web API

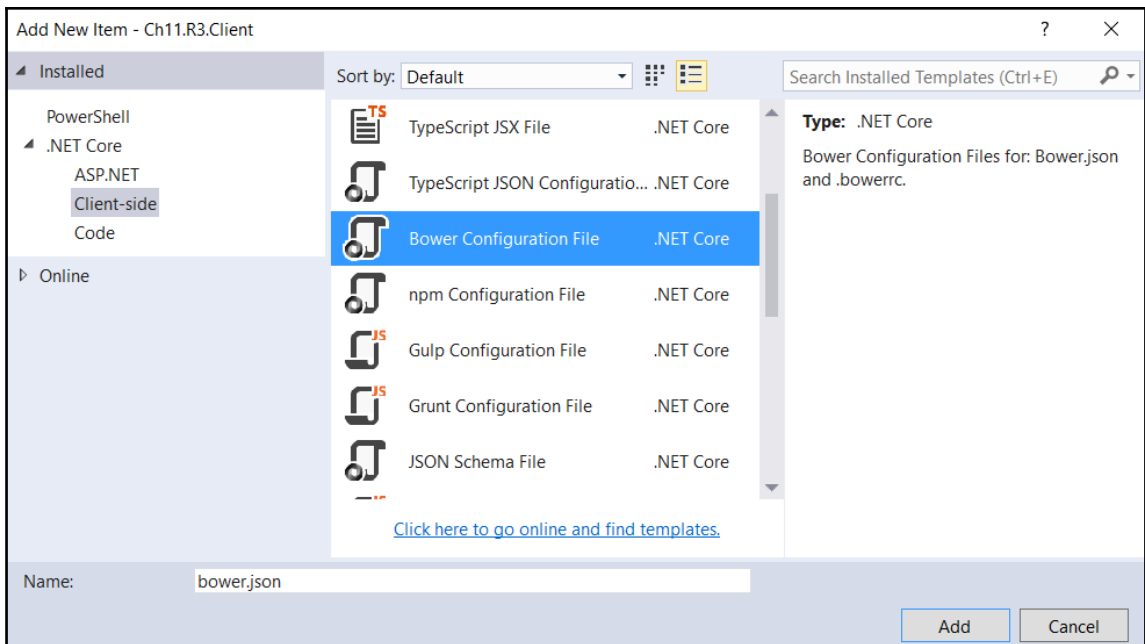


```
[{"id":1,"name":"Phone"}, {"id":2,"name":"Laptop"}, {"id":3,"name":"Screen"}, {"id":4,"name":"Mouse"}]
```



This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<ArrayOfProduct xmlns:i="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://schemas.datacontract.org/2004/07/Ch11.R1">
  <Product/>
  <Product/>
  <Product/>
  <Product/>
  <Product/>
  <Product/>
</ArrayOfProduct>
```



Add New Item - Ch11.R3.Client

Installed

- PowerShell
- .NET Core
  - ASP.NET
  - Client-side
  - Code
- Online

Sort by: Default

Icon	Template Name	Framework
	TypeScript JSX File	.NET Core
	TypeScript JSON Configuratio...	.NET Core
	Bower Configuration File	.NET Core
	npm Configuration File	.NET Core
	Gulp Configuration File	.NET Core
	Grunt Configuration File	.NET Core
	JSON Schema File	.NET Core

Search Installed Templates (Ctrl+E)

Type: .NET Core

Bower Configuration Files for: Bower.json and .bowerrc.

Name: bower.json

Add Cancel

## Manage Bower Packages: 'Ch11.R3.Client' Project

Browse Installed Update Available

Search (Ctrl+E)



**jquery**

JavaScript I...

Install

**bootstrap**

The most popular front-...

**angular**

HTML enhanced for we...

