

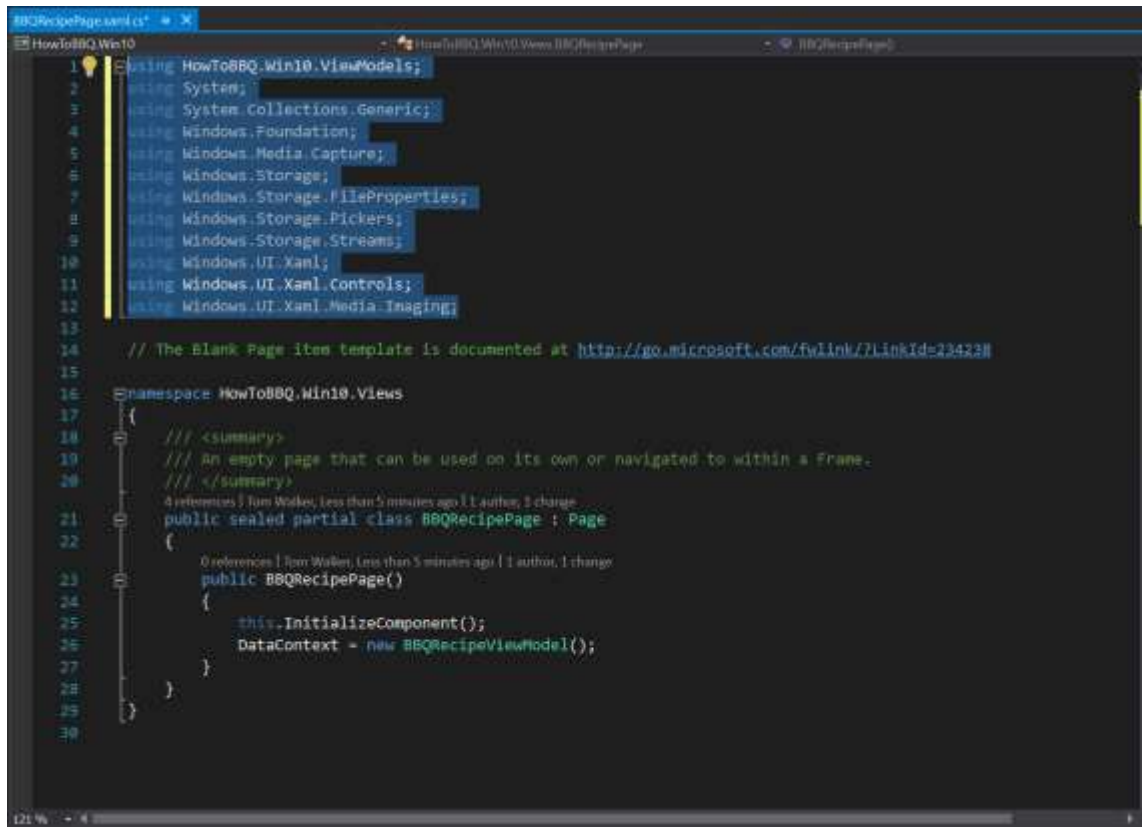
Windows 10 UWP – Hands on Lab

Lab 6:

Note: This demo app created for this lab uses the Visual Studio 2015 RTM and Windows Tools SDK ver 10240.

