Lab 4: Inserting Initial Data into the Database

Code:

// Program.cs

using Microsoft.EntityFrameworkCore;

using System.ComponentModel.DataAnnotations;

namespace MyApp

{

// Model class

public class Product

{

public int Id { get; set; }

[Required]

public string Name { get; set; }

public decimal Price { get; set; }

}

// DbContext class with seed data

public class AppDbContext : DbContext

{

public DbSet<Product> Products { get; set; }

public AppDbContext(DbContextOptions<AppDbContext> options) : base(options) { }

protected override void OnModelCreating(ModelBuilder modelBuilder)

{

base.OnModelCreating(modelBuilder);

modelBuilder.Entity<Product>().HasData(

new Product { Id = 1, Name = "Laptop", Price = 75000 },

new Product { Id = 2, Name = "Phone", Price = 25000 },

new Product { Id = 3, Name = "Tablet", Price = 30000 }

);

}

}

class Program

{

static void Main(string[] args)

{

var builder = WebApplication.CreateBuilder(args);

// Register DbContext with SQLite

builder.Services.AddDbContext<AppDbContext>(options =>

options.UseSqlite("Data Source=products.db"));

var app = builder.Build();

// Apply migrations and seed data

using (var scope = app.Services.CreateScope())

{

var dbContext = scope.ServiceProvider.GetRequiredService<AppDbContext>();

dbContext.Database.Migrate();

}

app.Run();

}

}

}

Output:

