```csharp
using Microsoft.Win32;
using System.IO;
using System.Windows;
using System.Windows.Documents;
using System.Windows.Media;

namespace WpfApp4
{
    /// <summary>
    /// MyDocumentViewer.xaml 的互動邏輯
    /// </summary>
    public partial class MyDocumentViewer : Window
    {
        Color fontColor = Colors.Black;
        public MyDocumentViewer()
        {
            InitializeComponent();
            fontColorPicker.SelectedColor = fontColor;
            foreach (FontFamily fontFamily in Fonts.SystemFontFamilies)
            {
                fontFamilyComboBox.Items.Add(fontFamily.Source);
            }
            fontFamilyComboBox.SelectedItem = "Arial";
            fontSizeComboBox.ItemsSource = new List<double>() { 8, 9,
                10, 11, 12, 14, 16, 18, 20, 22, 24, 26, 28, 36, 48, 72 };
            fontSizeComboBox.SelectedIndex = 2;
        }

        private void NewCommand_Executed(object sender,
          System.Windows.Input.ExecutedRoutedEventArgs e)
        {
            MyDocumentViewer myDocumentViewer = new MyDocumentViewer();
            myDocumentViewer.Show();
        }

        private void OpenCommand_Executed(object sender,
          System.Windows.Input.ExecutedRoutedEventArgs e)
        {
            OpenFileDialog openFileDialog = new OpenFileDialog();
            openFileDialog.Filter = "Rich Text Format (*.rtf)|*.rtf|All
                files (*.*)|*.*";
            openFileDialog.DefaultExt = ".rtf";
            openFileDialog.AddExtension = true;

            if (openFileDialog.ShowDialog() == true)
            {
                FileStream fileStream = new FileStream
                    (openFileDialog.FileName, FileMode.Open);
                TextRange range = new TextRange
                    (rtbEditor.Document.ContentStart,
                    rtbEditor.Document.ContentEnd);
                range.Load(fileStream, DataFormats.Rtf);
                fileStream.Close();
```

```
47                }
48            }
49
50        private void SaveCommand_Executed(object sender,
              System.Windows.Input.ExecutedRoutedEventArgs e)
51        {
52            SaveFileDialog saveFileDialog = new SaveFileDialog();
53            saveFileDialog.Filter = "Rich Text Format (*.rtf)|*.rtf|All
                  files (*.*)|*.*";
54            saveFileDialog.DefaultExt = ".rtf";
55            saveFileDialog.AddExtension = true;
56
57            if (saveFileDialog.ShowDialog() == true)
58            {
59                TextRange range = new TextRange
                    (rtbEditor.Document.ContentStart,
                    rtbEditor.Document.ContentEnd);
60                FileStream fileStream = new FileStream
                    (saveFileDialog.FileName, FileMode.Create);
61                range.Save(fileStream, DataFormats.Rtf);
62                fileStream.Close();
63            }
64        }
65
66        private void fontColorPicker_SelectedColorChanged(object
              sender, RoutedPropertyChangedEventArgs<Color?> e)
67        {
68            fontColor = (Color)e.NewValue;
69            SolidColorBrush fontBrush = new SolidColorBrush(fontColor);
70            rtbEditor.Selection.ApplyPropertyValue
                (TextElement.ForegroundProperty, fontBrush);//rtbEditor所
                選擇的文字 的顏色改為fontBrush
71        }
72
73        private void fontSizeComboBox_SelectionChanged(object sender,
              System.Windows.Controls.SelectionChangedEventArgs e)
74        {
75            if (fontSizeComboBox.SelectedItem ≠ null)
76            {
77                rtbEditor.Selection.ApplyPropertyValue
                    (TextElement.FontSizeProperty,
                    fontSizeComboBox.SelectedItem);
78            }
79        }
80
81        private void fontFamilyComboBox_SelectionChanged(object sender,
              System.Windows.Controls.SelectionChangedEventArgs e)
82        {
83            if (fontFamilyComboBox.SelectedItem ≠ null)
84            {
85                rtbEditor.Selection.ApplyPropertyValue
                    (TextElement.FontFamilyProperty,
                    fontFamilyComboBox.SelectedItem);
```

```
86                }
87            }
88
89        private void rtbEditor_SelectionChanged(object sender,
             RoutedEventArgs e)
90        {
91            var property_bold = rtbEditor.Selection.GetPropertyValue
                (TextElement.FontWeightProperty);
92            boldButton.IsChecked = (property_bold ≠
               DependencyProperty.UnsetValue) && (property_bold.Equals
               (FontWeights.Bold));
93
94            var property_italic = rtbEditor.Selection.GetPropertyValue
                (TextElement.FontStyleProperty);
95            italicButton.IsChecked = (property_italic ≠
               DependencyProperty.UnsetValue) && (property_italic.Equals
               (FontStyles.Italic));
96
97            var property_underline =
                 rtbEditor.Selection.GetPropertyValue
                 (Inline.TextDecorationsProperty);
98            underlineButton.IsChecked = (property_underline ≠
               DependencyProperty.UnsetValue) &&
               (property_underline.Equals(TextDecorations.Underline));
99
100           var property_fontFamily =
                 rtbEditor.Selection.GetPropertyValue
                 (TextElement.FontFamilyProperty);
101           fontFamilyComboBox.SelectedItem =
                 property_fontFamily.ToString();
102
103           var property_fontSize =
                 rtbEditor.Selection.GetPropertyValue
                 (TextElement.FontSizeProperty);
104           fontSizeComboBox.SelectedItem = property_fontSize;
105
106           var property_fontColor =
                 rtbEditor.Selection.GetPropertyValue
                 (TextElement.ForegroundProperty);
107           fontColorPicker.SelectedColor = ((SolidColorBrush)
                 property_fontColor).Color;
108        }
109
110        private void trashButton_Click(object sender, RoutedEventArgs
             e)
111        {
112            rtbEditor.Document.Blocks.Clear();
113        }
114    }
115 }
116
```