Министерство образования и молодежной политики Свердловской области

ГАПОУ СО «Екатеринбургский колледж транспортного строительства»

Отчет по ТРПО. Лабораторная работа   
**Использование фигур в WPF-приложениях**

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Группа: ПР-31

Преподаватель: Бушуева Е. В.

2024

Задание 1

<Window x:Class="Lab\_10\_WPF.MainWindow"

        xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"

        xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"

        xmlns:d="http://schemas.microsoft.com/expression/blend/2008"

        xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"

        xmlns:local="clr-namespace:Lab\_10\_WPF"

        mc:Ignorable="d"

        Title="MainWoindow" Height="450" Width="800">

    <Grid>

        <Grid.ColumnDefinitions>

            <ColumnDefinition />

            <ColumnDefinition />

            <ColumnDefinition />

        </Grid.ColumnDefinitions>

        <Viewbox Grid.Column="0">

            <Canvas Margin="10" Width="310" Height="310">

                <Line Stroke="Black" StrokeThickness="5" X1="0" Y1="0" X2="0" Y2="300" />

                <Line Stroke="Black" StrokeThickness="5" X1="0" Y1="300" X2="300" Y2="300" />

                <Polyline Stroke="DarkBlue" StrokeThickness="3" Points="10, 250 20, 100 50, 250 100, 50 200, 100 300, 100"/>

                <Ellipse Width="50" Height="30" Fill="Red" Canvas.Top="40" Canvas.Left="75" Opacity="0.4" />

            </Canvas>

        </Viewbox>

        <Viewbox Grid.Column="1">

            <Canvas Margin="10" Width="310" Height="310">

                <Line Stroke="Black" StrokeThickness="5" X1="0" Y1="0" X2="0" Y2="300" />

                <Line Stroke="Black" StrokeThickness="5" X1="0" Y1="300" X2="300" Y2="300" />

                <Polyline Stroke="DarkBlue" StrokeThickness="3" Points="10, 250 20, 100 50, 250 100, 50 200, 100 300, 100"/>

                <Ellipse Width="50" Height="30" Fill="Red" Canvas.Top="40" Canvas.Left="75" Opacity="0.4" />

            </Canvas>

        </Viewbox>

        <Viewbox Grid.Column="2">

            <Canvas Margin="10" Width="310" Height="310">

                <Line Stroke="Black" StrokeThickness="5" X1="0" Y1="0" X2="0" Y2="300" />

                <Line Stroke="Black" StrokeThickness="5" X1="0" Y1="300" X2="300" Y2="300" />

                <Polyline Stroke="DarkBlue" StrokeThickness="3" Points="10, 250 20, 100 50, 250 100, 50 200, 100 300, 100"/>

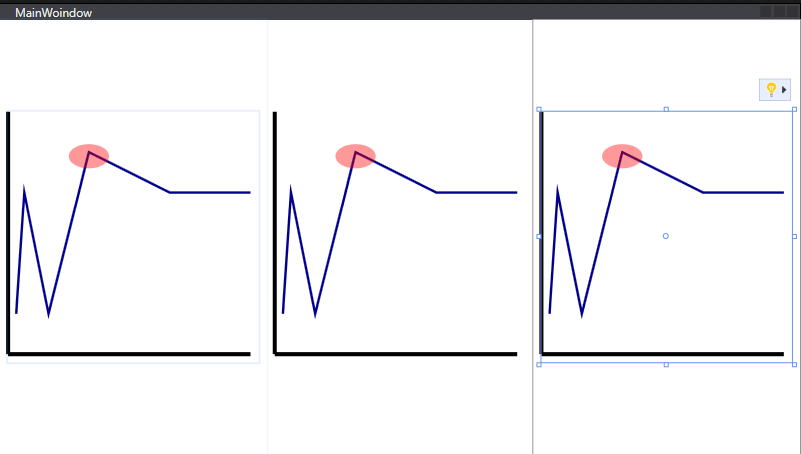
                <Ellipse Width="50" Height="30" Fill="Red" Canvas.Top="40" Canvas.Left="75" Opacity="0.4" />

