DAY 22 ASSIGNMENT

FINAL PROJECT(EMPLOYEE MANAGEMENT APPLICATION)

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CREATE PROJECT EMPLOYEE MANAGEMENT APPLICATION

3 Layered architecture using C# project (presentation layer(UI) , Business logic layer(BLL),Data access layer(DAL).

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
    {
        static string filepath = "F:\\EmployeeData\\Employee.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 )
            {
                return false;
            }
        }

        public static List<string> GetEmployeeID(int empId)
        {
            var allEmployees = File.ReadAllLines(filepath);
            bool isFound = false;
            List<string> EmployeeFound = new List<string>();
            {
                foreach (string employee in allEmployees)
                {
                    var empDetails = employee.Split(',');
                    if (Convert.ToInt32(empDetails[0]) == empId)
                    {
                        isFound = true;
                       EmployeeFound.Add(employee);
                        break;
                    }

                }
                return EmployeeFound;
            }
        }
        public static List<string> GetEmployeeName(string empName)
        {
            var allemployees = File.ReadAllLines(filepath);
            List<string> EmployeeFound = new List<string>();

             foreach (string employee in allemployees)
             {
                var empDetails = employee.Split(',');
                if (empDetails[1].Contains(empName))
                {
                    EmployeeFound.Add(employee);
                }
             }
            return EmployeeFound;
        }

        public static string[] GetAllEmployees()
        {
            var allemployees = File.ReadAllLines(filepath);
            return allemployees;
        }

    }

}
```

Business logic layer(BLL)

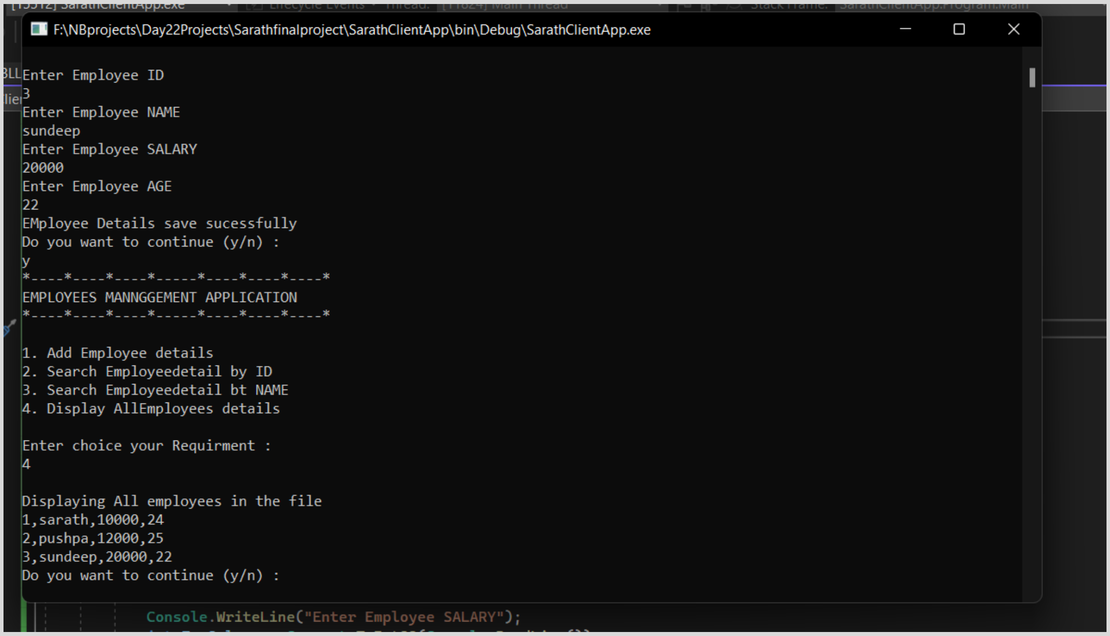
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using DataAccessLayer;

namespace BusinesslogicLayer
{
    public class EmployeeBLL
    {
        public static bool GetEmployeeAdd(int empId,string empName,int empSalary,int
empAge)
        {
            var result = EmployeeDAL.AddEmployee(empId, empName, empSalary, empAge);

            return result;
        }
        public static List<string> GetEmployeeById(int empId)
        {
            var result  = EmployeeDAL.GetEmployeeID(empId);
            return result;
        }
        public static List<string> GetEmployeeByName(string empName)
        {
            var result = EmployeeDAL.GetEmployeeName(empName);
            return result;
        }
        public static string[] GetALlEmployees()
        {
            var result = EmployeeDAL.GetAllEmployees();
            return result;
        }

    }
}
```

CLIENT APP(PRESENTATION LAYER)

