

TP 13

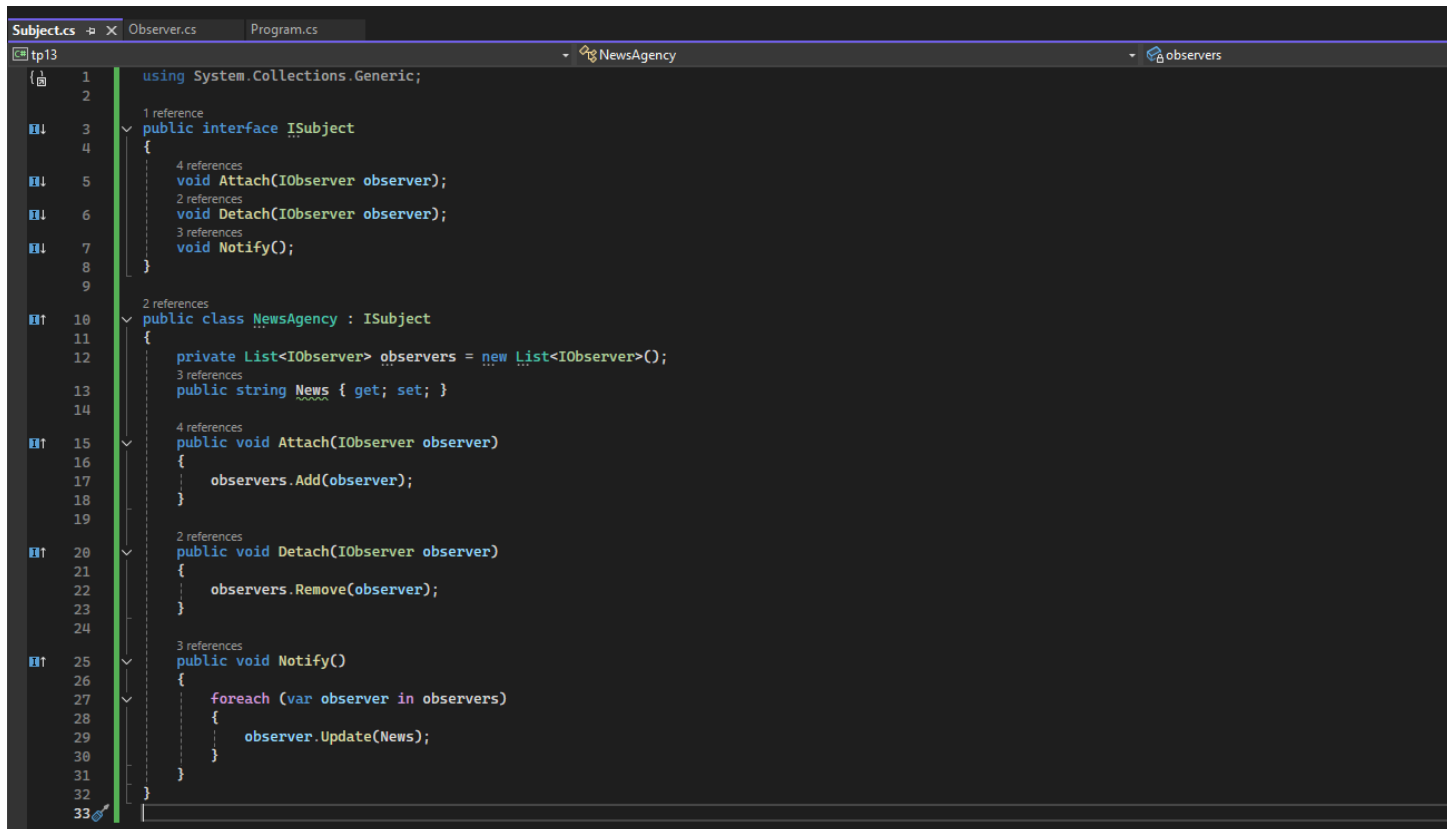
Nama:Fahmi Hasan Asagaf

Nim:2311104074

Link Repo:

https://github.com/fahmihasanasagaf/KPL_2311104074_SE0702/tree/main/13_Design_Pattern_Implementation

