

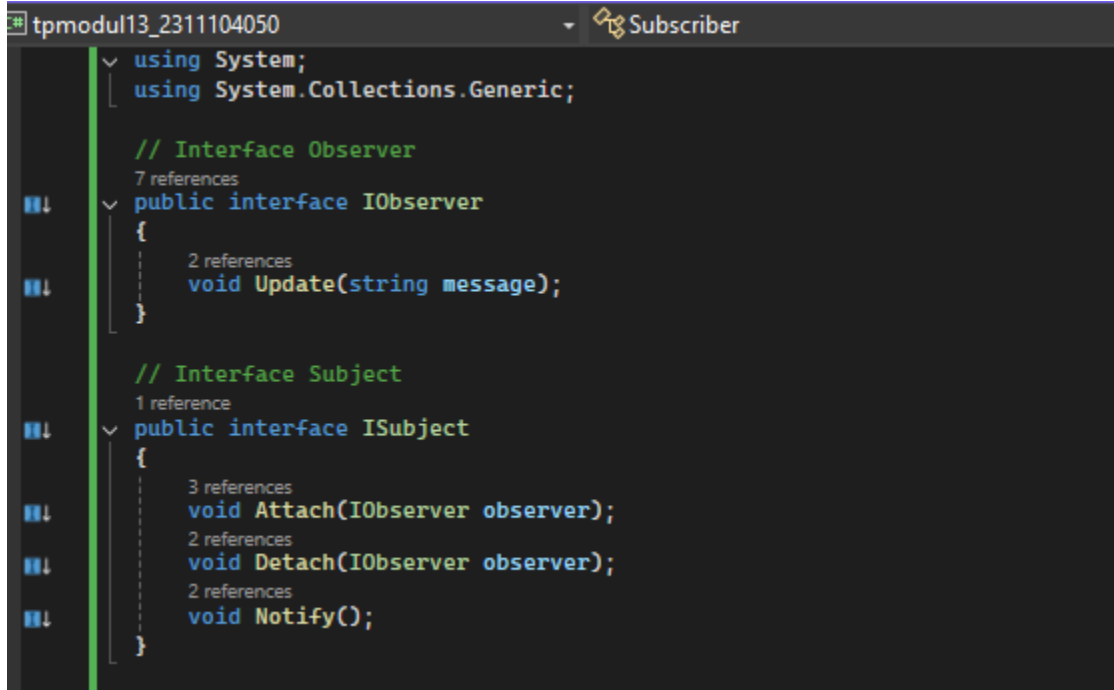
Putra Strata Tandika Setyawan

2311104050

S1SE0702

Jurnal Modul 13

### 1. Membuat Interface Observer dan Interface Subject

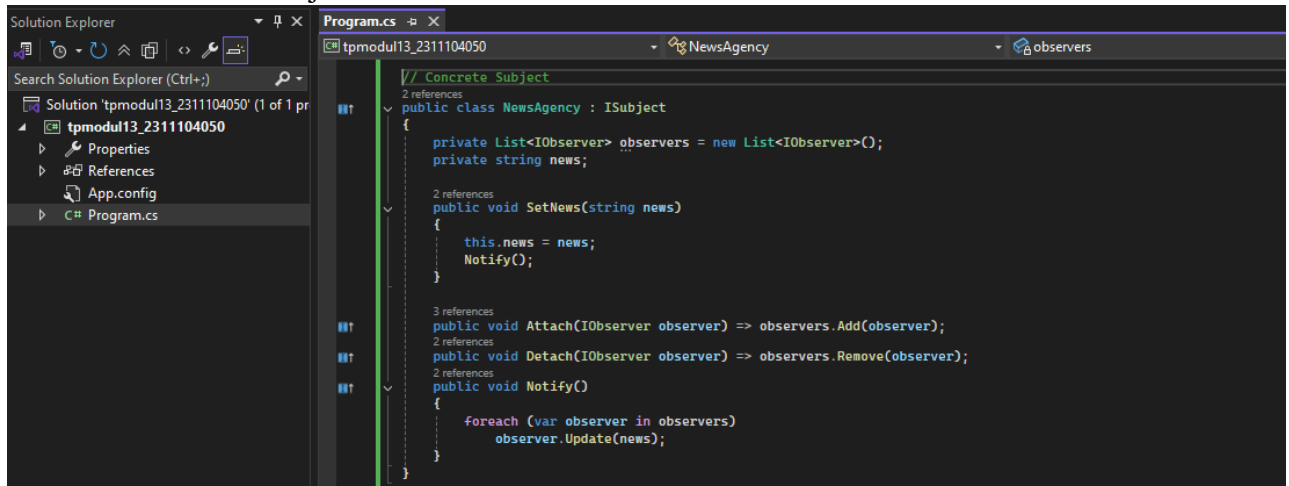


```
# tpmodul13_2311104050
using System;
using System.Collections.Generic;

// Interface Observer
7 references
public interface IObserver
{
    2 references
    void Update(string message);
}

// Interface Subject
1 reference
public interface ISubject
{
    3 references
    void Attach(IObserver observer);
    2 references
    void Detach(IObserver observer);
    2 references
    void Notify();
}
```

