Day 11 Entity Frame Work

Already explained Previous notes (how to install entity framework and use)

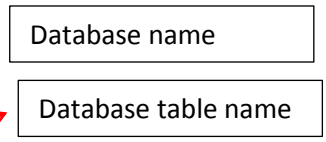
How to create automatically database and tables using Entity Frame work.

Step 1: Create model class (name : Customer.cs)

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;

namespace EFwork.Models
{
    public class Customer
    {
        public int ID { get; set; }
        public String Name { get; set; }
        public String Gender { get; set; }
        public String Address { get; set; }
        public String Email { get; set; }
    }
}
```

Step 2: create CustomerDataContext.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Data.Entity;
namespace EFwork.Models
{
    public class CustomerDataContext:DbContext
    {
        public CustomerDataContext()
            : base("CustomerDBConnection")
        {
        }
        public DbSet<Customer> Customers { get; set; }
    }
}
```



Step 3: web.config file add connection strings.(ctrl+s) automatically created database only.

```
<configuration>
<configSections>
     <section name="entityFramework"
type="System.Data.Entity.Internal.ConfigFile.EntityFrameworkSection, EntityFramework,
Version=6.0.0.0, Culture=neutral, PublicKeyToken=b77a5c561934e089"
requirePermission="false" />
  </configSections>
  <connectionStrings>
    <add name="CustomerDBConnection" connectionString="Data
Source=.\sqlexpress;Integrated Security=SSPI" providerName="System.Data.SqlClient" />
  </connectionStrings>
  <appSettings>
```

Step 4: create a controller with Empty MVC Controllers (mvc 4.0 not support entity framework controller read/write actions)

See

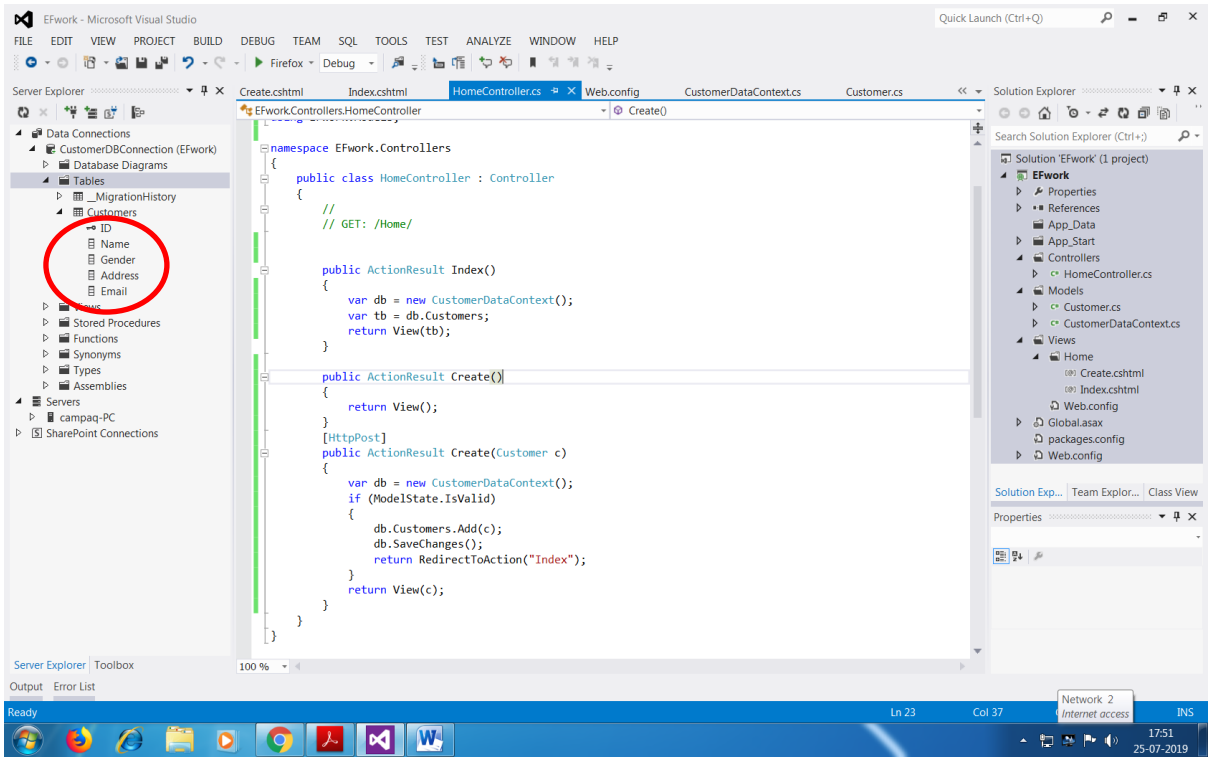
https://stackoverflow.com/questions/19513599/scaffolding-entityframework-6-unable-to-cast-object-of-type-system-data-entity

