

DAY22 C# FINAL PROJECT
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Final Project on Employee Management with Business Logic Layer and Data Access Layer

Data Access Layer(DAL):

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

namespace DataAccessLayer
{
    public static class EmployeeDAL
    {
        public static string filepath = "C:\\ManoharFinalProject\\Employee.txt";

        public static bool AddEmployee(int empid,string empname,int empsalary,int empage)
        {
            //write a code to append data
            try
            {
                string textcontent = string.Concat(empid, ",", empname, ",", empsalary, ",", empage, ",");
                File.AppendAllText(filepath, textcontent + Environment.NewLine);
                return true;
            }
            catch(Exception ex)
            {
                return false;
            }
        }
        /// <summary>
        /// This method is used for search ID
        /// </summary>
        /// <param name="id"></param>
        /// <returns></returns>
        public static List<string> GetEmpById(int id)
        {
            var allEmployees = File.ReadAllLines(filepath);
            bool isFound = false;
```

```

List<string> employeesFound = new List<string>();
foreach(string employees in allEmployees)
{
    var employeesDetails = employees.Split(',');
    if (Convert.ToInt32(employeesDetails[0]) == id)
    {
        isFound = true;
        employeesFound.Add(employees);
        break;
    }
}
return employeesFound;
}
/// <summary>
/// This method is used for search by name
/// </summary>
/// <param name="name"></param>
/// <returns></returns>
public static List<string> GetEmpByName(string name)
{
    var allEmployees = File.ReadAllLines(filepath);
    bool isFound = false;
    List<string> employeesFound = new List<string>();
    foreach (string employees in allEmployees)
    {
        var employeesDetails = employees.Split(',');
        if ((employeesDetails[1]).Contains(name))
        {
            employeesFound.Add(employees);
            break;
        }
    }
    return employeesFound;
}
/// <summary>
/// This method is used to DisplayAllEmployees
/// </summary>
/// <returns></returns>
public static string[] DisplayAllEmployees()
{
    var allEmployees = File.ReadAllLines(filepath);
    return allEmployees;
}
}
}

```

Business Logic Layer:

```
using System;
```

```

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

namespace BussinessLogicLibrary
{
    public static class EmployeesBLL
    {
        public static bool AddEmployee(int empId,string empname,int empsalary,int empage)
        {
            //To do
            var result = EmployeeDAL.AddEmployee(empId, empname, empsalary, empage);
            return result;
        }
        public static List<string> GetEmpById(int empId)
        {
            var result = EmployeeDAL.GetEmpById(empId);
            return result;
        }
        public static List<string> GetEmpByName(string empname)
        {
            var result = EmployeeDAL.GetEmpByName(empname);
            return result;
        }
        public static string [] DisplayAllEmployees()
        {
            var result = EmployeeDAL.DisplayAllEmployees();
            return result;
        }
    }
}

```

MyClientApp(Console Application):

```

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

namespace MyClientApp
{
    public static class Program
    {
        public static void AddEmployee()
        {

```

```

//user input
int empId, empsalary, empage;
string empname;
Console.WriteLine("Enter empId:");
empId = Convert.ToInt32(Console.ReadLine());
Console.WriteLine("Enter Employee Name:");
empname = Console.ReadLine();
Console.WriteLine("Enter Employee salary:");
empsalary = Convert.ToInt32(Console.ReadLine());
Console.WriteLine("Enter Employee age:");
empage = Convert.ToInt32(Console.ReadLine());

//call BLL
var result = EmployeesBLL.AddEmployee(empId, empname, empsalary, empage);
if (result)
    Console.WriteLine("Employee Details saved");
else
    Console.WriteLine("Error occured");
}

public static void GetEmpById()
{
    //user input
    int empId;
    Console.WriteLine("Enter emp Id:");
    empId = Convert.ToInt32(Console.ReadLine());
    //call BLL
    var result = EmployeesBLL.GetEmpById(empId);
    if (result.Count == 0)
        Console.WriteLine("No data found");
    else
        result.ForEach(d => Console.WriteLine(d));
}

public static void GetEmpyName()
{
    //user input
    string empname;
    Console.WriteLine("Enter name");
    empname = Console.ReadLine();

