Program.cs

```
using ShapeDrawing;
using SplashKitSDK;
using System;

namespace ShapeDrawing
{
    public class Program
    {
        public static void Main()
        {
            Window window = new("Shape Drawer", 800, 600);

            Drawing myDrawing = new();

            do
            {
                SplashKit.ProcessEvents();

                if (SplashKit.KeyDown(KeyCode.SpaceKey))
                {
                    myDrawing.Background = Color.Random();
                }

                if (SplashKit.MouseClicked(MouseButton.LeftButton))
                {
                    myDrawing.AddShape(new
Shape((int)SplashKit.MousePosition().X, (int)SplashKit.MousePosition().Y));
                }

                if (SplashKit.KeyDown(KeyCode.DeleteKey) ||
SplashKit.KeyDown(KeyCode.BackspaceKey))
                {
                    myDrawing.RemoveShapes();
                }

                if (SplashKit.MouseClicked(MouseButton.RightButton))
                {
                    myDrawing.SelectShapeAt(SplashKit.MousePosition());
                }

                myDrawing.Draw();
                SplashKit.RefreshScreen();
            }
            while (!window.CloseRequested);
        }
    }
}
```

Shape.cs

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Reflection;
using SplashKitSDK;
using System;
```

```
namespace ShapeDrawing
{
    public class Shape(int x, int y)
    {
        private Color _color = Color.Green;
        private float _x = x, _y = y;
        private float _width = 100, _height = 100;
        private bool _selected;

        public Color Color
        {
            get
            {
                return _color;
            }
            set
            {
                _color = value;
            }
        }

        public float X
        {
            get
            {
                return _x;
            }
            set
            {
                _x = value;
            }
        }

        public float Y
        {
            get
            {
                return _y;
            }
            set
            {
                _y = value;
            }
        }

        public float Width
        {
            get
            {
                return _width;
            }
            set
            {
                _width = value;
            }
        }

        public float Height
        {
            get
            {
                return _height;
            }
```

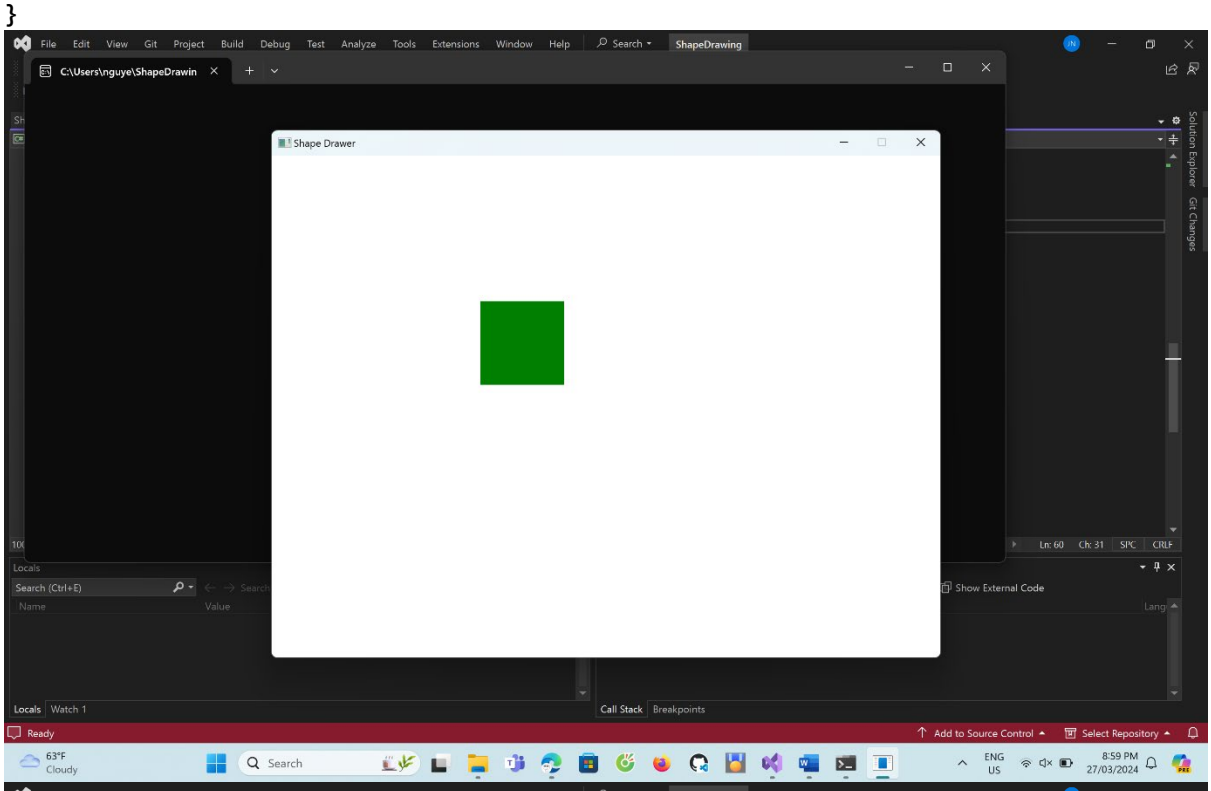
```
            set
            {
                _height = value;
            }
        }

