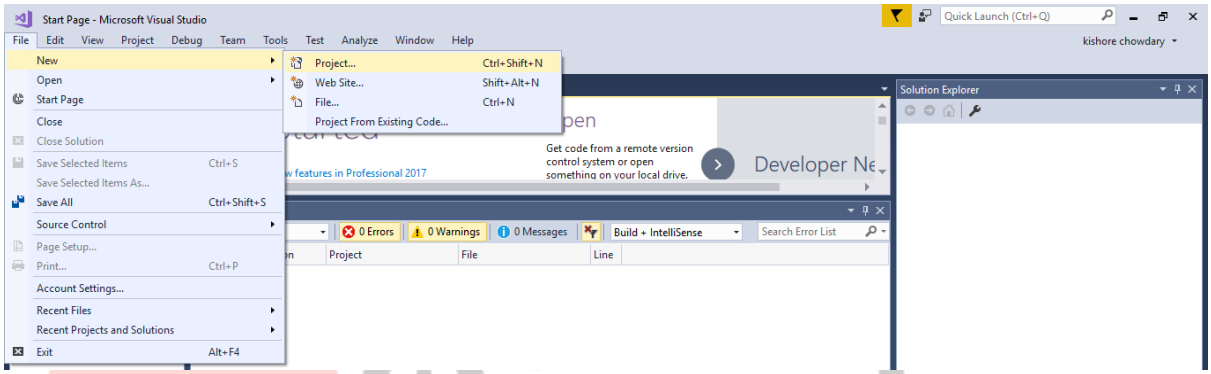
Android Camera

The following document is for creating an android application that can invoke the camera of the android device and capture a picture and finally display same. Let us see the steps now.

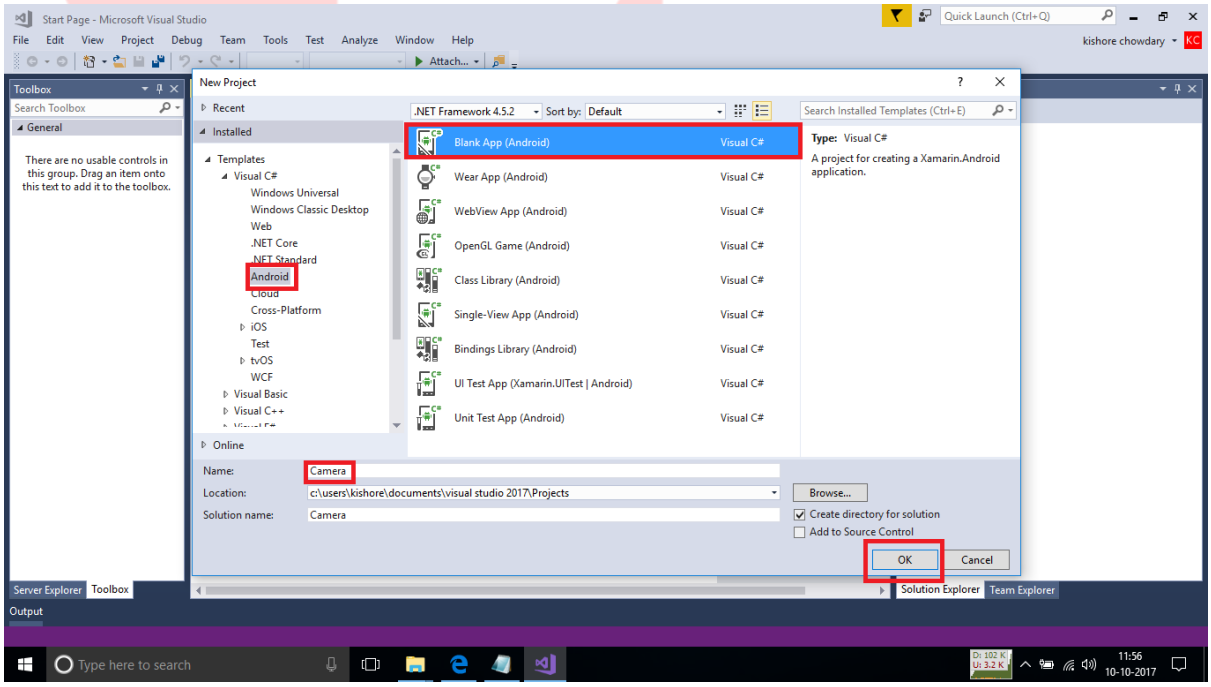
Step 1:

