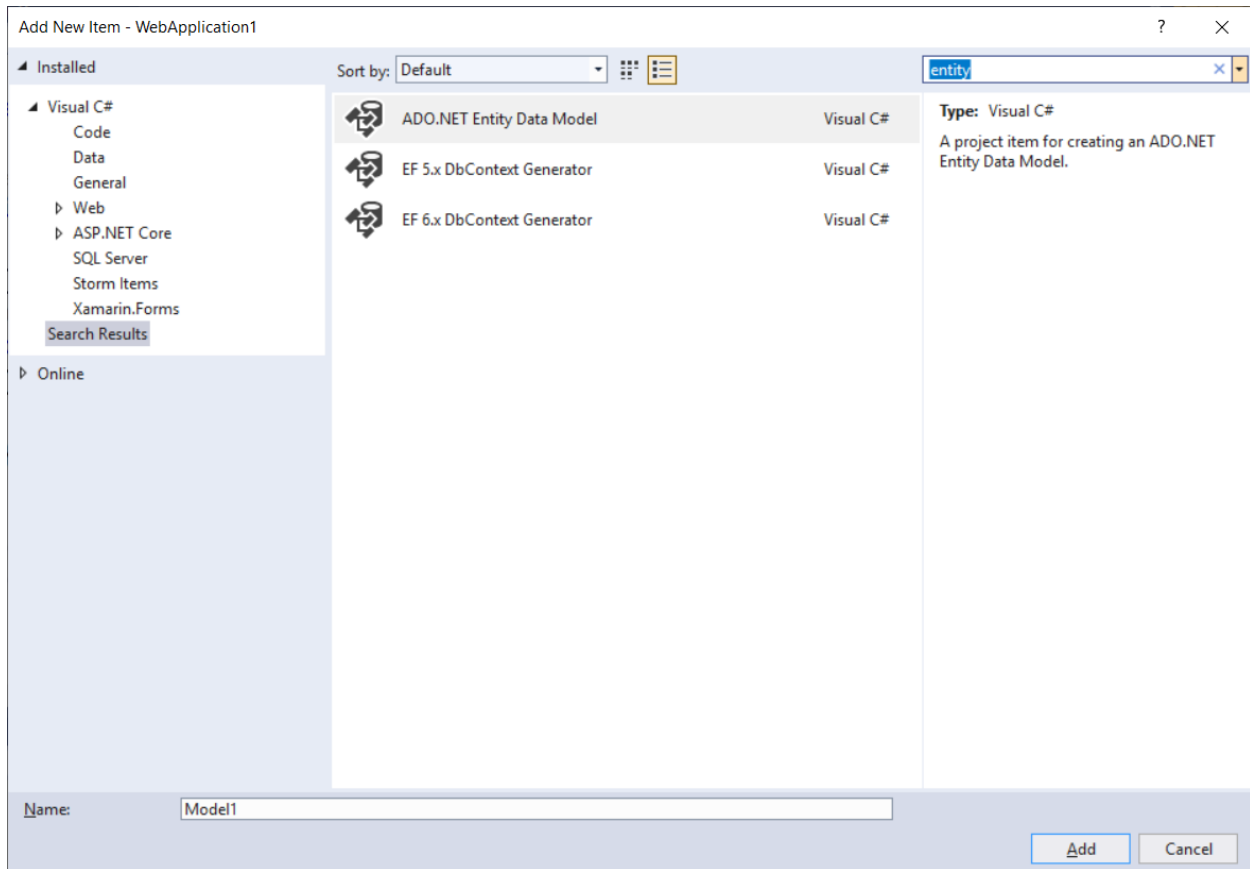
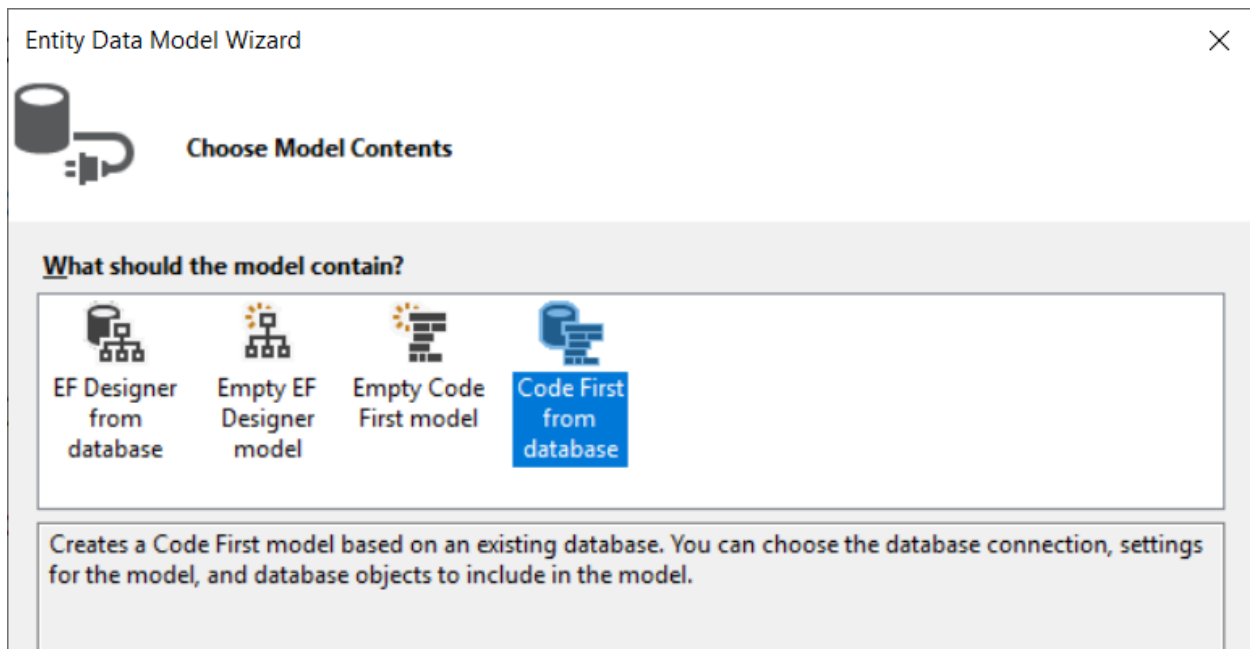


