# Answer on Question#38765- Programming, C#

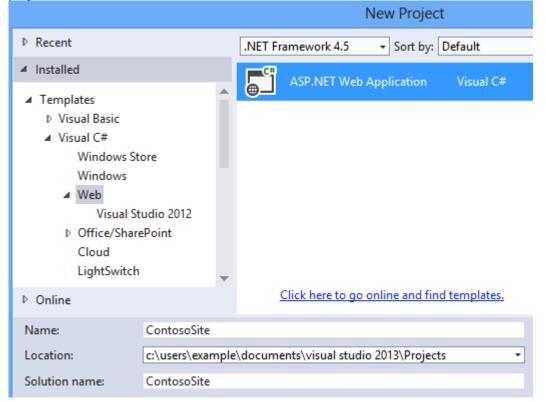
BS Bank Inc wants to add some additional features in the application. The company asks FIT technologies for the following additions: [15 Marks]
 ? BS Bank Inc. needs to add modules to provide the following services:

 a. Online share and mutual funds trading
 b. General insurance for health, car, and travel [10 Marks]
 BS Bank Inc. should be able to provide other services like bill payments, mobile recharge. [5 Marks] [Use static variables and static function to implement this.]

### Solution.

# Create a new ASP.NET Web Application

Create a new project in Visual Studio, and select the **ASP.NET Web Application** template. Name the project**ContosoSite**.



#### Click OK.

In the New ASP.NET Project window, select the MVC template and click Create Project.

New ASP.NET Pro	oject - ContosoSite ?
Select a template:	A project template for creating ASP.NET MVC applications. ASP.NET MVC allows you to build applications using the Model-View-Controller architecture. ASP.NET MVC includes many features that enable fast, test-driven development for creating applications that use the latest standards. Learn more
Add folders and core references for:          Web Forms       MVC       Web API         Add unit tests       Test project name:       ContosoSite.Tests	Change Authentication Authentication: Individual User Accounts
	Create Project Cancel

The project is created with the default files and folders.

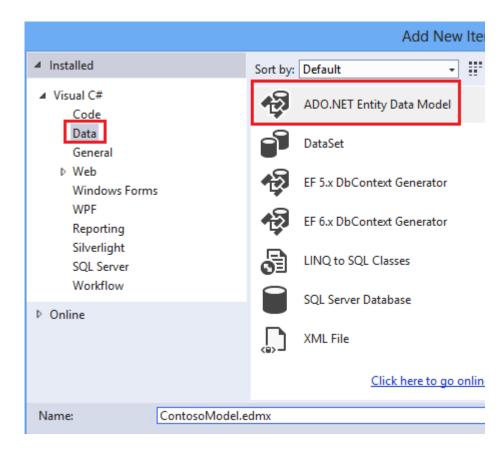
# Generate the models

You will now create Entity Framework models from the database tables. These models are classes that you will use to work with the data. Each model mirrors a table in the database and contains properties that correspond to the columns in the table.

Right-click the Models folder, and select Add and New Item.



In the Add New Item window, select **Data** in the left pane and **ADO.NET Entity Data Model** from the options in the center pane. Name the new model file **ContosoModel.edmx**.



### Click Add.

In the Entity Data Model Wizard, select Generate from database.

	Entity Data Model Wizard	×
	Choose Model Contents	
What shou	ld the model contain?	
	< Previous Next > Finish Cancel	

## Click Next.

Select the data connection you added earlier.

Entity Data Model Wizard				x		
Choose Your Data Conr	nection					
Which data connection should you	application use to	connect to the o	databas	e?		
tomfitz-note3\localdb#7663d4c9.Co	ntosoUniversity.dbo		~	New Co	nnection	
This connection string appears to co connect to the database. Storing sen to include this sensitive data in the c	sitive data in the con					t
No, exclude sensitive data from the sensitive data	om the connection s	tring. I will set it i	in my ap	pplication c	ode.	
<ul> <li>Yes, include the sensitive dat</li> </ul>	a in the connection	string.				
Entity connection string:						
metadata=res://*/Models.ContosoM res://*/Models.ContosoModel.msl;p source=(localdb)\v11.0;initial catalo security=True;MultipleActiveResults	orovider=System.Dat g=ContosoUniversit Sets=True;App=Entit	a.SqlClient;provi y2;integrated			ng="data	~
ContosoUniversityEntities						
	< Previous	Next >	Fir	nish	Cancel	

## Click Next.

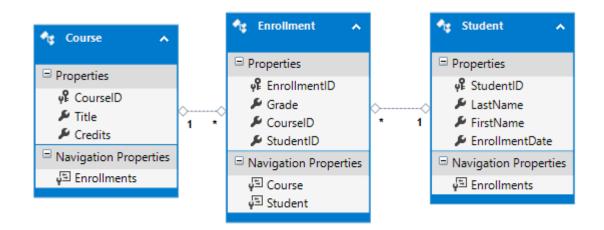
Select **Tables** to generate models for all three tables.

Entity Data Model Wizard	×
Choose Your Database Objects and Settings	
Which database objects do you want to include in your model?	
<ul> <li>✓ Tables</li> <li>✓ ✓ dbo</li> <li>✓ ⊕ Course</li> <li>✓ ⊕ Enrollment</li> <li>✓ ⊕ Student</li> <li>○ Views</li> <li>○ Stored Procedures and Functions</li> </ul>	
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:	
ContosoUniversityModel	
< Previous Next > Finish Ca	ncel

### Click Finish.

If you receive a security warning, select **OK** to continue running the template.

The models are generated from the database tables, and a diagram is displayed that shows the properties and relationships between the tables.



The Models folder now includes many new files related to the models that were generated from the database.

Solution Explorer
ⓒ 이 습 'o - ㄹ Q 리 🗿 🕨 🗕 Z
Search Solution Explorer (Ctrl+;)
<ul> <li>Models</li> <li>C* AccountViewModels.cs</li> </ul>
🔺 🐗 ContosoModel.edmx
<ul> <li>ContosoModel.Context.tt</li> <li>ContosoModel.Context.cs</li> <li>ContosoModel.Designer.cs</li> <li>ContosoModel.edmx.diagram</li> <li>ContosoModel.tt</li> <li>ContosoModel.cs</li> </ul>
<ul> <li>Course.cs</li> <li>Therefore Enrollment.cs</li> <li>Therefore Student.cs</li> <li>C# IdentityModels.cs</li> </ul>

The **ContosoModel.Context.cs** file contains a class that derives from the **DbContext** class, and provides a property for each model class that corresponds to a database table. The **Course.cs**, **Enrollment.cs**, and **Student.cs** files contain the model classes that represent the databases tables. You will use both the context class and the model classes when working with scaffolding.

Before proceeding with this tutorial, build the project. In the next section, you will generate code based on the data models, but that section will not work if the project has not been built.