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

namespace SarathClientApp
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int choice;
            string ch;
            do
            {
                Console.WriteLine("\n*----*----*----*-----*----*----*----*");
                Console.WriteLine("EMPLOYEES MANAGEMENT APPLICATION");
                Console.WriteLine("*----*----*----*-----*----*----*----*\n");
                Console.WriteLine("1. Add Employee details");
                Console.WriteLine("2. Search Employeedetail by ID");
                Console.WriteLine("3. Search Employeedetail bt NAME");
                Console.WriteLine("4. Display AllEmployees details");
                Console.WriteLine("\nEnter choice your Requirment : ");
                choice = Convert.ToInt32(Console.ReadLine());

                switch (choice)
                {
                    case 1:
                        AddEmployee();
                        break;

                    case 2:
                        SearchEmployeeByID();
                        break;

                    case 3:
                        SearchEmployeeByName();
                        break;
                    case 4:
                        DisplayEmployees();
                        break;

                    default:
                        Console.WriteLine("Invalid Option");
                        break;
                }
                Console.WriteLine("Do you want to continue (y/n) :");
                ch = Console.ReadLine();
            } while (ch.Equals( "y"));
        }
        public static void AddEmployee()
        {
            Console.WriteLine("\nEnter Employee ID");
            int EmpId = Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("Enter Employee NAME");
            string EmpName = Console.ReadLine();

            Console.WriteLine("Enter Employee SALARY");
            int EmpSalary = Convert.ToInt32(Console.ReadLine());

            Console.WriteLine("Enter Employee AGE");
            int EmpAge = Convert.ToInt32(Console.ReadLine());

            var result = EmployeeBLL.GetEmployeeAdd(EmpId, EmpName, EmpSalary, EmpAge);

            if(result)
            {
                Console.WriteLine("EMployee Details save sucessfully");
            }
            else
                Console.WriteLine("Some Error");

        }
        public static void SearchEmployeeByID()
        {
            Console.WriteLine("\nEnter the employee ID :");
            int empId = Convert.ToInt32(Console.ReadLine());

            var result = EmployeeBLL.GetEmployeeById(empId);
            if (result.Count == 0)
            {
                Console.WriteLine("No record exist with this Id");
            }
            else
            {
                result.ForEach(p => Console.WriteLine(p));
            }


        }
        public static void SearchEmployeeByName()
        {
            Console.WriteLine("\nEmter the employee Name :");
            string empName = Console.ReadLine();

            var result = EmployeeBLL.GetEmployeeByName(empName);

            if (result.Count == 0)
```

```
                {
                    Console.WriteLine("No record exist with Name");
                }
                else
                {
                    result.ForEach(p => Console.WriteLine(p));
                }
            }
            public static void DisplayEmployees()
            {
                var result = EmployeeBLL.GetALlEmployees();
                Console.WriteLine("\nDisplaying All employees in the file");
                foreach (var employee in result)
                {
                    Console.WriteLine(employee);
                }
            }

        }
    }
```

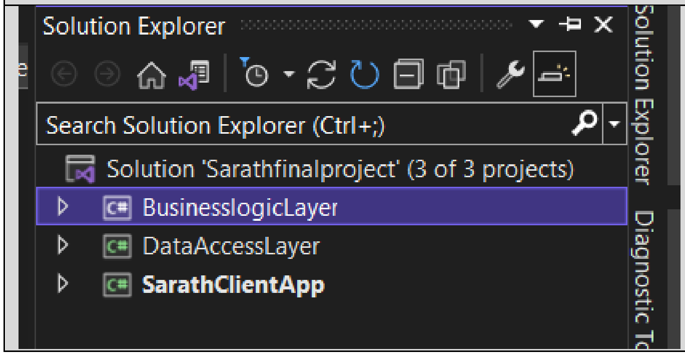
OUTPUT :



F:\NBprojects\Day22Projects\Sarathfinalproject\SarathClientApp\bin\Debug\SarathClientApp.exe

```
Enter Employee ID
3
Enter Employee NAME
sundeep
Enter Employee SALARY
20000
Enter Employee AGE
22
EMployee Details save sucessfully
Do you want to continue (y/n) :
y
*----*----*----*-----*----*----*----*
EMPLOYEES MANNGGEMENT APPLICATION
*----*----*----*-----*----*----*----*

1. Add Employee details
2. Search Employeedetail by ID
3. Search Employeedetail bt NAME
4. Display AllEmployees details

Enter choice your Requirment :
4

Displaying All employees in the file
1,sarath,10000,24
2,pushpa,12000,25
3,sundeep,20000,22
Do you want to continue (y/n) :
```

```
Console.WriteLine("Enter Employee SALARY");
```



Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'Sarathfinalproject' (3 of 3 projects)
BusinesslogicLayer
DataAccessLayer
SarathClientApp
Solution Explorer
Diagnostic To