

Application Bar

Introduction

- ❖ The Application Bar is a UI control that allows us to add toolbar to the application we develop.
- ❖ The Application Bar is displayed as a row that includes between one to four small buttons displayed on the bottom part of the screen.

Introduction



Consistent User Interface

- ❖ Using the Application Bar is the preferred option comparing with using our own menu system. Using the Application Bar we shall get a consistent user interface across all the applications installed on the device.
- ❖ When creating an Application Bar it is highly recommended to use the default system theme colors. This way the user interface will look consistent across all apps.

The Opacity

- ❖ The opacity of the Application Bar can be between 0 and 1. It is highly recommended to use one of the following values only: 0, 0.5 or 1.
- ❖ When the opacity value is set to 1 the displayed page will be resized to the area of the screen, the Application Bar doesn't cover.

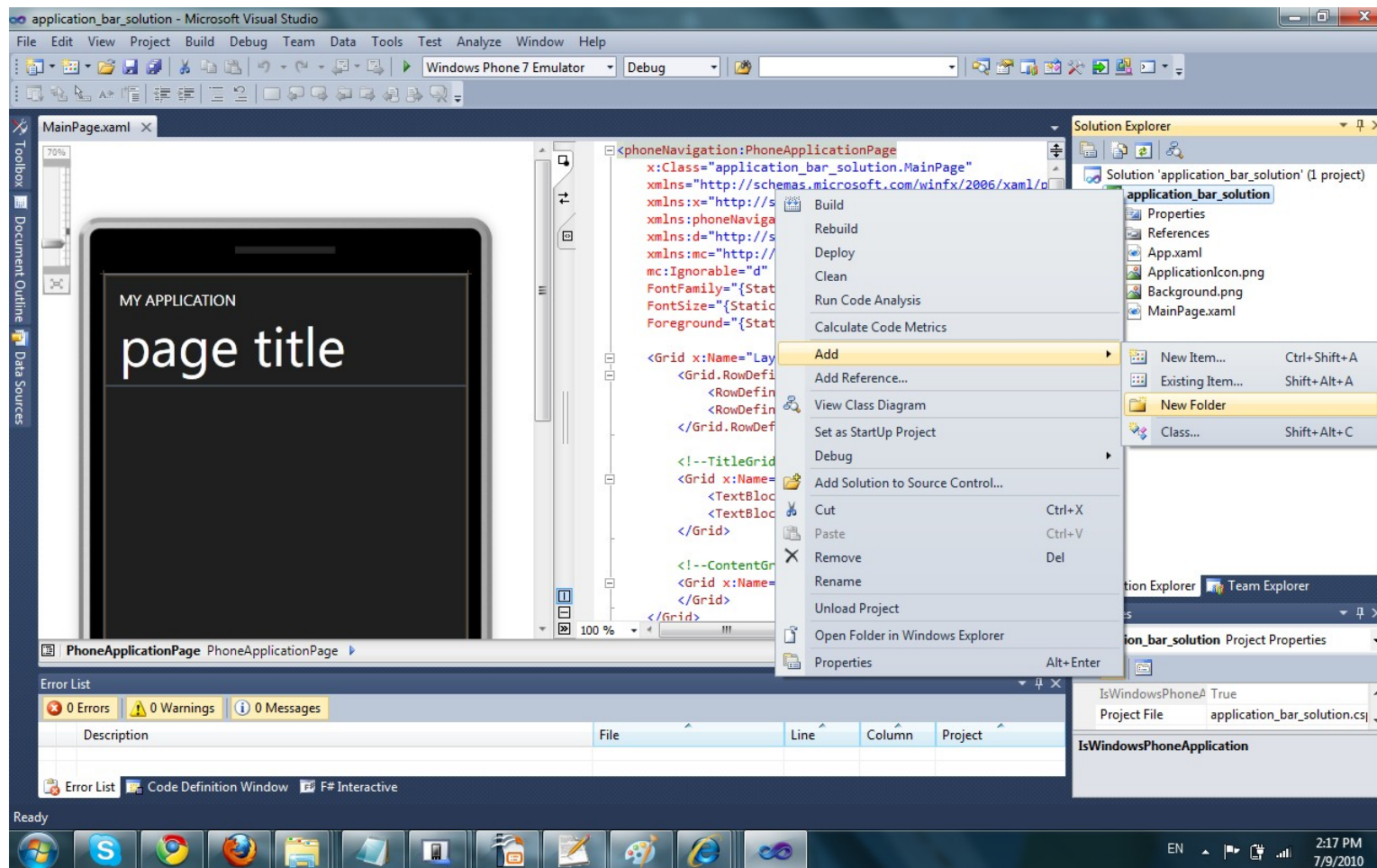
The `Microsoft.Phone.Shell` Assembly

- ❖ In order to add an Application Bar to our application we should first add to our project the references to the `Microsoft.Phone.Shell` assembly.