### 2. Membuat Concrete Subject



```
Solution Explorer
Solution 'tpmodul13_2311104050' (1 of 1 pr
    tpmodul13_2311104050
        Properties
        References
        App.config
        C# Program.cs

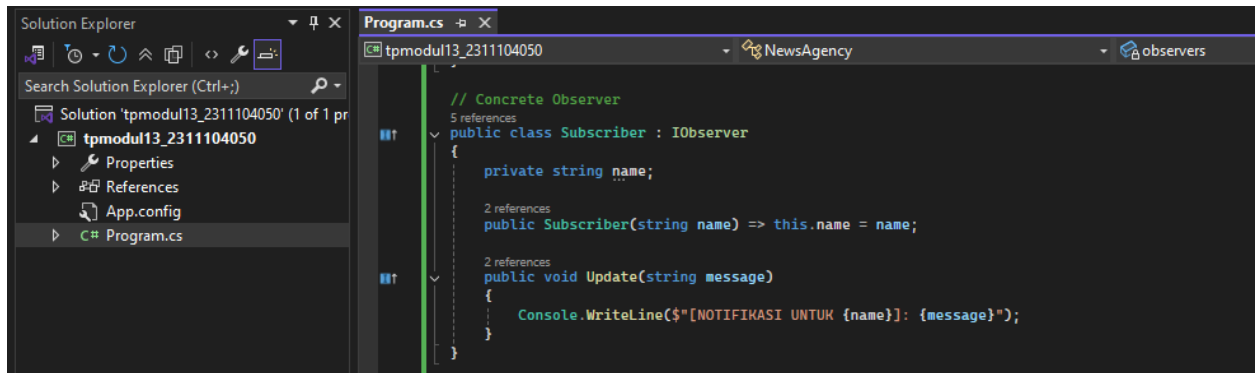
Program.cs
tpmodul13_2311104050
NewsAgency
observers

// Concrete Subject
2 references
public class NewsAgency : ISubject
{
    private List<IObserver> observers = new List<IObserver>();
    private string news;

    2 references
    public void SetNews(string news)
    {
        this.news = news;
        Notify();
    }

    3 references
    public void Attach(IObserver observer) => observers.Add(observer);
    2 references
    public void Detach(IObserver observer) => observers.Remove(observer);
    2 references
    public void Notify()
    {
        foreach (var observer in observers)
        {
            observer.Update(news);
        }
    }
}
```