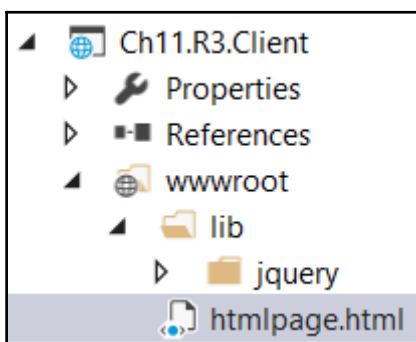
jquery

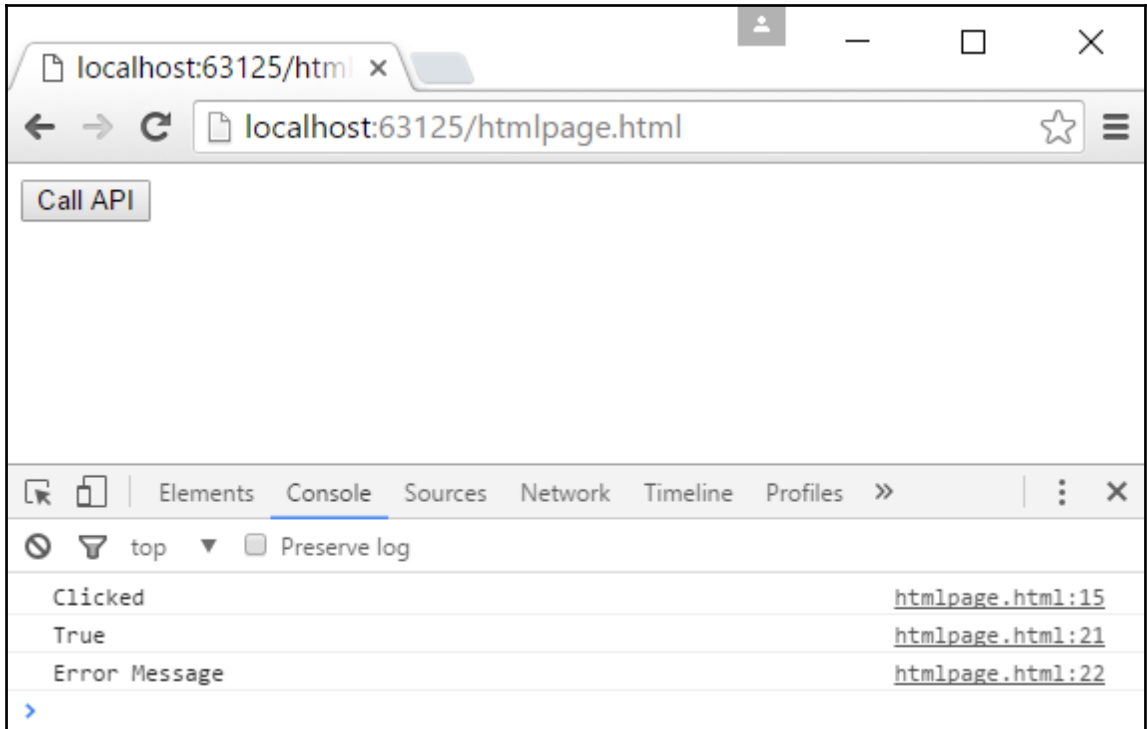
Install

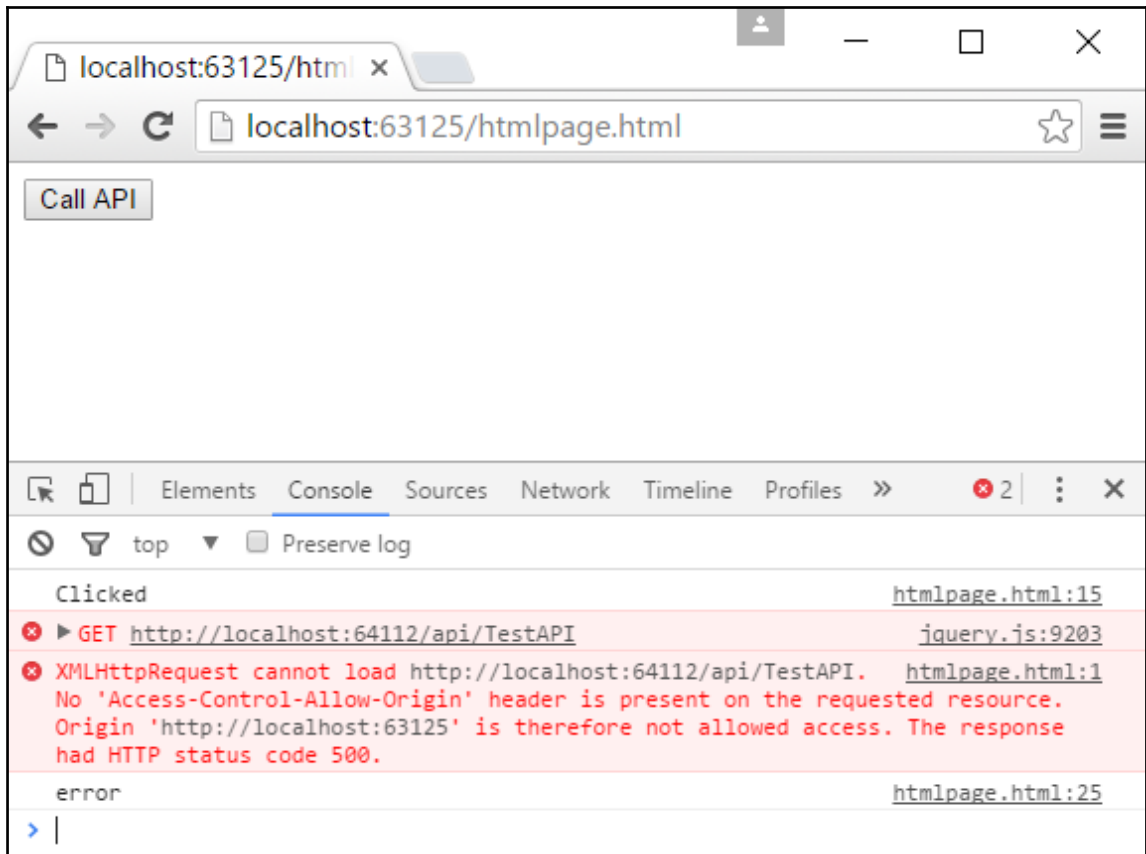
2.2.3

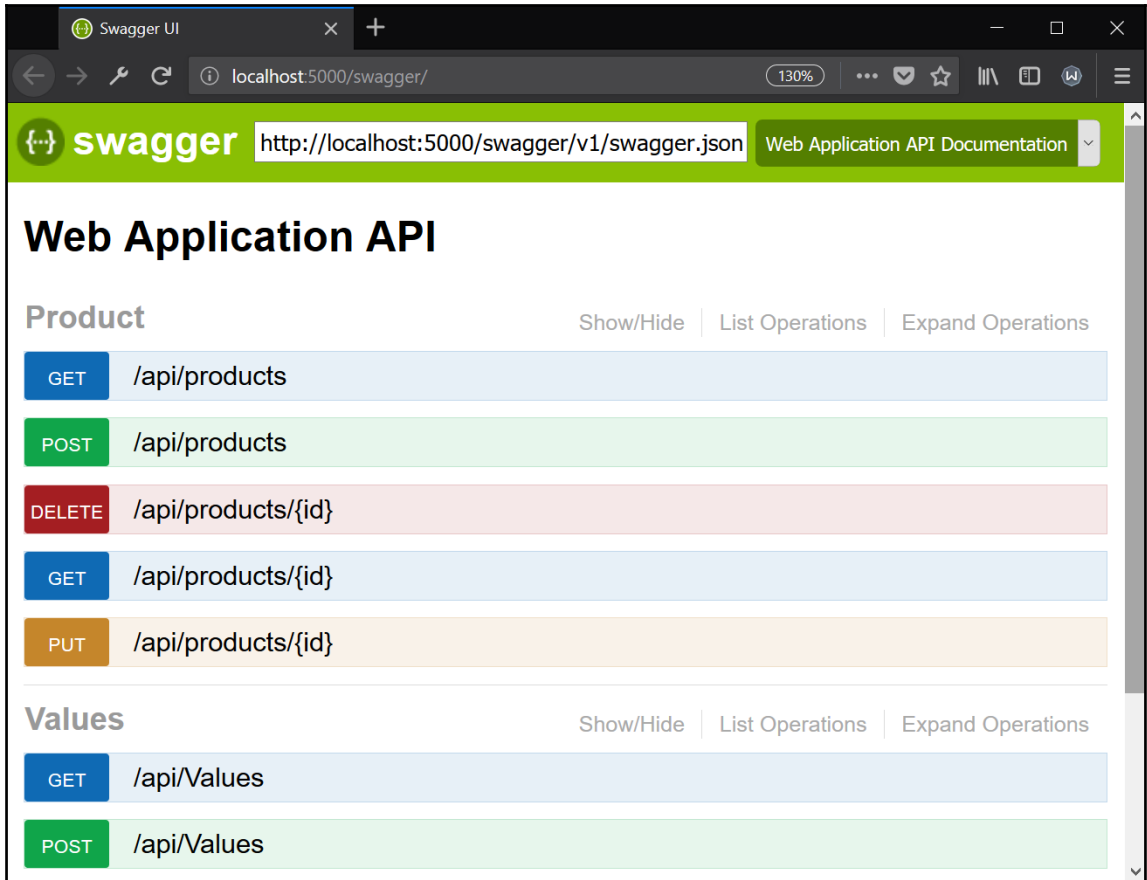
### Options

Save changes to bower.json









swagger  [Explore](#)

## API V1

### ProductApi [Show/Hide](#) | [List Operations](#) | [Expand Operations](#)

**GET** /api/ProductApi

**POST** /api/ProductApi

#### Parameters

Parameter	Value	Description	Parameter Type	Data Type
product	<input type="text"/>		body	Model <a href="#">Example Value</a>

Parameter content type:

#### Response Messages

HTTP Status Code	Reason	Response Model	Headers
200	Success		

[Try it out!](#)

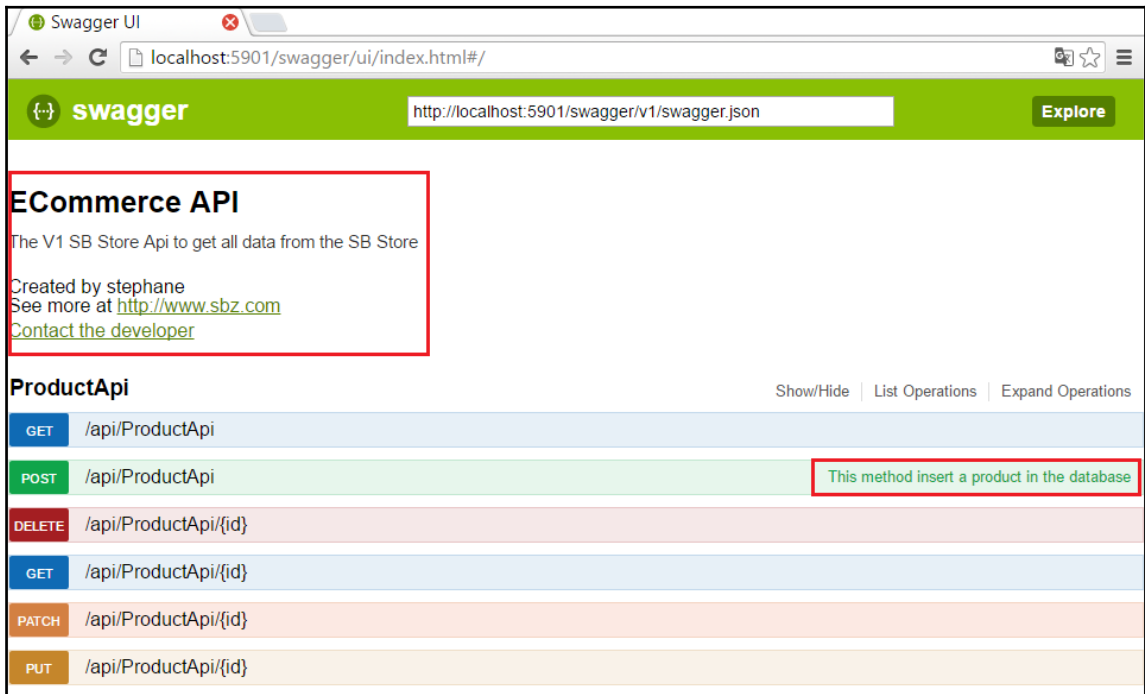
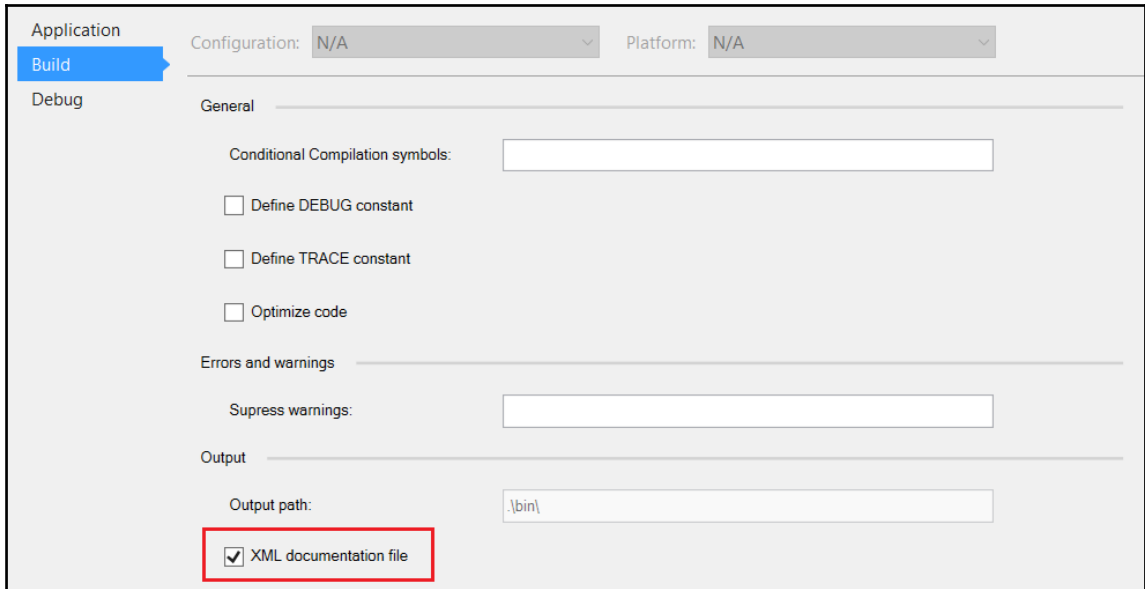
**DELETE** /api/ProductApi/{id}

**GET** /api/ProductApi/{id}

**PATCH** /api/ProductApi/{id}

**PUT** /api/ProductApi/{id}

[ BASE URL: / , API VERSION: v1 ]



**GET** /api/ProductApi/{id}

**Parameters**

Parameter	Value	Description	Parameter Type	Data Type
id	<input type="text" value="1"/>		path	integer

**Response Messages**

HTTP Status Code	Reason	Response Model	Headers
200	Success		

[Try it out!](#) [Hide Response](#)

**Curl**