            </Canvas>

        </Viewbox>

    </Grid>

</Window>



Задание 2

<Window x:Class="Lab\_10\_Toggle.MainWindow"

        xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"

        xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"

        xmlns:d="http://schemas.microsoft.com/expression/blend/2008"

        xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"

        xmlns:local="clr-namespace:Lab\_10\_Toggle"

        mc:Ignorable="d"

        Title="MainWindow" Height="450" Width="800">

    <Grid>

        <Grid.ColumnDefinitions>

            <ColumnDefinition />

            <ColumnDefinition />

            <ColumnDefinition />

        </Grid.ColumnDefinitions>

        <Viewbox Grid.Column="0">

            <local:UserControl1 />

        </Viewbox>

        <Viewbox Grid.Column="1">

            <local:UserControl1 />

        </Viewbox>

        <Viewbox Grid.Column="2">

            <local:UserControl1 />

        </Viewbox>

    </Grid>

</Window>

<UserControl x:Class="Lab\_10\_Toggle.UserControl1"

             xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"

             xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"

             xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"

             xmlns:d="http://schemas.microsoft.com/expression/blend/2008"

             xmlns:local="clr-namespace:Lab\_10\_Toggle"

             mc:Ignorable="d"

             d:DesignHeight="450" d:DesignWidth="800">

    <Canvas Margin="10" Width="310" Height="310">

        <Polygon Stroke="Gray" StrokeThickness="3" Points="50,180 50,110 115,75 180,110 180,180 115,210" Canvas.Left="40" Canvas.Top="10"  >

            <Polygon.Fill>

                <RadialGradientBrush>

                    <GradientStop Color="LightGray" Offset="0.2" />

                    <GradientStop Color="White" Offset="0.2" />

                    <GradientStop Color="LightGray" Offset="1" />

                </RadialGradientBrush>

            </Polygon.Fill>

            <Polygon.Triggers>

                <EventTrigger RoutedEvent="MouseEnter">

                    <BeginStoryboard>

                        <Storyboard>

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleX" To="1.5" Duration="0:0:2" />

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleY" To="1.5" Duration="0:0:2" />

                        </Storyboard>

                    </BeginStoryboard>

                </EventTrigger>

                <EventTrigger RoutedEvent="MouseLeave">

                    <BeginStoryboard>

                        <Storyboard>

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleX" To="1" Duration="0:0:2" />

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleY" To="1" Duration="0:0:2" />

                        </Storyboard>

                    </BeginStoryboard>

                </EventTrigger>

                <EventTrigger RoutedEvent="MouseLeftButtonUp">

                    <EventTrigger.Actions>

                        <BeginStoryboard>

                            <Storyboard>

                                <DoubleAnimation Storyboard.TargetName="Rotate\_1" Storyboard.TargetProperty="Angle" By="20" Duration="0:0:2" />

                            </Storyboard>

                        </BeginStoryboard>

                    </EventTrigger.Actions>

                </EventTrigger>

            </Polygon.Triggers>

            <Polygon.RenderTransform>

                <ScaleTransform x:Name="ScalePolygon\_1" ScaleX="1" ScaleY="1"/>

            </Polygon.RenderTransform>

        </Polygon>

        <Ellipse Width="90" Height="90" Canvas.Left="110" Canvas.Top="110" >

            <Ellipse.Fill>

                <RadialGradientBrush>

                    <GradientStop Color="Gray" Offset="0.1" />

                    <GradientStop Color="Gray" Offset="0.2" />

                    <GradientStop Color="Gray" Offset="0.3" />

                    <GradientStop Color="Gray" Offset="0.4" />

                    <GradientStop Color="DimGray" Offset="0.5" />

                    <GradientStop Color="LightGray" Offset="0.6" />

                    <GradientStop Color="LightGray" Offset="0.7" />

                    <GradientStop Color="LightGray" Offset="0.8" />

                    <GradientStop Color="LightGray" Offset="0.9" />

                    <GradientStop Color="White" Offset="1" />

                </RadialGradientBrush>

            </Ellipse.Fill>

            <Ellipse.Triggers>

                <EventTrigger RoutedEvent="MouseEnter">

                    <BeginStoryboard>

                        <Storyboard>

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleX" To="1.5" Duration="0:0:2" />