Open the Visual studio. The version can be even Visual studio 2015 with an update that supports Xamarin development. After opening the visual studio go to **New→Project.**



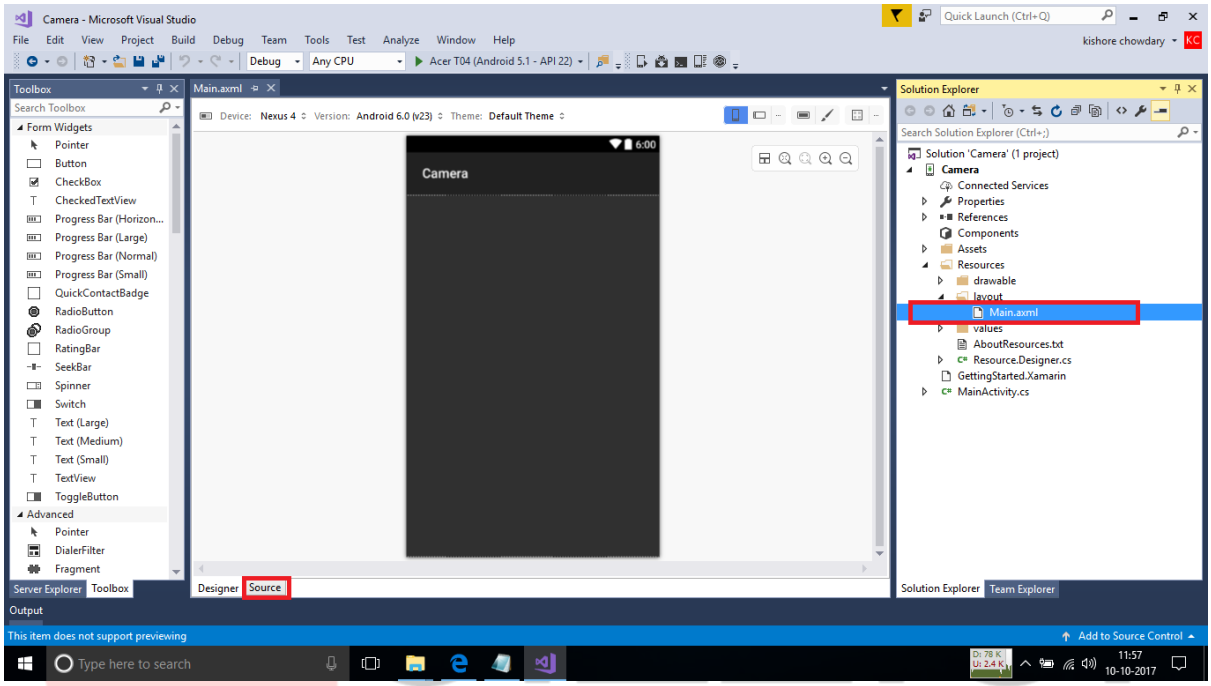
Step 2:

Next you have to choose your platform and technology. In the left side menu choose **Android.** Next in the options that are displayed, choose the **Blank App (Android)** and name it as **Camera** and the hit on **Ok.**



Step 3:

Now expand the **Resources** folder in the solution explorer which is in the right side. Then expand the **Layout** folder and click on the **Main.axml** which well display a designer window of mobile phone. There in the bottom you can find a small button with name **Source.** Click on it to go to the axml source code page.



Step 4:

