

Oefening 5.5

Polygon Class

Namespace: [System.Windows.Shapes](#)

[https://msdn.microsoft.com/en-us/library/system.windows.shapes.polygon\(v=vs.110\).aspx](https://msdn.microsoft.com/en-us/library/system.windows.shapes.polygon(v=vs.110).aspx)

```
public partial class MainWindow : Window
{
    public MainWindow()
    {
        InitializeComponent();
    }

    private void drawButton_Click(object sender, RoutedEventArgs e)
    {
        SolidColorBrush brush = new SolidColorBrush(Colors.Black);

        DrawTriangle2(paperCanvas, brush, 100, 10, 40, 40);
        DrawTriangle2(paperCanvas, brush, 10, 100, 20, 60);
    }

    private void DrawTriangle2(Canvas drawingArea,
                               SolidColorBrush brushToUse,
                               double xPlace,
                               double yPlace,
                               double width,
                               double height)
    {
        double rightCornerX, rightCornerY;
        rightCornerX = xPlace + width;
        rightCornerY = yPlace + height;

        DrawPolygon(drawingArea, brushToUse,
                    xPlace, yPlace,
                    xPlace, rightCornerY,
                    rightCornerX, rightCornerY);
    }

    private void DrawPolygon(Canvas drawingArea,
                              SolidColorBrush brushToUse,
                              double X1, double Y1,
                              double X2, double Y2,
                              double X3, double Y3)
    {
        Polygon polygon = new Polygon();
        polygon.Stroke = brushToUse;
        polygon.StrokeThickness = 1;
        polygon.Points.Add(new Point(X1, Y1));
        polygon.Points.Add(new Point(X2, Y2));
        polygon.Points.Add(new Point(X3, Y3));
        drawingArea.Children.Add(polygon);
    }
}
```

```
<Window x:Class="Oef5_5_Polygon.MainWindow"
        xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
        xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
        Title="Polygon Method" Height="245" Width="300">
    <Grid>
        <Button Content="Draw" HorizontalAlignment="Left"
                Margin="10,10,0,0" VerticalAlignment="Top"
                Width="75" Name="drawButton" Click="drawButton_Click" Height="19"/>
        <Canvas HorizontalAlignment="Left" Height="180"
                Margin="90,10,0,0" VerticalAlignment="Top" Width="190"
                Name="paperCanvas" Background="LightGray"/>
    </Grid>
</Window>
```