Bibliography

BOOKS

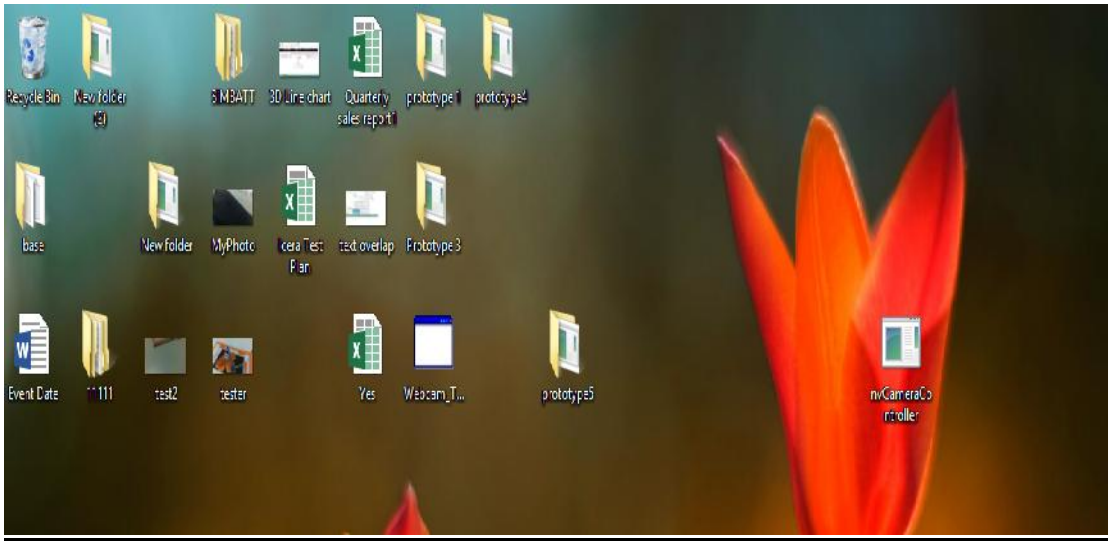
- Programming Windows
  - By Charles Petzold.
- Win32 Programming
  - By Brent E.Rector.
- Object Oriented Programming with C++
  - By E Balaguruswamy

WEB REFERENCES

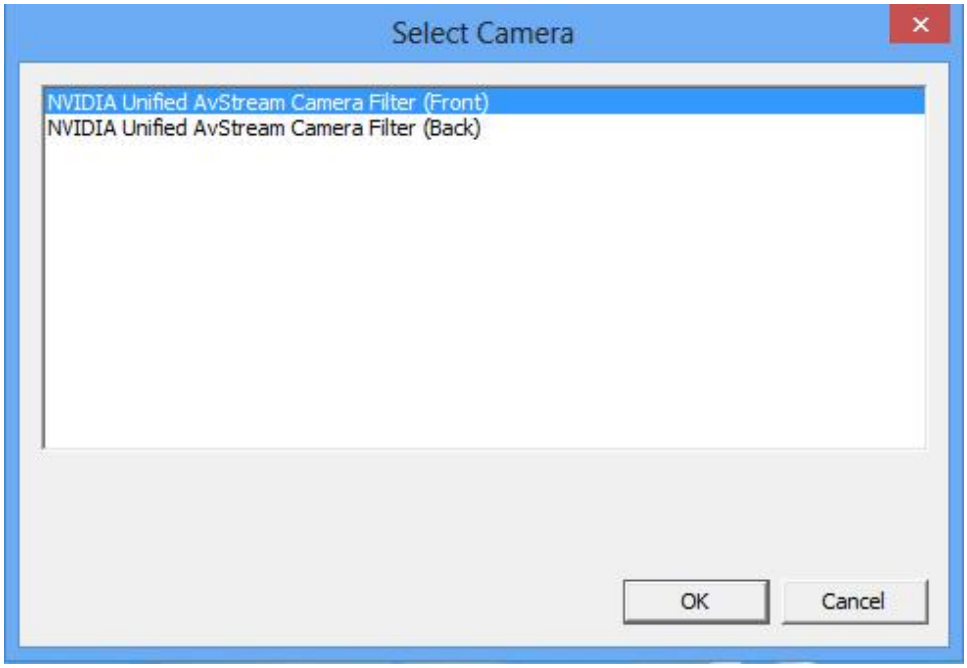
- http://msdn.microsoft.com/en-us/library
- http://www.functionx.com
- http://stackoverflow.com
- http://wiki.nvidia.com
- http://www.codeproject.com
- http://www.cplusplus.com