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleY" To="1.5" Duration="0:0:2" />

                        </Storyboard>

                    </BeginStoryboard>

                </EventTrigger>

                <EventTrigger RoutedEvent="MouseLeave">

                    <BeginStoryboard>

                        <Storyboard>

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleX" To="1" Duration="0:0:2" />

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleY" To="1" Duration="0:0:2" />

                        </Storyboard>

                    </BeginStoryboard>

                </EventTrigger>

                <EventTrigger RoutedEvent="MouseLeftButtonUp">

                    <EventTrigger.Actions>

                        <BeginStoryboard>

                            <Storyboard>

                                <DoubleAnimation Storyboard.TargetName="Rotate\_1" Storyboard.TargetProperty="Angle" By="20" Duration="0:0:2" />

                            </Storyboard>

                        </BeginStoryboard>

                    </EventTrigger.Actions>

                </EventTrigger>

            </Ellipse.Triggers>

        </Ellipse>

        <Rectangle x:Name="Rectangle\_1\_1" Fill="LightGreen" Width="100" Height="30" Canvas.Left="105" Canvas.Top="140" Stroke="Gray" StrokeThickness="2" >

            <Rectangle.Triggers>

                <EventTrigger RoutedEvent="MouseEnter">

                    <BeginStoryboard>

                        <Storyboard>

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleX" To="1.5" Duration="0:0:2" />

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleY" To="1.5" Duration="0:0:2" />

                        </Storyboard>

                    </BeginStoryboard>

                </EventTrigger>

                <EventTrigger RoutedEvent="MouseLeave">

                    <BeginStoryboard>

                        <Storyboard>

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleX" To="1" Duration="0:0:2" />

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleY" To="1" Duration="0:0:2" />

                        </Storyboard>

                    </BeginStoryboard>

                </EventTrigger>

                <EventTrigger RoutedEvent="MouseLeftButtonUp">

                    <EventTrigger.Actions>

                        <BeginStoryboard>

                            <Storyboard>

                                <DoubleAnimation Storyboard.TargetName="Rotate\_1" Storyboard.TargetProperty="Angle" By="20" Duration="0:0:2" />

                            </Storyboard>

                        </BeginStoryboard>

                    </EventTrigger.Actions>

                </EventTrigger>

            </Rectangle.Triggers>

        </Rectangle>

        <Rectangle x:Name="Rectangle\_1\_2" Fill="Red"  Width="25" Height="5" Canvas.Left="106" Canvas.Top="153" >

            <Rectangle.Triggers>

                <EventTrigger RoutedEvent="MouseEnter">

                    <BeginStoryboard>

                        <Storyboard>

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleX" To="1.5" Duration="0:0:2" />

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleY" To="1.5" Duration="0:0:2" />

                        </Storyboard>

                    </BeginStoryboard>

                </EventTrigger>

                <EventTrigger RoutedEvent="MouseLeave">

                    <BeginStoryboard>

                        <Storyboard>

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleX" To="1" Duration="0:0:2" />

                            <DoubleAnimation Storyboard.TargetName="CanvasScale\_1" Storyboard.TargetProperty="ScaleY" To="1" Duration="0:0:2" />

                        </Storyboard>

                    </BeginStoryboard>

                </EventTrigger>

                <EventTrigger RoutedEvent="MouseLeftButtonUp">

                    <EventTrigger.Actions>

                        <BeginStoryboard>

                            <Storyboard>

                                <DoubleAnimation Storyboard.TargetName="Rotate\_1" Storyboard.TargetProperty="Angle" By="20" Duration="0:0:2" />

                            </Storyboard>

                        </BeginStoryboard>

                    </EventTrigger.Actions>

                </EventTrigger>

            </Rectangle.Triggers>

        </Rectangle>

        <Canvas.RenderTransform>

            <TransformGroup>

                <ScaleTransform x:Name="CanvasScale\_1"  CenterX="150" CenterY="150"/>

                <RotateTransform x:Name="Rotate\_1" CenterX="150" CenterY="150"/>

            </TransformGroup>

        </Canvas.RenderTransform>

    </Canvas>

</UserControl>