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.Mvc;
using EFwork.Models;

namespace EFwork.Controllers
{
    public class HomeController : Controller
    {
        //
        // GET: /Home/


        public ActionResult Index()
        {
            var db = new CustomerDataContext();
            var tb = db.Customers;
            return View(tb);
        }

        public ActionResult Create()
        {
            return View();
        }
        [HttpPost]
        public ActionResult Create(Customer c)
        {
            var db = new CustomerDataContext();
            if (ModelState.IsValid)
            {
                db.Customers.Add(c);
                db.SaveChanges();
                return RedirectToAction("Index");
            }
            return View(c);
        }
    }
}
```

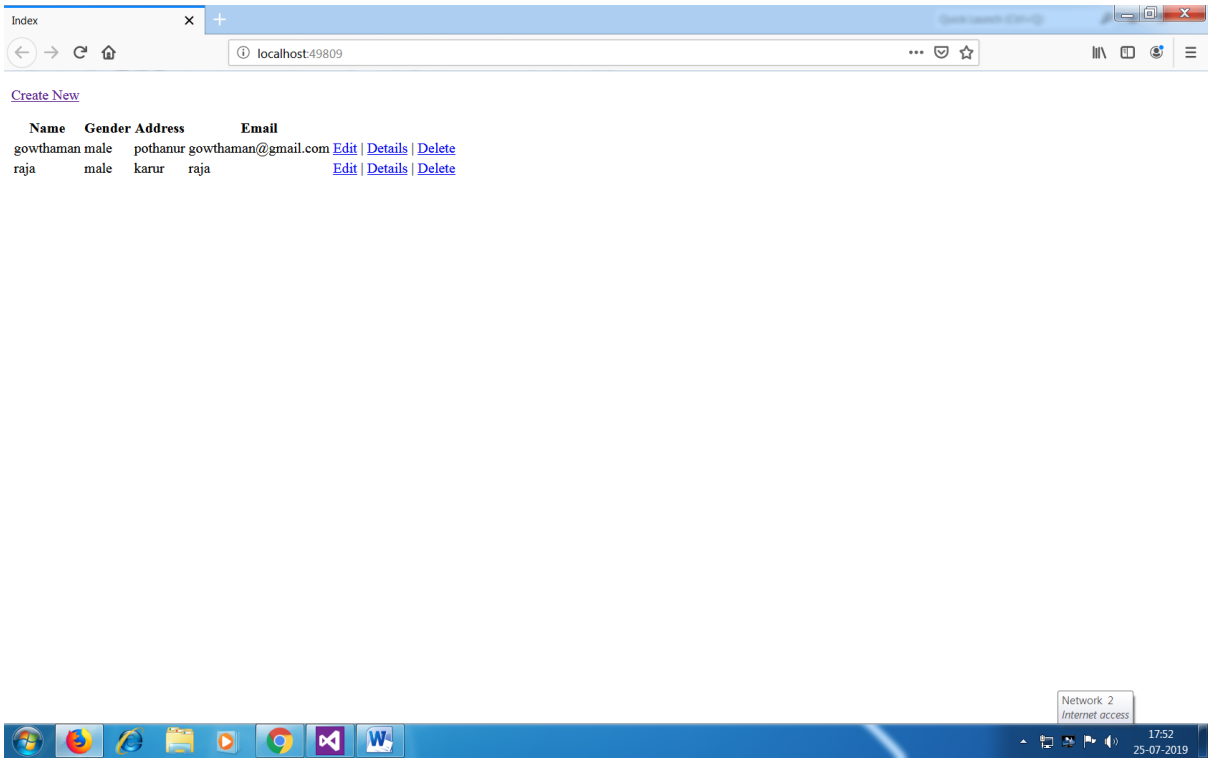
Step 5: create View using scaffolding (automatic view)

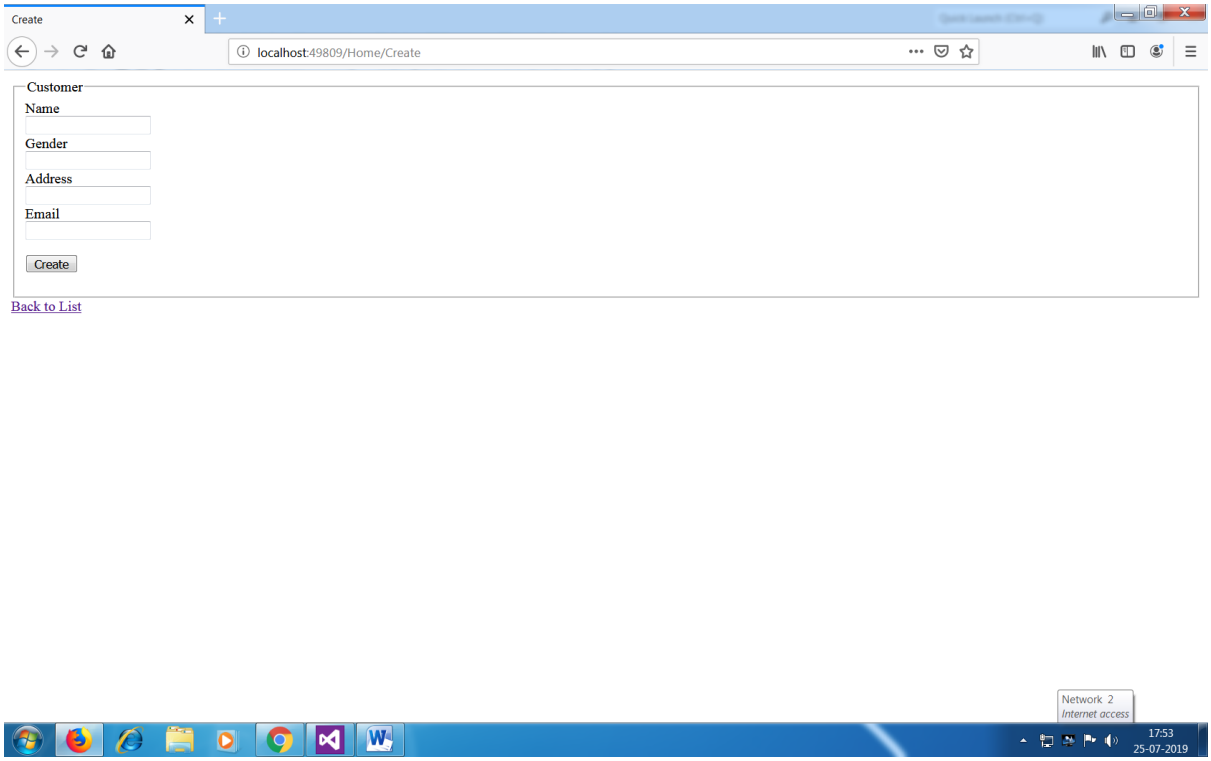
Save and Build : ctrl + shift + b

Run: ctrl + f5 (automatically created database table and values inserted)


EFwork - Microsoft Visual Studio
Quick Launch (Ctrl+Q)
FILE EDIT VIEW PROJECT BUILD DEBUG TEAM SQL TOOLS TEST ANALYZE WINDOW HELP
Firefox Debug
Server Explorer
Data Connections
CustomerDBConnection (EFwork)
Database Diagrams
Tables
_MigrationHistory
Customers
ID
Name
Gender
Address
Email
Stored Procedures
Functions
Synonyms
Types
Assemblies
Servers
campaq-PC