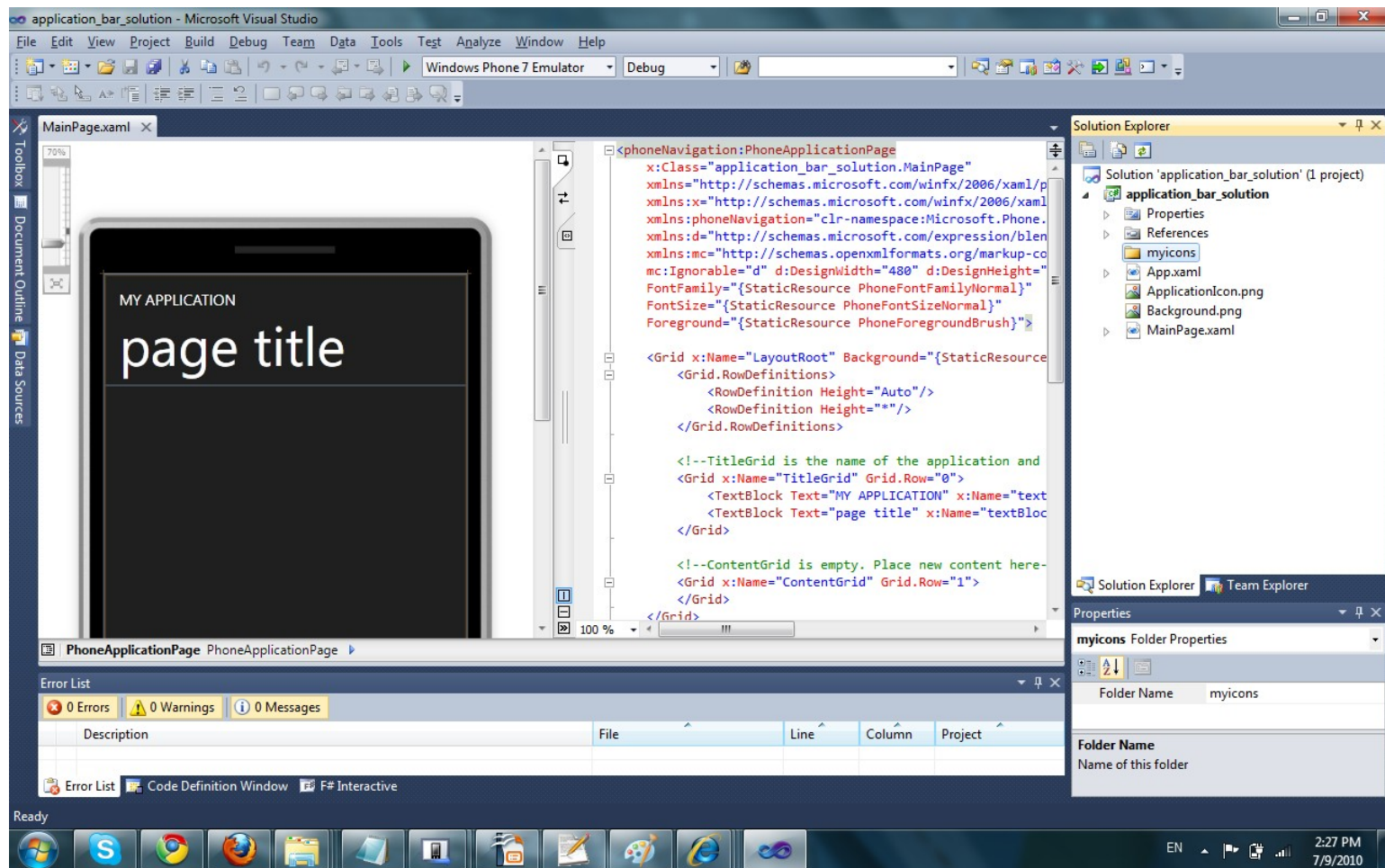
The Image Icons

- ❖ We can create a separated folder for placing the icon image files.

