Logical Trees

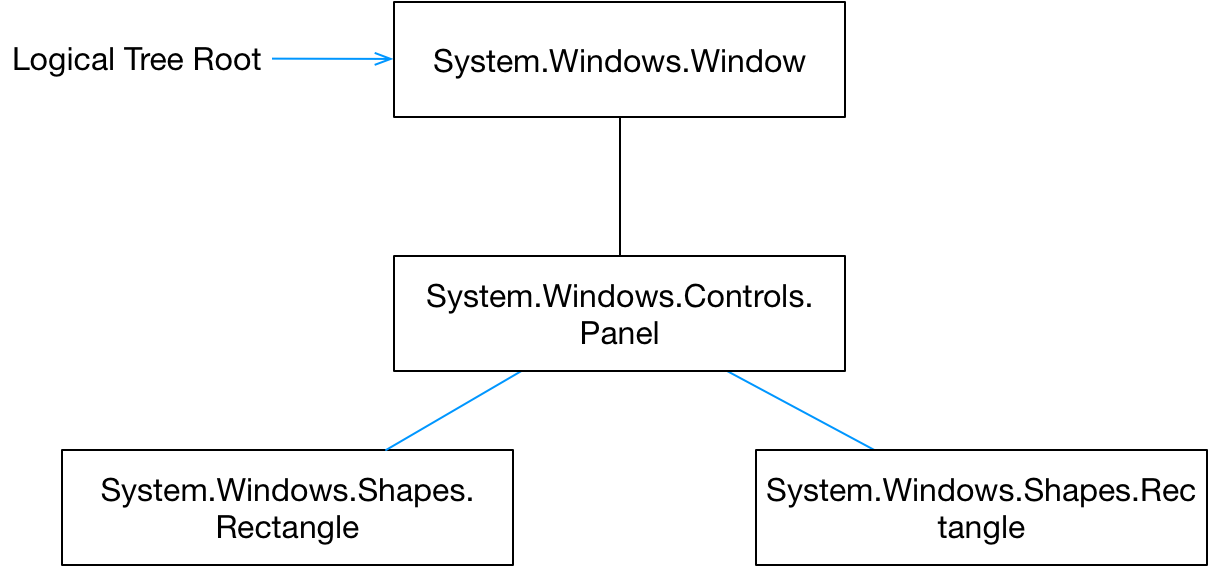
UI Structure

Nodes with more than one child

Source code



Logical tree



Questions

What is the logical tree?

Defined by object element nodes in the XAML

Each node is typically a FrameworkElement or Control

Each node in logical tree can map to many nodes in the visual tree

Give an example of a single node in logical tree mapping to many nodes in the visual tree?

A ListBox in the logical tree is composed of scrollbars, borders etc

ContentControls have a single child. How can we add more than one child to such an object?

By using a Panel

Write code to create a single window with two rectangle children; one blue and one red.

public class Answer

{

public static void CreateLogicalTree()

{

// Write code to create a logical tree consisting of a single

// window with two rectangles

Window mainWindow = new Window() {Height = 200, Width = 200};

var p = new StackPanel()

{

HorizontalAlignment = HorizontalAlignment.Center,

VerticalAlignment = VerticalAlignment.Center

};

var r = new Rectangle {Height = 200, Width = 200, Fill = Brushes.Red};

var b = new Rectangle {Height = 200, Width = 200, Fill = Brushes.Blue};

p.Children.Add(r);

p.Children.Add(b);

mainWindow.Content = p;

Application mainApp = new Application();

mainApp.Run(mainWindow);

}

}

Sketch the visual and logical trees for the previous code