```
curl -X GET --header 'Accept: application/json' 'http://localhost:5901/api/ProductApi/1'
```

**Request URL**

```
http://localhost:5901/api/ProductApi/1
```

**Response Body**

```
{
  "id": 1,
  "name": "Phone"
}
```

**Response Code**

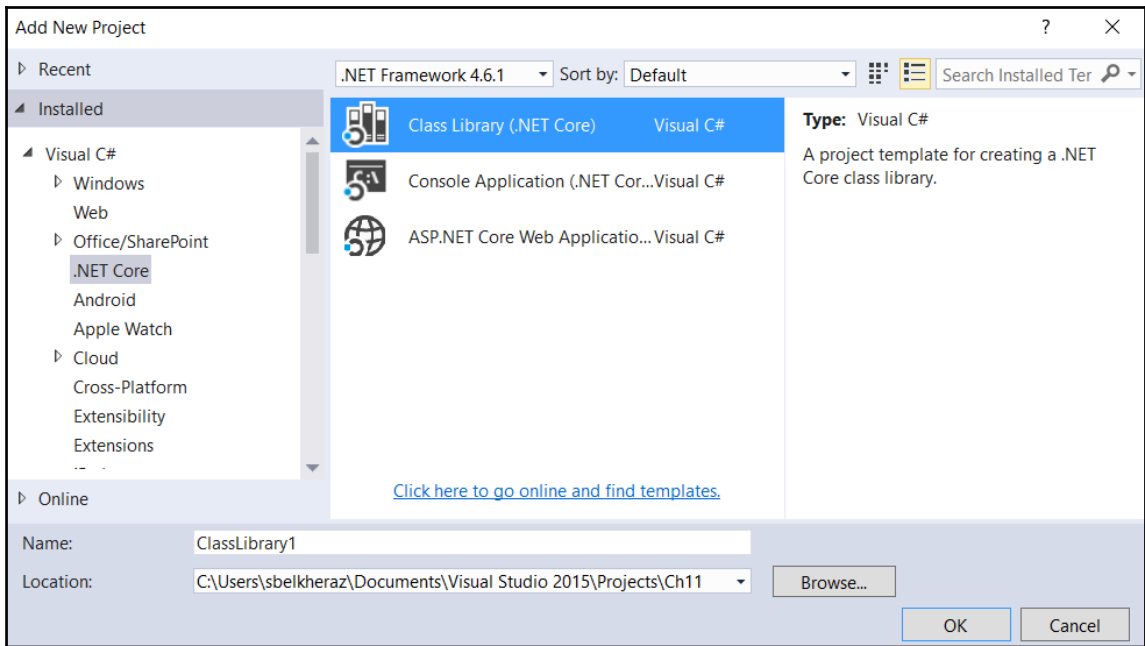
```
200
```

**Response Headers**

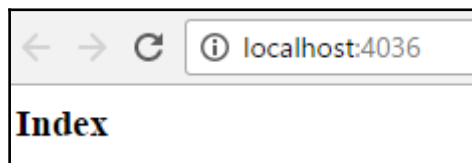
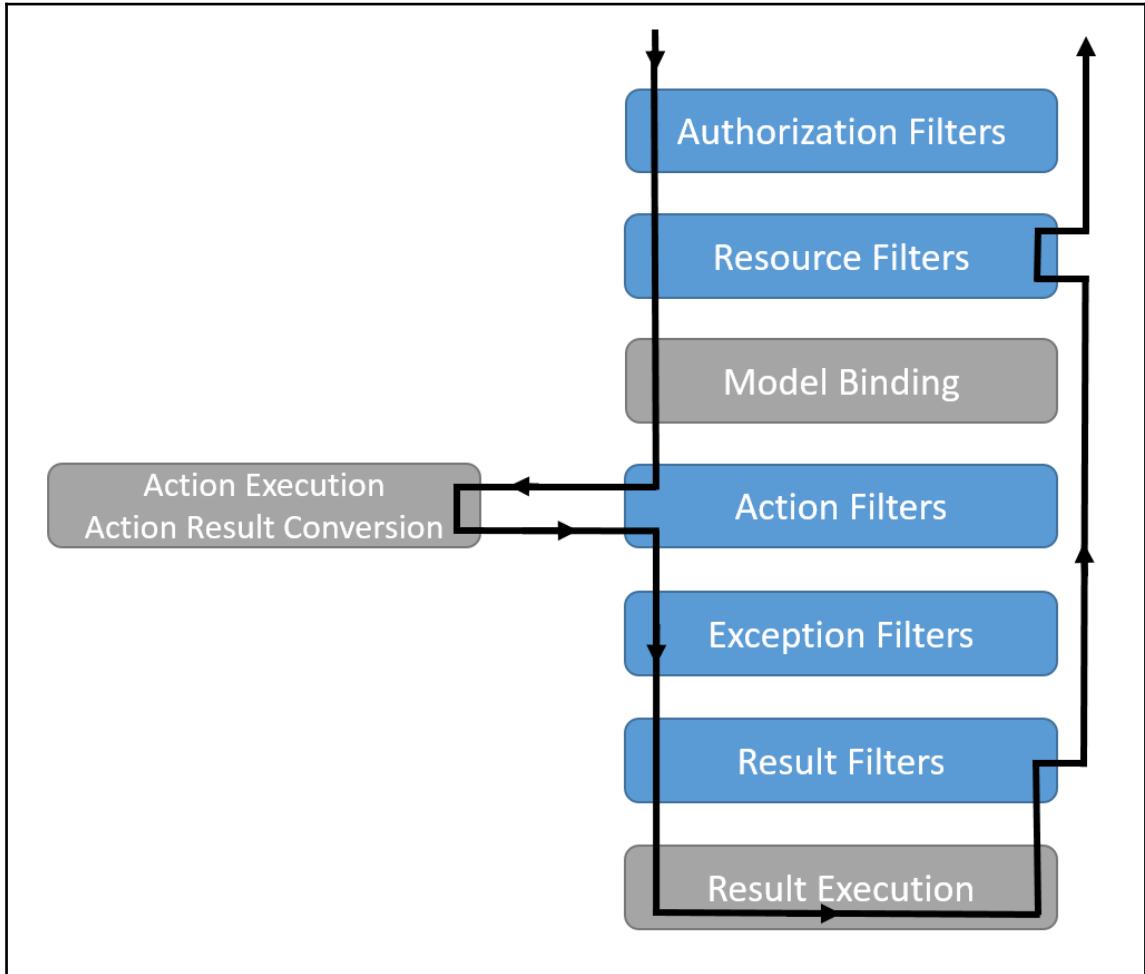
```
{
  "date": "Fri, 09 Sep 2016 21:03:16 GMT",
  "x-sourcefiles": "?UTF-8?B?QzpcVXN1cnNcc2J1bGtoZXJhe1xkb2N1bWVudHNdcm1zdWFsIHN0dWRpbyAyMDE1XFByb2p1Y3RzXENoMTFcc3JjXENoMTEuU",
  "server": "Kestrel",
  "x-powered-by": "ASP.NET",
  "transfer-encoding": "chunked",
  "content-type": "application/json; charset=utf-8"
}
```

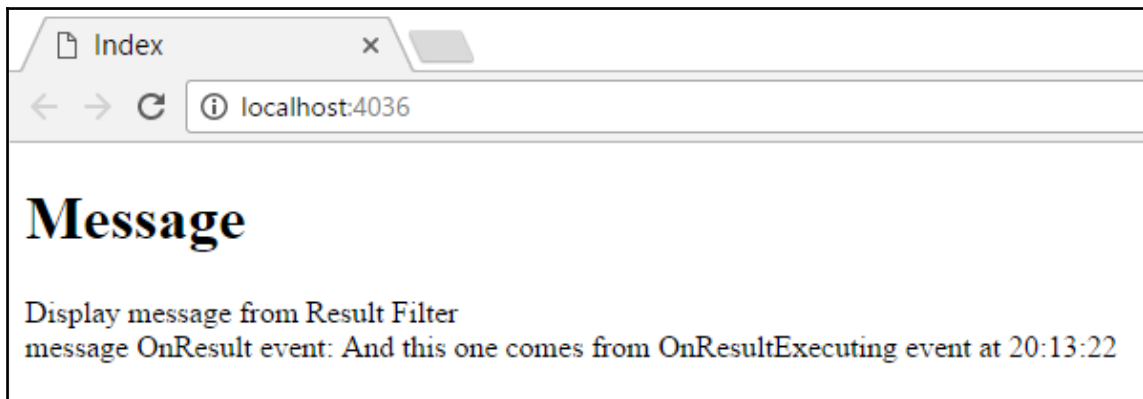
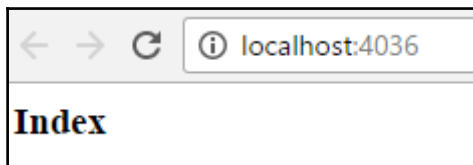
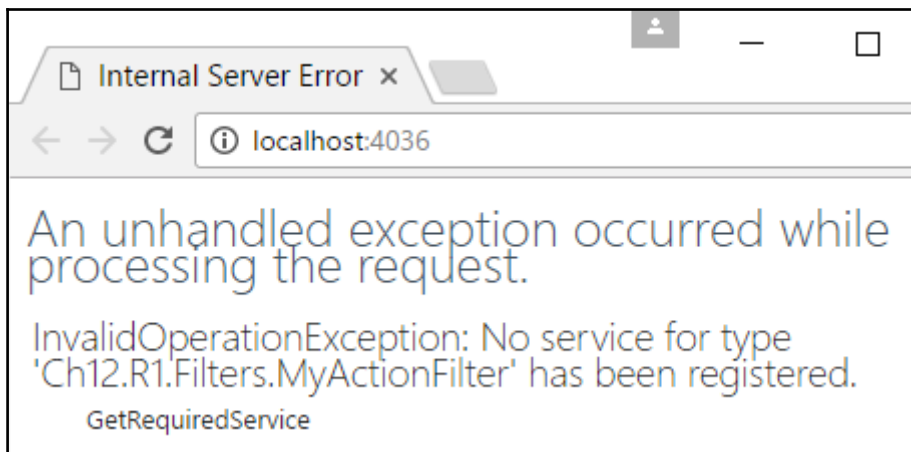
**PATCH** /api/ProductApi/{id}

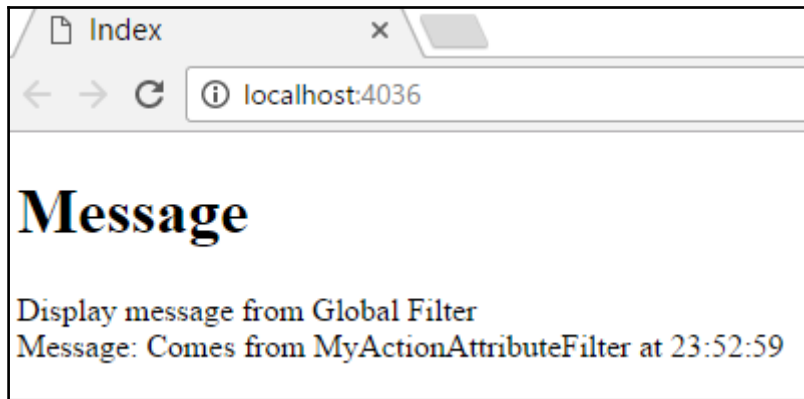




## Chapter 12: Filters







---

## Chapter 13: Views, Models, and ViewModels

R8 Home Add Product

Let's add a new product

Name  The field must be a string

Price  The field Price must be a number.

This screenshot shows a web form for adding a new product. The form has a dark header with 'R8', 'Home', and 'Add Product' links. Below the header, the text 'Let's add a new product' is displayed. There are two input fields: 'Name' and 'Price'. The 'Name' field contains the value '263' and has a yellow highlight with a red error message 'The field must be a string'. The 'Price' field contains the value 'tv' and has a blue border with a red error message 'The field Price must be a number.'. Below the input fields is an 'Add' button.

R8 Home Add Product

Let's add a new product

Name

Price

This screenshot shows the same web form as above, but with valid data. The 'Name' field now contains 'tv' and the 'Price' field contains '260'. There are no error messages. The 'Add' button is still present.

```
public IActionResult AddProduct(ProductViewModel model)
{
    if (ModelState.IsValid)
    {
        ≤ 1ms elapsed
        ModelState.IsValid true
```

```
public IActionResult AddProduct(ProductViewModel model)
{
    if (!model.Name.Contains("tv"))
    {
        ModelState.AddModelError(nameof(model.Name),
            "The model name must contain the word 'tv'");
    }

    if (ModelState.IsValid) ≤ 1ms elapsed
    {
        ModelState.IsValid false
```

Let's add a new product

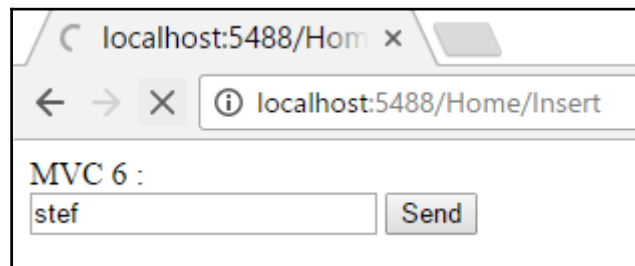
**Name**  The model name must contain the word 'tv'

**Price**

## Chapter 14: Razor and Views

```
0 references
25 public IActionResult Insert()
26 {
27     return View();
28 }
29
30 [HttpPost]
0 references
31 public IActionResult Insert(string name)
32 {
33     _repository.CreateProduct(name);
34     return View("Index");
35 }
```

```
<span>MVC 6 :</span>
<form asp-controller="Home" asp-action="Insert" method="post">
    <input type="text" asp-for="Name" />
    <input type="submit" value="Send" />
</form>
```



```
29
30 [HttpPost]
    0 references
31 public IActionResult Insert(string name)
32 {
```

Add New Item - Ch13.R2

Installed

- PowerShell
- .NET Core
  - ASP.NET
  - Client-side
  - Code
- Online

Sort by: Default

Search Installed Templates (Ctrl+E)

Icon	Template Name	Framework
@	MVC View Layout Page	.NET Core
@	MVC View Start Page	.NET Core
@	MVC View Imports Page	.NET Core
C#	Razor Tag Helper	.NET Core
C#	Middleware Class	.NET Core
C#	Startup class	.NET Core
C#	ASP.NET Configuration File	.NET Core

Type: .NET Core  
MVC View Imports Page

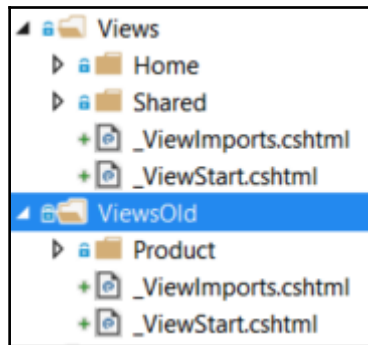
Name:

Add Cancel

```
_ViewImports.cshtml
1 @addTagHelper *, Microsoft.AspNetCore.Mvc.TagHelpers
```

```
30 [HttpPost]
    0 references
31 public IActionResult Insert(string name)
32 {
```





Let's add a new product

**Product Name****Product Price****Category**

Please select one category ▼

Please select one category

- Computers
- Software
- Electronics
- TV
- DVD

---

# Chapter 15: TagHelpers and ViewComponents

Application Configuration: N/A Platform: N/A

Build

**Debug**

Profile: IIS Express

Launch: IIS Express

Launch URL: *Absolute or relative URL*

**Environment Variables:**

Name	Value
ASPNETCORE_ENVIRONMENT	Development

Web Server Settings

App URL:

Enable SSL

Enable Anonymous Authentication

Enable Windows Authentication

---

R5

Home

Catalog

Name: Laptop

Price: 250

Add to basket

Name: Phone

Price: 150

Add to basket

Name: Screen

Price: 200

Add to basket

**Basket Items : 2 Total : 400**

---

# Chapter 17: Security

× Headers Preview Response Timing

