**User**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ClinicModelsLibrary

{

public class User

{

public int id { get; set; }

public string name { get; set; }

public string password { get; set; }

public int age { get; set; }

public string type { get; set; }

public void takeUserInfo()

{

Console.WriteLine("Please enter user ID : ");

id = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Please enter user name : ");

name = Console.ReadLine();

Console.WriteLine("Please enter user password : ");

password = Console.ReadLine();

Console.WriteLine("Please enter user age : ");

age = Convert.ToInt32(Console.ReadLine());

}

public override string ToString()

{

return " User ID " + id + "\n User Name " + name + "\n Type " + type;

}

}

}

**ManageUser**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using ClinicModelsLibrary;

namespace Day5Assignment

{

public class ManageUser

{

User newUser = new User();

public void GetUserDetails()

{

Console.WriteLine("Please enter the user type Patient/Doctor : ");

newUser.type = Console.ReadLine();

switch (newUser.type)

{

case "Doctor":

newUser = new Doctor();

((Doctor)newUser).takeUserInfo();

((Doctor)newUser).takeDoctorInfo();

break;

case "Patient":

newUser = new Patient();

((Patient)newUser).takeUserInfo();

((Patient)newUser).takePatientInfo();

break;

default:

Console.WriteLine("Invalid Entry. Treating as patient");

newUser = new Patient();

((Patient)newUser).takeUserInfo();

((Patient)newUser).takePatientInfo();

break;

}

}

public void PrintUserDetails()

{

Console.WriteLine(newUser);

}

}

}

**Program**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using ClinicModelsLibrary;

//Create the methods to take input in each class

//Override it in the inherited calss so that it takes teh appropriate details

//Hint : Keep the common ones in the base

//Override teh tostring method so that the details printed are complete

namespace Day5Assignment

{

class Program

{

static void Main(string[] args)

{

ManageUser program = new ManageUser();

program.GetUserDetails();

program.PrintUserDetails();

Console.ReadKey();

}

}

}

**Patient**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ClinicModelsLibrary

{

public class Patient : User

{

public string remarks { get; set; }

public string status { get; set; }

public Patient()

{

type = "Patient";

}

public void takePatientInfo()

{

Console.WriteLine("Please enter remarks :");

remarks = Console.ReadLine();

Console.WriteLine("Please enter status :");

status = Console.ReadLine();

}

public override string ToString()

{

return base.ToString() + "\n User Type : " + type + "\n Remarks : " + remarks + "\n Status : " + status;

}

}

}

**Doctor**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ClinicModelsLibrary

{

public class Doctor : User

{

public int experience { get; set; }

public string specialty { get; set; }

public Doctor()

{

type = "Doctor";

}

public void takeDoctorInfo()

{

Console.WriteLine("Please enter years of experience :");

experience = Convert.ToInt32(Console.ReadLine());

Console.WriteLine("Please enter specialty :");

specialty = Console.ReadLine();

}

public override string ToString()

{

return base.ToString() + "\n User Type :" + type + "\n Experience year(s) : " + experience + "\n Speciality : " + specialty;

}

}

}