**4. WebApi\_Handson**

1. **Web Api CRUD operation**

**EmployeeController.cs**

using Microsoft.AspNetCore.Mvc;

using System;

using System.Collections.Generic;

using System.Linq;

using EmployeeWebApi.Models;

namespace EmployeeWebApi.Controllers

{

[ApiController]

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

public class EmployeeController : ControllerBase

{

private static List<Employee> employeeList = new List<Employee>

{

new Employee

{

Id = 1,

Name = "Varsha",

Salary = 55000,

Permanent = true,

Department = new Department { Id = 101, Name = "Software" },

Skills = new List<Skill>

{

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

new Skill { Id = 2, Name = ".NET Core" }

},

DateOfBirth = new DateTime(2002, 10, 12)

},

new Employee

{

Id = 2,

Name = "John",

Salary = 47000,

Permanent = false,

Department = new Department { Id = 102, Name = "Testing" },

Skills = new List<Skill>

{

new Skill { Id = 3, Name = "Selenium" }

},

DateOfBirth = new DateTime(1998, 4, 25)

}

};

[HttpPut]

[ProducesResponseType(typeof(Employee), 200)]

[ProducesResponseType(400)]

public ActionResult<Employee> Put([FromBody] Employee updatedEmp)

{

if (updatedEmp == null || updatedEmp.Id <= 0)

{

return BadRequest("Invalid employee id");

}

var existing = employeeList.FirstOrDefault(e => e.Id == updatedEmp.Id);

if (existing == null)

{

return BadRequest("Invalid employee id");

}

existing.Name = updatedEmp.Name;

existing.Salary = updatedEmp.Salary;

existing.Permanent = updatedEmp.Permanent;

existing.Department = updatedEmp.Department;

existing.Skills = updatedEmp.Skills;

existing.DateOfBirth = updatedEmp.DateOfBirth;

return Ok(existing);

}

}

}  
**Employee.cs**  
using System;

using System.Collections.Generic;

namespace EmployeeWebApi.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 EmployeeWebApi.Models