The Image Icons



The Image Icons



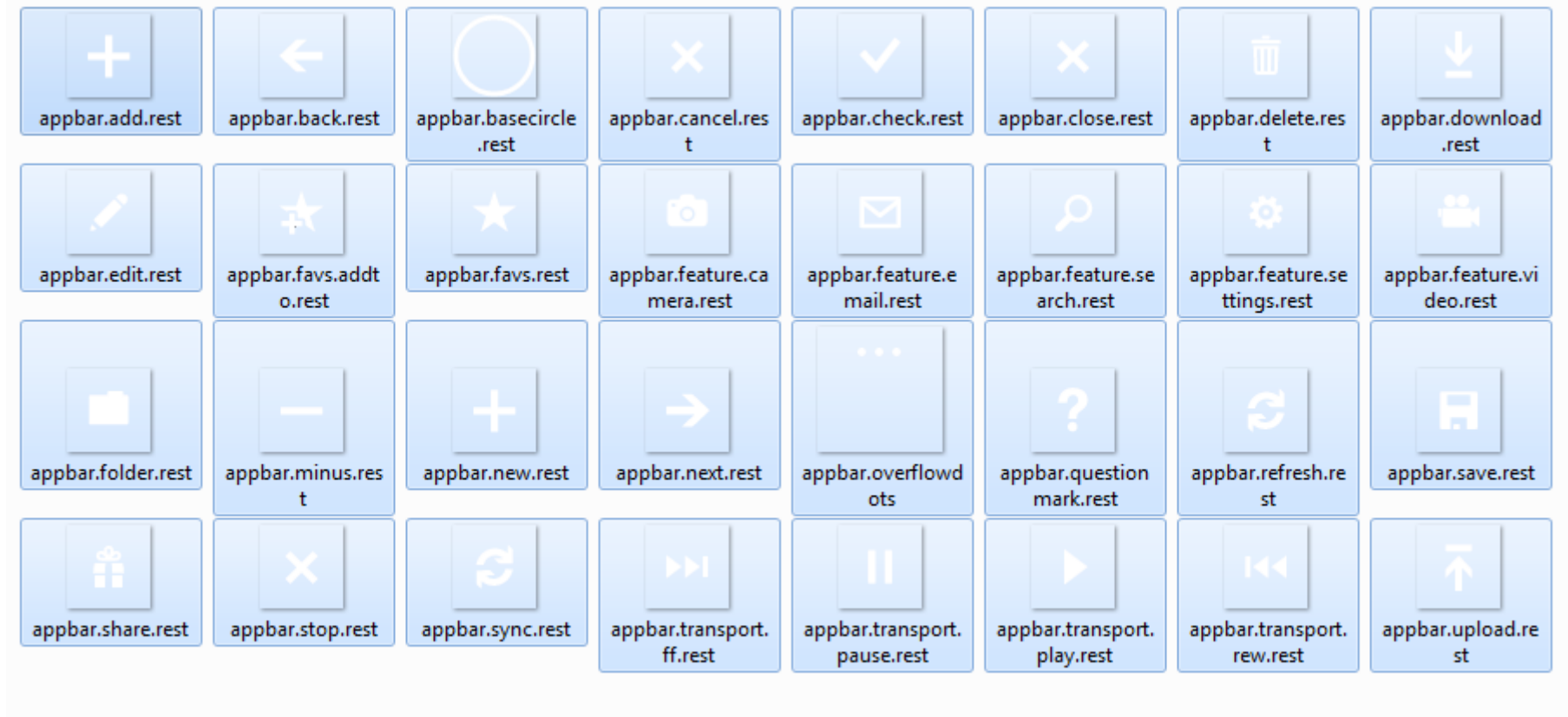
The Image Icons

- ❖ The image icon should be a PNG image file with the 48x48 pixels in size.
- ❖ It should use a white foreground and a transparent background. The transparency should be of the alpha transparency type.
- ❖ The Application Bar colorize the icon in accordance with the currently style setting. If the foreground isn't white the result might be unpredictable.

The Image Icons

- ❖ The image icon should not include the circle drawn on top.
That circle is drawn by the Application Bar.
- ❖ The drawn part of the icon shouldn't exceed the 26 x 26 area square in the center of the image.
- ❖ You can download ready to use icons at
<http://www.microsoft.com/downloads/details.aspx?FamilyID=369b20f7-9d30-4cff-8a1b-f80901b2da93&displaylang=en>