# Sử dụng Entity Framework cho WEB API:

Tại thư mục **Models**, thêm class mới, gõ **Entity** trên thanh tìm kiếm:



Chọn mục **ADO.NET Entity Data Model**



# Connection Properties

? X

Enter information to connect to the selected data source or click "Change" to choose a different data source and/or provider.

Data source:

Microsoft SQL Server (SqlClient)

Change...

Server name:

MAY321\SQLEXPRESS

Refresh

Log on to the server

Authentication: SQL Server Authentication

User name: abc

Password: ●●●●●●

☐ Save my password

Connect to a database

☒ Select or enter a database name:

truonghocdb

☐ Attach a database file:

Browse...

Logical name:

Advanced...

Test Connection

OK

Cancel



## Choose Your Data Connection

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

may321\sqlexpress.truonghocdb.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:

data source=MAY321\SQLEXPRESS;initial catalog=truonghocdb;user  
id=abc;password=\*\*\*\*\*;MultipleActiveResultSets=True;App=EntityFramework

☒ Save connection settings in Web.Config as:

Truonghoc


< Previous

Next >


Finish


Cancel


Entity Data Model Wizard ×


 Choose Your Database Objects and Settings


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

✓  **Tables**

✓  **dbo**

✓  lophoc

✓  sinhvien

 Views

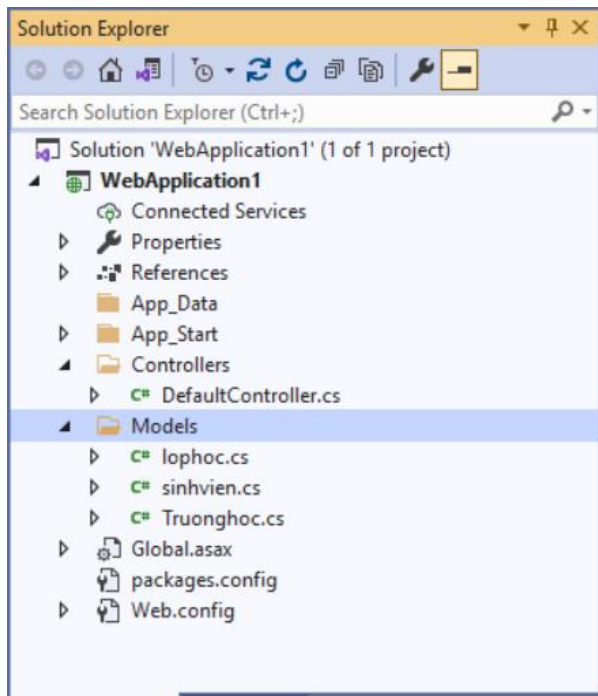
☒ Pluralize or singularize generated object names

