Education Project Architecture

In order to run this application you have to perform following task.

1. After opening project you have to make solution to “Enable Nuget Package” option click on solution property otherwise you have to install nuget package using package manager console using following command. Install-Package Unity.Mvc
2. You need to create database using given script in EducationSqlScript.sql after that you need to change web.config file for connectionstring.

Key Points:

* Sample project “Education” is developed using “Database First” methodology with EntityFramework 5.0. in asp.net Mvc4.
* It contains 3 Projects :
  + Education -> Ui & Business Layer
  + Education.Implementation -> Database Layer
  + Education.Tests -> Testing Unit

Education : Ui/Presentation & Business Layer

* IoC and dependency Injection is implemented through Unity Mvc4. Refer -> App\_Start -> BootStrapper.cs or UnityConfiguration.
  + In Global.asax, you can utilize Unity Container in two ways.

Using Bootstraper class, which is defaultly provided with Unity Container or by creating your own class like UnityConfiguration. Both in App\_start folder.

Both are valid implementations of IoC and Dependency Injection.

Where IEducationRepository and EducationRepository is registered.

For deep level of IoC implementation takes a service level and its interface intergration, which is not done here. But its easily implementable for varied services.

* Infrastructure -> BaseController which is base for all the controllers created for ClassMst, Student and Professor. This gives us a top level control over all the controllers and access the common features for all controllers at one place, this saves development time, better accessibility and redundancy of code.
* We have created Controllers, Views using razor for ClassMst, Student and Professor for Insert, Update, Delete and Display .

Education.Implementation -> Database Layer:

Key Points :

* Sql Server Database -> Education
* EntityFramework and Repository Pattern.
* IEducationRepository is the Interface created for Edcuation.
* EducationRepostiory is the repository that implements this interface and contains

the DataContext class of Edmx File by EducationEntities.