Day 22 Assignment
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22-02-2022

Write a C# Program for employee management application ?

Code:

Data Access Library:

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

namespace DataAccessLibrary
{
    //Author : Triveni Anumolu
    /***********  Purpose : Data Access Layer Library **************/
    public static class EmployeeDAL
    {
        public static string filePath =
"C:\\Users\\91832\\Desktop\\C#Projects\\Employee.txt";
        /// <summary>
        /// This method is used to Add Employee details
        /// </summary>
        /// <param name="empId"></param>
        /// <param name="empName"></param>
        /// <param name="eSal"></param>
        /// <param name="empAge"></param>
        /// <returns></returns>
        public static bool AddEmployee(int empId,string empName,int eSal,int empAge)
        {
            try
            {
                string
textContent=string.Concat(empId,",",empName,",",eSal,",",empAge);
                File.AppendAllText(filePath, textContent + Environment.NewLine);
                return true;
            }
            catch (Exception ex)
            {
                return false;
            }
        }
        /// <summary>
```

```
        /// This Method is used to search employee by id
        /// </summary>
        /// <param name="id"></param>
        /// <returns></returns>
        public static List<string> SearchById(int id)
        {
            var allEmployees=File.ReadAllLines(filePath);
            bool isFound=false;
            List<string> empFound=new List<string>();
            foreach (string emp in allEmployees)
            {
                var empDetails=emp.Split(',');
                if(Convert.ToInt32(empDetails[0]) == id)
                {
                    isFound=true;
                    empFound.Add(emp);
                    break;
                }
            }
            return empFound;
        }
        /// <summary>
        /// This Method is used to search employee by name
        /// </summary>
        /// <param name="name"></param>
        /// <returns></returns>
        public static List<string> SearchByName(string name)
        {
            var allEmployees = File.ReadAllLines(filePath);
            List<string> empFound = new List<string>();
            foreach (string emp in allEmployees)
            {
                var empDetails = emp.Split(',');
                if(empDetails[1].Contains(name))
                {
                    empFound.Add(emp);
                }
            }
            return empFound;
        }
        /// <summary>
        /// This method is used to Display all Employees
        /// </summary>
        /// <returns></returns>
        public static string[] DisplayAllEmployees()
        {
            var allEmployees = File.ReadAllLines(filePath);
            return allEmployees;
        }
    }
}
```

Business Logic Layer Library:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using DataAccessLibrary;
namespace BusinessLogicLibrary
{
    //Author: Triveni Anumolu
    /************Purpose:Business Logic Layer Library***********/
    public static class EmployeeBLL
    {
        /// <summary>
        /// This method is used to Add Employees
        /// </summary>
        /// <param name="empId"></param>
        /// <param name="empName"></param>
        /// <param name="eSal"></param>
        /// <param name="empAge"></param>
        /// <returns></returns>
        public static bool AddEmployee(int empId,string empName,int eSal,int empAge)
        {
            //to do


            //All success call DAL
            var result=EmployeeDAL.AddEmployee(empId,empName,eSal,empAge);
            return result;
        }
        /// <summary>
        /// This method is used to search employee by id
        /// </summary>
        /// <param name="id"></param>
        /// <returns></returns>
        public static List<string> SearchById(int id)
        {
            var result=EmployeeDAL.SearchById(id);
            return result;
        }
        /// <summary>
        /// This method is used to search employee by name
        /// </summary>
        /// <param name="name"></param>
        /// <returns></returns>
        public static List<string> SearchByName(string name)
        {
            var result= EmployeeDAL.SearchByName(name);
            return result;
        }
        /// <summary>
        /// This method is used to Display all Employees details
        /// </summary>
        /// <returns></returns>
        public static string[] DisplayAllEmployees()
        {
            var result=EmployeeDAL.DisplayAllEmployees();
```

```
            return result;
        }
    }
}
```

Client Application:

