

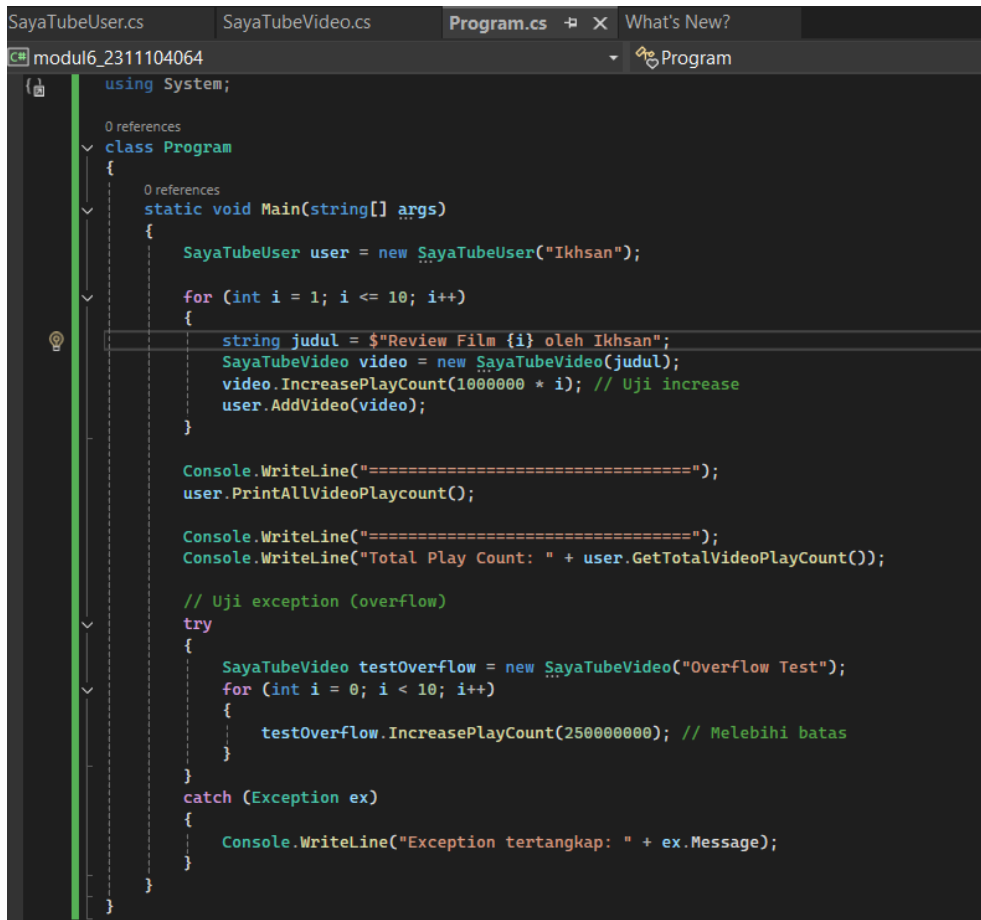
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S1SE0702

JURNAL MOUDUL 6

1. Code program



```
using System;

class Program
{
    static void Main(string[] args)
    {
        SayaTubeUser user = new SayaTubeUser("Ikhsan");

        for (int i = 1; i <= 10; i++)
        {
            string judul = $"Review Film {i} oleh Ikhsan";
            SayaTubeVideo video = new SayaTubeVideo(judul);
            video.IncreasePlayCount(1000000 * i); // Uji increase
            user.AddVideo(video);
        }

        Console.WriteLine("=====");
        user.PrintAllVideoPlaycount();

        Console.WriteLine("=====");
        Console.WriteLine("Total Play Count: " + user.GetTotalVideoPlayCount());

        // Uji exception (overflow)
        try
        {
            SayaTubeVideo testOverflow = new SayaTubeVideo("Overflow Test");
            for (int i = 0; i < 10; i++)
            {
                testOverflow.IncreasePlayCount(250000000); // Melebihi batas
            }
        }
        catch (Exception ex)
        {
            Console.WriteLine("Exception tertangkap: " + ex.Message);
        }
    }
}
```

2. Code SayaTubeVideo

```
SayaTubeUser.cs  SayaTubeVideo.cs  Program.cs  What's New?
modul6_2311104064  SayaTubeVideo

public class SayaTubeVideo
{
    private int id;
    private string title;
    private int playCount;

    2 references
    public SayaTubeVideo(string title)
    {
        if (title == null || title.Length > 200)
            throw new ArgumentException("Judul tidak boleh null dan maksimal 200 karakter");

        this.title = title;
        this.id = new Random().Next(10000, 99999);
        this.playCount = 0;
    }

    2 references
    public void IncreasePlayCount(int count)
    {
        if (count < 0 || count > 25000000)
            throw new ArgumentException("Count harus antara 0 dan 25.000.000");

        try
        {
            checked
            {
                this.playCount += count;
            }
        }
        catch (OverflowException e)
        {
            Console.WriteLine("Terjadi overflow: " + e.Message);
        }
    }

    0 references
    public void PrintVideoDetails()
    {
        Console.WriteLine($"ID: {id}");
        Console.WriteLine($"Title: {title}");
        Console.WriteLine($"Play Count: {playCount}");
    }

    2 references
    public int GetPlayCount()
    {
        return this.playCount;
    }

    1 reference
    public string GetTitle()
    {
        return this.title;
    }
}
```

3. Code SayaTubeUser

```
SayaTubeUser.cs  SayaTubeVideo.cs  Program.cs  What's New?
modul6_2311104064  SayaTubeUser

using System;
using System.Collections.Generic;

3 references
public class SayaTubeUser
{
    private int id;
    private List<SayaTubeVideo> uploadedVideos;
    public string Username;

    1 reference
    public SayaTubeUser(string username)
    {
        if (username == null || username.Length > 100)
            throw new ArgumentException("Username tidak boleh null dan maksimal 100 karakter");

        this.Username = username;
        this.id = new Random().Next(10000, 99999);
        this.uploadedVideos = new List<SayaTubeVideo>();
    }

    1 reference
    public void AddVideo(SayaTubeVideo video)
    {
        if (video == null)
            throw new ArgumentException("Video tidak boleh null");

        if (video.GetPlayCount() >= int.MaxValue)
            throw new ArgumentException("PlayCount video sudah maksimum");

        this.uploadedVideos.Add(video);
    }

    1 reference
    public int GetTotalVideoPlayCount()
    {
        int total = 0;
        foreach (var video in uploadedVideos)
        {
            total += video.GetPlayCount();
        }
        return total;
    }

    1 reference
    public void PrintAllVideoPlaycount()
    {
        Console.WriteLine($"User: {Username}");
        int count = 0;
        foreach (var video in uploadedVideos)
        {
            if (count >= 8) break;
            Console.WriteLine($"Video {count + 1} judul: {video.GetTitle()}");
            count++;
        }
    }
}
```

4. Output

```
Microsoft Visual Studio Debug Console
=====
User: Ikhsan
Video 1 judul: Review Film 1 oleh Ikhsan
Video 2 judul: Review Film 2 oleh Ikhsan
Video 3 judul: Review Film 3 oleh Ikhsan
Video 4 judul: Review Film 4 oleh Ikhsan
Video 5 judul: Review Film 5 oleh Ikhsan
Video 6 judul: Review Film 6 oleh Ikhsan
Video 7 judul: Review Film 7 oleh Ikhsan
Video 8 judul: Review Film 8 oleh Ikhsan
=====
Total Play Count: 55000000
Exception tertangkap: Count harus antara 0 dan 25.000.000
```