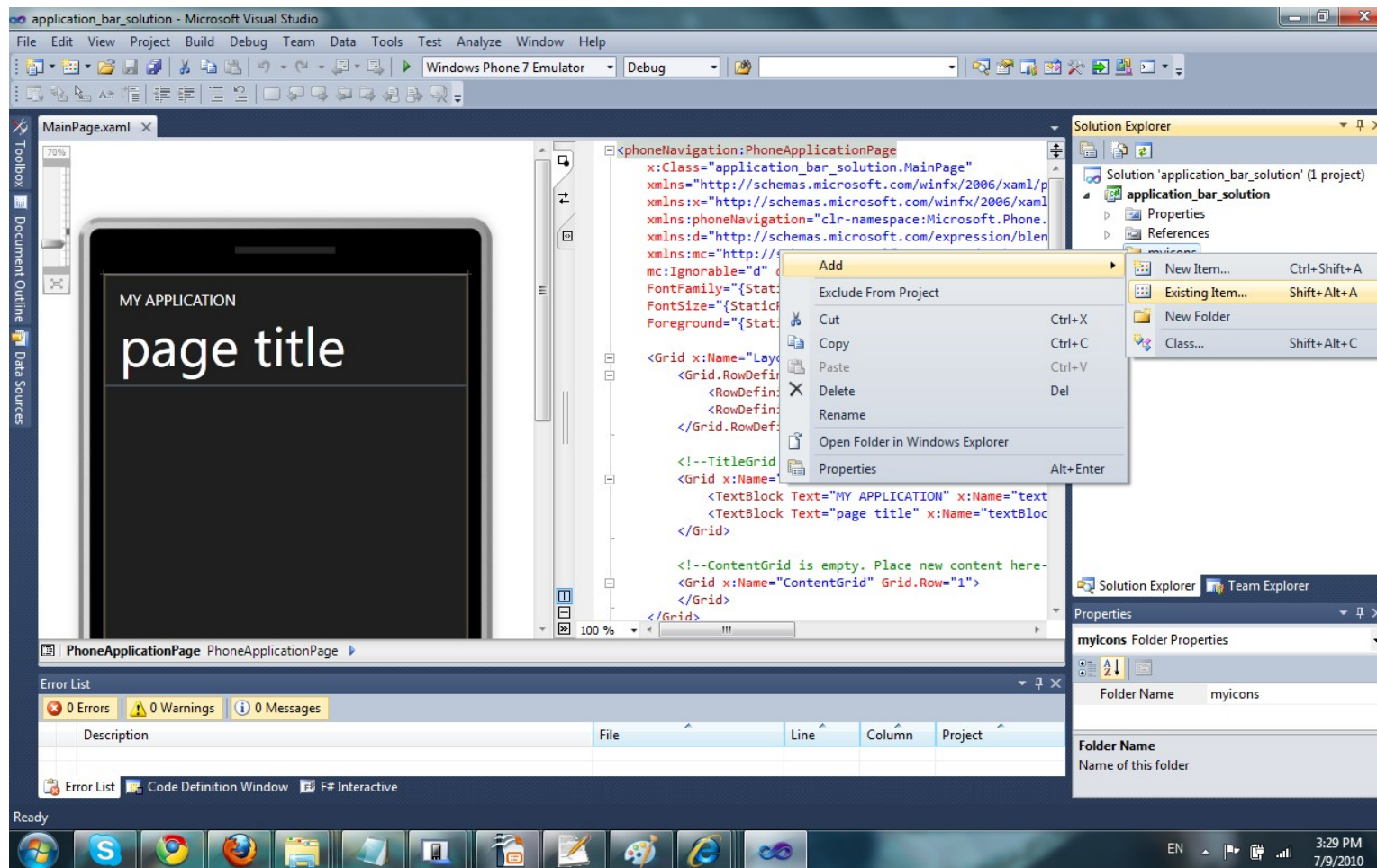
The Image Icons



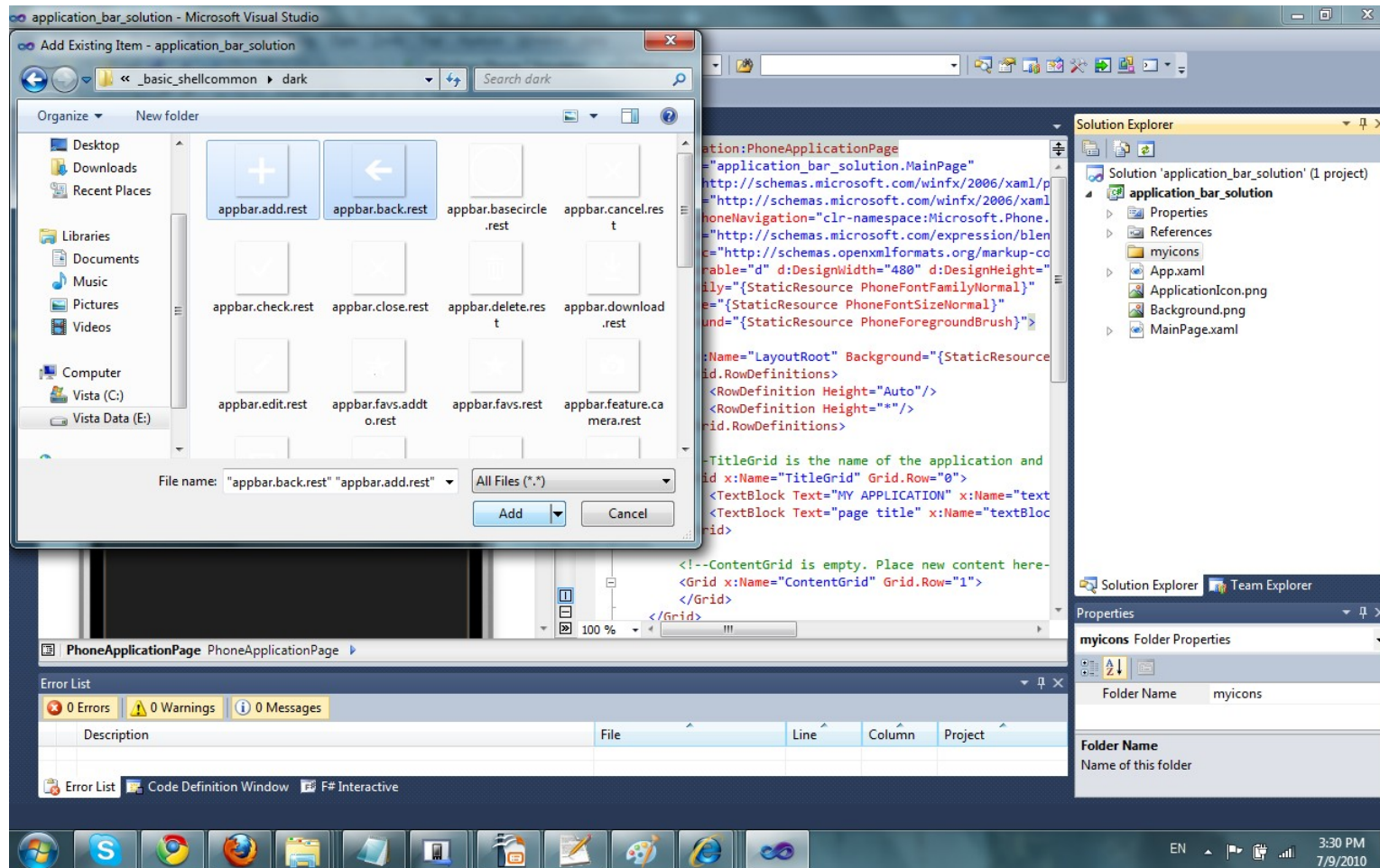
Adding Image Icons Files

- ❖ In order to add image icons to our project we should right click the folder (the one we created) to which we want the image files to be added and select the icon image files we want to add.