{

public class Department

{

public int Id { get; set; }

public string Name { get; set; }

}

}  
**Skill.cs**  
namespace EmployeeWebApi.Models

{

public class Skill

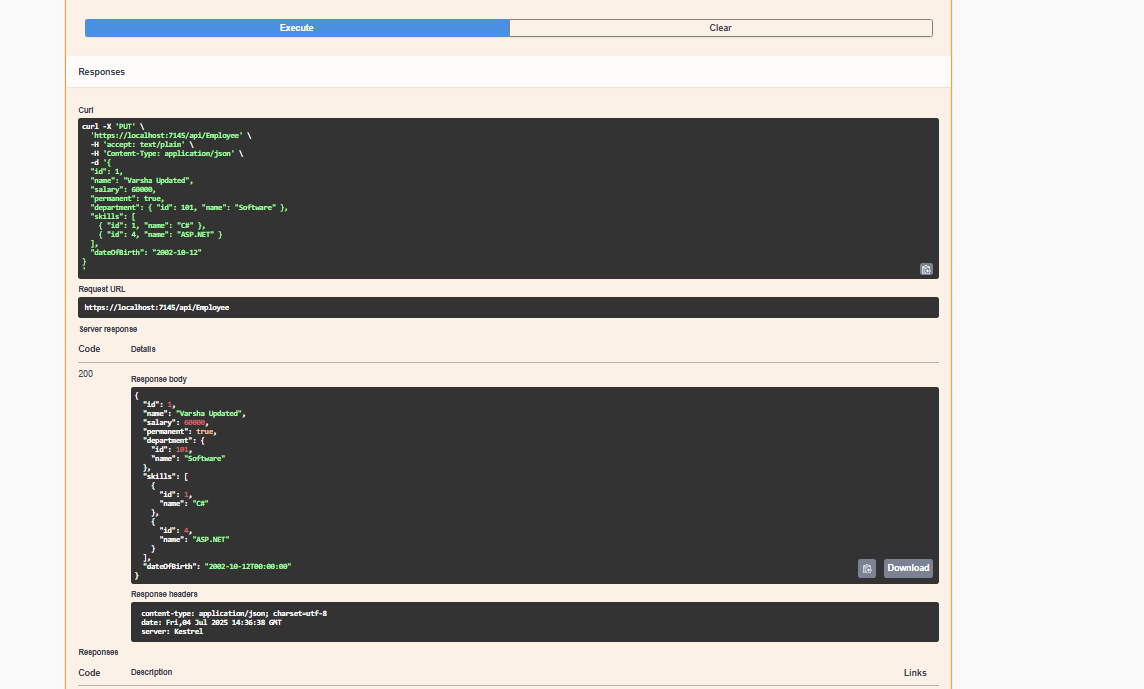
{

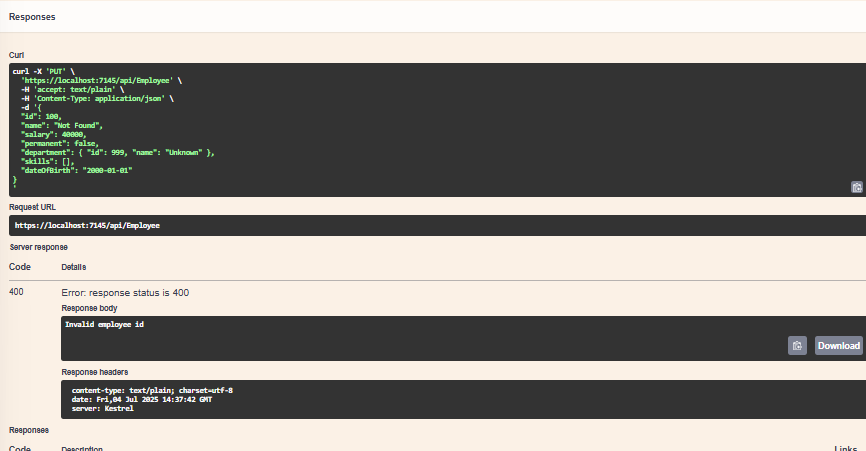
public int Id { get; set; }

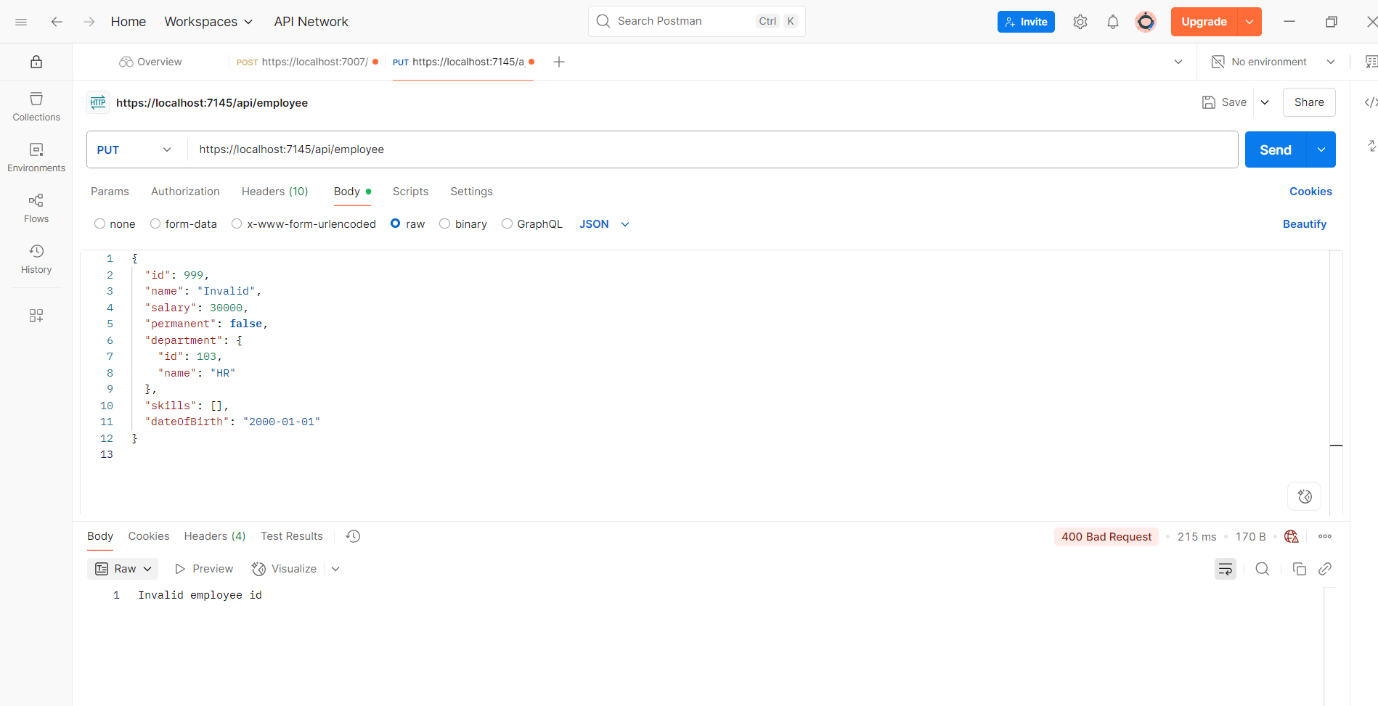
public string Name { get; set; }

}

}

**OUTPUT:  
  
  
  
  
**

****

****