    //call BLL
    var result = EmployeesBLL.GetEmpByName(empname);
    if (result != null)
        result.ForEach(d => Console.WriteLine(d));
    else
        Console.WriteLine("No data Found");
}

public static void DisplayAllEmployee()
{
    var result = EmployeesBLL.DisplayAllEmployees();
    result.ToList().ForEach(d => Console.WriteLine(d));
}

```

```

    }
    static void Main(string[] args)
    {
        int ch;
        string choice;
        do
        {
            Console.WriteLine("Employees Management");
            Console.WriteLine("1.Add Employee");
            Console.WriteLine("2.Search Employee By Id");
            Console.WriteLine("3. search Employee By name");
            Console.WriteLine("4.Display All Employees");
            Console.WriteLine("Enter your choice");
            ch = Convert.ToInt32(Console.ReadLine());
            switch (ch)
            {
                case 1:
                    AddEmployee();
                    break;
                case 2:
                    GetEmpById();
                    break;
                case 3:
                    GetEmpyName();
                    break;
                case 4:
                    DisplayAllEmployee();
                    break;
            }
            Console.WriteLine("Do you want to continue(y/n)");
            choice = Console.ReadLine();

        }
        while (choice.Equals("y"));
    }
}

```

OUTPUT:

D:\NBTRAININGS\DAY22 ASSIGNMENT\ManoharFinalProject\MyClientApp\bin\Debug\MyClientA...

```
Employees Management
1.Add Employee
2.Search Employee By Id
3. search Employee By name
4.Display All Employees
Enter your choice
1
Enter empId:
100
Enter Employee Name:
Manohar
Enter Employee salary:
25000
Enter Employee age:
24
Employee Details saved
Do you want to continue(y/n)
y
Employees Management
1.Add Employee
2.Search Employee By Id
3. search Employee By name
4.Display All Employees
Enter your choice
1
Enter empId:
102
Enter Employee Name:
Ashrith
Enter Employee salary:
23000
Enter Employee age:
22
Employee Details saved
Do you want to continue(y/n)
y
Employees Management
1.Add Employee
2.Search Employee By Id
3. search Employee By name
4.Display All Employees
Enter your choice
1
Enter empId:
103
Enter Employee Name:
Sandeep
Enter Employee salary:
24000
Enter Employee age:
27
Employee Details saved
Do you want to continue(y/n)
y
Employees Management
```

D:\ANBTRAININGS\DAY22 ASSIGNMENT\ManoharFinalProject\MyClientApp\bin\Debug\MyClientApp.exe

```
Enter empId:
104
Enter Employee Name:
Jaswanth
Enter Employee salary:
20000
Enter Employee age:
29
Employee Details saved
Do you want to continue(y/n)
y
Employees Management
1.Add Employee
2.Search Employee By Id
3. search Employee By name
4.Display All Employees
Enter your choice
2
Enter emp Id:
102
102,Ashrith,23000,22,
Do you want to continue(y/n)
y
Employees Management
1.Add Employee
2.Search Employee By Id
3. search Employee By name
4.Display All Employees
Enter your choice
3
Enter name
Manohar
100,Manohar,25000,24,
Do you want to continue(y/n)
y
Employees Management
1.Add Employee
2.Search Employee By Id
3. search Employee By name
4.Display All Employees
Enter your choice
4
100,Manohar,25000,24,
102,Ashrith,23000,22,
103,Sandeep,24000,27,
104,Jaswanth,20000,29,
Do you want to continue(y/n)
y
Employees Management
1.Add Employee
2.Search Employee By Id
3. search Employee By name
4.Display All Employees
Enter your choice
```

Employee.txt - Notepad

```
File Edit Format View Help
100,Manohar,25000,24,
102,Ashrith,23000,22,
103,Sandeep,24000,27,
104,Jaswanth,20000,29,
```