Adding Image Icons Files



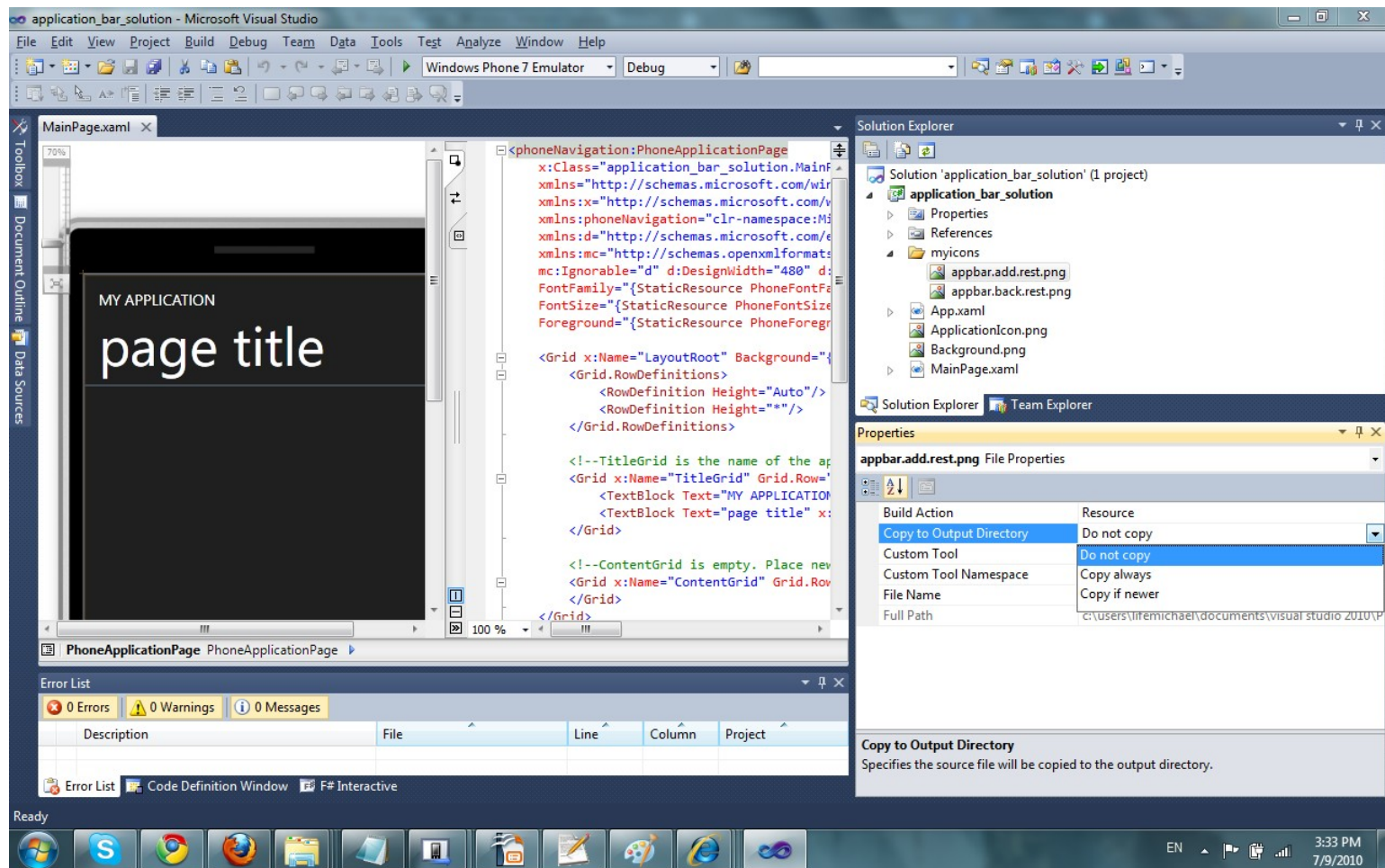
Adding Image Icons Files



Setting Image Icons as Part of The Product

- ❖ In order to include the image icon file within the product we should change the 'Copy to Output Directory' property value to be 'Copy Always'.

Setting Image Icons as Part of The Product



Local Application Bar

- ❖ We can create a local application bar in two ways. One option is creating it within the XAML file. Another option is creating it in code.
- ❖ The following code sample shows how to create an application bar using XML only. The following code sample also shows how to add icons on the application bar.

Local Application Bar

```
<phoneNavigation:PhoneApplicationPage
    x:Class="app_bar.MainPage"
    xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
    xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
    xmlns:phoneNavigation="clr-namespace:Microsoft.Phone.Controls;assembly=
        Microsoft.Phone.Controls.Navigation"
    xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
    xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
    mc:Ignorable="d" d:DesignWidth="480" d:DesignHeight="800"
    FontFamily="{StaticResource PhoneFontFamilyNormal}"
    FontSize="{StaticResource PhoneFontSizeNormal}"
    Foreground="{StaticResource PhoneForegroundBrush}"
    xmlns:shell="clr-namespace:Microsoft.Phone.Shell;assembly=
        Microsoft.Phone.Shell">

    <phoneNavigation:PhoneApplicationPage.ApplicationBar>
        <shell:ApplicationBar x:Name="globalApplicationBar" Opacity="0.7">
            <shell:ApplicationBar.MenuItems>
                <shell:ApplicationBarMenuItem Text="Home" />
                <shell:ApplicationBarMenuItem Text="Help" />
                <shell:ApplicationBarMenuItem Text="About" />
            </shell:ApplicationBar.MenuItems>
            <shell:ApplicationBar.Buttons>
                <shell:ApplicationBarIconButton IconUri="/ApplicationIcon.png" />
            </shell:ApplicationBar.Buttons>
        </shell:ApplicationBar>
    </phoneNavigation:PhoneApplicationPage.ApplicationBar>
```

Local Application Bar

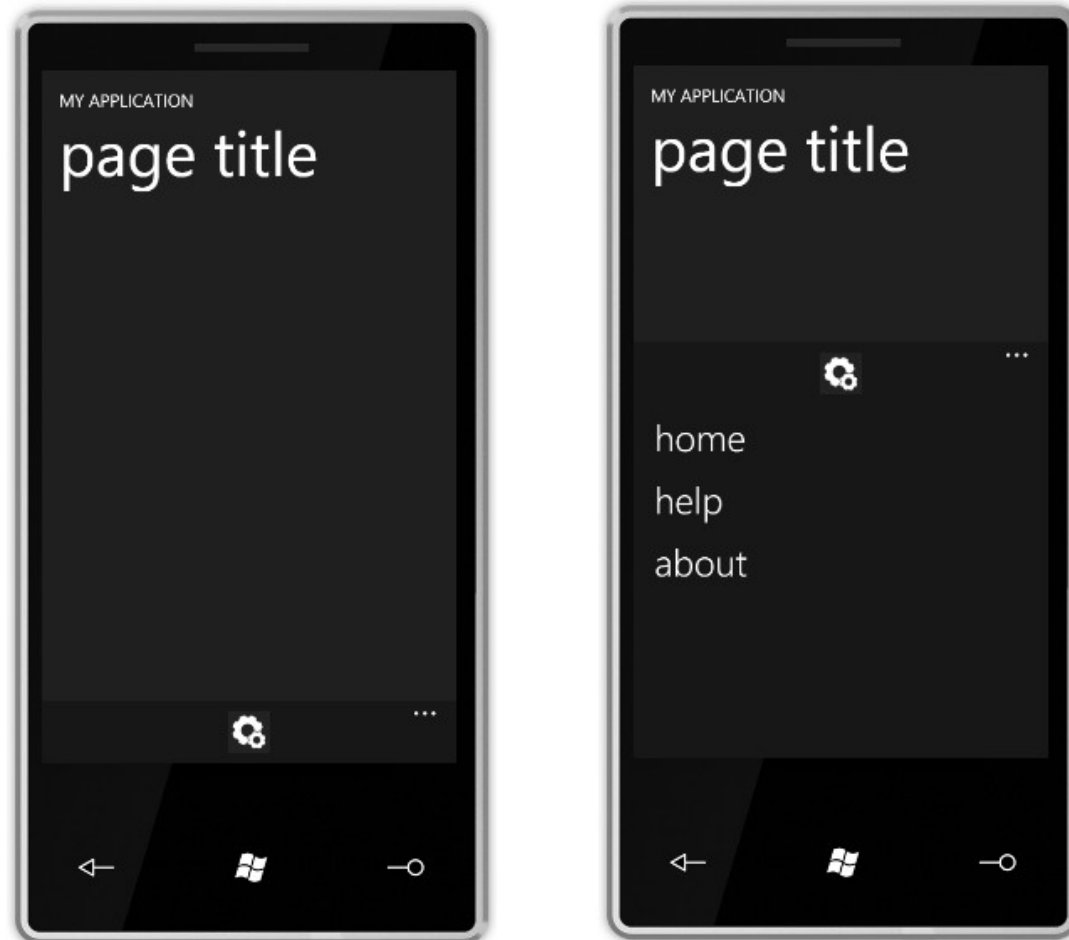
```
<Grid x:Name="LayoutRoot" Background="{StaticResource PhoneBackgroundBrush}">
  <Grid.RowDefinitions>
    <RowDefinition Height="Auto"/>
    <RowDefinition Height="*" />
  </Grid.RowDefinitions>

  <!--TitleGrid is the name of the application and page title-->
  <Grid x:Name="TitleGrid" Grid.Row="0">
    <TextBlock Text="MY APPLICATION" x:Name="textBlockPageTitle"
      Style="{StaticResource PhoneTextPageTitle1Style}" />
    <TextBlock Text="page title" x:Name="textBlockListTitle"
      Style="{StaticResource PhoneTextPageTitle2Style}" />
  </Grid>

  <!--ContentGrid is empty. Place new content here-->
  <Grid x:Name="ContentGrid" Grid.Row="1">
  </Grid>
</Grid>

</phoneNavigation:PhoneApplicationPage>
```