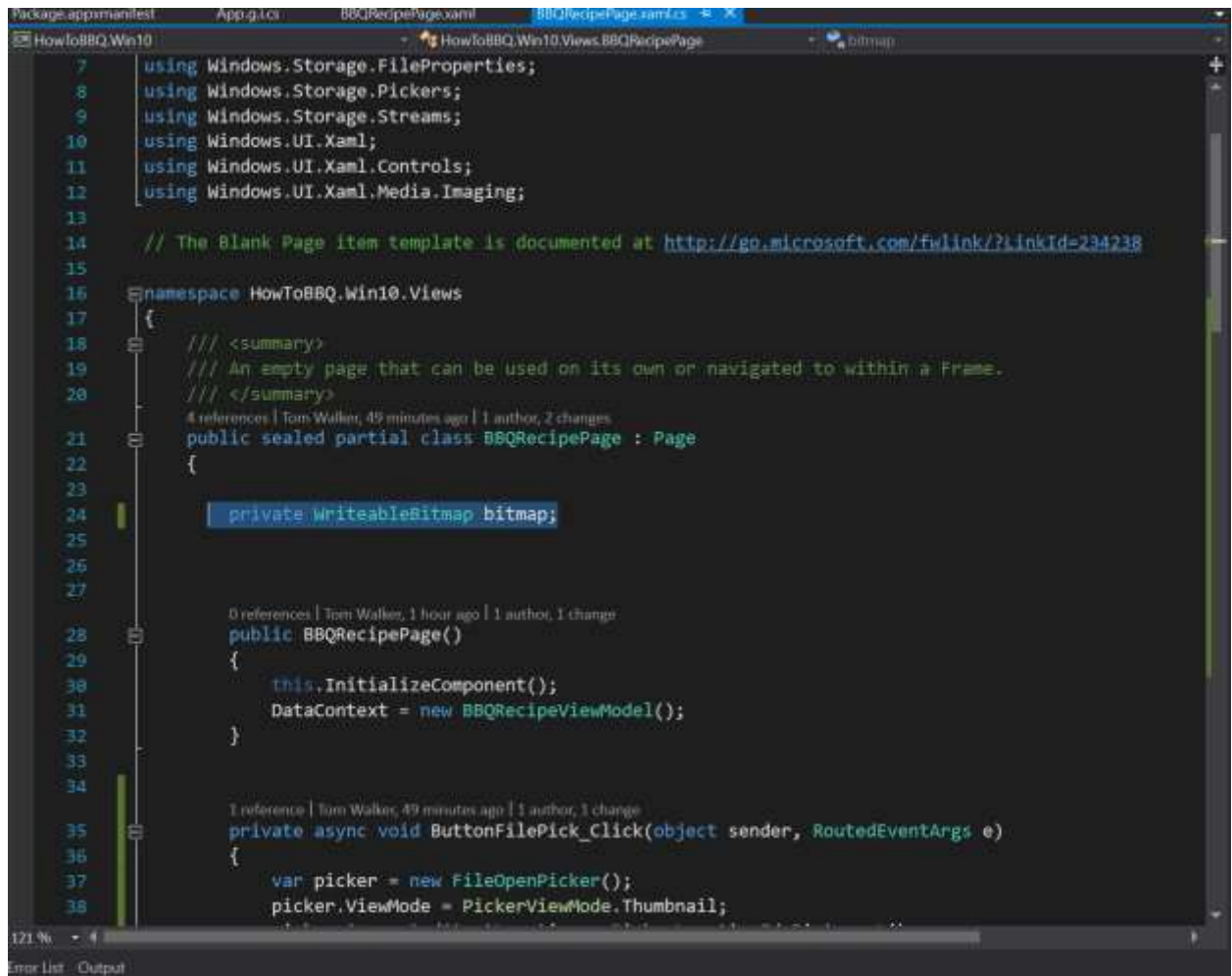
1. Open the \View\BBQRecipePage.xaml.cs file and make sure the following using statements match the ones below. Add the missing using statements.

```
using HowToBBQ.Win10.ViewModels;
using System;
using System.Collections.Generic;
using Windows.Foundation;
using Windows.Media.Capture;
using Windows.Storage;
using Windows.Storage.FileProperties;
using Windows.Storage.Pickers;
using Windows.Storage.Streams;
using Windows.UI.Xaml;
using Windows.UI.Xaml.Controls;
using Windows.UI.Xaml.Media.Imaging;
```