☒ Include foreign key columns in the model

☐ Import selected stored procedures and functions into the entity model

< Previous Next > **Finish** Cancel

Khi click Finish, xuất hiện các file .cs ở cửa sổ.



Ấn **Ctrl + Shift + B** để dịch project

Thêm **code** như hình:

```
public class DefaultController : ApiController
{
    [HttpGet]
    public string hello()
    {
        return "Hello from the first web api using database !";
    }

    TruongHoc db = new TruongHoc();

    //Danh sach sinh vien
    [HttpGet]
    [Route("api/default/listSV")]
    public List<sinhvien> listAll()
    {
        return db.sinhviens.ToList();
    }
}
```

Thêm code vào file **Global.asax.cs**

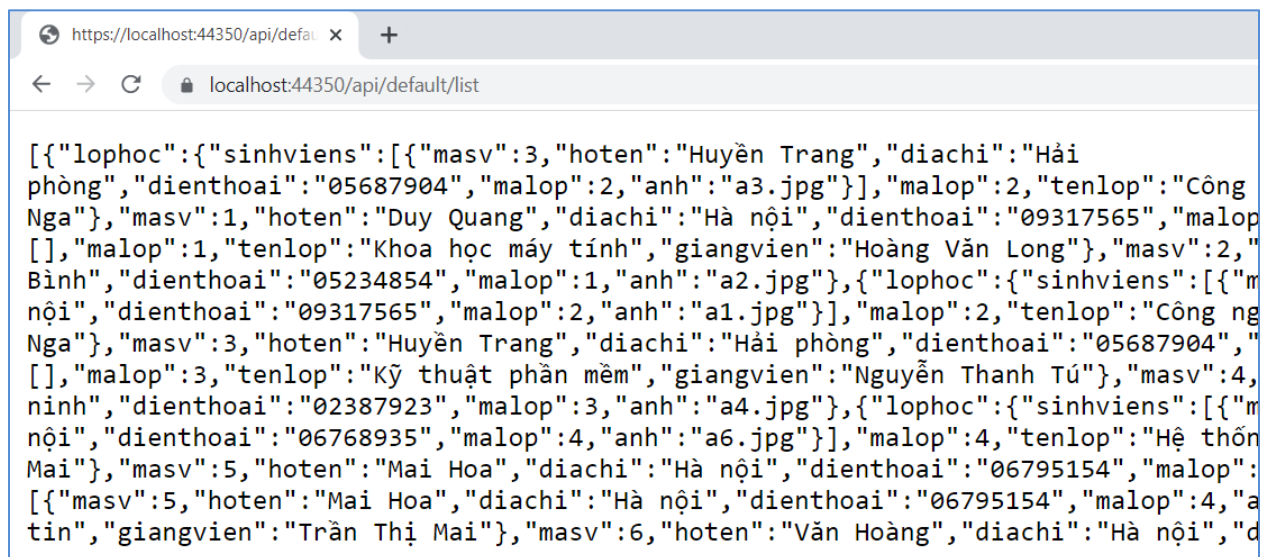
```
GlobalConfiguration.Configuration.Formatters.JsonFormatter.SerializerSettings
.ReferenceLoopHandling = Newtonsoft.Json.ReferenceLoopHandling.Ignore;
GlobalConfiguration.Configuration.Formatters.Remove(GlobalConfiguration.Confi
guration.Formatters.XmlFormatter);
```

```

namespace WebApplication1
{
    0 references
    public class WebApiApplication : System.Web.HttpApplication
    {
        0 references
        protected void Application_Start()
        {
            GlobalConfiguration.Configure(WebApiConfig.Register);
            GlobalConfiguration.Configuration.Formatters.JsonFormatter.SerializerSettings
            .ReferenceLoopHandling = Newtonsoft.Json.ReferenceLoopHandling.Ignore;
            GlobalConfiguration.Configuration.Formatters
            .Remove(GlobalConfiguration.Configuration.Formatters.XmlFormatter);
        }
    }
}

