Министерство образования и молодежной политики Свердловской области

ГАПОУ СО «Екатеринбургский колледж транспортного строительства»

Отчет по ТРПО. Лабораторная работа №8  
**«Трансформация в WPF-приложениях»**.

Выполнил: Гордейчик С.А.

Группа: ПР-31

Преподаватель: Бушуева Е.В.

2024

Разметка:

<Window x:Class="Text\_Editor.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:Text\_Editor"

WindowStartupLocation="CenterScreen"

mc:Ignorable="d"

Title="MainWindow" Height="450" Width="740" ResizeMode="CanMinimize">

<Canvas Margin="0,0,10,0">

<WrapPanel Width="200" Canvas.Top="186" Canvas.Left="18" x:Name="Wrap\_1">

<Button Margin="2">Копировать</Button>

<Button Margin="2">Вырезать</Button>

<Button Margin="2">Вставить</Button>

<ListBox Width="190" Height="100" Margin="3 10">

<ListBoxItem Content="RenderTransform.Angle" />

<ListBoxItem Content="RenderTransform.AngleX" />

<ListBoxItem Content="RenderTransform.AngleY" />

<ListBoxItem Content="RenderTransform.CenterX" />

<ListBoxItem Content="RenderTransform.CenterY" />

<ListBoxItem Content="RenderTransform.X" />

<ListBoxItem Content="RenderTransform.Y" />

<ListBoxItem Content="RenderTransform.ScaleX" />

<ListBoxItem Content="RenderTransform.ScaleY" />

</ListBox>

<WrapPanel.RenderTransform>

<TransformGroup>

<SkewTransform x:Name="Wrap\_Skew1" AngleX="0" AngleY="20" />

<ScaleTransform x:Name="Wrap\_Scale1" ScaleX="0.6" ScaleY="0.65" />

<TranslateTransform x:Name="Wrap\_Translate1" />

</TransformGroup>

</WrapPanel.RenderTransform>

<WrapPanel.Triggers>

<EventTrigger RoutedEvent="GotFocus">

<BeginStoryboard>

<Storyboard>

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew1" Storyboard.TargetProperty="AngleX" To="0" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew1" Storyboard.TargetProperty="AngleY" To="0" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale1" Storyboard.TargetProperty="ScaleX" To="1" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale1" Storyboard.TargetProperty="ScaleY" To="1" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate1" Storyboard.TargetProperty="X" To="250" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate1" Storyboard.TargetProperty="Y" To="-170" Duration="0:0:2" />

</Storyboard>

</BeginStoryboard>

</EventTrigger>

<EventTrigger RoutedEvent="LostFocus">

<BeginStoryboard>

<Storyboard>

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew1" Storyboard.TargetProperty="AngleX" To="0" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew1" Storyboard.TargetProperty="AngleY" To="20" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale1" Storyboard.TargetProperty="ScaleX" To="0.6" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale1" Storyboard.TargetProperty="ScaleY" To="0.65" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate1" Storyboard.TargetProperty="X" To="0" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate1" Storyboard.TargetProperty="Y" To="0" Duration="0:0:2" />

</Storyboard>

</BeginStoryboard>

</EventTrigger>

</WrapPanel.Triggers>

</WrapPanel>

<WrapPanel Width="200" Canvas.Top="245" Canvas.Left="160">

<Button Margin="2">Копировать</Button>

<Button Margin="2">Вырезать</Button>

<Button Margin="2">Вставить</Button>

<ListBox Width="190" Height="100" Margin="3 10">

<ListBoxItem Content="RenderTransform.Angle" />

<ListBoxItem Content="RenderTransform.AngleX" />

<ListBoxItem Content="RenderTransform.AngleY" />

<ListBoxItem Content="RenderTransform.CenterX" />

<ListBoxItem Content="RenderTransform.CenterY" />

<ListBoxItem Content="RenderTransform.X" />

<ListBoxItem Content="RenderTransform.Y" />

<ListBoxItem Content="RenderTransform.ScaleX" />

<ListBoxItem Content="RenderTransform.ScaleY" />

</ListBox>

<WrapPanel.RenderTransform>

<TransformGroup>

<SkewTransform x:Name="Wrap\_Skew2" AngleX="0" AngleY="15" />

<ScaleTransform x:Name="Wrap\_Scale2" ScaleX="0.6" ScaleY="0.65" />

<TranslateTransform x:Name="Wrap\_Translate2" />

</TransformGroup>

</WrapPanel.RenderTransform>

<WrapPanel.Triggers>

<EventTrigger RoutedEvent="GotFocus">

<BeginStoryboard>

<Storyboard>

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew2" Storyboard.TargetProperty="AngleX" To="0" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew2" Storyboard.TargetProperty="AngleY" To="0" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale2" Storyboard.TargetProperty="ScaleX" To="1" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale2" Storyboard.TargetProperty="ScaleY" To="1" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate2" Storyboard.TargetProperty="X" To="105" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate2" Storyboard.TargetProperty="Y" To="-200" Duration="0:0:2" />