2. In the \View\BBQRecipePage.xaml.cs file and add the following lines of code on line 24.

```
private WriteableBitmap bitmap;
```



```
Package.appamintest App.g.cs BBQRecipePage.xaml BBQRecipePage.xaml.cs
HowToBBQ.Win10 HowToBBQ.Win10.Views.BBQRecipePage bitmap
7 using Windows.Storage.FileProperties;
8 using Windows.Storage.Pickers;
9 using Windows.Storage.Streams;
10 using Windows.UI.Xaml;
11 using Windows.UI.Xaml.Controls;
12 using Windows.UI.Xaml.Media.Imaging;
13
14 // The Blank Page item template is documented at http://go.microsoft.com/fwlink/?LinkId=234238
15
16 namespace HowToBBQ.Win10.Views
17 {
18     /// <summary>
19     /// An empty page that can be used on its own or navigated to within a Frame.
20     /// </summary>
21     4 references | Tom Walker, 49 minutes ago | 1 author, 2 changes
22     public sealed partial class BBQRecipePage : Page
23     {
24         private WriteableBitmap bitmap;
25
26
27
28     0 references | Tom Walker, 1 hour ago | 1 author, 1 change
29     public BBQRecipePage()
30     {
31         this.InitializeComponent();
32         DataContext = new BBQRecipeViewModel();
33     }
34
35     1 reference | Tom Walker, 49 minutes ago | 1 author, 1 change
36     private async void ButtonFilePick_Click(object sender, RoutedEventArgs e)
37     {
38         var picker = new FileOpenPicker();
39         picker.ViewMode = PickerViewMode.Thumbnail;
```

3. In the \View\BBQRecipePage.xaml.cs file and add the following lines of code on line 35.

```
private async void ButtonFilePick_Click(object sender, RoutedEventArgs e)
{
    var picker = new FileOpenPicker();
    picker.ViewMode = PickerViewMode.Thumbnail;
    picker.SuggestedStartLocation = PickerLocationId.PicturesLibrary;
    picker.FileTypeFilter.Add(".jpg");
    picker.FileTypeFilter.Add(".jpeg");
    picker.FileTypeFilter.Add(".png");

    StorageFile file = await picker.PickSingleFileAsync();

    if (file != null)
    {
        ImageProperties imgProp = await
            file.Properties.GetImagePropertiesAsync();
        var savedPictureStream = await file.OpenAsync(FileAccessMode.Read);

        //set image properties and show the taken photo
        bitmap = new WriteableBitmap((int)imgProp.Width, (int)imgProp.Height);
        await bitmap.SetSourceAsync(savedPictureStream);
        BBQImage.Source = bitmap;
        BBQImage.Visibility = Visibility.Visible;

        (this.DataContext as BBQRecipeViewModel).imageSource = file.Path;
    }
}
```

```
Package.appxmanifest  App.g.cs  BBQRecipePage.xaml  BBQRecipePage.xaml.cs
HowToBBQ.Win10  HowToBBQ.Win10.Views.BBQRecipePage  ButtonFilePick_Click(object sender, RoutedEventArgs e)

30      this.InitializeComponent();
31      DataContext = new BBQRecipeViewModel();
32  }
33
34
35  1 reference | Tom Walker, 49 minutes ago | 1 author, 1 change
36  private async void ButtonFilePick_Click(object sender, RoutedEventArgs e)
37  {
38      var picker = new FileOpenPicker();
39      picker.ViewMode = PickerViewMode.Thumbnail;
40      picker.SuggestedStartLocation = PickerLocationId.PicturesLibrary;
41      picker.FileTypeFilter.Add(".jpg");
42      picker.FileTypeFilter.Add(".jpeg");
43      picker.FileTypeFilter.Add(".png");
44
45      StorageFile file = await picker.PickSingleFileAsync();
46
47      if (file != null)
48      {
49
50          ImageProperties imgProp = await file.Properties.GetImagePropertiesAsync();
51          var savedPictureStream = await file.OpenAsync(FileAccessMode.Read);
52
53          //set image properties and show the taken photo
54          bitmap = new WriteableBitmap((int)imgProp.Width, (int)imgProp.Height);
55          await bitmap.SetSourceAsync(savedPictureStream);
56          BBQImage.Source = bitmap;
57          BBQImage.Visibility = Visibility.Visible;
58
59          (this.DataContext as BBQRecipeViewModel).imageSource = file.Path;
60      }
61  }
62
```

