

1. File -> New -> Project -> ASP.Net Web Application(.Net Framework) ->MVC (勾選 Web Forms)

2. Control Panel ->管理工具->服務>SQL Server(SQLExpress)啟動

3. View -> Server Explorer -> Data Connections -> Add Connection.. ->
Data Source: **Microsoft SQL Server**
Server Name: **.\SQLEXPRESS**
Select or Enter a Database Name: **Northwind**
按 OK

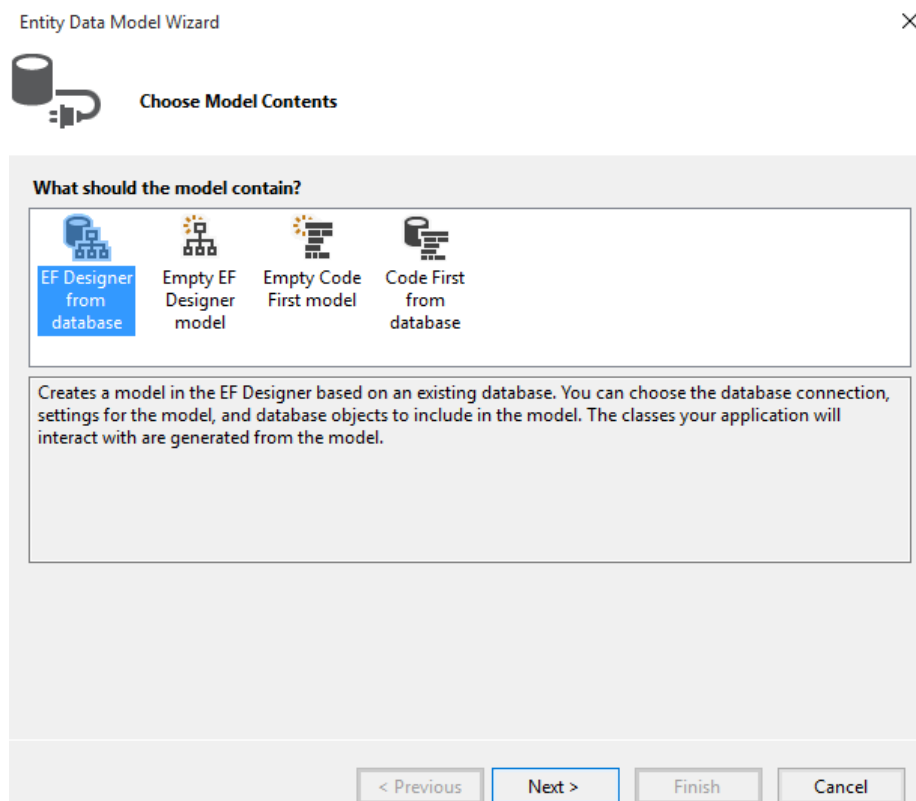
***安裝 Northwind 資料庫**

Server Name: **.\SQLEXPRESS**
Select or Enter a Database Name: **Master**
按 OK

New Query-->執行 instnwnd.sql

4. View -> Solution Explorer -> 在 **Models** 資料夾 -> Add -> New Item -> **Data**(左)
ADO.NET Entity Data Model (右)->
Name: **NorthwindModel**
按 Add

5. 點選 **EF Designer from database** ->按 Next



6. Save connection settings in Web.config as : **NorthwindEntities**->按 Next

Entity Data Model Wizard

Choose Your Data Connection

Which data connection should your application use to connect to the database?

vs2015\sqlexpress.Northwind.dbo

New Connection...

This connection string appears to contain sensitive data (for example, a password) that is required to connect to the database. Storing sensitive data in the connection string can be a security risk. Do you want to include this sensitive data in the connection string?

☐ No, exclude sensitive data from the connection string. I will set it in my application code.

☐ Yes, include the sensitive data in the connection string.

Connection string:

```
metadata=res://*/Models.NorthwindModel.csdl|res://*/Models.NorthwindModel.ssdl|
res://*/Models.NorthwindModel.msl;provider=System.Data.SqlClient;provider connection string="data
source=.\SQLExpress;initial catalog=Northwind;integrated
security=True;MultipleActiveResultSets=True;App=EntityFramework"
```

☒ Save connection settings in Web.Config as:

NorthwindEntities

< Previous Next > Finish Cancel

7. 選點 Entity Framework 6.x 按 **Next**

8. 選點 **Customers, Orders, Order Details, Products, Categories , Suppliers**

勾選 **Pluralize or singularize generated object names**

Model Namespace: **NorthwindModel**

按 **Finish**



Choose Your Database Objects and Settings

Which database objects do you want to include in your model?