```
▼ [{Id: 1, Title: "Istanbul"}, {Id: 2, Title: "New York"}, {Id: 3, Title: "Madrid"},...]
  ▼ 0: {Id: 1, Title: "Istanbul"}
      Id: 1
      Title: "Istanbul"
  ▼ 1: {Id: 2, Title: "New York"}
      Id: 2
      Title: "New York"
  ▼ 2: {Id: 3, Title: "Madrid"}
      Id: 3
      Title: "Madrid"
  ▼ 3: {Id: 4, Title: "Rome"}
      Id: 4
      Title: "Rome"
  ▼ 4: {Id: 5, Title: "Vienna"}
      Id: 5
      Title: "Vienna"
```

## Create a New App ID

Get started integrating Facebook into your app or website

Display Name

Contact Email

---


By proceeding, you agree to the [Facebook Platform Policies](#)

AspNetCoreAuth... APP ID: 358493001267659 View Analytics Tools & Support Docs


Dashboard  
Settings  
Roles  
Alerts  
App Review

PRODUCTS  
+ Add Product

### Recommended Products




**Account Kit**  
Seamless account creation. No more passwords.




**Facebook Login**  
The world's number one social login product.


[Read Docs](#) [Set Up](#)




**Audience Network**  
Monetize your mobile app or website with native ads from 3 million Facebook advertisers.



**Analytics**  
Understand how people engage with your business across apps, devices, platforms and websites.



**Messenger**  
Customize the way you interact with people on Messenger.



**Webhooks**  
Subscribe to changes and receive updates in real time without calling the API.

facebook for developers

AspNetCoreAuth... APP ID: 358493001267659 View Analytics Tools & Support Docs

Dashboard  
Settings  
Roles  
Alerts  
App Review

PRODUCTS  
Facebook Login  
Settings  
Quickstart  
+ Add Product

### Facebook Login Quickstart

Easily add Facebook Login to your app with our Quickstart

#### Client OAuth Settings

**Client OAuth Login**  
Enables the standard OAuth client token flow. Secure your application and prevent abuse by locking down which token redirect URIs are allowed with the options below. Disable globally if not used. [?]

**Web OAuth Login**  
Enables web based OAuth client login for building custom login flows. [?]

**Embedded Browser OAuth Login**  
Enables browser control redirect url for OAuth client login. [?]

**Force Web OAuth Reauthentication**  
When on, prompts people to enter their Facebook password in order to log in on the web. [?]

**Use Strict Mode for Redirect URIs**  
Only allow redirects that use the Facebook SDK or that exactly match the Valid OAuth Redirect URIs. Strongly recommended. [?]

Valid OAuth redirect URIs

**Login from Devices**  
Enables the OAuth client login flow for devices like a smart TV [?]

#### Deauthorize

Deauthorize Callback URL

facebook for developers

---

## Dashboard



# AspNetCoreAuthenticationSample ○

This app is in development mode and can only be used by app admins, developers and testers [?]

API Version [?]

App ID

v2.10

358493001267659

App Secret

••••••••

Show

## APIs & services

# Library

To view this page, select a project.


Select


or

Create


---

## New Project

 You have 11 projects remaining in your quota. [Learn more.](#)

Project name 

AspNetCoreAuthenticationSample

Your project ID will be aspnetcoreauthenticationsample  [Edit](#)

**Please email me updates regarding feature announcements, performance suggestions, feedback surveys and special offers.**

Yes  No

**I have read and agree to the [Firebase APIs/Services Terms of Service.](#)**

Yes  No

Create

Cancel



---

[← API Library](#)




## Google+ API

Google

The Google+ API enables developers to build on top of the Google+ platform.

[ENABLE](#)

[TRY THIS API](#) 

---

## Credentials

# Add credentials to your project

### 1 Find out what kind of credentials you need

We'll help you set up the correct credentials.

If you want you can skip this step and create an [API key](#), [client ID](#) or [service account](#).

#### Which API are you using?

Determines what kind of credentials you need.

Google+ API

#### Where will you be calling the API from?

Determines which settings you'll need to configure.

Web server (e.g. node.js, Tomcat)

#### What data will you be accessing?

User data

Access data belonging to a Google user, with their permission

Application data

Access data belonging to your own application

[What credentials do I need?](#)

## Credentials

# Add credentials to your project

- ✓ Find out what kind of credentials you need  
Calling Google+ API from a web server

## 2 Create an OAuth 2.0 client ID

### Name

### Restrictions

Enter JavaScript origins, redirect URIs or both

#### Authorised JavaScript origins

For use with requests from a browser. This is the origin URI of the client application. It cannot contain a wildcard (`https://*.example.com`) or a path (`https://example.com/subdir`). If you're using a non-standard port, you must include it in the origin URI.



#### Authorised redirect URIs

For use with requests from a web server. This is the path in your application that users are redirected to after they have authenticated with Google. The path will be appended with the authorisation code for access. Must have a protocol. Cannot contain URL fragments or relative paths. Cannot be a public IP address.



Create client ID

---

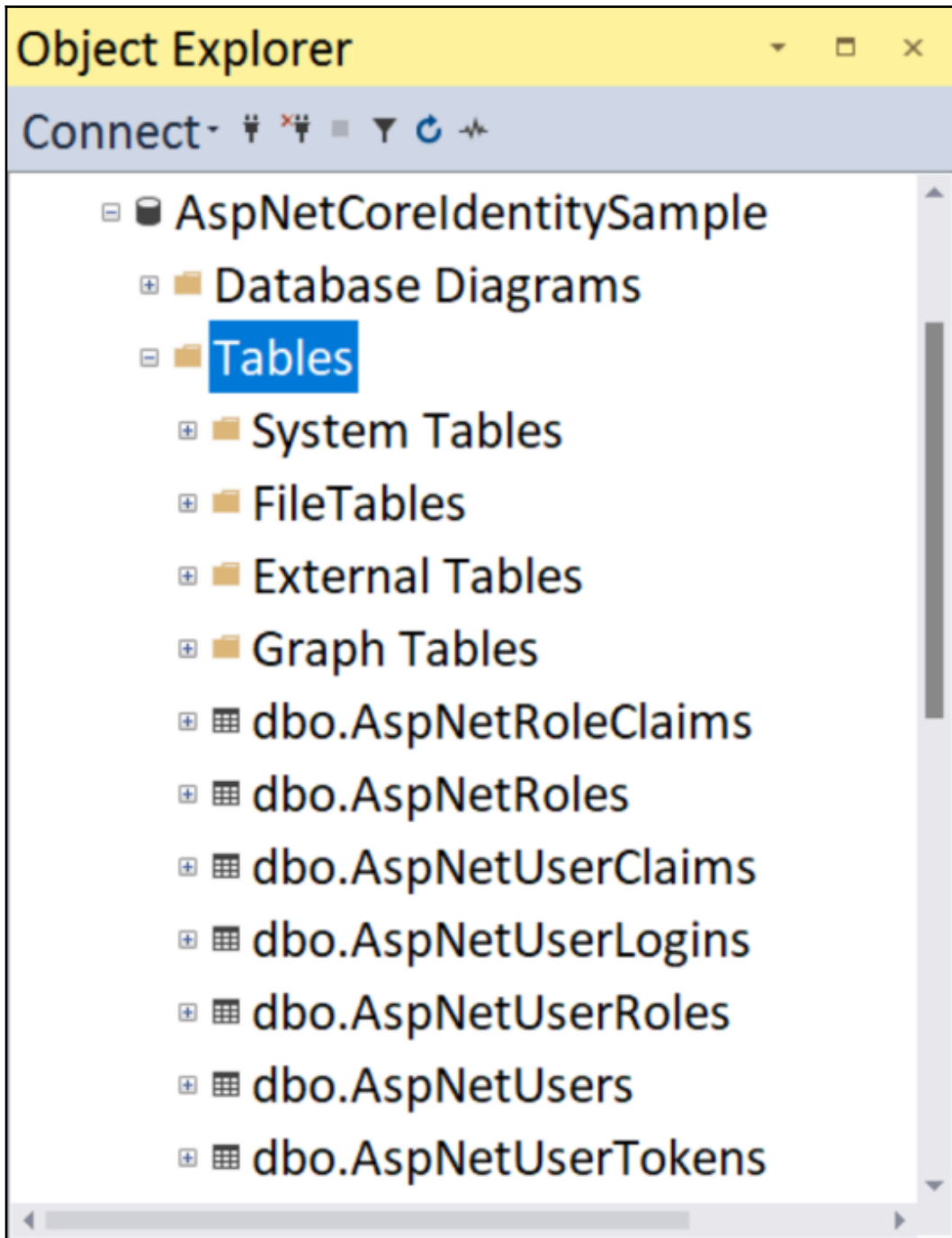
#### 4 Download credentials

**Client ID** 1074523660996-lmhrghsuhau31ptca5ajln1334t94b4tj.apps.googleusercontent.com

Download this credential information in JSON format. This is always available for you on the credentials page.

[Download](#)

[I'll do this later](#)



[Login](#) [Register](#) [Logout](#)

# Register

UserName	<input type="text" value="polatengin"/>
Password	<input type="password" value="●●●●●●●●"/>
Confirm Password	<input type="password" value="●●●●●●●●"/>
Email	<input type="text" value="engin@enginpolat.com"/>
Phone Number	<input type="text" value="0123456789"/>
City Name	<input type="text" value="Istanbul"/>
Job Begin Date	<input type="text" value="01 / 01 / 2000"/>
<input type="button" value="Register"/>	

Id	AccessFailedCount	CityName	ConcurrencyStamp	Email
1	0	Istanbul	B525F731-BB98-4AC3...	engin@enginpolat.com

---

# Login

UserName

Password

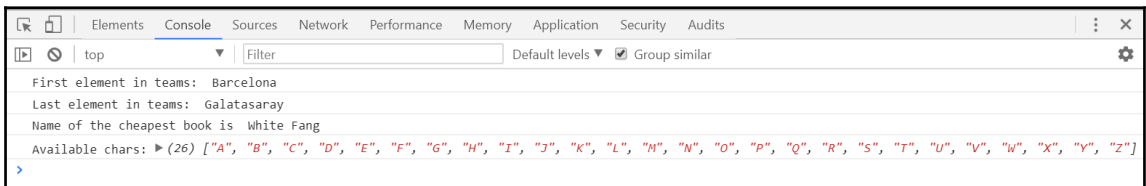
Remember Me

Login

```
Windows PowerShell
861844d6704e8573fec34d967e20bcfef3d424cf48be04e6dc08f2bd58c72974
3371015ead891cc3cf1c9d34b49264b510751b1ff9e537937bc46b5d6ff4ecc8
```