Subject.cs



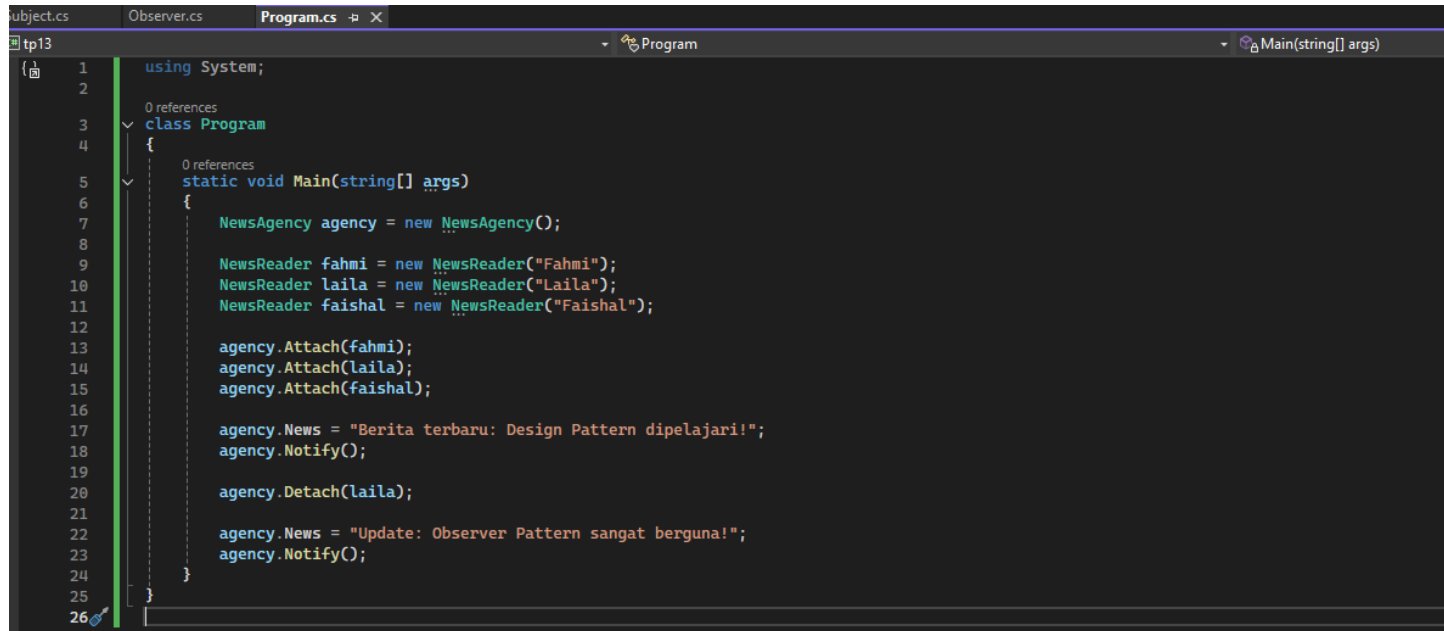
```
1 using System.Collections.Generic;
2
3 public interface ISubject
4 {
5     void Attach(IObserver observer);
6     void Detach(IObserver observer);
7     void Notify();
8 }
9
10 public class NewsAgency : ISubject
11 {
12     private List<IObserver> observers = new List<IObserver>();
13     public string News { get; set; }
14
15     public void Attach(IObserver observer)
16     {
17         observers.Add(observer);
18     }
19
20     public void Detach(IObserver observer)
21     {
22         observers.Remove(observer);
23     }
24
25     public void Notify()
26     {
27         foreach (var observer in observers)
28         {
29             observer.Update(News);
30         }
31     }
32 }
33
```

Observer.cs

```
Subject.cs  Observer.cs  Program.cs
tp13  NewsReader

1  using System;
2
3  public interface IObserver
4  {
5      void Update(string message);
6  }
7
8  public class NewsReader : IObserver
9  {
10     private string name;
11
12     public NewsReader(string name)
13     {
14         this.name = name;
15     }
16
17     public void Update(string message)
18     {
19         Console.WriteLine($"{name} menerima berita: {message}");
20     }
21 }
22
```

Program.cs



```
1 using System;
2
3 0 references
4 class Program
5 {
6     0 references
7     static void Main(string[] args)
8     {
9         NewsAgency agency = new NewsAgency();
10
11         NewsReader fahmi = new NewsReader("Fahmi");
12         NewsReader laila = new NewsReader("Laila");
13         NewsReader faishal = new NewsReader("Faishal");
14
15         agency.Attach(fahmi);
16         agency.Attach(laila);
17         agency.Attach(faishal);
18
19         agency.News = "Berita terbaru: Design Pattern dipelajari!";
20         agency.Notify();
21
22         agency.Detach(laila);
23
24         agency.News = "Update: Observer Pattern sangat berguna!";
25         agency.Notify();
26     }
27 }
```

Output

```
Fahmi menerima berita: Berita terbaru: Design Pattern dipelajari!
Laila menerima berita: Berita terbaru: Design Pattern dipelajari!
Faishal menerima berita: Berita terbaru: Design Pattern dipelajari!
Fahmi menerima berita: Update: Observer Pattern sangat berguna!
Faishal menerima berita: Update: Observer Pattern sangat berguna!

C:\Users\fahmi\source\repos\KPL_2311104074_SE0702\13_Design_Pattern_Implementation\tp13\tp13\bin\Debug\net6.0\tp13.exe
process 12812) exited with code 0 (0x0).
Press any key to close this window . . .
```