Entity Framework

* Uses Lazy Loading so can hold huge data too.

Install

* Microsoft.EntityFrameworkCore.SqlServer
* Microsoft.EntityFrameworkCore.Design
* Microsoft.EntityFrameworkCore.Tools
* In Power Shell,
  + dotnet tool install --global dotnet-ef

In Tools -> nugen

A screenshot of a computer program

Description automatically generated

Introduction

* The Entity Framework is an object-relational mapper (ORM).
* It takes the structure of the database and turns it into objects that the .NET Framework can understand.
* These objects are used to interact with the database instead of interacting with the database directly (No ADO.NET).
* It can perform CRUD operations as well as create Tables and Functions on the Database.

(See pic)

Most Important namespaces

* System.Data.Entity
* System.Data.Entity.Infrastructure

DB Context

* A DbContext instance represents a combination of the Unit of Work.
* It can be used to query from a database and
* Group together changes that can be then written back to the store as a unit.
* Properties: Configuration, Database
* Methods: Entry<TEntity>( TEntity), Set<TEntity>(), GetValidationErrors(), SaveChanges(), SaveChangesAsync()

Code first/Forward engineering method

* Create a model
* View
* And then db

Steps

* dotnet ef migrations add InitialCreate
* dotnet ef database update