SharePoint Connections
Create.cshtml
Index.cshtml
HomeController.cs
Web.config
CustomerDataContext.cs
Customer.cs
EFwork.Controllers.HomeController
Create()
namespace EFwork.Controllers
{
public class HomeController : Controller
{
//
// GET: /Home/
public ActionResult Index()
{
var db = new CustomerDataContext();
var tb = db.Customers;
return View(tb);
}
public ActionResult Create()
{
return View();
}
[HttpPost]
public ActionResult Create(Customer c)
{
var db = new CustomerDataContext();
if (ModelState.IsValid)
{
db.Customers.Add(c);
db.SaveChanges();
return RedirectToAction("Index");
}
return View(c);
}
}
}
Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'EFwork' (1 project)
EFwork
Properties
References
App_Data
App_Start
Controllers
HomeController.cs
Models
Customer.cs
CustomerDataContext.cs
Views
Home
Create.cshtml
Index.cshtml
Web.config
Global.asax
packages.config
Web.config
Solution Exp... Team Explor... Class View
Properties
Server Explorer Toolbox
Output Error List
100 %
Ready
Ln 23 Col 37 INS
Network 2
Internet access
17:51
25-07-2019

Output:


Index
localhost:49809
Create New
Name Gender Address Email
gowthaman male pothanur gowthaman@gmail.com Edit | Details | Delete
raja male karur raja Edit | Details | Delete
Network 2
Internet access
17:52
25-07-2019


Create
localhost:49809/Home/Create
Customer
Name
Gender
Address
Email
Create
Back to List
Network 2
Internet access
17:53
25-07-2019