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

namespace MyClientApp
{
    //Author : Triveni Anumolu
    /*********************  Purpose: Client Application  *************/
    public static  class Program
    {
        /// <summary>
        /// This method is to read user input and Add Employee Details
        /// </summary>
        public static void AddEmployee()
        {
            int id, sal, 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");
            sal=Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("Enter Age");
            age=Convert.ToInt32(Console.ReadLine());
            //Calling BLL
            var result=EmployeeBLL.AddEmployee(id,name,sal,age);
            if(result)
                Console.WriteLine("Employee Details Saved");
            else
                Console.WriteLine("error Occured");
        }
        /// <summary>
        /// This method is used to get employee by Id
        /// </summary>
        public static void SearchById()
        {
            int id;
            Console.WriteLine("Enter id:");
            id= Convert.ToInt32(Console.ReadLine());
            //Calling BLL
            var result=EmployeeBLL.SearchById(id);
            if(result.Count==0)
                Console.WriteLine("No record Found");
            else
                result.ForEach(d => Console.WriteLine(d));
        }
```

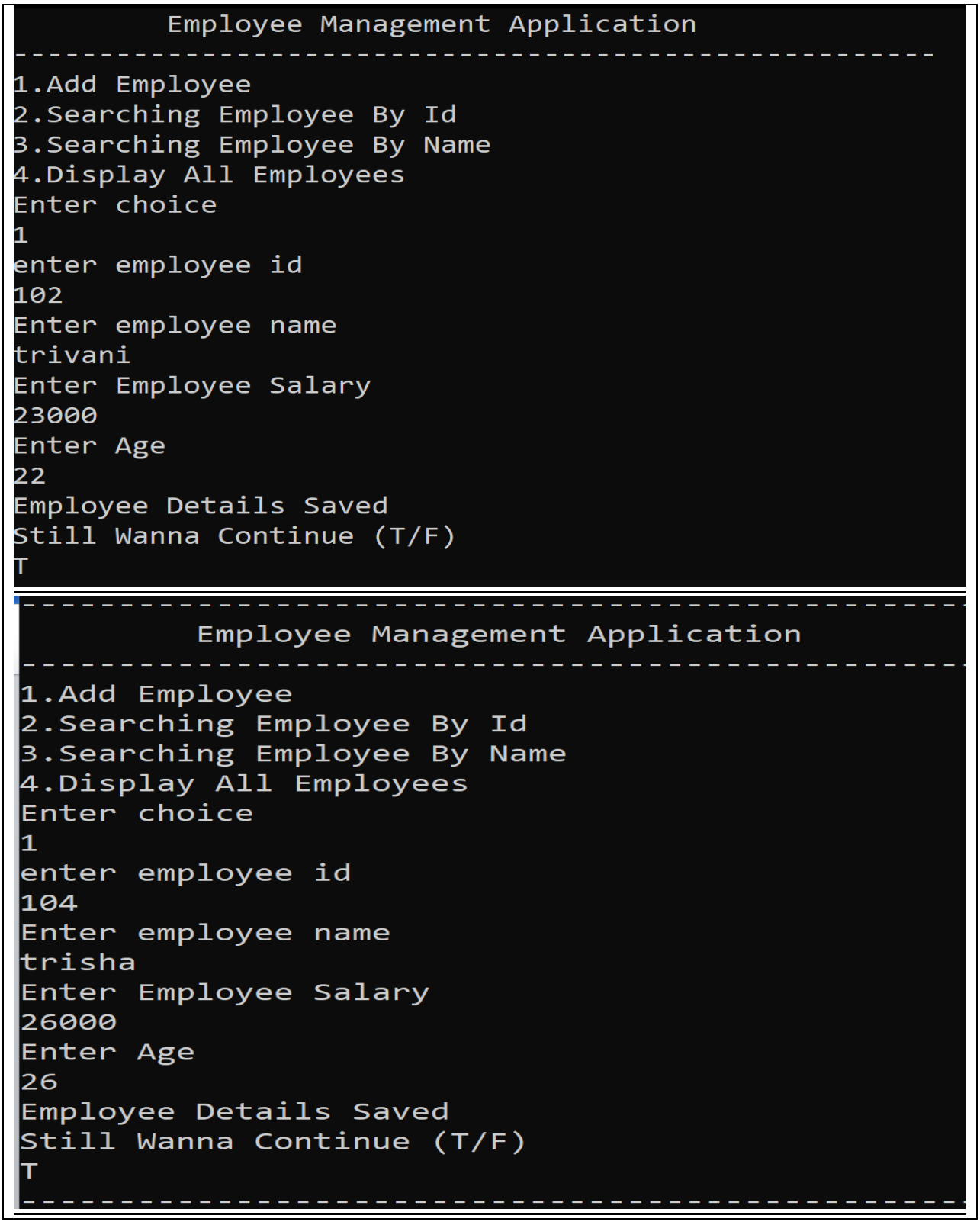
```
        /// <summary>
        /// this method is used to get employee by name
        /// </summary>
        public static void SearchByName()
        {
            string name;
            Console.WriteLine("Enter name:");
            name = Console.ReadLine();
            //Calling BLL
            var result = EmployeeBLL.SearchByName(name);
            if (result.Count==0)
                Console.WriteLine("No record Found");
            else
                result.ForEach(d => Console.WriteLine(d));
        }
        /// <summary>
        /// This method is used to Display Employee Details
        /// </summary>
        public static void DisplayAllEmployees()
        {
            var result= EmployeeBLL.DisplayAllEmployees();
            result.ToList().ForEach(d => Console.WriteLine(d));
        }
        static void Main(string[] args)
        {
            int ch;
            string choice;
            do
            {
                Console.WriteLine("-----------------------------------------------
-----");
                Console.WriteLine("         Employee Management Application
");
                Console.WriteLine("-----------------------------------------------
-----");
                Console.WriteLine("1.Add Employee");
                Console.WriteLine("2.Searching Employee By Id");
                Console.WriteLine("3.Searching Employee By Name");
                Console.WriteLine("4.Display All Employees");
                Console.WriteLine("Enter choice");
                ch = Convert.ToInt32(Console.ReadLine());
                switch (ch)
                {
                    case 1:
                        AddEmployee();
                        break;
                    case 2:
                        SearchById();
                        break;
                    case 3:
                        SearchByName();
                        break;
                    case 4:
                        DisplayAllEmployees();
                        break;
                    default:
                        Console.WriteLine("Invalid Input");
                        break;
```