Local Application Bar



Global Application Bar

- ❖ We define the Global Application Bar as a resources within the App.xaml file.
- ❖ Once the Global Application Bar was defined we can have it within each and every page that refers it.

Global Application Bar

App.xaml

```
<Application
  x:Class="app_bar.App"
  xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
  xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
  xmlns:system="clr-namespace:System;assembly=mscorlib"
  xmlns:mpc="clr-namespace:Microsoft.Phone.Controls;assembly=
    Microsoft.Phone.Controls"
  xmlns:phoneNavigation="clr-namespace:Microsoft.Phone.Controls;assembly=
    Microsoft.Phone.Controls.Navigation"
  xmlns:shell="clr-namespace:Microsoft.Phone.Shell;assembly=
    Microsoft.Phone.Shell">

  <!--RootFrame points to and loads the first page of your application-->
  <Application.RootVisual>
    <phoneNavigation:PhoneApplicationFrame x:Name="RootFrame"
      Source="/MainPage.xaml"/>
  </Application.RootVisual>
```

Global Application Bar

```
<Application.Resources>
```

```
...
```

```
<Color x:Key="PhoneBackgroundColor">#FF1F1F1F</Color>
```

```
<Color x:Key="PhoneContrastForegroundColor">Black</Color>
```

```
<shell:ApplicationBar x:Name="globalApplicationBar"
```

```
  x:Key="globalApplicationBar" Opacity="0.7">
```

```
  <shell:ApplicationBar.MenuItems>
```

```
    <shell:ApplicationBarMenuItem Text="Home" />
```

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    <shell:ApplicationBarMenuItem Text="Help" />
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    <shell:ApplicationBarMenuItem Text="About" />
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```
  </shell:ApplicationBar.MenuItems>
```

```
</shell:ApplicationBar>
```

```
...
```

```
</Application.Resources>
```

```
</Application>
```


Global Application Bar

MainPage.xaml

```
<phoneNavigation:PhoneApplicationPage
    x:Class="app_bar.MainPage"
    xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
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    xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
    mc:Ignorable="d" d:DesignWidth="480" d:DesignHeight="800"
    FontFamily="{StaticResource PhoneFontFamilyNormal}"
    FontSize="{StaticResource PhoneFontSizeNormal}"
    Foreground="{StaticResource PhoneForegroundBrush}"
    ApplicationBar="{StaticResource globalApplicationBar}" >

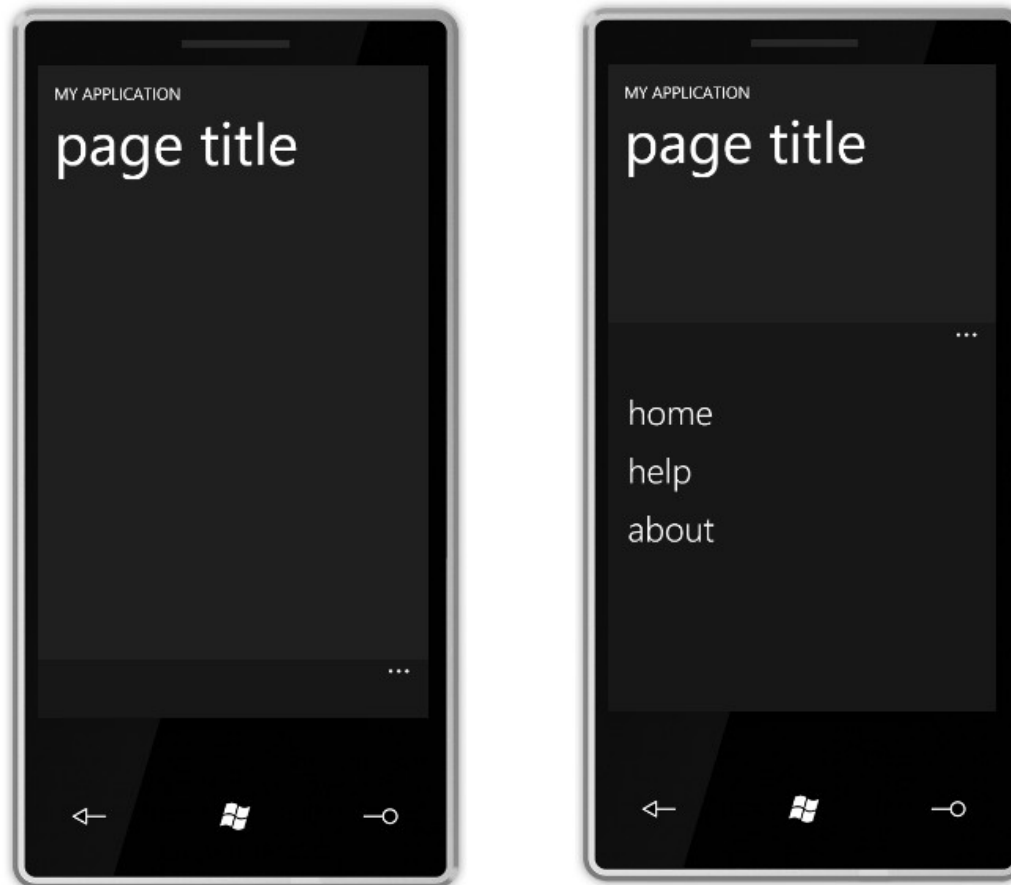
    <Grid x:Name="LayoutRoot" Background="{StaticResource PhoneBackgroundBrush}">