4. In the \View\BBQRecipePage.xaml.cs file and add the following lines of code on line 37.

```
private async void ButtonCamera_Click(object sender, RoutedEventArgs e)
{
    CameraCaptureUI captureUI = new CameraCaptureUI();
    captureUI.PhotoSettings.Format = CameraCaptureUIPhotoFormat.Jpeg;
    captureUI.PhotoSettings.CroppedSizeInPixels = new Size(600, 600);

    StorageFile photo = await
        captureUI.CaptureFileAsync(CameraCaptureUIMode.Photo);

    if (photo != null)
    {
        BitmapImage bmp = new BitmapImage();
        IRandomAccessStream stream = await photo.
            OpenAsync(FileAccessMode.Read);
        bmp.SetSource(stream);
        BBQImage.Source = bmp;

        FileSavePicker savePicker = new FileSavePicker();
        savePicker.FileTypeChoices.Add
            ("jpeg image", new List<string>() { ".jpeg" });

        savePicker.SuggestedFileName = "New picture";

        StorageFile savedFile = await savePicker.PickSaveFileAsync();

        (this.DataContext as BBQRecipeViewModel).imageSource = savedFile.Path;

        if (savedFile != null)
        {
            await photo.MoveAndReplaceAsync(savedFile);
        }
    }
}
```

```
HowToBBQ.Win10 - HowToBBQ.Win10.Views.BBQRecipePage - ButtonCamera_Click(object sender, RoutedEventArgs e)
42
43 // reference: Tom Weber, 51 minutes ago | 1 author, 1 change
44 private async void ButtonCamera_Click(object sender, RoutedEventArgs e)
45 {
46     CameraCaptureUI captureUI = new CameraCaptureUI();
47     captureUI.PhotoSettings.Format = CameraCaptureUIPhotoFormat.Jpeg;
48     captureUI.PhotoSettings.CroppedSizeInPixels = new Size(600, 600);
49
50     StorageFile photo = await captureUI.CaptureFileAsync(CameraCaptureUIMode.Photo);
51
52     if (photo != null)
53     {
54         BitmapImage bmp = new BitmapImage();
55         IRandomAccessStream stream = await photo.OpenAsync(FileAccessMode.Read);
56         bmp.SetSource(stream);
57         BBQImage.Source = bmp;
58
59         FileSavePicker savePicker = new FileSavePicker();
60         savePicker.FileTypeChoices.Add("jpeg image", new List<string>() { ".jpeg" });
61
62         savePicker.SuggestedFileName = "New picture";
63
64         StorageFile savedFile = await savePicker.PickSaveFileAsync();
65
66         (this.DataContext as BBQRecipeViewModel).ImageSource = savedFile.Path;
67
68         if (savedFile != null)
69         {
70             await photo.MoveAndReplaceAsync(savedFile);
71         }
72     }
73 }
74
75
76
77
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```

100 %

Error List Output

5. Open the \View\BBQRecipePage.xaml file and add the following lines of xaml code on line 63.

