

Module 10

What to learn

Entity Framework Core
What is Entity Framework Core
DB context Methods
Database First Approach
Include method

Practice Exercise

Practice 1

Do the practice exercise from msdn for given topics

Practice 2

Create a new DbContext class named AppDbContext with a DbSet for the Product entity.
Configure a connection string in AppDbContext for a SQL Server database named ShopDb.
Install the required NuGet packages for using Entity Framework Core in a .NET Core project. Write the installation commands.
Add a new product with the following details to the database: Name = "Phone", Price = 500.
Retrieve all products where the price is greater than 100 using LINQ.
Update the name of the product with Id = 1 to "Smartphone."

Practice 3

Migrations

Enable migrations for a new Entity Framework Core project. Write the command used to initialize migrations.

Create a migration to add a new column Description to the Product entity.

Apply the migration to the database and verify that the new column is created.

Practice 4

Create a one-to-many relationship between Category and Product. Add navigation properties and update the model.

Seed initial data for Category and Product tables in the OnModelCreating method.

Use the Include method to retrieve all products along with their respective categories.

```
public class Category {    public int Id { get; set; }    public string Name { get; set; }    public List<Product> Products { get; set; } }
```

Practice 5

Fluent API

Configure the Product entity to make the Name column required and set a maximum length of 100 using Fluent API.

Create a composite key for an entity named OrderDetail with OrderId and ProductId.

Use Fluent API to specify that the Price column in the Product entity should have a precision of 10 and scale of 2.

Assignment Exercise

Assignment 1

Create A Database design and insert record in the database. Create views In a hospital there are different departments. Patients are treated in these departments by the doctors assigned to patients. Usually each patient is treated by a single doctor, but in rare cases they will have two or three. Healthcare assistants will also attend to patients; every department has many healthcare assistants. Each patient is required to take a variety of drugs during different parts of the day such as morning, afternoon and night.

Assignment 2

After Creating a Database design. Create ORM with database first Approach. Insert a Doctor Update a Doctor Delete a Doctor Find a report of patient assigned to a particular doctor Find a report of medicine list for a particular patient Display summary report of Doctor and patient (use Include method)

Online Reference

<https://www.entityframeworktutorial.net/efcore/entity-framework-core.aspx>

<https://www.entityframeworktutorial.net/efcore/install-entity-framework-core.aspx>

<https://www.entityframeworktutorial.net/efcore/create-model-for-existing-database-in-ef-core.aspx>

.NET Core Web API

WEB API (old)

Authentication And Authorization (WEBAPI)(old)

FullStackDevelopment_With_Dotnet_AND_Angular