**ASSIGNMENT 2**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Clinic

{

internal class ClinicHome

{

static void Main(string[] args)

{

Console.WriteLine("Welcome to my Clinic");

ClinicHome home = new ClinicHome();

home.AdminActivities();

}

DoctorRepository docRepository;

public ClinicHome()

{

docRepository = new DoctorRepository();

}

void DisplayAdminMenu()

{

Console.WriteLine("1. Add Doctor's Details");

Console.WriteLine("2. Update Doctor's Details");

Console.WriteLine("3. Delete Doctor's Details");

Console.WriteLine("4. Show All Doctors details");

Console.WriteLine("0. Exit");

}

void AdminActivities()

{

int choice;

do

{

DisplayAdminMenu();

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

switch (choice)

{

case 0:

Console.WriteLine("Thank you!!!");

break;

case 1:

docRepository.Add();

break;

case 2:

UpdateDoctor();

break;

case 3:

DeleteDoctor();

break;

case 4:

ShowDetails();

break;

default:

Console.WriteLine("Invalid choice \n Please choose the correct option");

break;

}

} while (choice != 0);

}

private void ShowDetails()

{

Console.WriteLine("--------------------------------------");

var details = docRepository.getDoctorsDetails();

foreach (var detail in details)

{

Console.WriteLine(detail);

Console.WriteLine("---------------------------------------");

}

Console.WriteLine("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

}

int GetDoctorId()

{

int id;

Console.WriteLine("Please Enter Doctor ID : ");

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

return id;

}

private void UpdateDoctor()

{

int id = GetDoctorId();

int choice;

Console.WriteLine("Do you Want To Change Doctor's Experience or Mobile Number ? \nPress 1 for Experience\nPress 2 for Mobile Number");

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

if (choice == 1 || choice == 2)

docRepository.Update(id, choice);

else

Console.WriteLine("Invalid choice!");

}

private void DeleteDoctor()

{

int id = GetDoctorId();

docRepository.Delete(id);

}

}

}

----------------------------------------------------------------------

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Clinic

{

internal class DoctorRepository

{

List<Doctor> Doctors;

public DoctorRepository()

{

Doctors = new List<Doctor>();

}

int getNextDoctorId()

{

if (Doctors.Count == 0)

return 1;

int id = Doctors[Doctors.Count - 1].ID;

return id + 1;

}

Doctor getDoctorById(int id)

{

for (int i = 0; i < Doctors.Count; i++)

{

if (Doctors[i].ID == id)

return Doctors[i];

}

return null;

}

public void Add()

{

int id = getNextDoctorId();

Doctor doctor = new Doctor();

doctor.ID = id;

getOtherDetails(doctor);

Doctors.Add(doctor);

Console.WriteLine("New Doctor is Added Successfully");

}

public void getOtherDetails(Doctor doctor)

{

Console.WriteLine("Enter Doctor Name : ");

doctor.name = Console.ReadLine();

Console.WriteLine("Enter The Experience(In Years) : ");

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

Console.WriteLine("Enter Doctor's Mobile Number : ");

doctor.phoneNumber = Console.ReadLine();

}

public void Update(int id, int choice)

{

Doctor doctor = getDoctorById(id);

if (doctor != null)

{

if (choice == 1)

{

Console.WriteLine("Enter the Updated Experience(In Years) : ");

int exp = Convert.ToInt32(Console.ReadLine());

doctor.experience = exp;

Console.WriteLine("Updated Successfully!");

return;

}

else

{

Console.WriteLine("Enter New Mobile Number : ");

string Number = Console.ReadLine();

doctor.phoneNumber = Number;

Console.WriteLine("Updated Successfully!");

return;

}

}

Console.WriteLine("Invalid ID");

}

public void Delete(int id)

{

Doctor doctor = getDoctorById(id);

if (doctor != null)

{

Doctors.Remove(doctor);

Console.WriteLine("Successfully deleted!");

}

else

Console.WriteLine("Can't Delete!");

}

public List<Doctor> getDoctorsDetails()

{

return Doctors;

}

}

}

------------------------------------------------------------------------

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Clinic

{

internal class Doctor

{

public int ID { get; set; }

public string name { get; set; }

public int experience { get; set; }

public string phoneNumber { get; set; }

public Doctor()

{

experience = 0;

}

public Doctor(int ID, string name, int experience, string phoneNumber)

{

this.ID = ID;

this.name = name;

this.experience = experience;

this.phoneNumber = phoneNumber;

}

public override string ToString()