```
<StackPanel Margin="0,20,0,0" Orientation="Horizontal"
    HorizontalAlignment="Center">
    <Button Margin="10" x:Name="ButtonFilePick" Content="Select Image"
        FontSize="32" Click="ButtonFilePick_Click">
        <Button.Background>
            <LinearGradientBrush EndPoint="0.5,1"
                StartPoint="0.5,0">
                <GradientStop Color="#FFDC9743" Offset="0.171"/>
                <GradientStop Color="#FF0A0A0A"/>
                <GradientStop Color="#FF0A0A0A" Offset="0.98"/>
                <GradientStop Color="#FFDC9743" Offset="0.949"/>
            </LinearGradientBrush>
        </Button.Background>
    </Button>
    <Button Margin="10" x:Name="ButtonCamera" Content="Camera"
        FontSize="32" Click="ButtonCamera_Click">
        <Button.Background>
            <LinearGradientBrush EndPoint="0.5,1"
                StartPoint="0.5,0">
                <GradientStop Color="#FF4293CE" Offset="0.171"/>
                <GradientStop Color="#FF0A0A0A"/>
                <GradientStop Color="#FF0A0A0A" Offset="0.98"/>
                <GradientStop Color="#FF4293CE" Offset="0.949"/>
            </LinearGradientBrush>
        </Button.Background>
    </Button>
</StackPanel>
```

```

StackPanel
StackPanel
55 <RowDefinition Height="*" />
56 </Grid.RowDefinitions>
57
58 <Grid Grid.Row="1" x:Name="BBQRecipeGridView" Grid.RowSpan="2" Margin="46,0,56,0">
59 <ScrollViewer>
60 <RelativePanel>
61 <StackPanel x:Name="ImageStackPanel" Orientation="Vertical" HorizontalAlignment="Left">
62 <Image x:Name="BBQImage" Source="{Binding ImageSource, Mode=TwoWay}" Canvas.ZIndex="-1" Height="596"
63 <StackPanel Margin="0,20,0,0" Orientation="Horizontal" HorizontalAlignment="Center">
64 <Button Margin="10" x:Name="ButtonFilePick" Content="Select Image" FontSize="32" Click="ButtonFilePick_Click" />
65 <Button.Background>
66 <LinearGradientBrush EndPoint="0.5,1" StartPoint="0.5,0">
67 <GradientStop Color="#FFDC9743" Offset="0.171" />
68 <GradientStop Color="#FFB8A8A8" />
69 <GradientStop Color="#FFB8A8A8" Offset="0.98" />
70 <GradientStop Color="#FFDC9743" Offset="0.949" />
71 </LinearGradientBrush>
72 </Button.Background>
73 </Button>
74 <Button Margin="10" x:Name="ButtonCamera" Content="Camera" FontSize="32" Click="ButtonCamera_Click" />
75 <Button.Background>
76 <LinearGradientBrush EndPoint="0.5,1" StartPoint="0.5,0">
77 <GradientStop Color="#FFA293C2" Offset="0.171" />
78 <GradientStop Color="#FFB8A8A8" />
79 <GradientStop Color="#FFB8A8A8" Offset="0.98" />
80 <GradientStop Color="#FFA293C2" Offset="0.949" />
81 </LinearGradientBrush>
82 </Button.Background>
83 </Button>
84 </StackPanel>
85 </StackPanel>
86 <StackPanel x:Name="DetailstackPanel" Orientation="Vertical" HorizontalAlignment="Left">
87 <StackPanel Margin="0,20,20,10">
88 <TextBlock Text="Name" FontSize="14" />
89 <TextBox x:Name="TextBoxTitle" Text="{Binding Name, Mode=TwoWay}" />
90 </StackPanel>
91 <StackPanel Margin="0,0,20,10">
92 <TextBlock Text="Prep Time" FontSize="14" />
93 <TextBox Text="{Binding PrepTime, Mode=TwoWay}" />
94 </StackPanel>
95 </StackPanel>
96 </Grid>

```

100 % 3m 57m 57 minutes ago 1 author 1 changes

6. Double click on the file “Package.appxmanifest” to open the App Manifest widow. Make sure to enable “Video Library”, “Picture Library”.