```
Windows PowerShell
Hello World!
gvd3898kAnw7CJungmBiJIZLmzzxq5E2Yh9NvzONOGA=
Hello World!
```

# Chapter 18: Frontend Development





---

# ToDo App

What to do?

Add

## ToDo List

buy milk :)

finish writing this chapter

do nothing :)

watch some movie

## QUnit Unit Testing Example

Hide passed tests  Check for Globals  No try-catch

Module:  ▼

Filter:

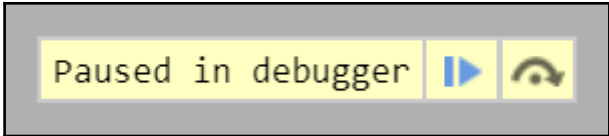
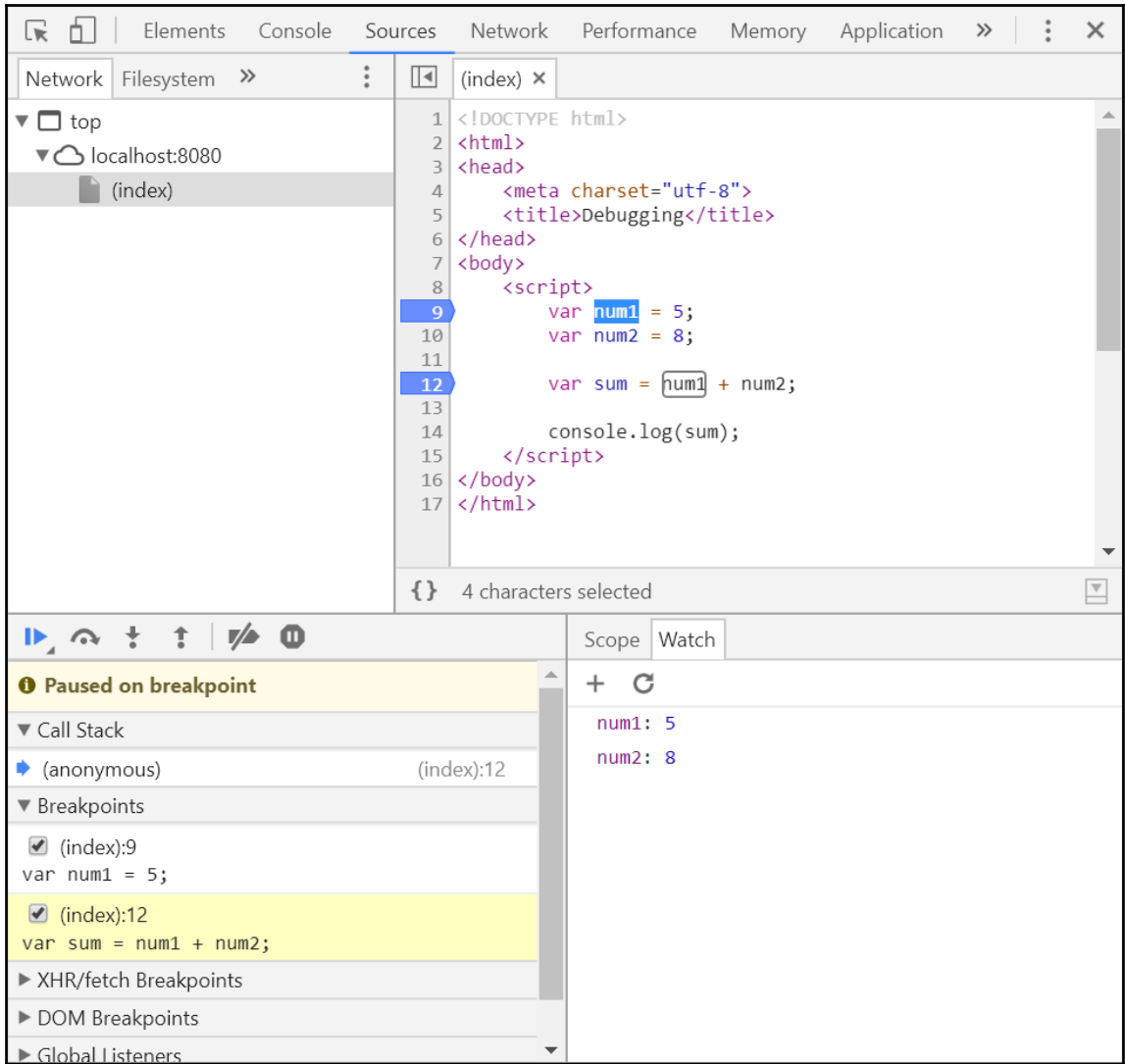
**QUnit 2.4.1; Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:58.0) Gecko/20100101 Firefox/58.0**

7 tests completed in 14 milliseconds, with 0 failed, 0 skipped, and 0 todo.  
8 assertions of 8 passed, 0 failed.

1. <b>This is most basic test (1)</b> <small>Rerun</small>	1 ms
2. <b>This is another basic test (1)</b> <small>Rerun</small>	1 ms
3. <b>current number is zero (1)</b> <small>Rerun</small>	0 ms
4. <b>current number is one after increment (1)</b> <small>Rerun</small>	1 ms
5. <b>current number is zero again after decrement (1)</b> <small>Rerun</small>	0 ms
6. <b>current number is zero AND even (2)</b> <small>Rerun</small>	0 ms
7. <b>current number is odd after increment by 5 (1)</b> <small>Rerun</small>	0 ms

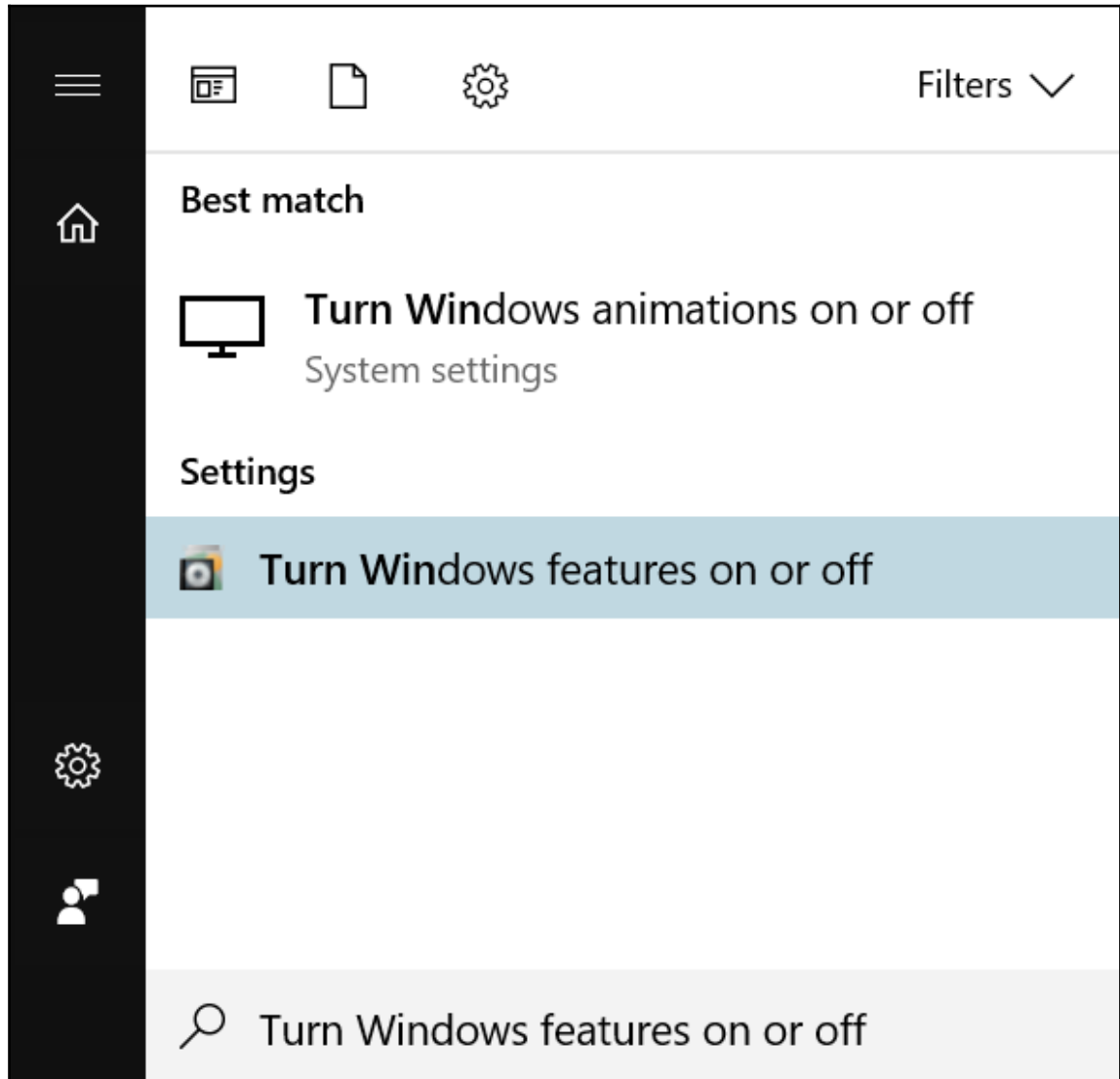
The screenshot shows a browser's developer console with the 'Console' tab selected. The console displays the following content:

