

//Interface

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;


namespace AssessmentOne
{
    public interface ITeam
    {
        void Add(Player player);

        void Remove(int id);

        Player GetPlayerById(int id);

        Player GetPlayerByName(string name);

        List<Player> GetAllPlayer();

    }
}
```

//Player Class

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;


namespace AssessmentOne
{
    public class Player
    {
        public int PlayerId { get; set; }

        public string PlayerName { get; set; }

        public int PlayerAge { get; set; }

        public Player() { }

        public Player(int id, string name, int age)
        {
            PlayerId = id;

            PlayerName = name;

            PlayerAge = age;
        }
    }
}
```

//Team Class which implements Interface

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;


namespace AssessmentOne
{
    public class OneDayTeam : ITeam
    {
        public static List<Player> oneDayTeam = new List<Player>();

        public OneDayTeam()
        {
            if (oneDayTeam.Count <= 11)
            {
                oneDayTeam = new List<Player>();
            }
            else
            {
                Console.WriteLine("The team can only have 11 Members");
            }
        }

        public void Add(Player player)
        {
```

```

        oneDayTeam.Add(player);

        Console.WriteLine("Player Added Successfully");
    }

    public void Remove(int id)
    {
        Player playerRemoval = oneDayTeam.Find(oneDayTeam => oneDayTeam.PlayerId == id);

        if (playerRemoval != null)
        {
            oneDayTeam.Remove(playerRemoval);

            Console.WriteLine("Player Removed Successfully");
        }
        else
        {
            Console.WriteLine("There is no such member in the Team");
        }
    }

    public Player GetPlayerById(int id)
    {
        Player playerById = oneDayTeam.Find(oneDayTeam => oneDayTeam.PlayerId == id);

        return playerById;
    }

    public Player GetPlayerByName(string name)
    {
        Player playerByName = oneDayTeam.Find(oneDayTeam =>
oneDayTeam.PlayerName.Equals(name));

        return playerByName;
    }

    public List<Player> GetAllPlayer()

```

```
    {  
        return oneDayTeam;  
    }  
}  
}
```

//Main Class

```
using System;  
  
using System.Collections.Generic;  
  
using System.Linq;  
  
using System.Runtime.InteropServices;  
  
using System.Text;  
  
using System.Threading.Tasks;  
  
  
namespace AssessmentOne  
{  
    internal class Program  
    {  
        static void Main(string[] args)  
        {  
            try  
            {  
                OneDayTeam team = new OneDayTeam();  
  
                again:
```

```
Console.WriteLine("The Available Functions to Perform\n\t1. Add Player\n\t2. Remove Player  
by Id\n\t3. Get Player By Id\n\t4. Get Player By Name\n\t5. Get All Players");
```

```
Console.Write("Enter the Number : ");
```

```
switch (int.Parse(Console.ReadLine()))
```

```
{
```

```
case 1:
```

```
{
```

```
Console.WriteLine("\nAdding Player to the Team....");
```

```
Player player = new Player();
```

```
Console.WriteLine("Enter Player Id");
```

```
player.PlayerId = int.Parse(Console.ReadLine());
```

```
Console.WriteLine("Enter Player Name");
```

```
player.PlayerName = Console.ReadLine();
```

```
Console.WriteLine("Enter Player Age");
```

```
player.PlayerAge = int.Parse(Console.ReadLine());
```

```
team.Add(player);
```

```
break;
```

```
}
```

```
case 2:
```

```
{
```

```
Console.WriteLine("\nEnter Player Id to Remove");
```

```
int id = int.Parse(Console.ReadLine());
```

```
team.Remove(id);
```

```
break;
```

```
}
```

```
case 3:
```

```

{
    Console.WriteLine("\nEnter Player Id to Display");

    int id = int.Parse(Console.ReadLine());

    Player player = team.GetPlayerById(id);

    Console.WriteLine("\nPlayer Id\tPlayer Name\t Player Age");

    Console.WriteLine($"{player.PlayerId}\t\t{player.PlayerName}\t\t{player.PlayerAge}");

    break;
}

```

case 4:

```

{
    Console.WriteLine("\nEnter Player Name to Display");

    string name = Console.ReadLine();

    Player player = team.GetPlayerByName(name);

    Console.WriteLine("\nPlayer Id\tPlayer Name\t Player Age");

    Console.WriteLine($"{player.PlayerId}\t\t{player.PlayerName}\t\t{player.PlayerAge}");

    break;
}

```

case 5:

```

{
    Console.WriteLine("\nList Of All Players....");

    List<Player> allPlayers = team.GetAllPlayer();

    Console.WriteLine("\nPlayer Id\tPlayer Name\t Player Age");

    foreach (Player player in allPlayers)
    {
        Console.WriteLine($"{player.PlayerId}\t\t{player.PlayerName}\t\t{player.PlayerAge}");
    }
}

```

```

        }

        break;

    }

    default:

    {

        Console.WriteLine("\nYou have Entered the Wrong Number!!!\nChoose the Right
One\n");

        goto again;

    }

}

Console.WriteLine("\nPress 1 to Continue....And Others to Exit.");

if (int.Parse(Console.ReadLine()) == 1)

    goto again;

}

catch(Exception ec)

{

    Console.WriteLine("\nNow The Error has Occured\n");

    Console.WriteLine(ec.Message);

}

finally

{

    Console.ReadKey();

}

}

}

```