        ...

    </Grid>

</phoneNavigation:PhoneApplicationPage>
```

Global Application Bar



Application Bar

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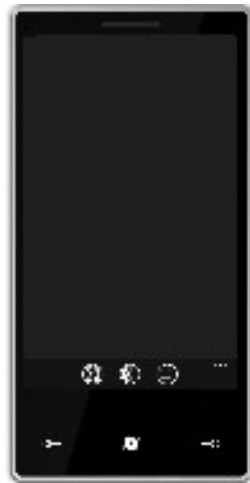
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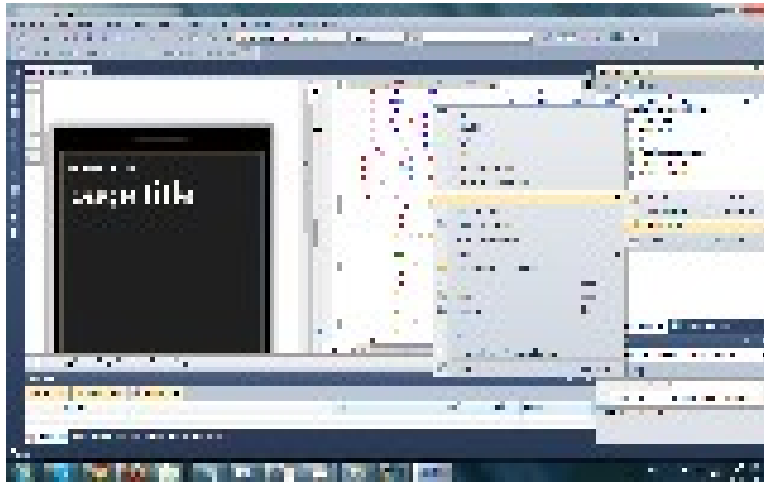
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The Image Icons



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The Image Icons

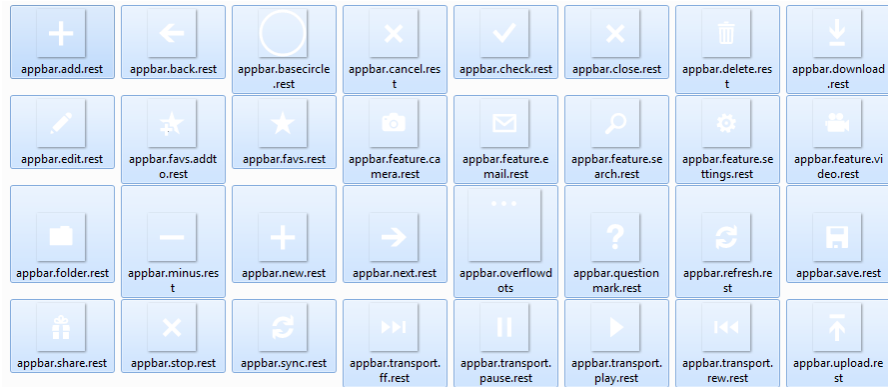
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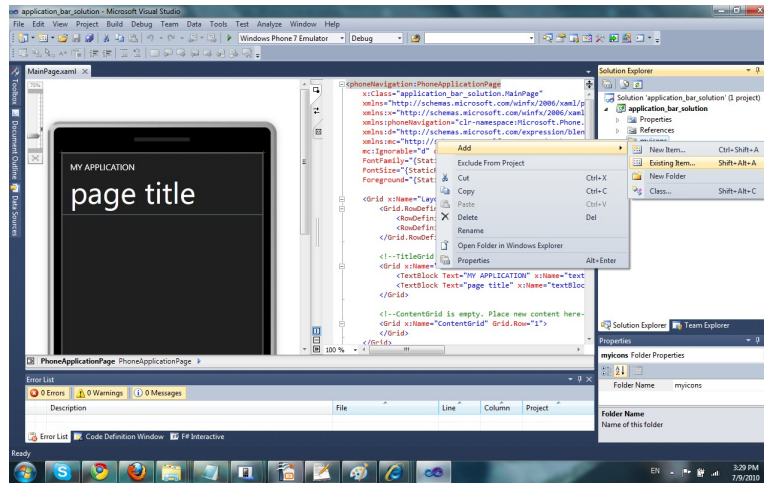
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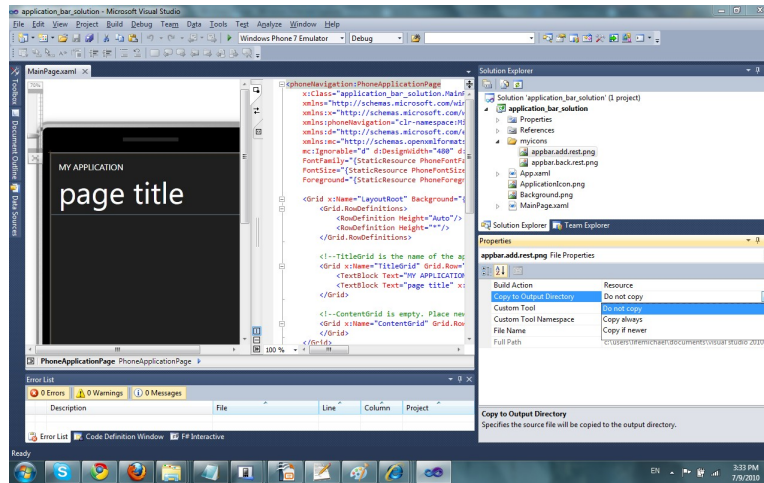
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Setting Image Icons as Part of The Product



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  x:Class="app_bar.MainPage"
  xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
  xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
  xmlns:phoneNavigation="clr-namespace:Microsoft.Phone.Controls;assembly=
    Microsoft.Phone.Controls.Navigation"
  xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
  xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
  mc:Ignorable="d" d:DesignWidth="480" d:DesignHeight="800"
  FontFamily="{StaticResource PhoneFontFamilyNormal}"
  FontSize="{StaticResource PhoneFontSizeNormal}"
  Foreground="{StaticResource PhoneForegroundBrush}"
  xmlns:shell="clr-namespace:Microsoft.Phone.Shell;assembly=
    Microsoft.Phone.Shell">

  <phoneNavigation:PhoneApplicationPage.ApplicationBar>
    <shell:ApplicationBar x:Name="globalApplicationBar" Opacity="0.7">
      <shell:ApplicationBar.MenuItems>
        <shell:ApplicationBarMenuItem Text="Home" />
        <shell:ApplicationBarMenuItem Text="Help" />
        <shell:ApplicationBarMenuItem Text="About" />
      </shell:ApplicationBar.MenuItems>
      <shell:ApplicationBar.Buttons>
        <shell:ApplicationBarIconButton IconUri="/ApplicationIcon.png" />
      </shell:ApplicationBar.Buttons>
    </shell:ApplicationBar>
  </phoneNavigation:PhoneApplicationPage.ApplicationBar>
```

