

FINAL PROJECT

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FINAL PROJECT

CODE FOR CLIENT APP

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

namespace ClientApp
{
    internal class Program
    {
        static void Main(string[] args)
        {
            int option;
            string choice;

            do
            {
                Console.WriteLine("\n1.Add Employee : ");
                Console.WriteLine("\n2.Search Employee by Id: ");
                Console.WriteLine("\n3.Search Employee byname: ");
                Console.WriteLine("\n4.Display all Employees : ");
                Console.WriteLine("\nEnter your choice : ");
                option = Convert.ToInt32(Console.ReadLine());

                switch (option)
                {
                    case 1:
                        AddEmployee();
                        break;
                    case 2:
                        GetEmployeeById();
                        break;
                    case 3:
                        GetEmployeeByName();
                        break;
                    case 4:
                        GetAllEmployees();
                        break;
                    default:
                        Console.WriteLine("Invalid option");
                        break;
                }

                Console.WriteLine("\nDo you want to choose more options(y/n)? :");
                choice = Console.ReadLine();
            } while (choice.Equals("y"));
        }

        public static void AddEmployee()
        {
            int id, salary, age;
            string name;

            Console.WriteLine("\n Enter id : ");
            id = Convert.ToInt32(Console.ReadLine());
```

```

        Console.WriteLine("\n Enter name : ");
        name = Console.ReadLine();
        Console.WriteLine("\n Enter salary : ");
        salary = Convert.ToInt32(Console.ReadLine());
        Console.WriteLine("\n Enter age : ");
        age = Convert.ToInt32(Console.ReadLine());

        var result = EmployeeBLL.AddEmployee(id, name, salary, age);

        if (result)
            Console.WriteLine("\nEmployee details are succesfully saved");
        else
            Console.WriteLine("\nSome error occured,check input");
    }

    public static void GetEmployeeById()
    {
        int id;
        Console.WriteLine("Enter id : ");
        id = Convert.ToInt32(Console.ReadLine());
        var result = EmployeeBLL.GetEmployeeById(id);

        if (result.Count == 0)
            Console.WriteLine("\n\nNo records exist witg this id");
        else
            result.ForEach(p => Console.WriteLine("\n" + p));
    }

    public static void GetEmployeeByName()
    {
        string name;
        Console.WriteLine("Enter name : ");
        name = Console.ReadLine();
        var result = EmployeeBLL.GetEmployeeByName(name);

        if (result.Count == 0)
            Console.WriteLine("\n\nNo records exist with this name");
        else
            result.ForEach(p => Console.WriteLine("\n" + p));
    }

    public static void GetAllEmployees()
    {
        Console.WriteLine("\nComplete details of all the employees : ");
        var result = EmployeeBLL.GetAllEmployees();
        result.ToList().ForEach(p => Console.WriteLine("\n" + p));
    }
}
}

```

CODE FOR BLL

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Text.RegularExpressions;
using System.Threading.Tasks;
using DataAccessLibrary;
using System.IO;
namespace BusinessLogicLibrary
{
    public class EmployeeBLL
    {
        public static string filePath = "C:\\Users\\gottu\\Desktop\\csc
images\\Employees.txt";
        public static bool AddEmployee(int empId, string empName, int empSalary, int empAge)
        {

```

```

        //todo add validations
        //if all validations are succesful then call dal

        var allEmployees = File.ReadAllLines(filePath);
        bool isFound = false;

        foreach (string employee in allEmployees)
        {
            var employeeDetails = employee.Split(',');
            if (Convert.ToInt32(employeeDetails[0]) == empId)
            {
                isFound = true;
                break;
            }
        }

        if (Regex.Match(empName, "[a-zA-Z.]{3,50}$").Success &&
            Regex.Match(empId.ToString(), @"^[1-9]\d*$").Success && isFound == false)
        {
            var result = EmployeeDAL.AddEmployee(empId, empName, empSalary, empAge);

            return result;
        }
        else
        {
            return false;
        }
    }

    public static List<string> GetEmployeeById(int id)
    {
        var result = EmployeeDAL.GetEmployeeById(id);
        return result;
    }

    public static List<string> GetEmployeeByName(string name)
    {
        var result = EmployeeDAL.GetEmployeeByName(name);
        return result;
    }

    public static string[] GetAllEmployees()
    {
        var result = EmployeeDAL.GetAllEmployees();
        return result;
    }
}

