Day 22 Assignment

EMPLOYEE MANAGEMENT APPLICATION

By

VARUN SAI KUMAR CHEGONI

NB Healthcare and Technology

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Topics

Project: Employee Management Application.

Project Employee Management Application

Code :

Data Access Layer:

```
using System;
using System.Collections.Generic;
using System.IO;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace DataAccessLayer
{
    public static class EmpDAL
    {
        public static string FilePath =
"D:\\NB_Training\\Training_Assignments\\DotNET_Assignments\\Day22(22
Feb)\\Employees.txt";
        public static bool AddEmployee(int empId, string empName, int empSalary, int
empAge)
        {
            try
            {
                String textContent = String.Concat(empId, ",", empName, ",",
empSalary, ",", empAge);
                File.AppendAllText(FilePath, textContent + Environment.NewLine);
                return true;
            }
            catch (Exception ex)
            {
                return false;
            }
        }
        public static List<String> GetEmployeeById(int id)
        {
            var allEmployees = File.ReadAllLines(FilePath);
            bool isFound = false;
            List<String> empFound = new List<string>();

            foreach(String employee in allEmployees)
            {
                var empDetails = employee.Split(',');
                if (Convert.ToInt32(empDetails[0]) == id)
                {
                    isFound = true;
                    empFound.Add(employee);
                    break;
                }
            }
            return empFound;
        }
        public static List<String> GetEmployeeByName(string name)
        {
            var allEmployees = File.ReadAllLines(FilePath);
            bool isFound = false;
            List<String> empFound = new List<string>();

            foreach (String employee in allEmployees)
```

```
            {
                var empDetails = employee.Split(',');
                if (empDetails[1].Contains(name))
                {
                    empFound.Add(employee);
                }
            }
            return empFound;
        }
        public static string[] GetAllEmployee()
        {
            var allEmployees = File.ReadAllLines(FilePath);
            return allEmployees;
        }

    }
}
```

Business Layer Library:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

using DataAccessLayer;

namespace BusinessLogicLibrary
{
    public class EmployeeBLL
    {
        public static bool AddEmployee(int empId, string empName, int empSalary, int
empAge)
        {
            var result = EmpDAL.AddEmployee(empId, empName, empSalary, empAge);
            return result;
        }
        public static List<String> GetEmployeeById(int id)
        {
            var result = EmpDAL.GetEmployeeById(id);
            return result;
        }
        public static List<String> GetEmployeeByName(string name)
        {
            var result = EmpDAL.GetEmployeeByName(name);
            return result;
        }
        public static string[] GetAllEmployee()
        {
            var result = EmpDAL.GetAllEmployee();
            return result;
        }
    }
}
```

Empolyee Client Application:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

using BusinessLogicLibrary;

namespace EmpClientApp
{
    /*****************************************************************************
        * Author : Varun Sai Kumar Chegoni.
        * Purpose : simple division program and handle three exceptions discussed in
the class., also add super exception at the last.
       *****************************************************************************/

    internal class Program
    {
        static void Main(string[] args)
        {
            int choice1;
            string choice2;
            do
            {

Console.WriteLine("*****************************************************************
***************");
                Console.WriteLine("Employee Management Application By Varun");
                Console.WriteLine("=======================================");

Console.WriteLine("*****************************************************************
***************");
                Console.WriteLine("1. Add Employee: ");
                Console.WriteLine("2. Search Employee by ID: ");
                Console.WriteLine("3. Search Employee by Name: ");
                Console.WriteLine("4. Display All Employee: ");
                Console.WriteLine("Enter your Choice: ");
                choice1 = Convert.ToInt32(Console.ReadLine());
                switch (choice1)
                {
                    case 1:
                        AddEmployee();
                        break;
                    case 2:
                        SearchEmployeeById();
                        break;
                    case 3:
                        SearchEmployeeByName();
                        break;
                    case 4:
                        DisplayAllEmployees();
                        break;
                    default:
                        Console.WriteLine("Invalid Option");
                        break;
                }
                Console.WriteLine("Do you Wish to Continue (y/n): ");
                choice2 = Console.ReadLine();
            }
            while (choice2.Equals("y"));
        }
        public static void AddEmployee()
```

```
        {
            int id, salary, age;
            string name;
            Console.WriteLine("Enter Employee ID: ");
            id = Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("Enter Employee Name: ");
            name = Console.ReadLine();
            Console.WriteLine("Enter Employee Salary: ");
            salary = Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("Enter Employee Age: ");
            age = Convert.ToInt32(Console.ReadLine());

            // Calling BLL Method
            var result = EmployeeBLL.AddEmployee(id, name, salary, age);
            if(result)
                Console.WriteLine("Employee Details has been Saved Successfully");
            else
                Console.WriteLine("Some Error Occured");
        }
        public static void SearchEmployeeById()
        {
            int id;
            Console.WriteLine("Enter Employee ID: ");
            id = Convert.ToInt32(Console.ReadLine());
            var result = EmployeeBLL.GetEmployeeById(id);
            if(result.Count == 0)
                Console.WriteLine("No Records Found");
            else
            {
                result.ForEach(x => Console.WriteLine(x));
            }
        }
        public static void SearchEmployeeByName()
        {
            string name;
            Console.WriteLine("Enter Employee Name: ");
            name = Console.ReadLine();
            var result = EmployeeBLL.GetEmployeeByName(name);
            if (result.Count == 0)
                Console.WriteLine("No Records Found");
            else
            {
                result.ForEach(x => Console.WriteLine(x));
            }
        }
        public static void DisplayAllEmployees()
        {
            var result = EmployeeBLL.GetAllEmployee();
            result.ToList().ForEach(x => Console.WriteLine(x));
        }
    }
}
```