        public Shape() : this(0, 0)
        {

        }

        public bool Selected
        {
            get
            {
                return _selected;
            }
            set
            {
                _selected = value;
            }
        }

        public void Draw()
        {
            if (Selected)
            {
                DrawOutLine();
            }
            SplashKit.FillRectangle(_color, _x, _y, _width, _height);
        }

        public bool IsAt(Point2D pt)
        {
            return pt.X >= _x && pt.X < _x + _width && pt.Y >= _y && pt.Y <= _y +
_height;
        }

        void DrawOutLine()
        {
            SplashKit.DrawRectangle(Color.Black, _x - 2, _y - 2, _width + 4,
_height + 4);
        }
    }
}
```

Drawing.cs

```
using System.Collections.Generic;
using System.Linq;
using ShapeDrawing;
using SplashKitSDK;

namespace ShapeDrawing
{
    public class Drawing(Color background)
    {
        public Drawing() : this(Color.White)
        {

        }

        private readonly List<Shape> _shapes = [];
```

```
public List<Shape> SelectedShape()
{
    List<Shape> _selectedShapes = [];
    foreach (Shape s in _shapes)
    {
        if (s.Selected)
        {
            _selectedShapes.Add(s);
        }
    }
    return _selectedShapes;
}

public int ShapeCount
{
    get { return _shapes.Count; }
}

private Color _background = background;

public Color Background
{
    get
    {
        return _background;
    }
    set
    {
        _background = value;
    }
}
public void Draw()
{
    SplashKit.ClearScreen(_background);
    foreach (Shape shape in _shapes)
    {
        shape.Draw();
    }
}
public void SelectShapeAt(Point2D pt)
{
    foreach (Shape s in _shapes)
    {
        if (s.IsAt(pt))
            s.Selected = true;
        else
            s.Selected = false;
    }
}

public void AddShape(Shape shape)
{
    _shapes.Add(shape);
}

public void RemoveShapes()
{
    foreach (Shape s in _shapes.ToList())
    {
        if (s.Selected)
        {
            _shapes.Remove(s);
```