```
                }
                Console.WriteLine("Still Wanna Continue (T/F)");
                choice = Console.ReadLine();
            } while (choice.Equals("T"));
        }
    }
}
```

Output:

```
-----------------------------------------------------------
          Employee Management Application
-----------------------------------------------------------
1.Add Employee
2.Searching Employee By Id
3.Searching Employee By Name
4.Display All Employees
Enter choice
1
enter employee id
101
Enter employee name
triveni
Enter Employee Salary
22000
Enter Age
21
Employee Details Saved
Still Wanna Continue (T/F)
T
-----------------------------------------------------------
```

```
-----------------------------------------------------------
          Employee Management Application
-----------------------------------------------------------
1.Add Employee
2.Searching Employee By Id
3.Searching Employee By Name
4.Display All Employees
Enter choice
1
enter employee id
103
Enter employee name
trivenianumolu
Enter Employee Salary
25000
Enter Age
24
Employee Details Saved
Still Wanna Continue (T/F)
T
```


Employee Management Application
1.Add Employee
2.Searching Employee By Id
3.Searching Employee By Name
4.Display All Employees
Enter choice
1
enter employee id
102
Enter employee name
trivani
Enter Employee Salary
23000
Enter Age
22
Employee Details Saved
Still Wanna Continue (T/F)
T
Employee Management Application
1.Add Employee
2.Searching Employee By Id
3.Searching Employee By Name
4.Display All Employees
Enter choice
1
enter employee id
104
Enter employee name
trisha
Enter Employee Salary
26000
Enter Age
26
Employee Details Saved
Still Wanna Continue (T/F)
T