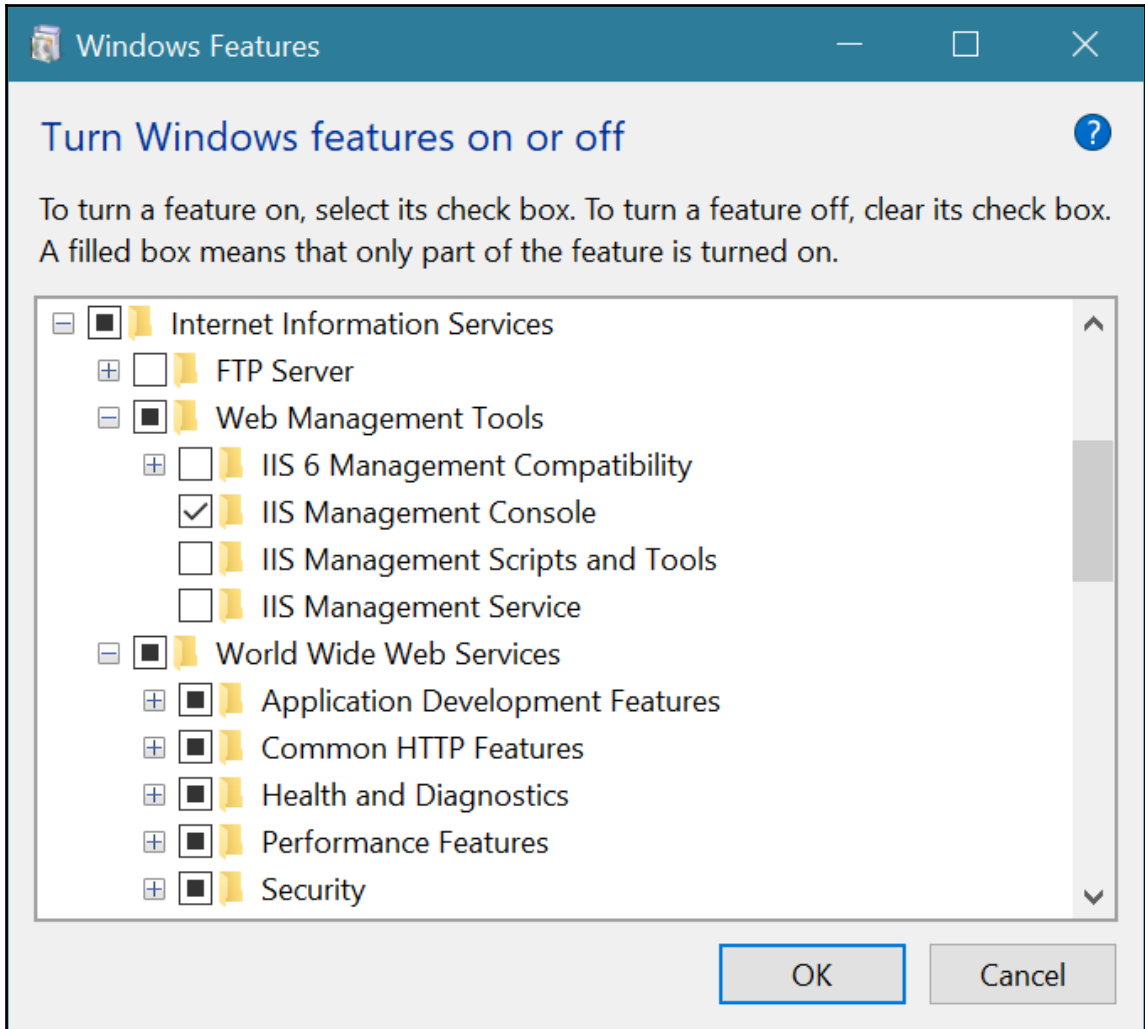
- Navigation icons: back, forward, home, search.
- Panel tabs: Elements, Console (selected), Sources, Network, Performance.
- Filter: top
- Filter input:
- Default levels: Default levels ▼
- Group similar:  Group similar
- Settings icon: ⚙️
- Message: 13 .(index):14
- Expand icon: >



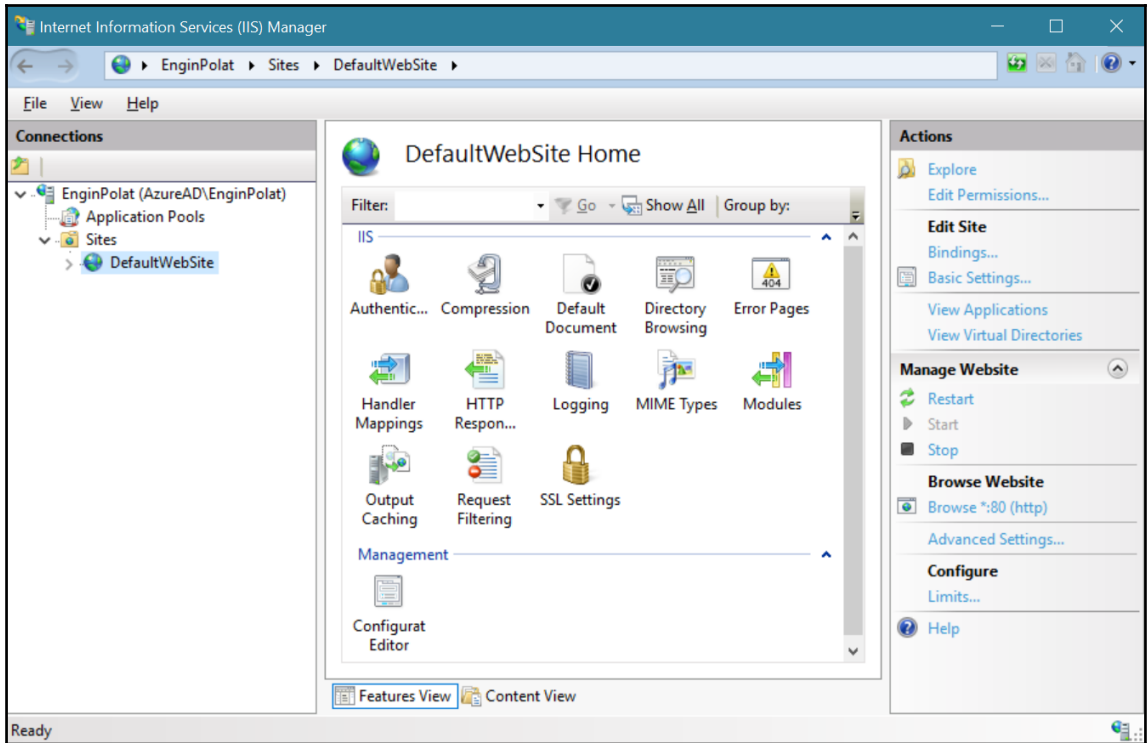
---

## Chapter 19: Deployment and Hosting









Add Website

Site name:  Application pool:

Content Directory

Physical path:

Pass-through authentication

Binding

Type:	IP address:	Port:
<input type="text" value="http"/>	<input type="text" value="All Unassigned"/>	<input type="text" value="80"/>

Host name:

Example: www.contoso.com or marketing.contoso.com

Start Website immediately



---

Dialog box titled "Edit Application Pool" with a help icon and a close icon.

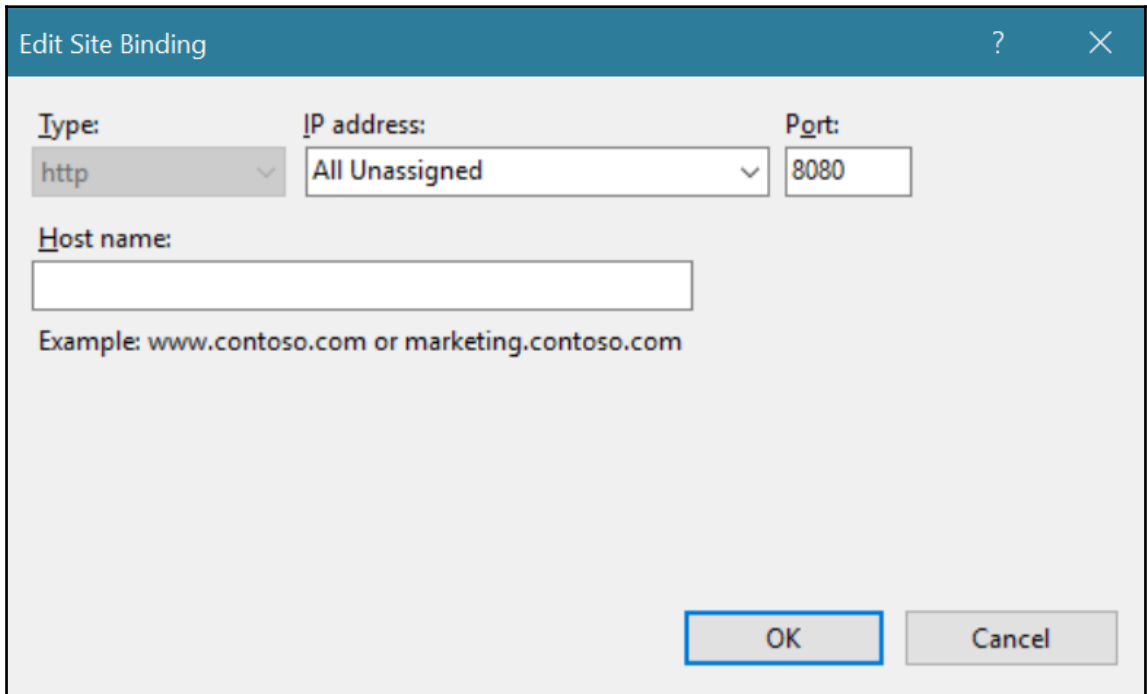
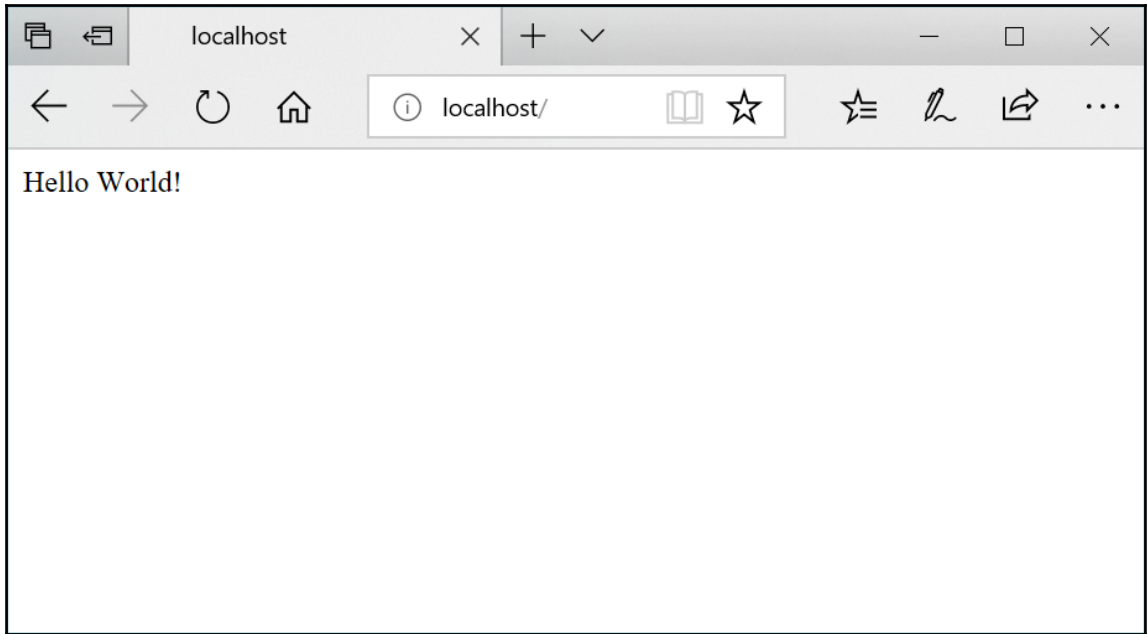
Name:

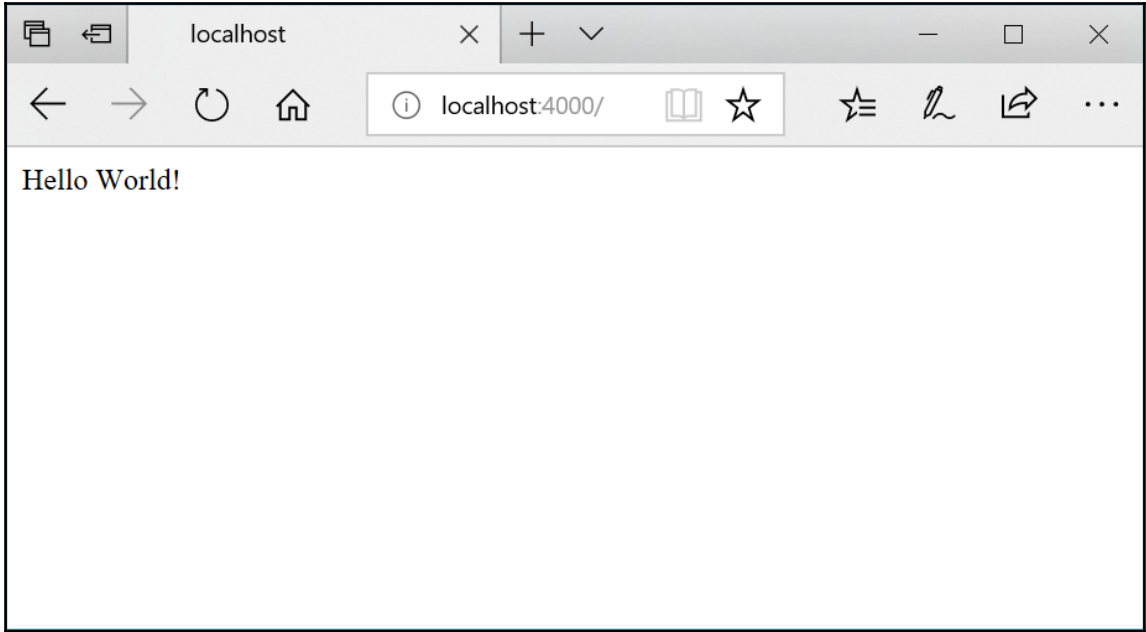
.NET CLR version:

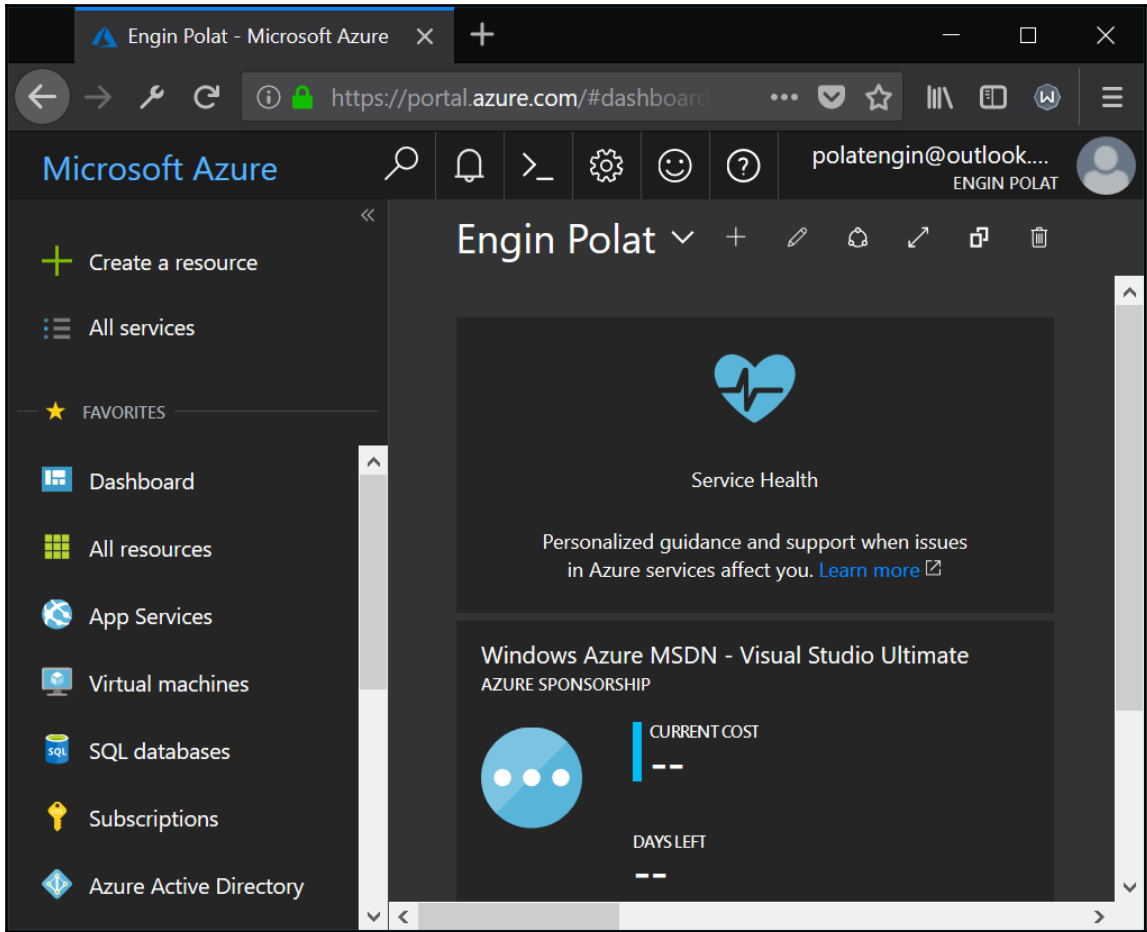
Managed pipeline mode:

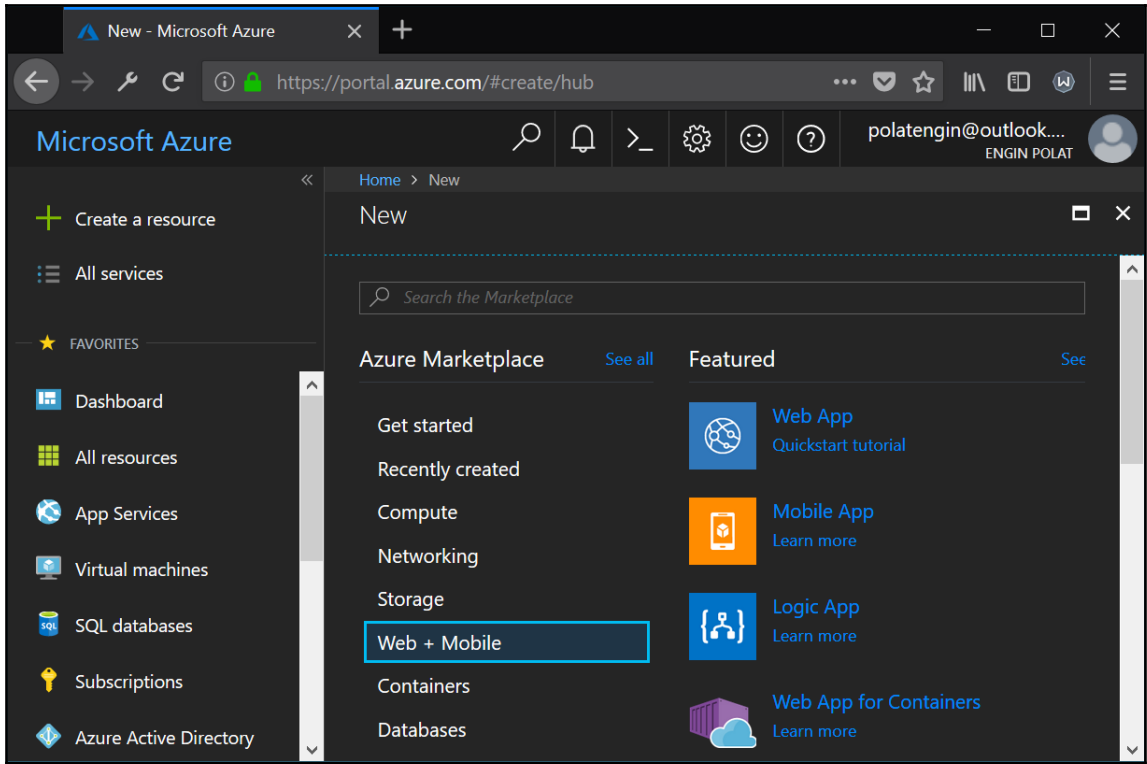
Start application pool immediately

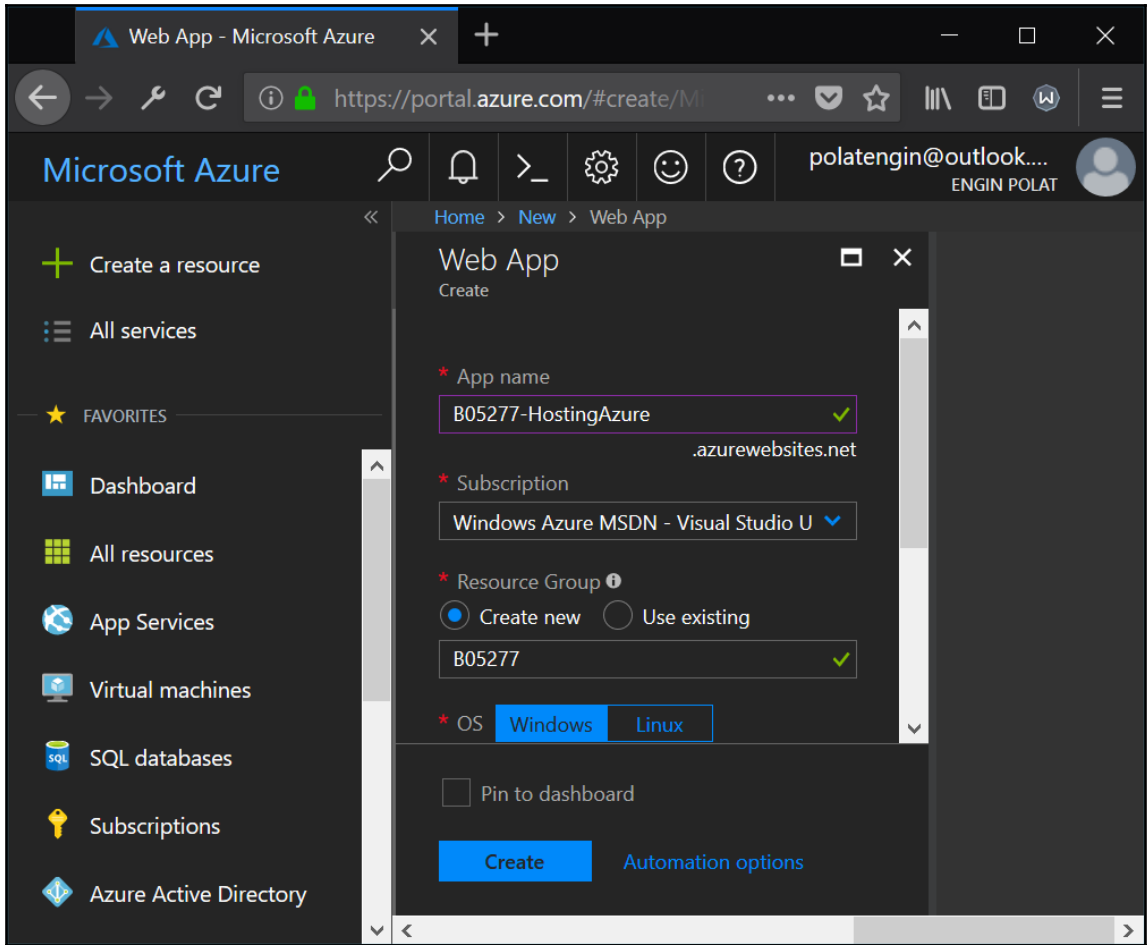
Buttons: OK, Cancel











Extension: Azure App Service Tools - Visual Studio Code - Insiders