```

CODE FOR DAL

```

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

namespace DataAccessLibrary
{
    public static class EmployeeDAL
    {
        public static string filePath = "C:\\Users\\gottu\\Desktop\\csc
images\\Employees.txt";

        public static bool AddEmployee(int empId, string empName, int empSalary, int empAge)
        {
            try
            {

```

```

empAge);
        string textContent = string.Concat(empId, ",", empName, ",", empSalary, ",",
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> 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;
}

public static List<string> GetEmployeeByName(string name)
{
    var allEmployees = File.ReadAllLines(filePath);
    bool isFound = false;
    List<string> employeeFound = new List<string>();

    foreach (string employee in allEmployees)
    {
        var employeeDetails = employee.Split(',');
        if (employeeDetails[1].Contains(name))
        {
            isFound = true;
            employeeFound.Add(employee);
        }
    }

    return employeeFound;
}

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

```

OUTPUTS

```
1.Add Employee :
2.Search Employee by Id:
3.Search Employee byname:
4.Display all Employees :
Enter your choice : 1

Enter id : 25432

Enter name : AGJGJG

Enter salary : 34422

Enter age : 23

Employee details are succesfully saved
Do you want to choose more options(y/n)? :
```

```
Employee details are succesfully saved
Do you want to choose more options(y/n)? :y

1.Add Employee :
2.Search Employee by Id:
3.Search Employee byname:
4.Display all Employees :
Enter your choice : 1

Enter id : -22

Enter name : efewgeg

Enter salary : 32433

Enter age : 23

Some error occured,check input
Do you want to choose more options(y/n)? :
```

```
Some error occured,check input
Do you want to choose more options(y/n)? :y
```

```
1.Add Employee :
2.Search Employee by Id:
3.Search Employee byname:
4.Display all Employees :
Enter your choice : 1
```

```
Enter id : 1
```

```
Enter name : efefew
```

```
Enter salary : 23432
```

```
Enter age : 32
```

```
Some error occured,check input
Do you want to choose more options(y/n)? :
```

```
Do you want to choose more options(y/n)? :y
```

```
1.Add Employee :
2.Search Employee by Id:
3.Search Employee byname:
4.Display all Employees :
Enter your choice : 1
```

```
Enter id : 2898
```

```
Enter name : w
```

```
Enter salary : 2687
```

```
Enter age : 22
```

```
Some error occured,check input
Do you want to choose more options(y/n)? :
```

Do you want to choose more options(y/n)? :y

1.Add Employee :
2.Search Employee by Id:
3.Search Employee byname:
4.Display all Employees :

Enter your choice : 2

Enter id : 2

2,xyz,30000,32

Do you want to choose more options(y/n)? :y

1.Add Employee :
2.Search Employee by Id:
3.Search Employee byname:
4.Display all Employees :

Enter your choice : 3

Enter name : ds

3,sgdds,32355,32

9,sgdsgh,32222,24

Do you want to choose more options(y/n)? :

Enter your choice : 4

Complete details of all the employees :

1,abc,20000,23

2,xyz,30000,32

3,sgdds,32355,32

4,dhfdh,43324,25

5,hshgj,3452,26

6,dhdhd,253323,42

7,wtwet,23333,24

8,hshfs,35322,21

9,sgdsgh,32222,24

10,ddhhr,23244,22

11,dhfdh,34444,28

23,EWEG,323253,32

24,sgsh,43,4

22,gd,32425,2

1111,rtttt,3,2

22222,affdg,442,3

2222222,wadaf,233,3

2555,wte,2352,23

3464,rweew,25,3

5555,wtewt,23425,3

33333,rwrqq,235,3

235,esgww,3446,4

2424,esgszdz,2522,33

46363,dhhhghfng,366,4

25432,AGJGJG,34422,23

Do you want to choose more options(y/n)? :