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Local Application Bar

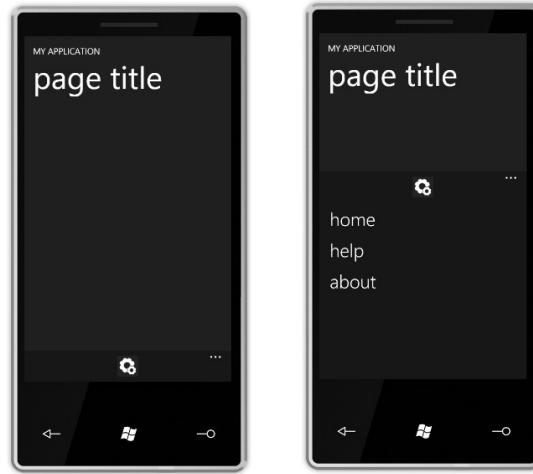
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<Grid x:Name="LayoutRoot" Background="{StaticResource PhoneBackgroundBrush}">
  <Grid.RowDefinitions>
    <RowDefinition Height="Auto"/>
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  </Grid.RowDefinitions>

  <!--TitleGrid is the name of the application and page title-->
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  </Grid>

  <!--ContentGrid is empty. Place new content here-->
  <Grid x:Name="ContentGrid" Grid.Row="1">
  </Grid>
</Grid>

</phoneNavigation:PhoneApplicationPage>
```

Local Application Bar



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Global Application Bar

- ❖ We define the Global Application Bar as a resources within the App.xaml file.
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Global Application Bar

App.xaml

```
<Application
  x:Class="app_bar.App"
  xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
  xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
  xmlns:system="clr-namespace:System;assembly=mscorlib"
  xmlns:mpc="clr-namespace:Microsoft.Phone.Controls;assembly=
    Microsoft.Phone.Controls"
  xmlns:phoneNavigation="clr-namespace:Microsoft.Phone.Controls;assembly=
    Microsoft.Phone.Controls.Navigation"
  xmlns:shell="clr-namespace:Microsoft.Phone.Shell;assembly=
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  <!--RootFrame points to and loads the first page of your application-->
  <Application.RootVisual>
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  </Application.RootVisual>
```

Global Application Bar

```
<Application.Resources>

...

<Color x:Key="PhoneBackgroundColor">#FF1F1F1F</Color>
<Color x:Key="PhoneContrastForegroundColor">Black</Color>

<shell:ApplicationBar x:Name="globalApplicationBar"
  x:Key="globalApplicationBar" Opacity="0.7">
  <shell:ApplicationBar.MenuItems>
    <shell:ApplicationBarMenuItem Text="Home" />
    <shell:ApplicationBarMenuItem Text="Help" />
    <shell:ApplicationBarMenuItem Text="About" />
  </shell:ApplicationBar.MenuItems>
</shell:ApplicationBar>

...

</Application.Resources>

</Application>
```

Global Application Bar

MainPage.xaml

```
<phoneNavigation:PhoneApplicationPage
    x:Class="app_bar.MainPage"
    xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
    xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml"
    xmlns:phoneNavigation="clr-namespace:Microsoft.Phone.Controls;assembly=
        Microsoft.Phone.Controls.Navigation"
    xmlns:d="http://schemas.microsoft.com/expression/blend/2008"
    xmlns:mc="http://schemas.openxmlformats.org/markup-compatibility/2006"
    mc:Ignorable="d" d:DesignWidth="480" d:DesignHeight="800"
    FontFamily="{StaticResource PhoneFontFamilyNormal}"
    FontSize="{StaticResource PhoneFontSizeNormal}"
    Foreground="{StaticResource PhoneForegroundBrush}"
    ApplicationBar="{StaticResource globalApplicationBar}" >

    <Grid x:Name="LayoutRoot" Background="{StaticResource PhoneBackgroundBrush}">
        ...
    </Grid>
</phoneNavigation:PhoneApplicationPage>
```

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Global Application Bar

