Entity Framework Activity

**Code first Approach**

1.Create a Console Application in asp.net Core…

2.Install Nugget Packages

Microsoft.EntityFrameworkCore

Microsoft.EntityframeworkCore.SqlServer

Microsoft.EntityFrameworkCore.Tools

3.Create a folder Model

4.Add class student,Grade

public class Student

{

public int StudentId { get; set; }

public string FirstName { get; set; }

public string LastName { get; set; }

public int GradeId { get; set; }

public Grade Grade { get; set; }

}

public class Grade

{

public Grade()

{

Students = new List<Student>();

}

public int GradeId { get; set; }

public string GradeName { get; set; }

public IList<Student> Students { get; set; }

}

5.Create context class that derives the DbContext class, as shown below in the model folder

public class SchoolContext : DbContext

{

}

turn domain classes into entities by specifying them as DbSet<TEntity> type properties. This will allow Entity Framework to track their changes and perform CRUD operations accordingly.

public class SchoolContext : DbContext

{

public DbSet<Student> Students { get; set; }

public DbSet<Grade> Grades { get; set; }

}

Configure Database Connection

public class SchoolContext : DbContext

{

//entities

public DbSet<Student> Students { get; set; }

public DbSet<Grade> Grades { get; set; }

protected override void OnConfiguring(DbContextOptionsBuilder optionsBuilder)

{

optionsBuilder.UseSqlServer("Server=(localdb)\\mssqllocaldb;Database=SchoolDb;Trusted\_Connection=True;");

}

} Sql Connection

6.add-migration "ModifiedStudentEntity"

7.Update-database "InitialSchoolDB"

8.Add data to the database

**Database First Approach**

1.Create database with tables Student,Grade (Server Name:RAZIYA,Database Name:demo2)

2.Create Models Folder in the project

3.Take the connection string

3.In console Application IN Nugget console

**Scaffold-DbContext "MyConnectionString" Microsoft.EntityFrameworkCore.SqlServer -OutputDir Models**

In models folder The domain and context classes created..Now We can add to database

Example:

In program .cs

using ConsoleApp7.Models;

using System;

namespace ConsoleApp7 // Note: actual namespace depends on the project name.

{

public class Program

{

static void Main(string[] args)

{

Demo2Context db = new Demo2Context();

Student std = new Student();

std.Id = 1;

std.Name = "Razz";

db.Students.Add(std);

db.SaveChanges();

}

}

}

2.Create console application for login and registration and perform CRUD operation…… using 2 Approaches