1. **Web Api CRUD operation**

**EmployeeController**

**using Microsoft.AspNetCore.Mvc;**

**using MyFirstWebAPI.Models;**

**using MyFirstWebAPI.Filters;**

**using System;**

**using System.Collections.Generic;**

**using System.Linq;**

**namespace MyFirstWebAPI.Controllers**

**{**

**[ApiController]**

**[Route("api/[controller]")]**

**[CustomAuthFilter]**

**public class EmployeeController : ControllerBase**

**{**

**private static List<Employee> \_employees = new List<Employee>**

**{**

**new Employee**

**{**

**Id = 1,**

**Name = "John",**

**Salary = 50000,**

**Permanent = true,**

**DateOfBirth = new DateTime(1990, 1, 1),**

**Department = new Department { Id = 1, Name = "IT" },**

**Skills = new List<Skill> {**

**new Skill { Id = 1, Name = "C#" },**

**new Skill { Id = 2, Name = "SQL" }**

**}**

**},**

**new Employee**

**{**

**Id = 2,**

**Name = "Alice",**

**Salary = 60000,**

**Permanent = false,**

**DateOfBirth = new DateTime(1992, 3, 5),**

**Department = new Department { Id = 2, Name = "HR" },**

**Skills = new List<Skill> {**

**new Skill { Id = 3, Name = "Communication" }**

**}**

**}**

**};**

**[HttpPut("{id}")]**

**[ProducesResponseType(typeof(Employee), 200)]**

**[ProducesResponseType(typeof(string), 400)]**

**public ActionResult<Employee> Put(int id, [FromBody] Employee updatedEmployee)**

**{**

**if (id <= 0)**

**{**

**return BadRequest("Invalid employee id");**

**}**

**var employee = \_employees.FirstOrDefault(e => e.Id == id);**

**if (employee == null)**

**{**

**return BadRequest("Invalid employee id");**

**}**

**employee.Name = updatedEmployee.Name;**

**employee.Salary = updatedEmployee.Salary;**

**employee.Permanent = updatedEmployee.Permanent;**

**employee.DateOfBirth = updatedEmployee.DateOfBirth;**

**employee.Department = updatedEmployee.Department;**

**employee.Skills = updatedEmployee.Skills;**

**return Ok(employee);**

**}**

**}**

**}**

**Employee.cs**

**using System;**

**using System.Collections.Generic;**

**namespace MyFirstWebAPI.Models**

**{**

**public class Employee**

**{**

**public int Id { get; set; }**

**public string Name { get; set; }**

**public int Salary { get; set; }**

**public bool Permanent { get; set; }**

**public Department Department { get; set; }**

**public List<Skill> Skills { get; set; }**

**public DateTime DateOfBirth { get; set; }**

**}**

**}**

**Department.cs**

**namespace MyFirstWebAPI.Models**

**{**

**public class Department**

**{**

**public int Id { get; set; }**

**public string Name { get; set; }**

**}**

**}**

**Skill.cs**

**namespace MyFirstWebAPI.Models**

**{**

**public class Skill**

**{**

**public int Id { get; set; }**

**public string Name { get; set; }**

**}**

**}**