### 3. Membuat Concrete Observer



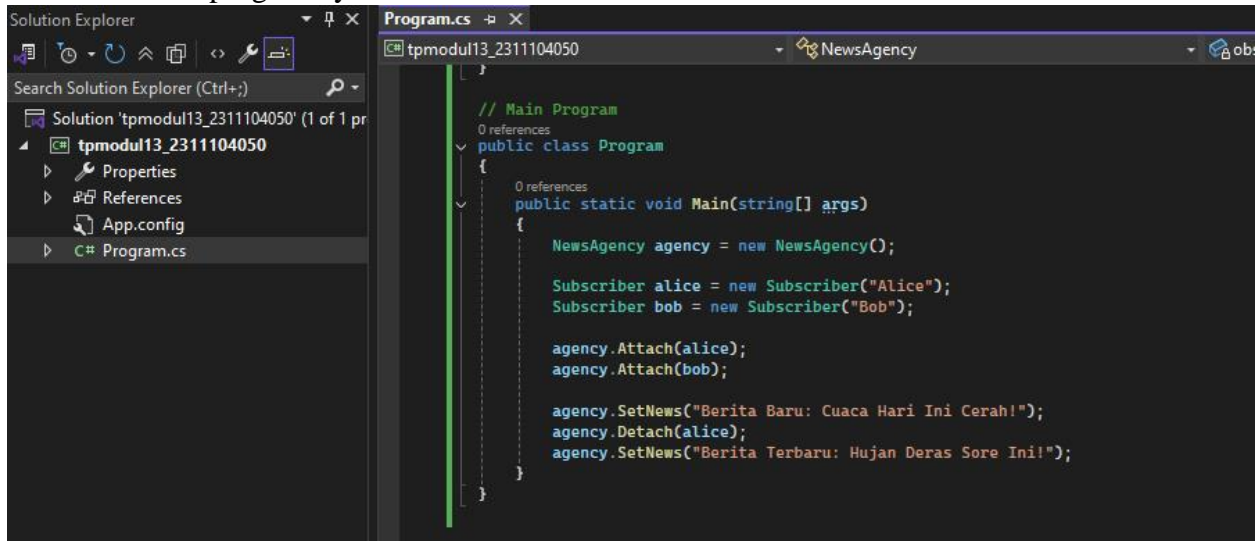
The screenshot shows the Visual Studio IDE with the Solution Explorer on the left and the Program.cs file open in the main editor. The Solution Explorer shows a project named 'tpmodul13\_2311104050' with files 'Properties', 'References', 'App.config', and 'Program.cs'. The Program.cs file contains the following code:

```
// Concrete Observer
public class Subscriber : IObservable
{
    private string name;

    public Subscriber(string name) => this.name = name;

    public void Update(string message)
    {
        Console.WriteLine($"[NOTIFIKASI UNTUK {name}]: {message}");
    }
}
```

### 4. Membuat main programnya



The screenshot shows the Visual Studio IDE with the Solution Explorer on the left and the Program.cs file open in the main editor. The Solution Explorer shows a project named 'tpmodul13\_2311104050' with files 'Properties', 'References', 'App.config', and 'Program.cs'. The Program.cs file contains the following code:

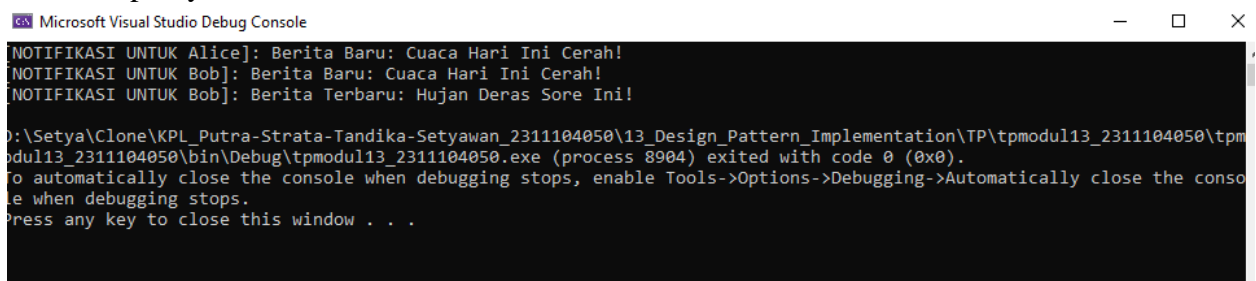
```
// Main Program
public class Program
{
    public static void Main(string[] args)
    {
        NewsAgency agency = new NewsAgency();

        Subscriber alice = new Subscriber("Alice");
        Subscriber bob = new Subscriber("Bob");

        agency.Attach(alice);
        agency.Attach(bob);

        agency.SetNews("Berita Baru: Cuaca Hari Ini Cerah!");
        agency.Detach(alice);
        agency.SetNews("Berita Terbaru: Hujan Deras Sore Ini!");
    }
}
```

### 5. Hasil Outputnya



The screenshot shows the Microsoft Visual Studio Debug Console with the following output:

```
[NOTIFIKASI UNTUK Alice]: Berita Baru: Cuaca Hari Ini Cerah!
[NOTIFIKASI UNTUK Bob]: Berita Baru: Cuaca Hari Ini Cerah!
[NOTIFIKASI UNTUK Bob]: Berita Terbaru: Hujan Deras Sore Ini!
```

Below the output, there is a message from the debugger:

```
D:\Setya\Clone\KPL_Putra-Strata-Tandika-Setyawan_2311104050\13_Design_Pattern_Implementation\TP\tpmodul13_2311104050\tpmodul13_2311104050\bin\Debug\tpmodul13_2311104050.exe (process 8904) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```