```
                }
            }
        }
    }
}
```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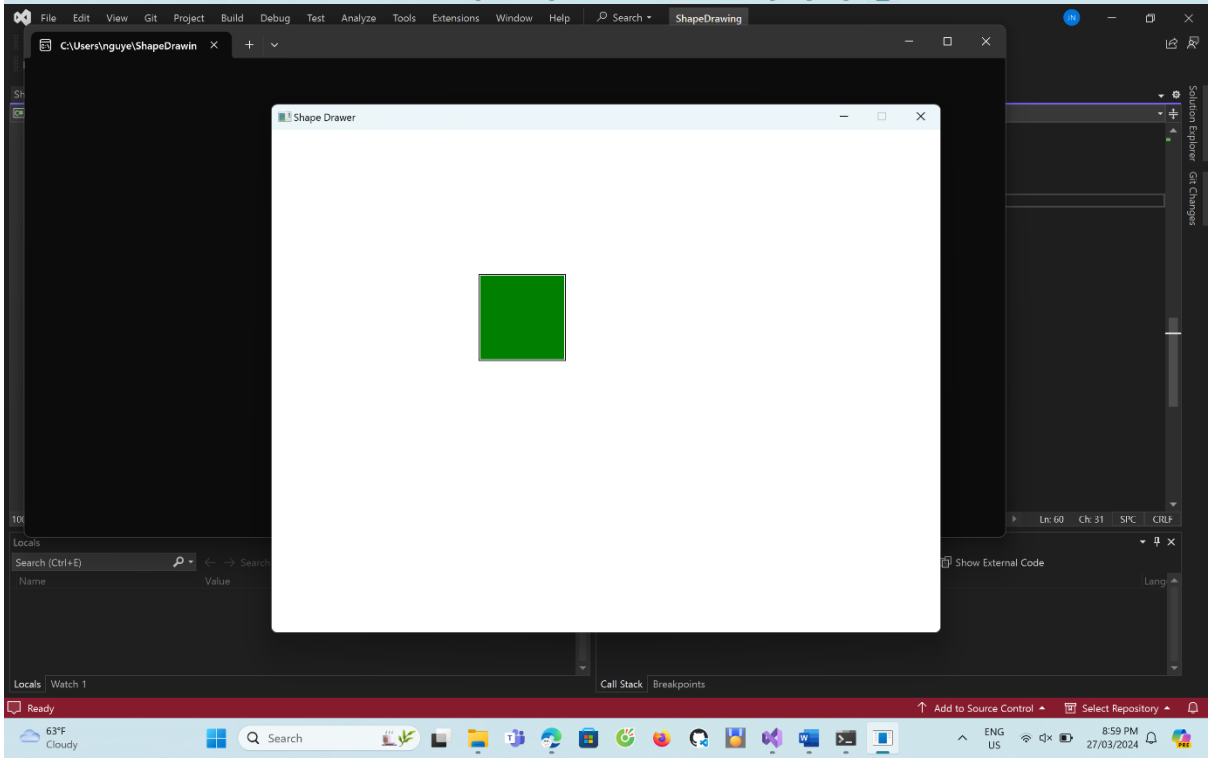
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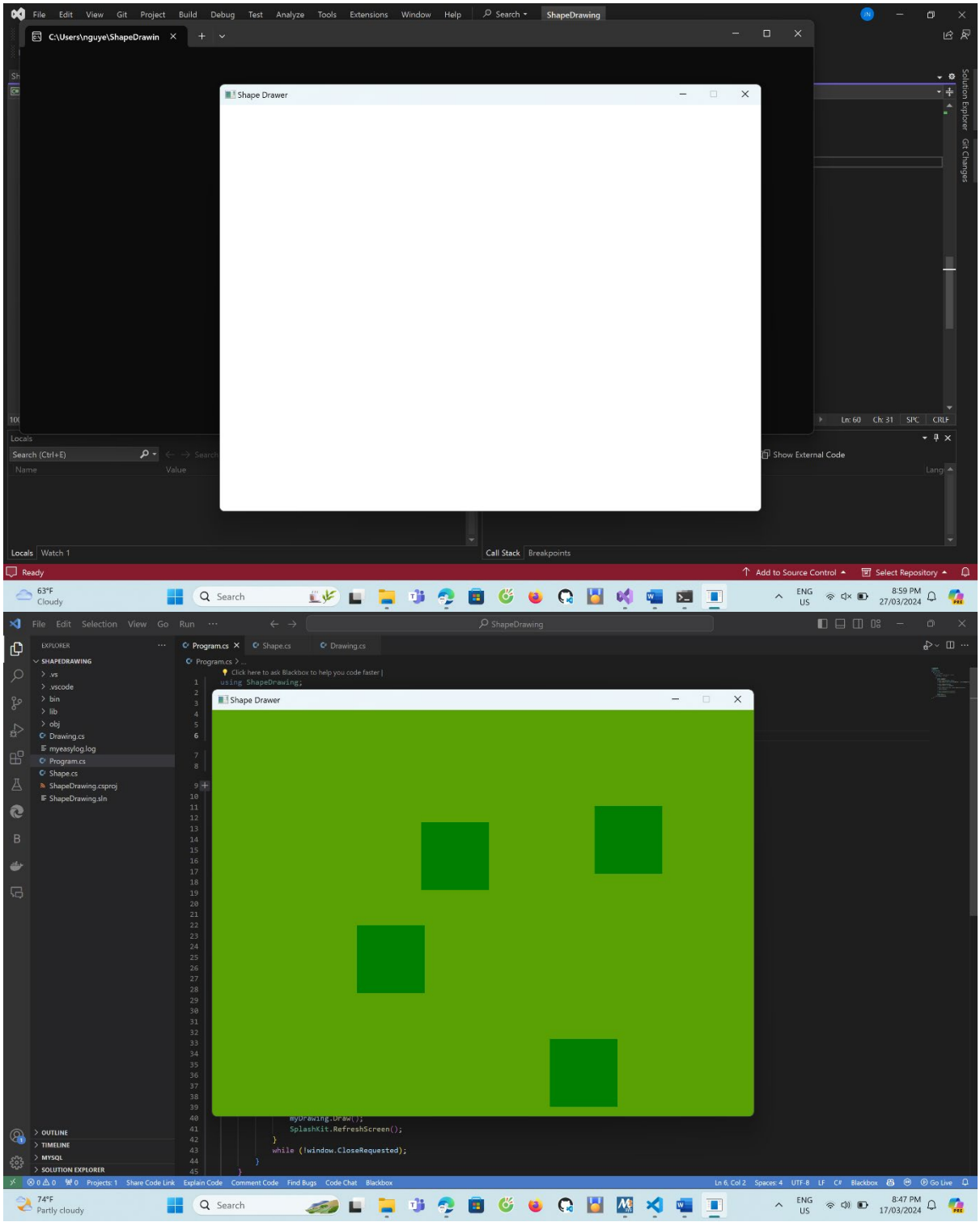
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