☒ dbo

- ☒ Categories
- ☐ CustomerCustomerDemo
- ☐ CustomerDemographics
- ☒ Customers
- ☐ Employees
- ☐ EmployeeTerritories
- ☒ Order Details
- ☒ Orders
- ☒ Products
- ☐ Region
- ☐ Shippers

☒ Pluralize or singularize generated object names

☒ Include foreign key columns in the model

☒ Import selected stored procedures and functions into the entity model

Model Namespace:

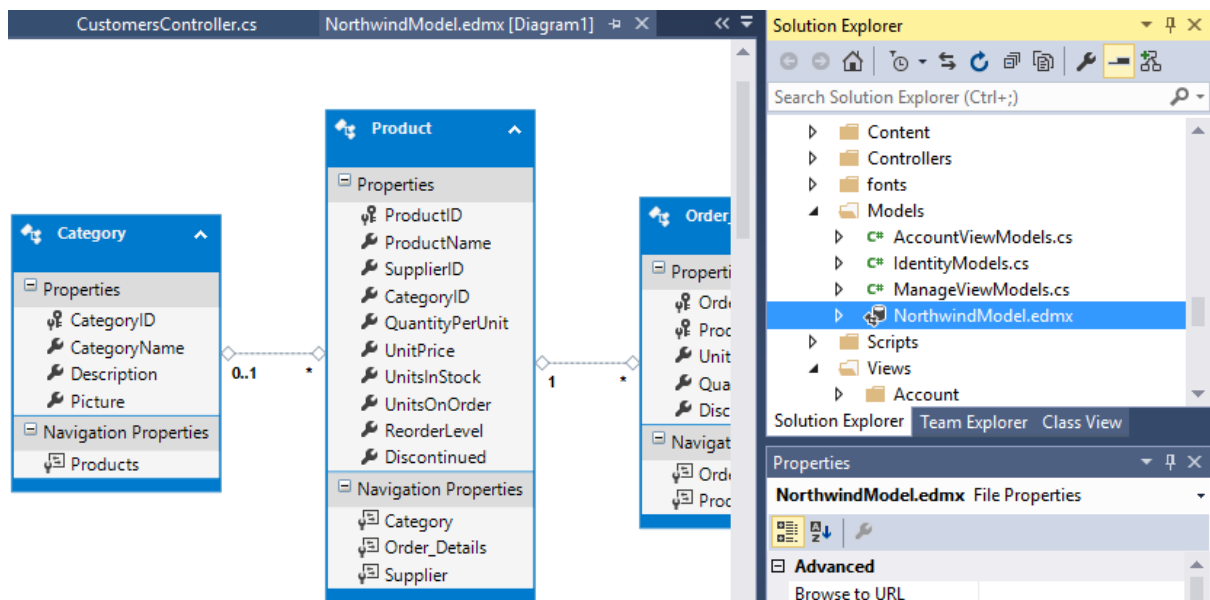
NorthwindModel

英

< Previous Next > Finish Cancel

9. Build -> Build Solution

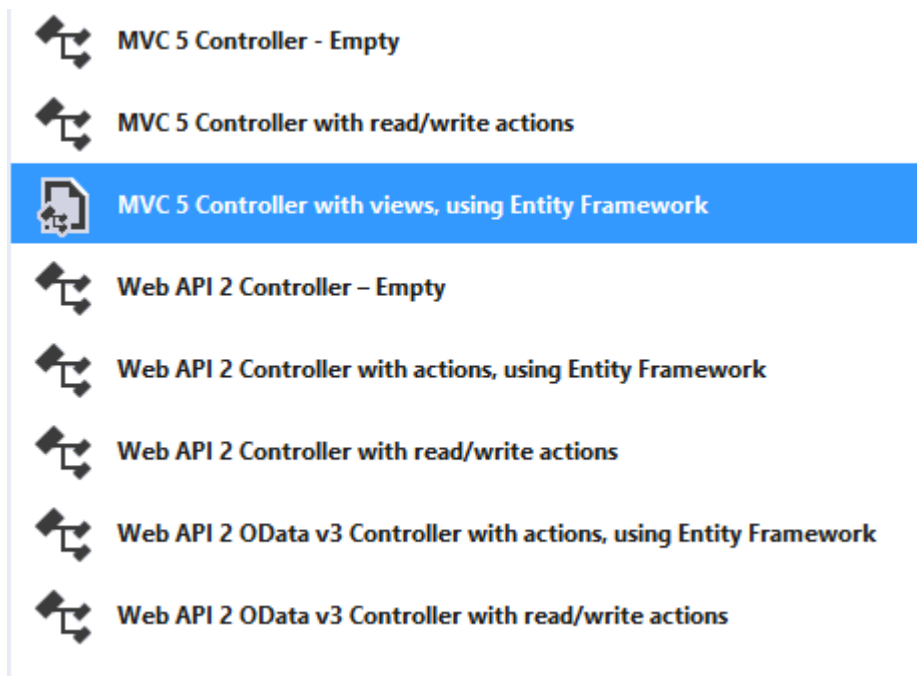
View -> Solution Explorer -> 在 **Models** 資料夾--> 檢視 NorthwindModel.edmx