</Storyboard>

</BeginStoryboard>

</EventTrigger>

<EventTrigger RoutedEvent="LostFocus">

<BeginStoryboard>

<Storyboard>

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew2" Storyboard.TargetProperty="AngleX" To="0" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew2" Storyboard.TargetProperty="AngleY" To="15" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale2" Storyboard.TargetProperty="ScaleX" To="0.6" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale2" Storyboard.TargetProperty="ScaleY" To="0.65" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate2" Storyboard.TargetProperty="X" To="0" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate2" Storyboard.TargetProperty="Y" To="0" Duration="0:0:2" />

</Storyboard>

</BeginStoryboard>

</EventTrigger>

</WrapPanel.Triggers>

</WrapPanel>

<WrapPanel Width="200" Canvas.Top="280" Canvas.Left="300">

<Button Margin="2">Копировать</Button>

<Button Margin="2">Вырезать</Button>

<Button Margin="2">Вставить</Button>

<ListBox Width="190" Height="100" Margin="3 10">

<ListBoxItem Content="RenderTransform.Angle" />

<ListBoxItem Content="RenderTransform.AngleX" />

<ListBoxItem Content="RenderTransform.AngleY" />

<ListBoxItem Content="RenderTransform.CenterX" />

<ListBoxItem Content="RenderTransform.CenterY" />

<ListBoxItem Content="RenderTransform.X" />

<ListBoxItem Content="RenderTransform.Y" />

<ListBoxItem Content="RenderTransform.ScaleX" />

<ListBoxItem Content="RenderTransform.ScaleY" />

</ListBox>

<WrapPanel.RenderTransform>

<TransformGroup>

<ScaleTransform x:Name="Wrap\_Scale3" ScaleX="0.7" ScaleY="0.65" />

<TranslateTransform x:Name="Wrap\_Translate3" />

</TransformGroup>

</WrapPanel.RenderTransform>

<WrapPanel.Triggers>

<EventTrigger RoutedEvent="GotFocus">

<BeginStoryboard>

<Storyboard>

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale3" Storyboard.TargetProperty="ScaleX" To="1" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale3" Storyboard.TargetProperty="ScaleY" To="1" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate3" Storyboard.TargetProperty="X" To="-50" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate3" Storyboard.TargetProperty="Y" To="-260" Duration="0:0:2" />

</Storyboard>

</BeginStoryboard>

</EventTrigger>

<EventTrigger RoutedEvent="LostFocus">

<BeginStoryboard>

<Storyboard>

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale3" Storyboard.TargetProperty="ScaleX" To="0.7" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale3" Storyboard.TargetProperty="ScaleY" To="0.65" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate3" Storyboard.TargetProperty="X" To="0" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate3" Storyboard.TargetProperty="Y" To="0" Duration="0:0:2" />

</Storyboard>

</BeginStoryboard>

</EventTrigger>

</WrapPanel.Triggers>

</WrapPanel>

<WrapPanel Width="200" Canvas.Top="280" Canvas.Left="455">

<Button Margin="2">Копировать</Button>

<Button Margin="2">Вырезать</Button>

<Button Margin="2">Вставить</Button>

<ListBox Width="190" Height="100" Margin="3 10">

<ListBoxItem Content="RenderTransform.Angle" />

<ListBoxItem Content="RenderTransform.AngleX" />

<ListBoxItem Content="RenderTransform.AngleY" />

<ListBoxItem Content="RenderTransform.CenterX" />

<ListBoxItem Content="RenderTransform.CenterY" />

<ListBoxItem Content="RenderTransform.X" />

<ListBoxItem Content="RenderTransform.Y" />

<ListBoxItem Content="RenderTransform.ScaleX" />

<ListBoxItem Content="RenderTransform.ScaleY" />

</ListBox>

<WrapPanel.RenderTransform>

<TransformGroup>

<SkewTransform x:Name="Wrap\_Skew4" AngleX="0" AngleY="-15" />

<ScaleTransform x:Name="Wrap\_Scale4" ScaleX="0.6" ScaleY="0.65" />

<TranslateTransform x:Name="Wrap\_Translate4" />

</TransformGroup>

</WrapPanel.RenderTransform>

<WrapPanel.Triggers>

<EventTrigger RoutedEvent="GotFocus">

<BeginStoryboard>

<Storyboard>

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew4" Storyboard.TargetProperty="AngleX" To="0" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew4" Storyboard.TargetProperty="AngleY" To="0" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale4" Storyboard.TargetProperty="ScaleX" To="1" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale4" Storyboard.TargetProperty="ScaleY" To="1" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate4" Storyboard.TargetProperty="X" To="-170" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate4" Storyboard.TargetProperty="Y" To="-230" Duration="0:0:2" />

