MVC_Core_CollectionCRUD Task1

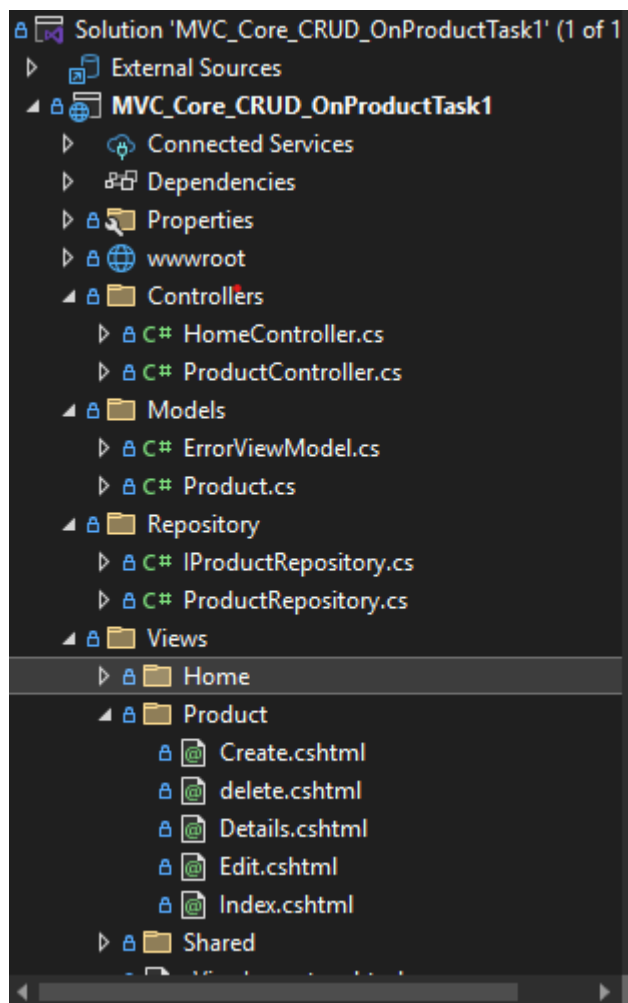Name : Vaibhav Indure
Location : Pune
Batch : Dotnet
Date : 7th October 2025

Github Link:
https://github.com/indurevaibhav9/VaibhavIndure_DotnetTask1_MVC_Core_CollectionCRUD_7thOctober

Folder structure:

Product Model:

```
namespace MVC_Core_CRUD_OnProductTask1.Models
{
    26 references | Vaibhav.Indure, 6 minutes ago | 1 author, 1 change
    public class Product
    {
        20 references | Vaibhav.Indure, 6 minutes ago | 1 author, 1 change
        public int Id { get; set; }
        12 references | Vaibhav.Indure, 6 minutes ago | 1 author, 1 change
        public string Name { get; set; }
        14 references | Vaibhav.Indure, 6 minutes ago | 1 author, 1 change
        public decimal Price { get; set; }
    }
}
```

—---

Repository Layer :

IProductRepository Interface

```csharp
using MVC_Core_CRUD_OnProductTask1.Models;

namespace MVC_Core_CRUD_OnProductTask1.Repository
{
    4 references | Vaibhav.Indure, 7 minutes ago | 1 author, 1 change
    public interface IProductRepository
    {
        2 references | Vaibhav.Indure, 7 minutes ago | 1 author, 1 change
        public List<Product> GetAllProducts();
        4 references | Vaibhav.Indure, 7 minutes ago | 1 author, 1 change
        public Product GetById(int id);
        2 references | Vaibhav.Indure, 7 minutes ago | 1 author, 1 change
        public bool DeleteById(int id);
        2 references | Vaibhav.Indure, 7 minutes ago | 1 author, 1 change
        public void InsertProduct(Product product);
        2 references | Vaibhav.Indure, 7 minutes ago | 1 author, 1 change
        public int UpdateProduct(int id, decimal price);
    }
}
```

ProductRepository Class:

```csharp
using MVC_Core_CRUD_OnProductTask1.Models;

namespace MVC_Core_CRUD_OnProductTask1.Repository
{
    1 reference | Vaibhav.Indure, 9 minutes ago | 1 author, 1 change
    public class ProductRepository : IProductRepository
    {
        private static List<Product> _products = new List<Product>();
        2 references | Vaibhav.Indure, 9 minutes ago | 1 author, 1 change
        public bool DeleteById(int id)
        {
            Product product = _products.FirstOrDefault(p => p.Id == id);
            if (product == null) return false;
            _products.Remove(product);
            return true;
        }

        2 references | Vaibhav.Indure, 9 minutes ago | 1 author, 1 change
        public List<Product> GetAllProducts()
        {
            return _products;
        }

        4 references | Vaibhav.Indure, 8 minutes ago | 1 author, 1 change
        public Product GetById(int id)
        {
            return _products.FirstOrDefault(p => p.Id == id);
        }

        2 references | Vaibhav.Indure, 9 minutes ago | 1 author, 1 change
        public void InsertProduct(Product product)
        {
```

```csharp
public Product GetById(int id)
{
    return _products.FirstOrDefault(p => p.Id == id);
}

2 references | Vaibhav.Indure, 9 minutes ago | 1 author, 1 change
public void InsertProduct(Product product)
{
    _products.Add(product);

}

2 references | Vaibhav.Indure, 13 minutes ago | 1 author, 1 change
public int UpdateProduct(int id, decimal price)
{
    Product product = _products.FirstOrDefault(product => product.Id == id);
    product.Price = price;
    return product.Id;
}
}
```