Output :

```
D:\NB_Training\Training_Assignments\DotNET_Assignments\Day22(22 Feb)\EmpManagementApp\EmpClientApp\bin\Debug\EmpClientApp.exe
********************************************************************************
Employee Management Application By Varun
=======================================
********************************************************************************
1. Add Employee:
2. Search Employee by ID:
3. Search Employee by Name:
4. Display All Employee:
Enter your Choice:
1
Enter Employee ID:
120
Enter Employee Name:
Ram
Enter Employee Salary:
40000
Enter Employee Age:
32
Employee Details has been Saved Successfully
```

```
Do you Wish to Continue (y/n):
y
********************************************************************************
Employee Management Application By Varun
=======================================
********************************************************************************
1. Add Employee:
2. Search Employee by ID:
3. Search Employee by Name:
4. Display All Employee:
Enter your Choice:
2
Enter Employee ID:
124
124,Varun,35000,22
```

```
Do you Wish to Continue (y/n):
y
********************************************************************************
Employee Management Application By Varun
=======================================
********************************************************************************
1. Add Employee:
2. Search Employee by ID:
3. Search Employee by Name:
4. Display All Employee:
Enter your Choice:
3
Enter Employee Name:
Vikas
125,Vikas,33000,26
Do you Wish to Continue (y/n):
```

```
Do you Wish to Continue (y/n):
y
********************************************************************************
Employee Management Application By Varun
========================================
********************************************************************************
1. Add Employee:
2. Search Employee by ID:
3. Search Employee by Name:
4. Display All Employee:
Enter your Choice:
4
124,Varun,35000,22
125,Vikas,33000,26
130,Tharun,30000,23
128,Kiran,25000,25
120,Ram,40000,32
Do you Wish to Continue (y/n):
```

```
Do you Wish to Continue (y/n):
y
********************************************************************************
Employee Management Application By Varun
========================================
********************************************************************************
1. Add Employee:
2. Search Employee by ID:
3. Search Employee by Name:
4. Display All Employee:
Enter your Choice:
3
Enter Employee Name:
V
124,Varun,35000,22
125,Vikas,33000,26
Do you Wish to Continue (y/n):
```