10. Controllers 資料夾 -> Add -> Controller...

MVC5 Controller with views , using Entity Framework

按 Add

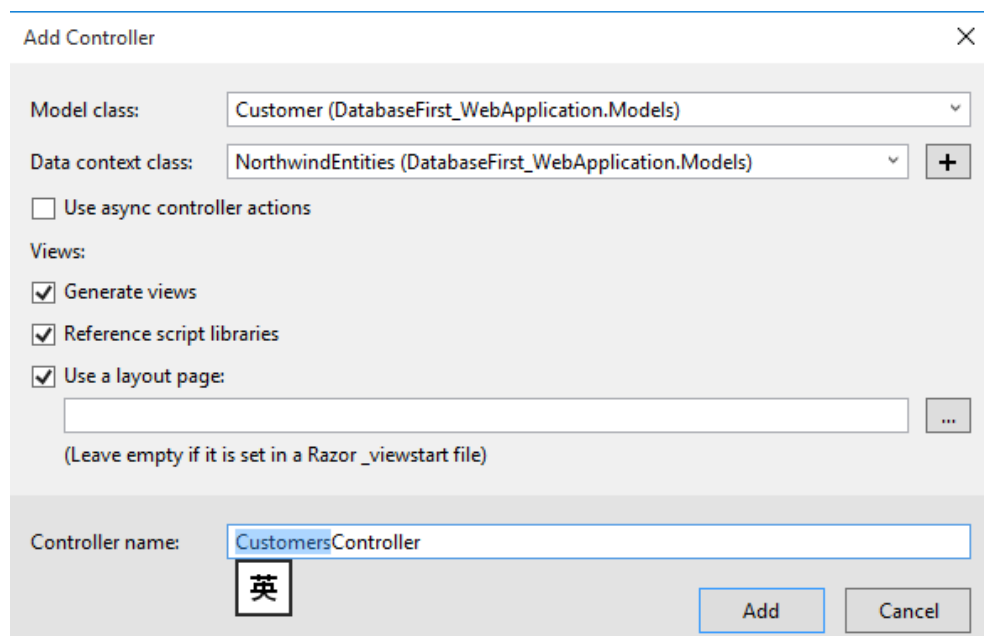


10. Model class: **Customer (DatabaseFirst_WebApplication.Models)**

Data context class: **NorthwindEntities (DatabaseFirst_WebApplication.Models)**

Controller Name: **CustomersController**

按 Add



11. View -> Solution Explorer -> 在 **Controllers** 資料夾--> 檢視 **CustomersController.cs**

會自動產生 **Index, Details, Create, Edit, Delete** 等 5 個 CRUD Actions

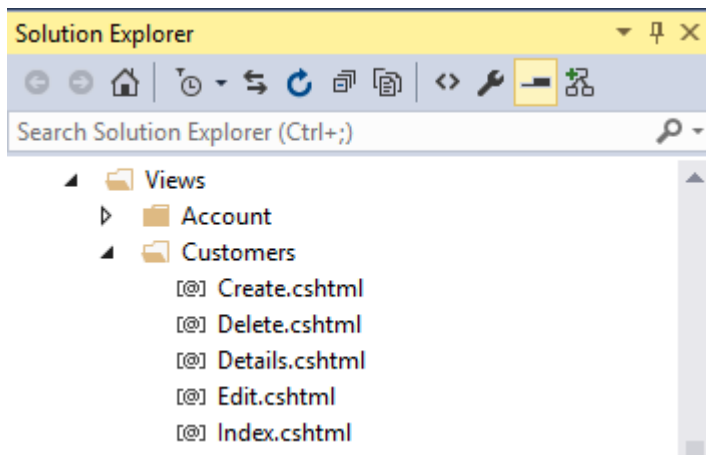
```

public ActionResult Index()...
0 references
public ActionResult Details(string id)...
0 references
public ActionResult Create()...
[HttpPost]