EXTENSIONS: MARKETPLACE

azure

- Azure Resource Ma...** 0.3.7 76K 4.5  
Template language support for Azure ...  
Microsoft [Install](#)
- Azure Account** 0.2.2 218K 5  
A common Sign-In and Subscription ...  
Microsoft [Install](#)
- Azure Cosmos DB** 0.2.1 12K 5  
Create, browse, and update globally d...  
Microsoft [Install](#)
- Azure App Service To...** 0.4.0 10K 5  
An Azure App Service management ex...  
Microsoft [Install](#)
- Azure IoT Toolkit** 0.4.2 45K 5  
Interact with Azure IoT Hub, IoT Devic...  
Microsoft [Install](#)
- Azure Tools for Visua...** 1.3.0 42K 5  
Convenient features for Microsoft Azu...  
bradygaster [Install](#)

**Azure App Service Tools** ms-azu  
Microsoft | 10,919 | ★★★★★ | Rep  
An Azure App Service management extension for Visu...  
[Install](#)

[Details](#) [Contributions](#) [Changelog](#) [Dependencies](#)

## Azure App Services for Visual Studio Code (Preview)

The Azure App Services extension for VS Code lets you quickly browse, create, manage, and deploy Azure App Service websites.

### Features

0 0 0

Visual Studio Code - Insiders

EXPLORER

- OPEN EDITORS
  - NO FOLDER OPENED
  - DOCKER
  - AZURE APP SERVICE
    - Visual Studio Enterprise
    - Visual Studio Enterprise
    - Windows Azure MSDN -
    - B05277-HostingAzure**
    - enginplat