{

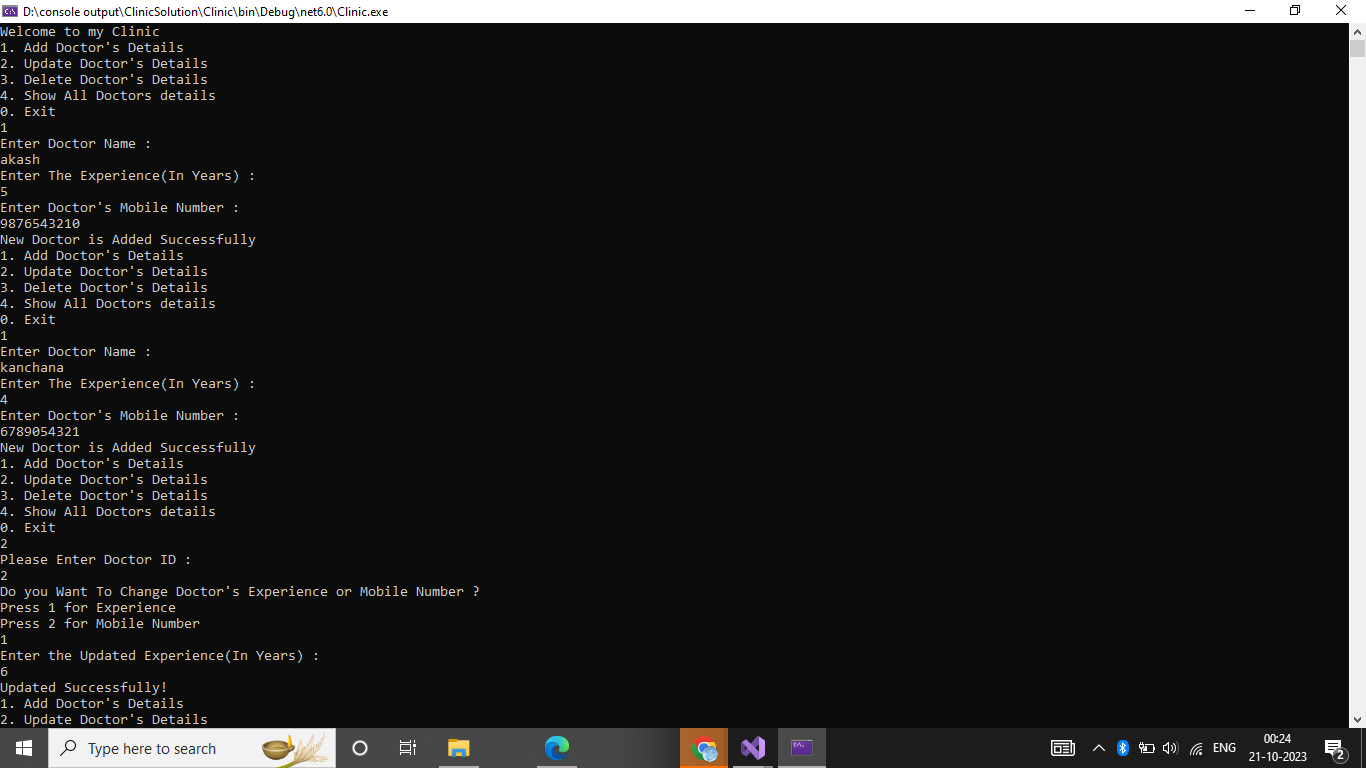
return $"Doctor Id : {ID}\nDoctor Name {name}\nExperience : { experience} years\nMobile Numer : { phoneNumber}";