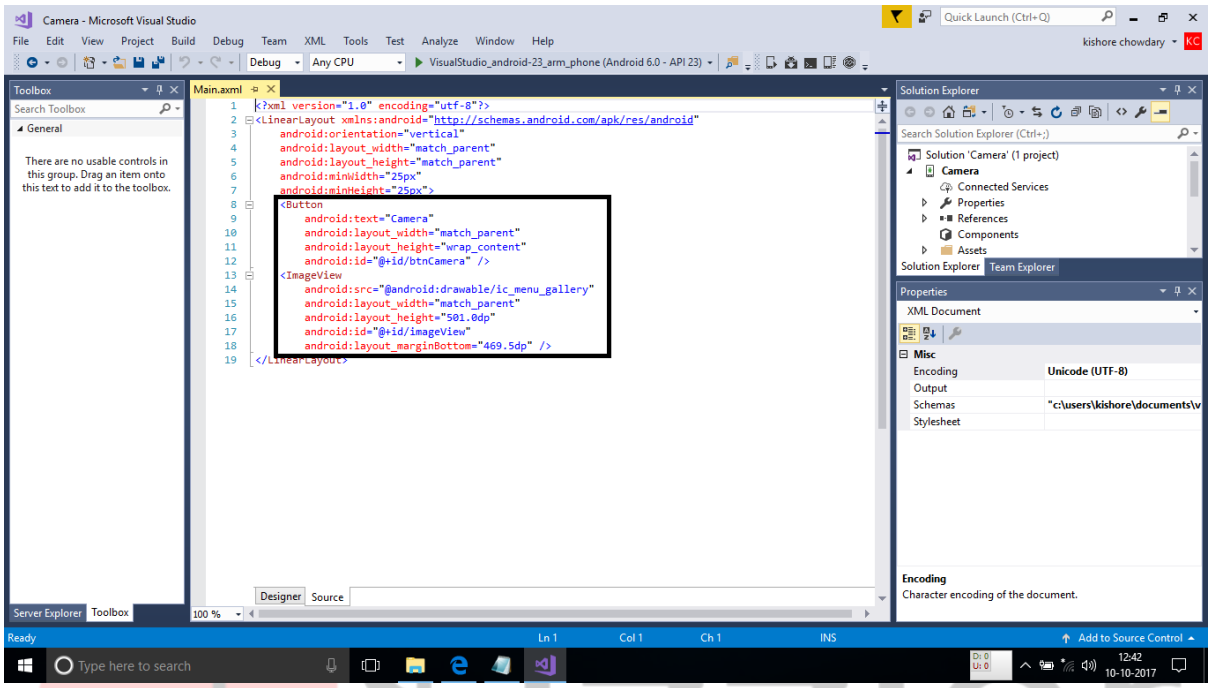
There you can find some default code. There add the below given code in the middle.