</Storyboard>

</BeginStoryboard>

</EventTrigger>

<EventTrigger RoutedEvent="LostFocus">

<BeginStoryboard>

<Storyboard>

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew4" Storyboard.TargetProperty="AngleX" To="0" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew4" Storyboard.TargetProperty="AngleY" To="-15" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale4" Storyboard.TargetProperty="ScaleX" To="0.6" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale4" Storyboard.TargetProperty="ScaleY" To="0.65" Duration="0:0:2"/>

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate4" Storyboard.TargetProperty="X" To="0" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate4" Storyboard.TargetProperty="Y" To="0" Duration="0:0:2" />

</Storyboard>

</BeginStoryboard>

</EventTrigger>

</WrapPanel.Triggers>

</WrapPanel>

<WrapPanel Width="200" Canvas.Top="235" Canvas.Left="595" HorizontalAlignment="Left" VerticalAlignment="Top">

<Button Margin="2">Копировать</Button>

<Button Margin="2">Вырезать</Button>

<Button Margin="2">Вставить</Button>

<ListBox Width="190" Height="100" Margin="3 10">

<ListBoxItem Content="RenderTransform.Angle" />

<ListBoxItem Content="RenderTransform.AngleX" />

<ListBoxItem Content="RenderTransform.AngleY" />

<ListBoxItem Content="RenderTransform.CenterX" />

<ListBoxItem Content="RenderTransform.CenterY" />

<ListBoxItem Content="RenderTransform.X" />

<ListBoxItem Content="RenderTransform.Y" />

<ListBoxItem Content="RenderTransform.ScaleX" />

<ListBoxItem Content="RenderTransform.ScaleY" />

</ListBox>

<WrapPanel.RenderTransform>

<TransformGroup>

<SkewTransform x:Name="Wrap\_Skew5" AngleX="0" AngleY="-20" />

<ScaleTransform x:Name="Wrap\_Scale5" ScaleX="0.6" ScaleY="0.65" />

<TranslateTransform x:Name="Wrap\_Translate5" />

</TransformGroup>

</WrapPanel.RenderTransform>

<WrapPanel.Triggers>

<EventTrigger RoutedEvent="GotFocus">

<BeginStoryboard>

<Storyboard>

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew5" Storyboard.TargetProperty="AngleX" To="0" Duration="0:0:2"/>

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew5" Storyboard.TargetProperty="AngleY" To="0" Duration="0:0:2"/>

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale5" Storyboard.TargetProperty="ScaleX" To="1" Duration="0:0:2"/>

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale5" Storyboard.TargetProperty="ScaleY" To="1" Duration="0:0:2"/>

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate5" Storyboard.TargetProperty="X" To="-310" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate5" Storyboard.TargetProperty="Y" To="-190" Duration="0:0:2" />

</Storyboard>

</BeginStoryboard>

</EventTrigger>

<EventTrigger RoutedEvent="LostFocus">

<BeginStoryboard>

<Storyboard>

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew5" Storyboard.TargetProperty="AngleX" To="0" Duration="0:0:2"/>

<DoubleAnimation Storyboard.TargetName="Wrap\_Skew5" Storyboard.TargetProperty="AngleY" To="-20" Duration="0:0:2"/>

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale5" Storyboard.TargetProperty="ScaleX" To="0.6" Duration="0:0:2"/>

<DoubleAnimation Storyboard.TargetName="Wrap\_Scale5" Storyboard.TargetProperty="ScaleY" To="0.65" Duration="0:0:2"/>

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate5" Storyboard.TargetProperty="X" To="0" Duration="0:0:2" />

<DoubleAnimation Storyboard.TargetName="Wrap\_Translate5" Storyboard.TargetProperty="Y" To="0" Duration="0:0:2" />

</Storyboard>

</BeginStoryboard>

</EventTrigger>

</WrapPanel.Triggers>

</WrapPanel>

</Canvas>

</Window>

Снимок экрана:  