Open In Portal  
Browse Website

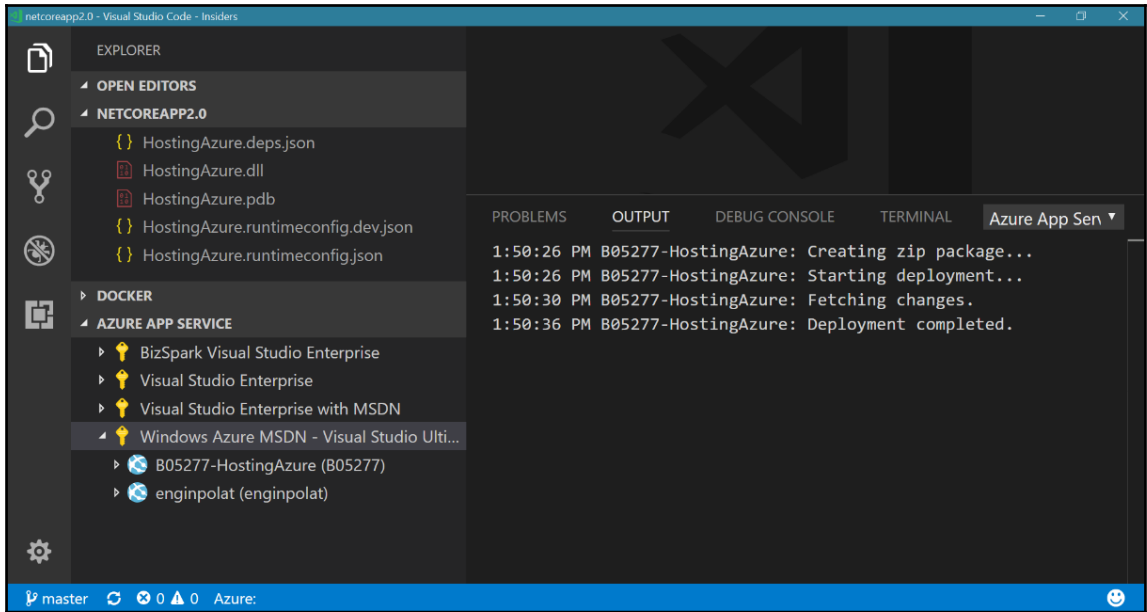
Start  
Stop  
Restart  
Delete

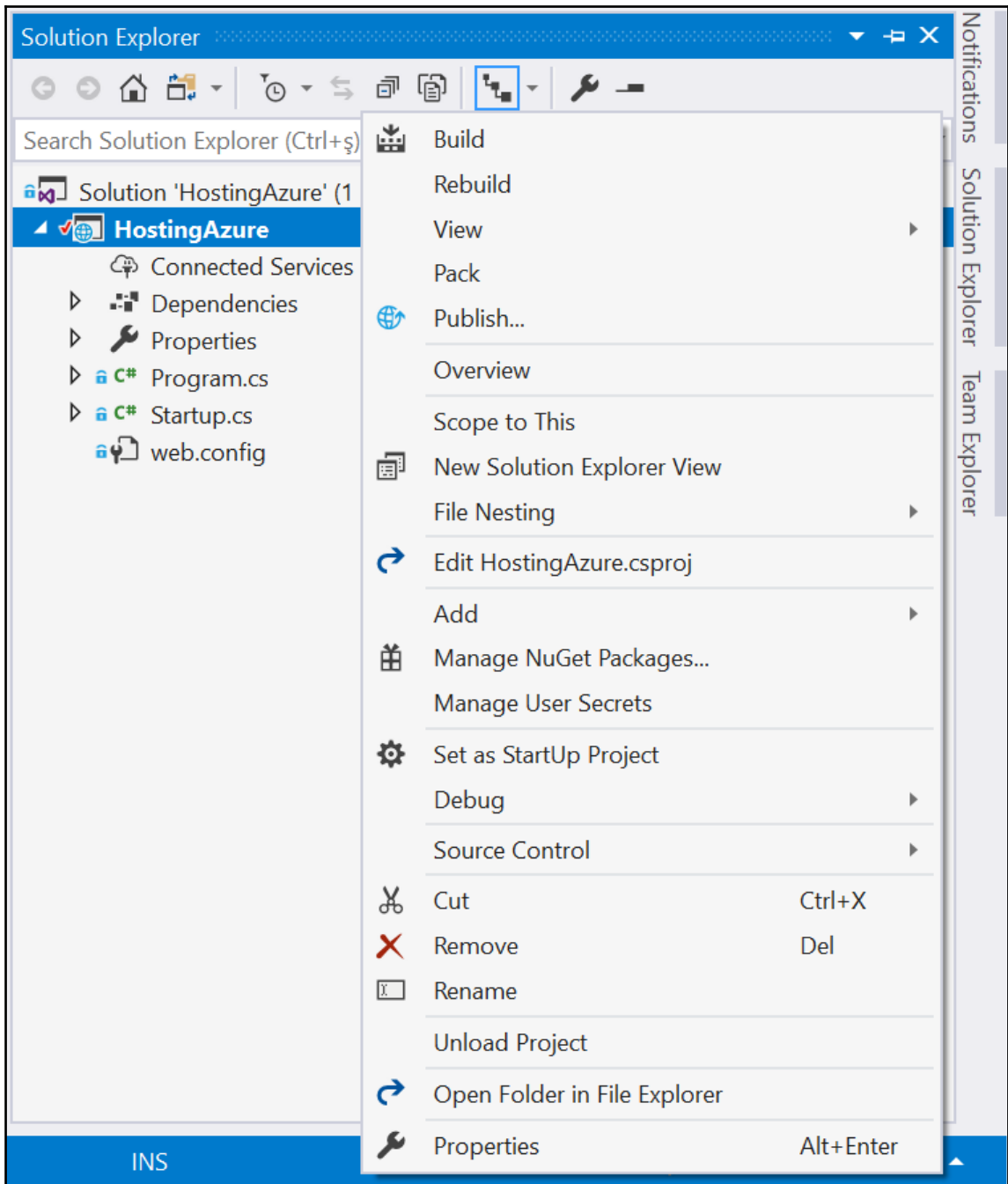
Continuous Delivery (Preview)  
Configure Deployment Source

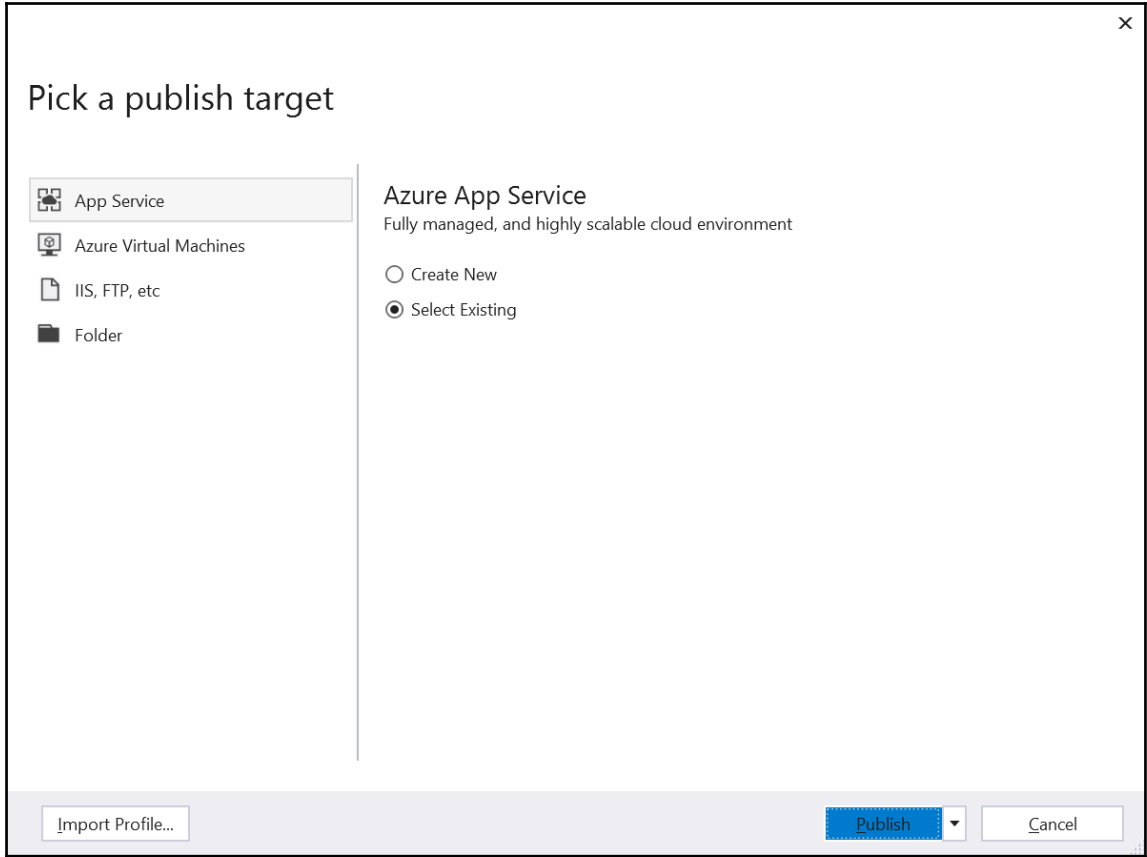
View Streaming Logs  
Stop Streaming Logs

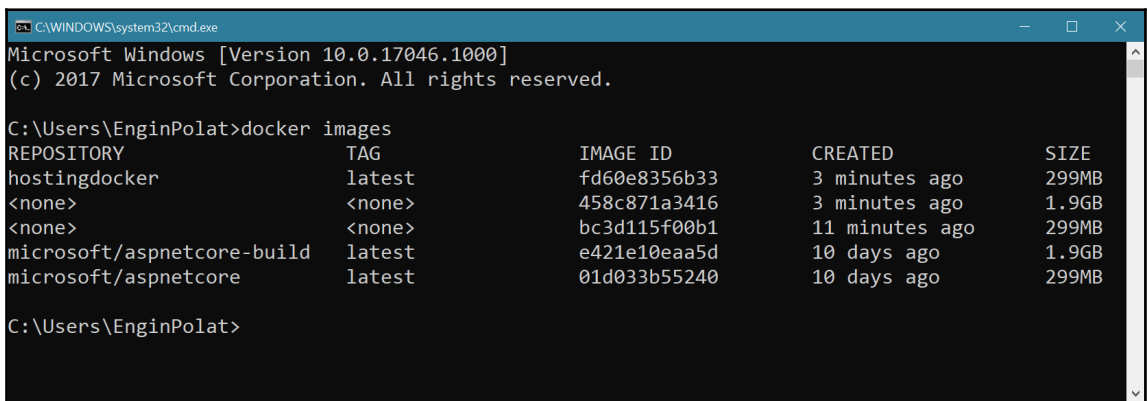
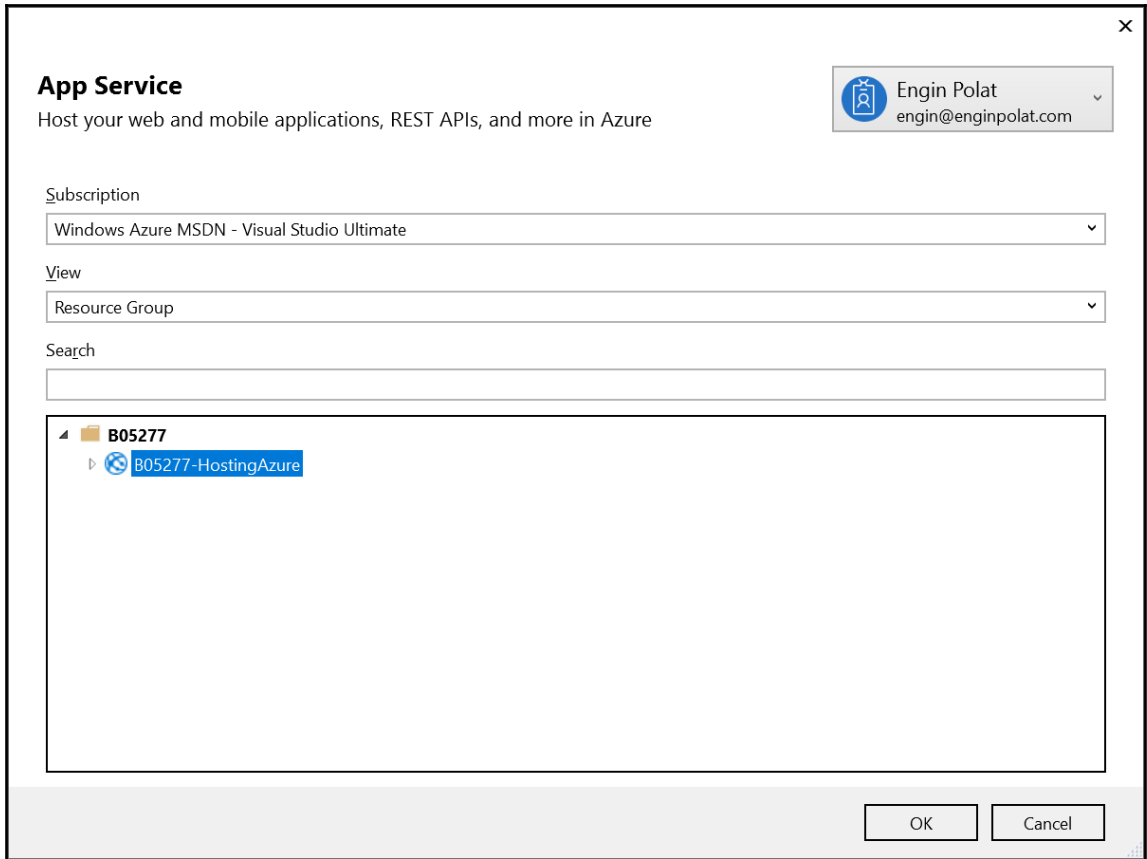
Generate Azure CLI Script











```
C:\WINDOWS\system32\cmd.exe - docker run -it -p 5000:80 hostingdocker
Microsoft Windows [Version 10.0.17046.1000]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\EnginPolat>docker images
REPOSITORY          TAG                 IMAGE ID            CREATED             SIZE
hostingdocker       latest             fd60e8356b33      3 minutes ago     299MB
<none>              <none>            458c871a3416      3 minutes ago     1.9GB
<none>              <none>            bc3d115f00b1      11 minutes ago    299MB
microsoft/aspnetcore-build  latest            e421e10eaa5d      10 days ago       1.9GB
microsoft/aspnetcore  latest            01d033b55240      10 days ago       299MB

C:\Users\EnginPolat>docker run -it -p 5000:80 hostingdocker
Hosting environment: Production
Content root path: /app
Now listening on: http://[::]:80
Application started. Press Ctrl+C to shut down.
```