Main.axml:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
   android:orientation="vertical"
   android:layout_width="match_parent"
   android:layout_height="match_parent"
   android:minWidth="25px"
   android:minHeight="25px">
   <Button
      android:text="Camera"
      android:layout_width="match_parent"
      android:layout_height="wrap_content"
      android:id="@+id/btnCamera" />
   <ImageView
      android:src="@android:drawable/ic_menu_gallery"
      android:layout_width="match_parent"
      android:layout_height="501.0dp"
      android:id="@+id/imageView"
```

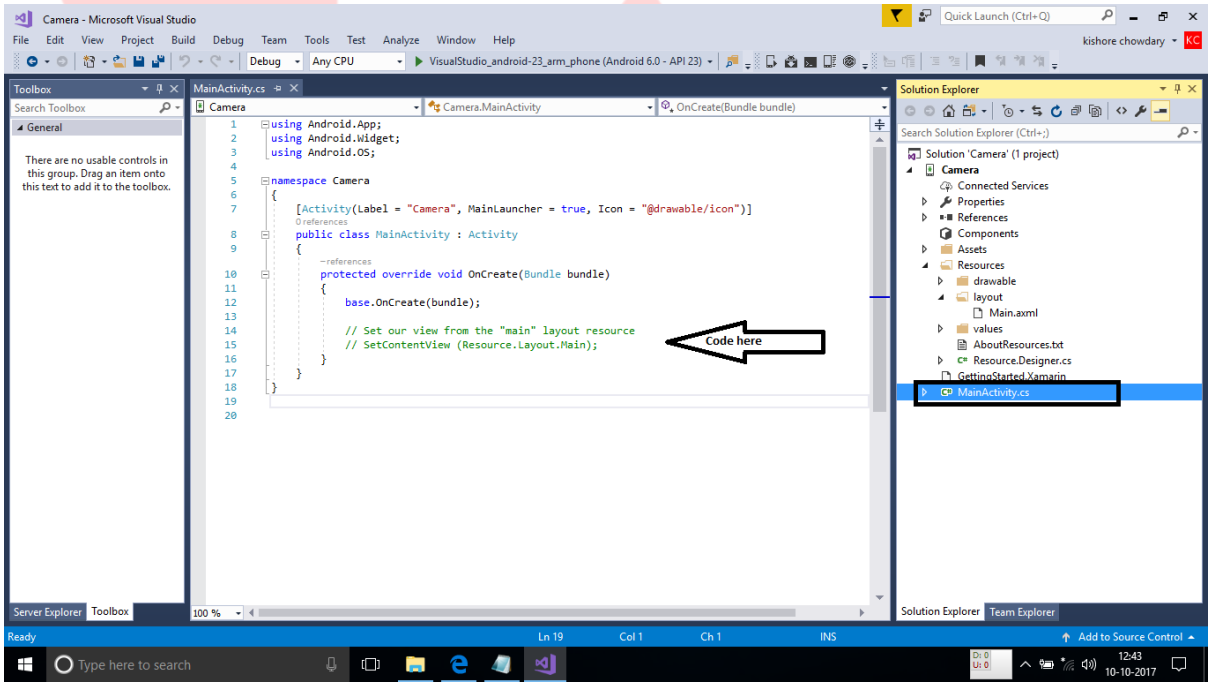
```
    android:layout_marginBottom="469.5dp" />
</LinearLayout>
```

After adding the code, the page might look somewhat like this.



Step 5:

Now let us write some code that will connect the design with a logic. In the solution explorer click on the **MainActivity.cs** and there you will find some code like below.



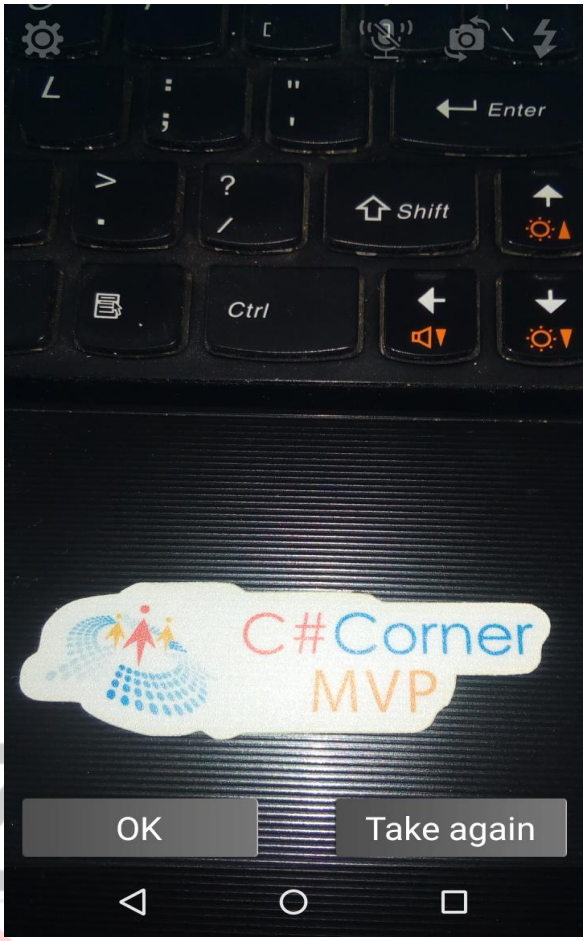
Here replace the entire code with the below given code. This will connect the design with some programming logic.

MainActivity.cs

```
using Android.App;
using Android.Widget;
using Android.OS;
using Android.Content;
using Android.Provider;
using Android.Runtime;
using Android.Graphics;
namespace Camera
{
   [Activity(Label = "Camera", MainLauncher = true, Icon = "@drawable/icon")]
   public class MainActivity : Activity
   {
      ImageView imageView;
      protected override void OnCreate(Bundle bundle)
      {
         base.OnCreate(bundle);
         // Set our view from the "main" layout resource
         SetContentView(Resource.Layout.Main);
         var btnCamera = FindViewById<Button>(Resource.Id.btnCamera);
         imageView = FindViewById<ImageView>(Resource.Id.imageView);
         btnCamera.Click += BtnCamera_Click;
      }
      protected override void OnActivityResult(int requestCode, [GeneratedEnum]Result resultCode,
Intent data)
      {
         base.OnActivityResult(requestCode, resultCode, data);
         Bitmap bitmap = (Bitmap)data.Extras.Get("data");
         imageView.SetImageBitmap(bitmap);
      }
      private void BtnCamera_Click(object sender, System.EventArgs e)
      {
         Intent intent = new Intent(MediaStore.ActionImageCapture);
         StartActivityForResult(intent, 0);
      }
   }
}
```

After adding the code, you are all set to deploy the application. Click on the **Triangle** button in the top of the page or press the **F5** button to deploy the app. Thus the application will be as follows.


84% 12:48
Camera
CAMERA


Enter
Shift
Ctrl
C#Corner
MVP
OK
Take again