DI In program.cs

```csharp
// DI of ProductRepository object
builder.Services.AddScoped<IProductRepository, ProductRepository>();
```

Product Controller

```csharp
using Microsoft.AspNetCore.Mvc;
using MVC_Core_CRUD_OnProductTask1.Repository;
using MVC_Core_CRUD_OnProductTask1.Models;

namespace MVC_Core_CRUD_OnProductTask1.Controllers
{
    1 reference | Vaibhav.Indure, 16 minutes ago | 1 author, 1 change
    public class ProductController : Controller
    {
        private IProductRepository _repo;
        0 references | Vaibhav.Indure, 16 minutes ago | 1 author, 1 change
        public ProductController(IProductRepository repo)
        {
            _repo = repo;
        }
        0 references | Vaibhav.Indure, 16 minutes ago | 1 author, 1 change
        public IActionResult Index()
        {
            List<Product> products = _repo.GetAllProducts();
            return View(products);
        }

        0 references | Vaibhav.Indure, 15 minutes ago | 1 author, 1 change
        public IActionResult Details(int id)
        {
            Product product = _repo.GetById(id);
            return View(product);
        }

        0 references | Vaibhav.Indure, 16 minutes ago | 1 author, 1 change
        public IActionResult Create()
        {
            return View();
        }
```

```csharp
[HttpPost]
0 references | Vaibhav.Indure, 17 minutes ago | 1 author, 1 change
public IActionResult Create(Product product)
{
    _repo.InsertProduct(product);
    return RedirectToAction("Index");
}


0 references | Vaibhav.Indure, 17 minutes ago | 1 author, 1 change
public IActionResult Delete(int id)
{
    Product product = _repo.GetById(id);
    return View(product);
}


[HttpPost, ActionName("delete")]
[ValidateAntiForgeryToken]
0 references | Vaibhav.Indure, 17 minutes ago | 1 author, 1 change
public IActionResult DeleteConfirmed(int id)
{
    bool deleted = _repo.DeleteById(id);

    if (deleted)
    {
        TempData["SuccessMessage"] = "Employee deleted successfully!";
    }
    else
    {
        TempData["ErrorMessage"] = "Failed to delete employee.";
    }

    return RedirectToAction("Index");
}
```

```csharp
0 references | Vaibhav.Indure, 17 minutes ago | 1 author, 1 change
public IActionResult Edit(int id)
{
    Product product = _repo.GetById(id);
    return View(product);
}

[HttpPost]
0 references | Vaibhav.Indure, 18 minutes ago | 1 author, 1 change
public IActionResult Edit(Product product)
{
    _repo.UpdateProduct(product.Id, product.Price);
    return RedirectToAction("Index");
}
```

Views code created

Create.cshtml

```cshtml
@model MVC_Core_CRUD_OnProductTask1.Models.Product

@{
    ViewData["Title"] = "Create";
}

<h1>Create</h1>

<h4>Product</h4>
<hr />
<div class="row">
    <div class="col-md-4">
        <form asp-action="Create">
            <div asp-validation-summary="ModelOnly" class="text-danger"></div>
            <div class="form-group">
                <label asp-for="Id" class="control-label"></label>
                <input asp-for="Id" class="form-control" />
                <span asp-validation-for="Id" class="text-danger"></span>
            </div>
            <div class="form-group">
                <label asp-for="Name" class="control-label"></label>
                <input asp-for="Name" class="form-control" />
                <span asp-validation-for="Name" class="text-danger"></span>
            </div>
            <div class="form-group">
                <label asp-for="Price" class="control-label"></label>
                <input asp-for="Price" class="form-control" />
                <span asp-validation-for="Price" class="text-danger"></span>
            </div>
            <div class="form-group">
                <input type="submit" value="Create" class="btn btn-primary" />
            </div>
        </form>
    </div>
</div>
```

Output:
Index page in which all products are listed

Edit Page :

Edit Page browser view showing the URL localhost:7157/Product/Edit/102

MVC_Core_CRUD_OnProductTask1   Home   Privacy

Edit

Product

Id

> 102

Name

> IPhone 17

Price

> 120000.00

Save

Back to List

© 2025 - MVC_Core_CRUD_OnProductTask1 - Privacy

Edited Price :

MVC_Core_CRUD_OnProductTask1   Home   Privacy

Available Products

Create New

Id	Name	Price		
101	HP Laptop	70200.00		Edit | Details | Delete
102	IPhone 17	120000.00		Edit | Details | Delete

Details page

MVC_Core_CRUD_OnProductTask1   Home   Privacy

Details

Product

Id	101
Name	HP Laptop
Price	70200.00

Edit | Back to List

Delete page :

MVC_Core_CRUD_OnProductTask1   Home   Privacy

delete

Are you sure you want to delete this?

Product

Id	102
Name	IPhone 17
Price	120000.00

Delete | Back to List

After deletion :

Available Products

[Create New](#)

Id	Name	Price	
101	HP Laptop	70200.00	Edit | Details | Delete