```
         Employee Management Application
-------------------------------------------------------
1.Add Employee
2.Searching Employee By Id
3.Searching Employee By Name
4.Display All Employees
Enter choice
2
Enter id:
102
102,trivani,23000,22
Still Wanna Continue (T/F)
T
```

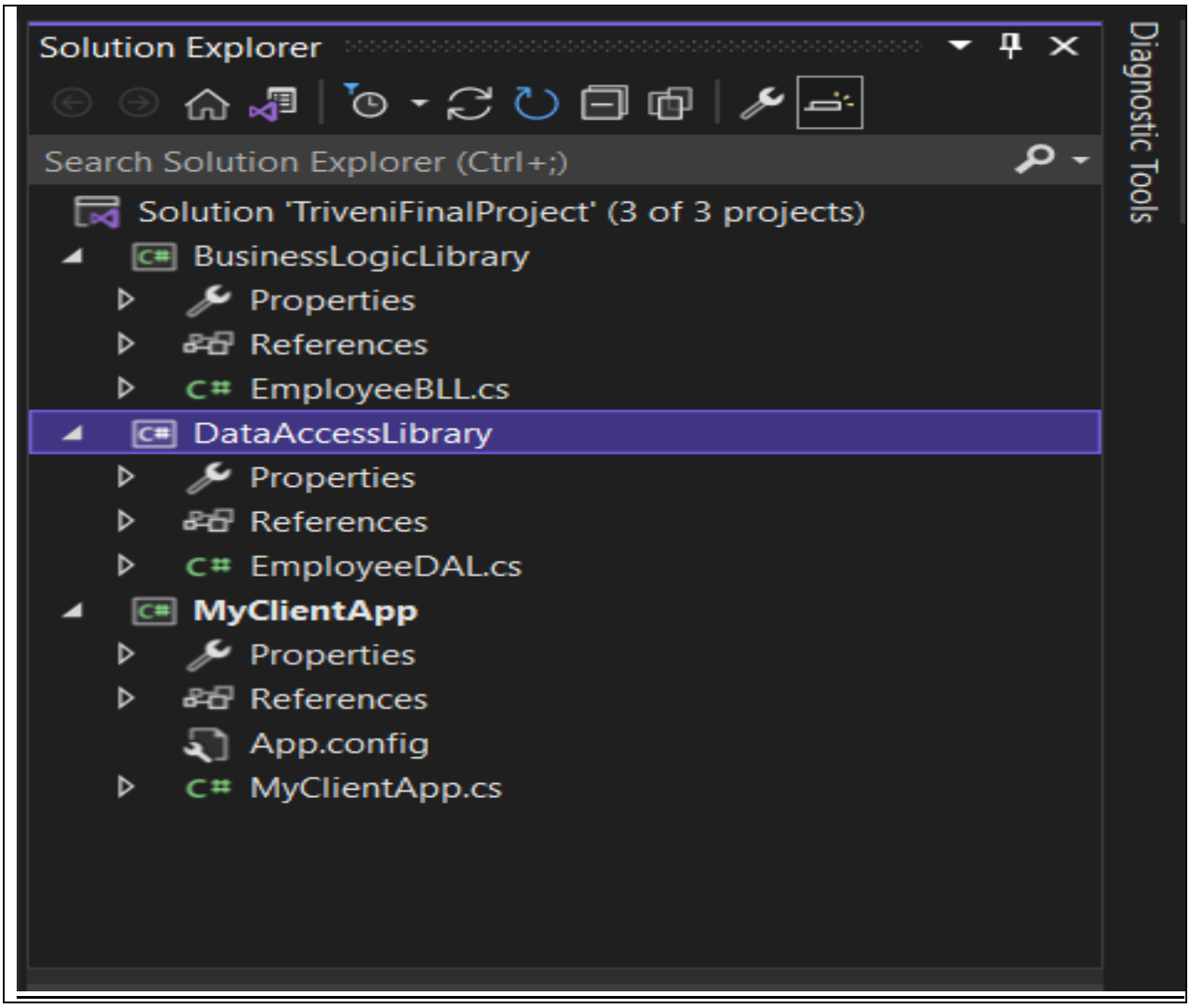
```
-------------------------------------------------------
          Employee Management Application
-------------------------------------------------------
1.Add Employee
2.Searching Employee By Id
3.Searching Employee By Name
4.Display All Employees
Enter choice
3
Enter name:
tri
101,triveni,22000,21
102,trivani,23000,22
103,trivenianumolu,25000,24
104,trisha,26000,26
Still Wanna Continue (T/F)
T
```

```
-----------------------------------------------
          Employee Management Application
-----------------------------------------------
1.Add Employee
2.Searching Employee By Id
3.Searching Employee By Name
4.Display All Employees
Enter choice
3
Enter name:
t
101,triveni,22000,21
102,trivani,23000,22
103,trivenianumolu,25000,24
104,trisha,26000,26
Still Wanna Continue (T/F)
T
```

```
-----------------------------------------------
          Employee Management Application
-----------------------------------------------
1.Add Employee
2.Searching Employee By Id
3.Searching Employee By Name
4.Display All Employees
Enter choice
4
101,triveni,22000,21
102,trivani,23000,22
103,trivenianumolu,25000,24
104,trisha,26000,26
Still Wanna Continue (T/F)
T
```

```
-------------------------------------------
          Employee Management Application
-------------------------------------------
1.Add Employee
2.Searching Employee By Id
3.Searching Employee By Name
4.Display All Employees
Enter choice
4
101,triveni,22000,21
102,trivani,23000,22
103,trivenianumolu,25000,24
104,trisha,26000,26
Still Wanna Continue (T/F)
```

```
101,triveni,22000,21
102,trivani,23000,22
103,trivenianumolu,25000,24
104,trisha,26000,26
```


Solution Explorer
Search Solution Explorer (Ctrl+;)
Solution 'TriveniFinalProject' (3 of 3 projects)
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Diagnostic Tools