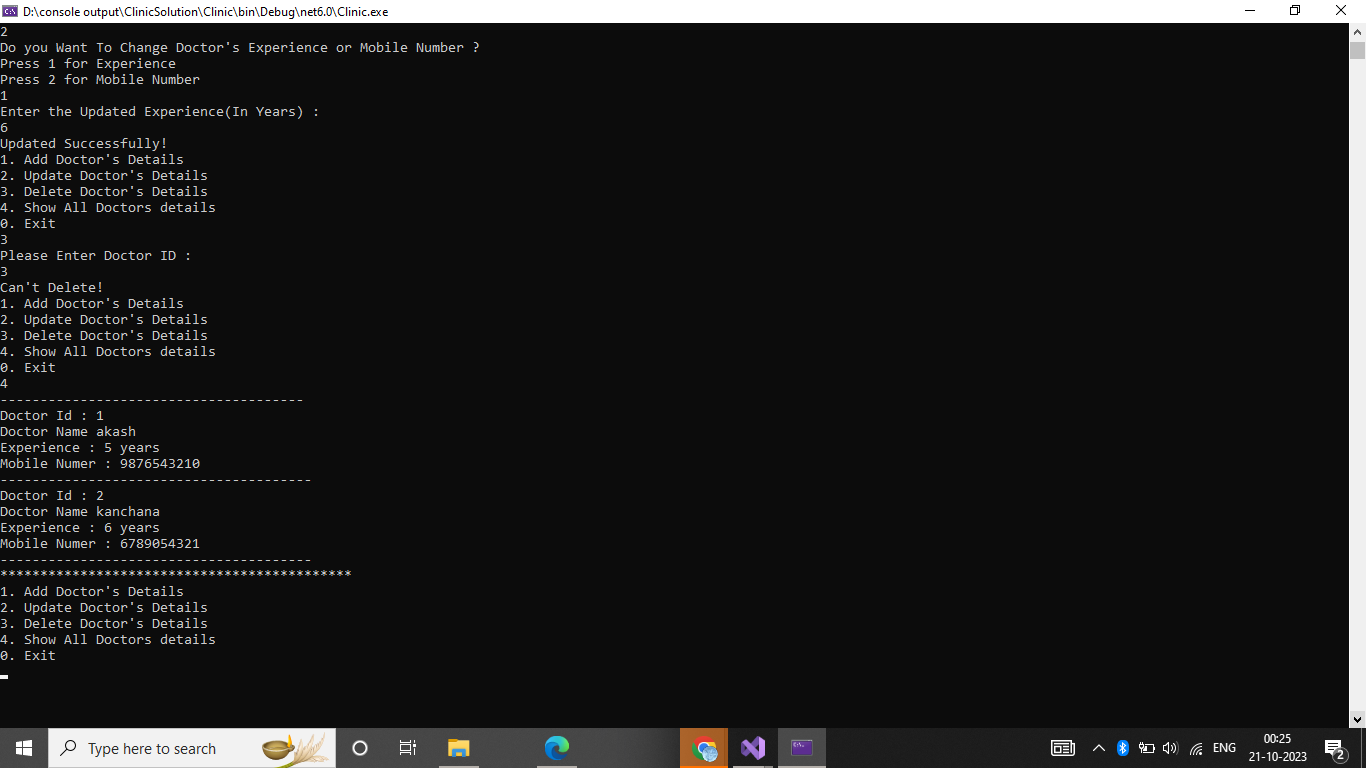
}

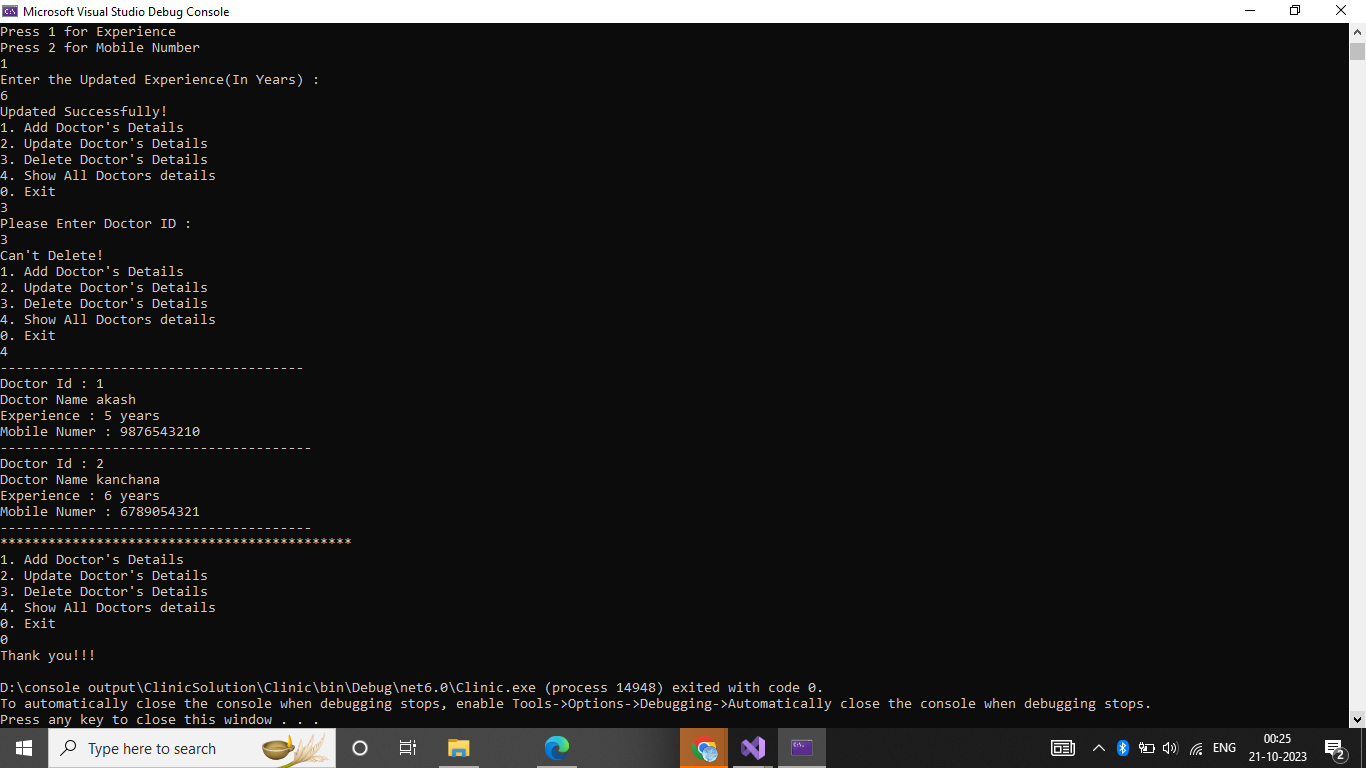
}

}

**OUTPUT**

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