[ValidateAntiForgeryToken]
0 references
public ActionResult Create([Bind(Include = "CustomerID,C
0 references
public ActionResult Edit(string id)...
[HttpPost]
[ValidateAntiForgeryToken]
0 references
public ActionResult Edit([Bind(Include = "CustomerID,Com
0 references
public ActionResult Delete(string id)...
[HttpPost, ActionName("Delete")]
[ValidateAntiForgeryToken]
0 references
public ActionResult DeleteConfirmed(string id)...

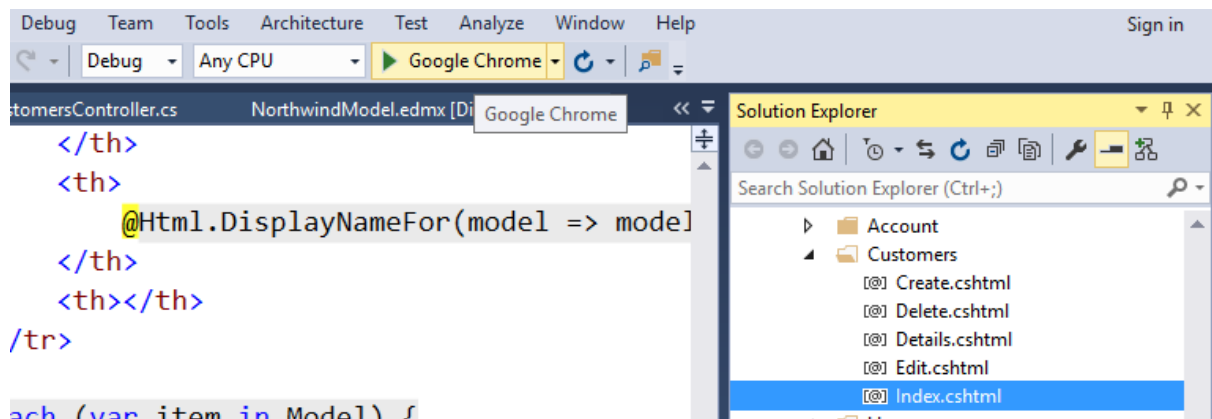
```

12.View -> Solution Explorer -> 在 **Views** 資料夾--> 檢視 **Customers** 資料夾

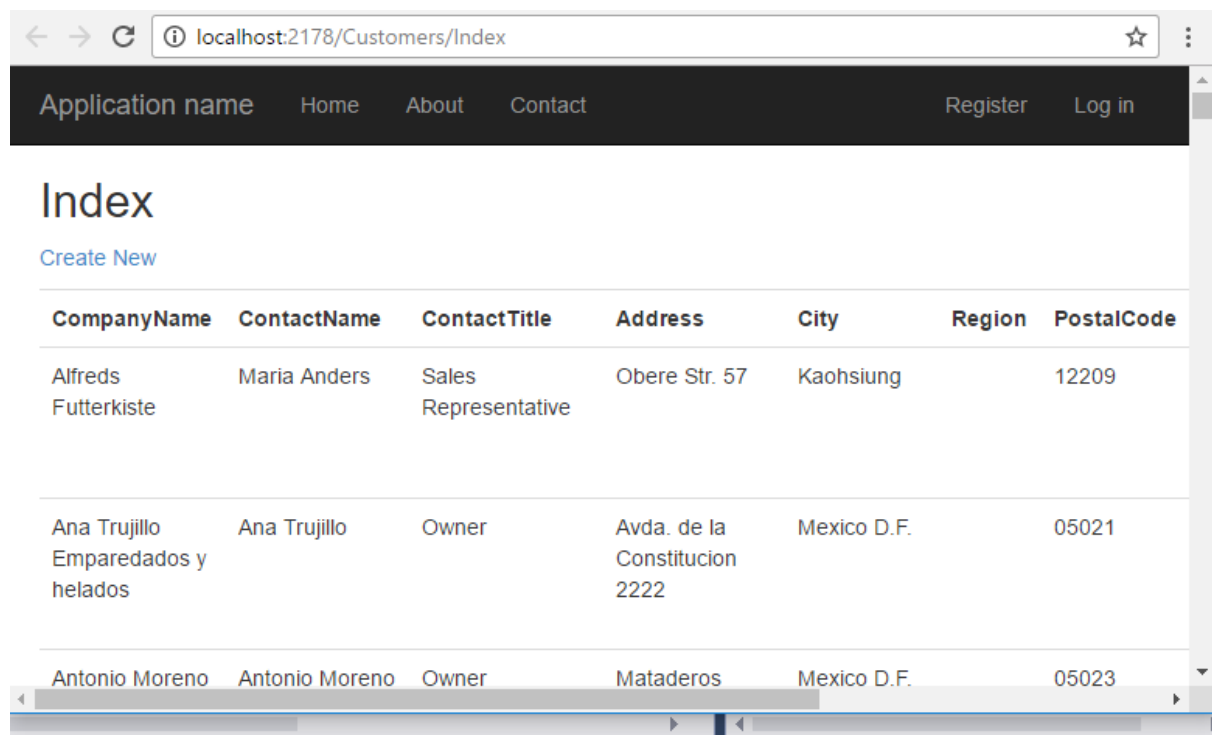
會自動產生 **Index.cshtml**, **Details.cshtml**, **Create.cshtml**, **Edit.cshtml**, **Delete.cshtml**
等 5 個 Views



