Отчёт студента ПОКС-31В

Моисеев А.Д.

Практическая №8

```
Window x:Class="Практическая 8 12 .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:Практическая 8 12 " xmlns:sys="clr-
namespace:System;assembly=mscorlib"
    mc:Ignorable="d"
    Title="MainWindow" Height="450" Width="800">
  <Window.Resources>
    <Style x:Key="style1">
       <Setter Property="Shape.Fill">
         <Setter.Value>
           <LinearGradientBrush>
              <GradientStop Offset="0" Color="White"/>
              <GradientStop Offset="0.5" Color="Pink"/>
              <GradientStop Offset="1" Color="Red"/>
           </LinearGradientBrush>
         </Setter.Value>
       </Setter>
       <Setter Property="Shape.Stroke" Value="Black"/>
       <Setter Property="Shape.StrokeThickness" Value="10"/>
    </Style>
    <Style x:Key="style2">
       <Setter Property="Shape.Fill" Value="Pink"/>
       <Setter Property="Shape.Stroke" Value="Violet"/>
       <Setter Property="Shape.StrokeThickness" Value="3"/>
```

```
</Style>
  <Style x:Key="style3">
    <Setter Property="Shape.StrokeThickness" Value="5"/>
    <Setter Property="Shape.Stroke" Value="DarkGreen"/>
    <Setter Property="Shape.StrokeThickness" Value="2"/>
  </Style>
  <Style x:Key="style4">
    <Setter Property="Shape.Fill" Value="Blue"/>
    <Setter Property="Shape.Stroke" Value="LightCoral"/>
    <Setter Property="Shape.StrokeThickness" Value="4"/>
  </Style>
  <Style TargetType="Button">
    <Style.Setters>
      <Setter Property="Button.Background" Value="Black"/>
      <Setter Property="Button.Foreground" Value="White"/>
    </Style.Setters>
    <Style.Triggers>
      <Trigger Property="IsMouseOver" Value="True">
         <Setter Property="Button.Foreground" Value="Red"/>
      </Trigger>
    </Style.Triggers>
  </Style>
</Window.Resources>
<Grid>
  <Grid.RowDefinitions>
    <RowDefinition Height="Auto"/>
    <RowDefinition/>
  </Grid.RowDefinitions>
  <Grid>
    <Grid.ColumnDefinitions>
```

```
<ColumnDefinition/>
         <ColumnDefinition Width="Auto"/>
       </Grid.ColumnDefinitions>
       <TextBox Name="FigureCount" ToolTip="Inter figere Count" Margin="5" Text="15"/>
       <Button Grid.Column="1" Click="Button_Click">Generate Shapes
       </Button>
    </Grid>
    <Canvas Name="MainCanvas" Grid.Row="1" Margin="5">
    </Canvas>
  </Grid>
</Window>
namespace Практическая_8_12_
{
  /// <summary>
  /// Логика взаимодействия для MainWindow.xaml
  /// </summary>
  public partial class MainWindow : Window
  {
    public MainWindow()
       InitializeComponent();
    }
    private void Button_Click(object sender, RoutedEventArgs e)
    {
       int N = 15;
       try
       {
         N = Convert.ToInt32(FigureCount.Text);
```

```
}
  catch (Exception ee)
  {
    this.Title = "Только цедое число!";
  }
  GenerateShapes(N);
}
private void GenerateShapes(int N)
{
  Random rndShapeType = new Random(DateTime.Now.Millisecond);
  Random rndStyle = new Random(DateTime.Now.Second);
  Random rndPosition = new Random(DateTime.Now.Minute);
  Random rndSize = new Random(DateTime.Now.Minute);
  for (int i = 0; i < N; i++)
  {
    Shape currentShape;
    int shapeType = rndShapeType.Next(0, 2);
    if (shapeType == 0)
       currentShape = new Ellipse();
    else
       currentShape = new Rectangle();
    int shapeStyle = rndStyle.Next(0, 3) + 1;
    String styleName ="style"+shapeStyle.ToString();
    Style currentStyle = (Style)this.FindResource(styleName);
    currentShape.Style = currentStyle;
    currentShape.Width = rndSize.Next(10, 200);
    currentShape.Height = rndSize.Next(10, 100);
    MainCanvas.Children.Add(currentShape);
    Canvas.SetLeft(currentShape, rndPosition.Next(5, 750));
    Canvas.SetTop(currentShape, rndPosition.Next(5, 370));
```

}
}