```

Test → ok



```

[{"lophoc":{"sinhvien":[{"masv":3,"hoten":"Huỳnh Trang","diachi":"Hải phòng","dienthoai":"05687904","malop":2,"anh":"a3.jpg"}],"malop":2,"tenlop":"Công Nga"}, {"masv":1,"hoten":"Duy Quang","diachi":"Hà nội","dienthoai":"09317565","malop":1,"malop":1,"tenlop":"Khoa học máy tính","giangvien":"Hoàng Văn Long"}, {"masv":2,"Bình","dienthoai":"05234854","malop":1,"anh":"a2.jpg"}, {"lophoc":{"sinhvien":[{"m nội","dienthoai":"09317565","malop":2,"anh":"a1.jpg"}],"malop":2,"tenlop":"Công ng Nga"}, {"masv":3,"hoten":"Huỳnh Trang","diachi":"Hải phòng","dienthoai":"05687904"}, [{"malop":3,"tenlop":"Kỹ thuật phần mềm","giangvien":"Nguyễn Thanh Tú"}, {"masv":4, nình","dienthoai":"02387923","malop":3,"anh":"a4.jpg"}, {"lophoc":{"sinhvien":[{"m nội","dienthoai":"06768935","malop":4,"anh":"a6.jpg"}],"malop":4,"tenlop":"Hệ thốn Mai"}, {"masv":5,"hoten":"Mai Hoa","diachi":"Hà nội","dienthoai":"06795154","malop": [{"masv":5,"hoten":"Mai Hoa","diachi":"Hà nội","dienthoai":"06795154","malop":4,"a tin","giangvien":"Trần Thị Mai"}, {"masv":6,"hoten":"Văn Hoàng","diachi":"Hà nội","d

```

Mã viết trong Entity Framework có chút khác biệt với Linq to SQL.

Cụ thể mã sử dụng Entity Framework như sau:

```

public class DefaultController : ApiController
{
    [HttpGet]
    public string hello()
    {
        return "Hello from default web api !";
    }

    TruongHoc db = new TruongHoc();

    //Danh sach sinh vien
    [HttpGet]
    [Route("api/default/listSV")]
    public List<sinhvien> listAll()

```

```

{
    return db.sinhviens.ToList();
}

//Danh sach sinh vien theo lop
[HttpGet]
[Route("api/default/dstheolop")]
public List<sinhvien> DSSVTheoLop(int maLop)
{
    return db.sinhviens.Where(sv => sv.malop == maLop).ToList();
}

//Tim sinh vien
[HttpGet]
[Route("api/default/timsv")]
public sinhvien timSV(int maSV)
{
    return db.sinhviens.SingleOrDefault(sv => sv.masv == maSV);
}

//Them sinh vien
[HttpPost]
[Route("api/default/themsv")]
public bool themSV([FromBody] sinhvien s)
{
    try
    {
        db.sinhviens.Add(s);
        db.SaveChanges();
        return true;
    }
    catch (Exception ex)
    {
        Console.WriteLine("Loi o day: " + ex.Message);
        return false;
    }
}

//Sua sinh vien
[HttpPut]
[Route("api/default/suasv")]
public bool suaSV([FromBody] sinhvien s)
{
    try
    {
        sinhvien old = db.sinhviens.SingleOrDefault(sv => sv.masv == s.masv);
        old.hoten = s.hoten;
        old.diachi = s.diachi;
        old.dienthoai = s.dienthoai;
        old.anh = s.anh;
        old.malop = s.malop;
        db.SaveChanges();
        return true;
    }

```

```

    }
    catch (Exception ex)
    {
        Console.WriteLine("Loi o day: " + ex.Message);
        return false;
    }
}

//xoa sinh vien
[HttpDelete]
[Route("api/default/xoasv")]
public bool xoaSV(int maSV)
{
    sinhvien sv = db.sinhviens.SingleOrDefault(x => x.masv == maSV);
    if (sv != null)
    {
        db.sinhviens.Remove(sv);
        db.SaveChanges();
        return true;
    }

    return false;
}

//Danh sach lop
[HttpGet]
[Route("api/default/dslop")]
public List<lophoc> DSLop()
{
    return db.lophocs.ToList();
}

}

```