

## Day 22 Assignment

By

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### Q) Project for Employee Management App

Code:

#### Data Access Layer:

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

namespace DataAccessLibrary
{
    //Author:Vinay kumar kudali
    //Purpose:To develop an app for employee managment.
    public static class EmployeeDAL
    {
        public static string filePath = "C:\\Users\\91832\\Desktop\\Vinay Final Project\\Emp.txt.txt";
        public static bool AddEmployee(int empId, string empName, int empSalary, int empAge)
        {
            //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 to search by 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> employeeFound = new List<string>();
    foreach (string employee in allEmployees)
    {
        var employeeDetails = employee.Split(',');
        if (Convert.ToInt32(employeeDetails[0]) == id)
        {
            isFound = true;
            employeeFound.Add(employee);
            break;
        }
    }
    return employeeFound;
}
/// <summary>
/// This method is used to search by name
/// </summary>
/// <param name="name"></param>
/// <returns></returns>
public static List<string> GetEmpByName(string name)
{
    var allEmployees = File.ReadAllLines(filePath);
    List<string> employeeFound = new List<string>();
    foreach (string employee in allEmployees)
    {
        var employeeDetails = employee.Split(',');
        if ((employeeDetails[1]).Contains(name))
        {
            employeeFound.Add(employee);
        }
    }
    return employeeFound;
}
/// <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:**

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

namespace BusinessLogicLibrary
{
    public static class EmployeeBll
    {
        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;
        }
    }
}
```

## **Client App:**

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

namespace MyClientApp
{
```

```

public 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 BLI
        var result = EmployeeBll.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 = EmployeeBll.GetEmpById(empId);
        if(result.Count == 0)
            Console.WriteLine(" No data Found ");
        else
            result.ForEach(f => Console.WriteLine(f));
    }

    public static void GetEmpByName()
    {
        string empName;
        Console.WriteLine("enter name");
        empName = Console.ReadLine();
        var result = EmployeeBll.GetEmpByName(empName);
        if (result.Count == 0)
            Console.WriteLine("NO Data Found");
        else
            result.ForEach(n => Console.WriteLine(n));
    }

    public static void DisplayAllEmployees()
    {
        var result = EmployeeBll.DisplayAllEmployees();
    }
}

```

```

        result.ToList().ForEach(y => Console.WriteLine(y));
    }
    static void Main(string[] args)
    {
        int ch;
        string choice;
        do
        {
            Console.WriteLine(".....");
            Console.WriteLine("\nEmployee Management\n");
            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 Employees");
            Console.WriteLine(".....");
            Console.WriteLine("\nEnter Choice:");
            ch= Convert.ToInt32(Console.ReadLine());
            switch (ch)
            {
                case 1: AddEmployee(); break;
                case 2: GetEmpById(); break;
                case 3: GetEmpByName(); break;
                case 4: DisplayAllEmployees(); break;
                default: Console.WriteLine("Invalid Input"); break;
            }
            Console.WriteLine(".....");
            Console.WriteLine("Do you want to continue (y/n)");
            choice = Console.ReadLine();
        }while (choice.Equals("y"));


    }
}


```


**Output:**


**Solution Explorer:**

Search Solution Explorer (Ctrl+;)

 Solution 'VinayFinalProject' (3 of 3 projects)

▷  BusinessLogicLibrary

▷  DataAccessLibrary

▷  **MyClientApp**

.....

## Employee Management

.....

- 1.Add Employee
2. Search Employee By Id
- 3.Search Employee By name
- 4.Display All Employees

.....

Enter Choice:

1

Enter empId:

1166

Enter employee Name:

sanni

Enter Employee Salary:

222222

Enter Employee age:

33

Employee Details Saved

.....

Do you want to continue (y/n)

y

.....

## Employee Management

- .....
- 1.Add Employee
  2. Search Employee By Id
  - 3.Search Employee By name
  - 4.Display All Employees
- .....

Enter Choice:

2

Enter emp id:

112

112,vinaykumar,21000,21

.....

Do you want to continue (y/n)

y



```
.....  
Employee Management
```

- ```
.....  
1.Add Employee  
2. Search Employee By Id  
3.Search Employee By name  
4.Display All Employees  
.....
```

```
Enter Choice:
```

```
3
```

```
enter name
```

```
vi
```

```
111,vinay,20000,20
```

```
112,vinaykumar,21000,21
```

```
113,vinaykumarkudali,23000,23
```

```
114,vinaybabu,24000,24
```

```
.....  
Do you want to continue (y/n)
```

```
y
```

```
.....  
Employee Management
```

- ```
.....  
1.Add Employee  
2. Search Employee By Id  
3.Search Employee By name  
4.Display All Employees  
.....
```

```
Enter Choice:
```

```
4
```

```
111,vinay,20000,20  
112,vinaykumar,21000,21  
113,vinaykumarkudali,23000,23  
114,vinaybabu,24000,24  
115,maheshbabu,25000,25  
1166,sanni,222222,33
```

```
.....  
Do you want to continue (y/n)
```

```
Y
```



Emp.txt - Notepad

File

Edit

View

```
111,vinay,20000,20  
112,vinaykumar,21000,21  
113,vinaykumarkudali,23000,23  
114,vinaybabu,24000,24  
115,maheshbabu,25000,25  
1166,sanni,222222,33
```