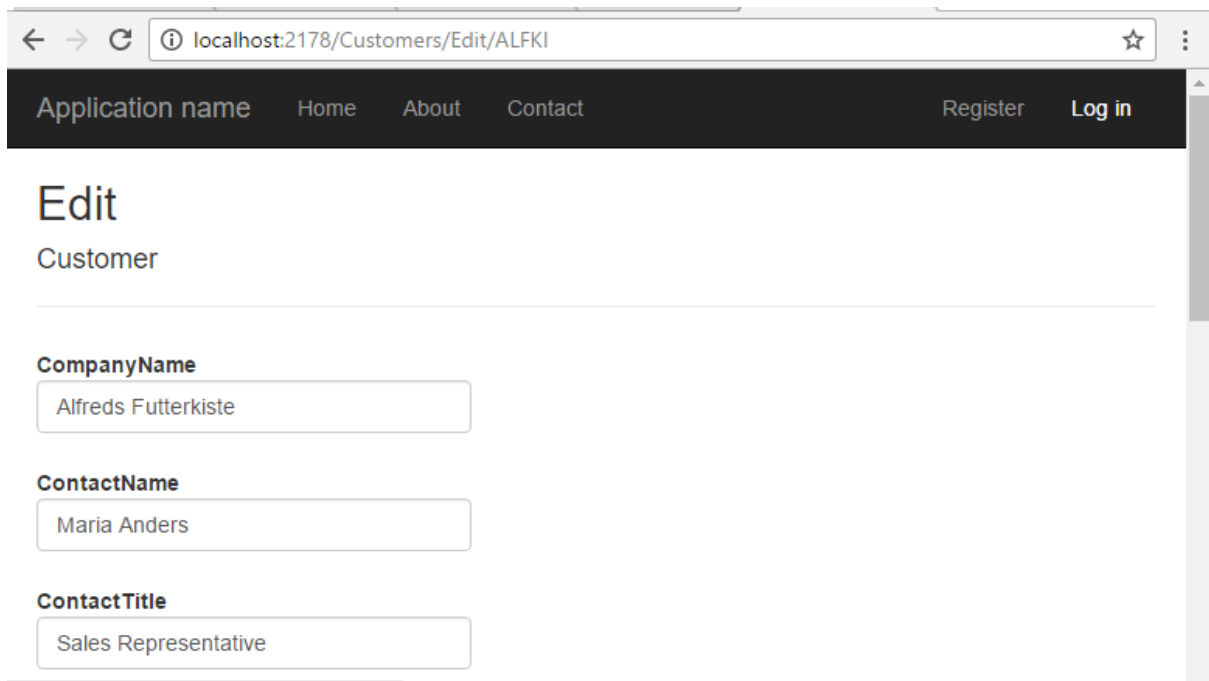
13.點選 **Index.cshtml**, 然後 **Debug** -> **Start Debugging**



14.檢視 URL 路由, 是由 `../<ControllerName>/ <ActionName>` 組合



15.在畫面點選 **Edit** 超連結, 檢視 URL 路由, 是由 `../<ControllerName>/ <ActionName>/<參數值>` 組合



15.在畫面點選 **Edit** 超連結, 檢視 URL 路由, 是由 `../<ControllerName>/<ActionName>/<參數值>` 組合

16.View -> Solution Explorer -> 在 **App_Start** 資料夾--> 檢視 **RouteConfig.cs**

在 **RegisterRoutes** 方法中, 找出路由設定 `routes.MapRoute`

```
1 reference
public static void RegisterRoutes(RouteCollection routes)
{
    routes.IgnoreRoute("{resource}.axd/{*pathInfo}");

    routes.MapRoute(
        name: "Default",
        url: "{controller}/{action}/{id}",
        defaults: new { controller = "Home", action = "Index", id = UrlParameter.Optional }
    );
}
```