Annexure1: User Interfaces Screens

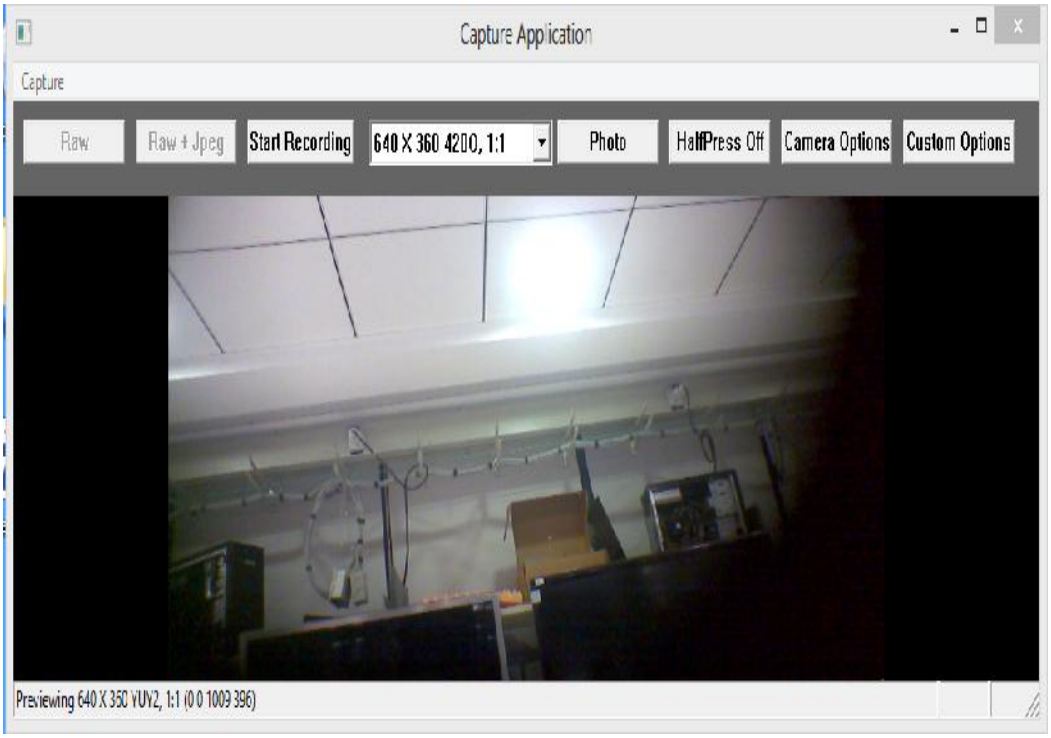
NvCameraCntroller Tool



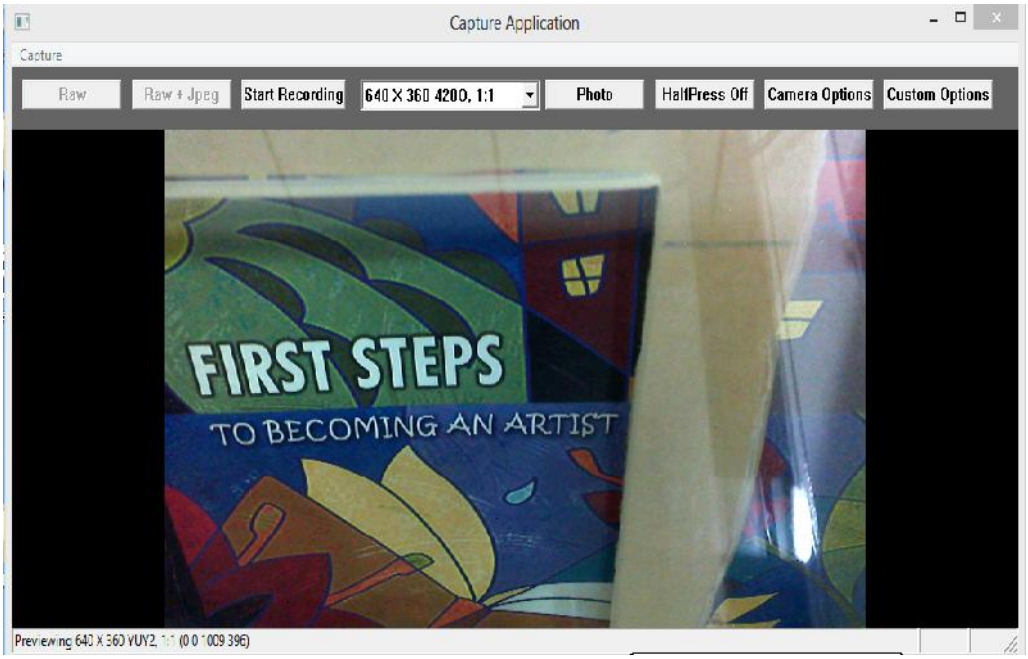
Select Camera Mode:



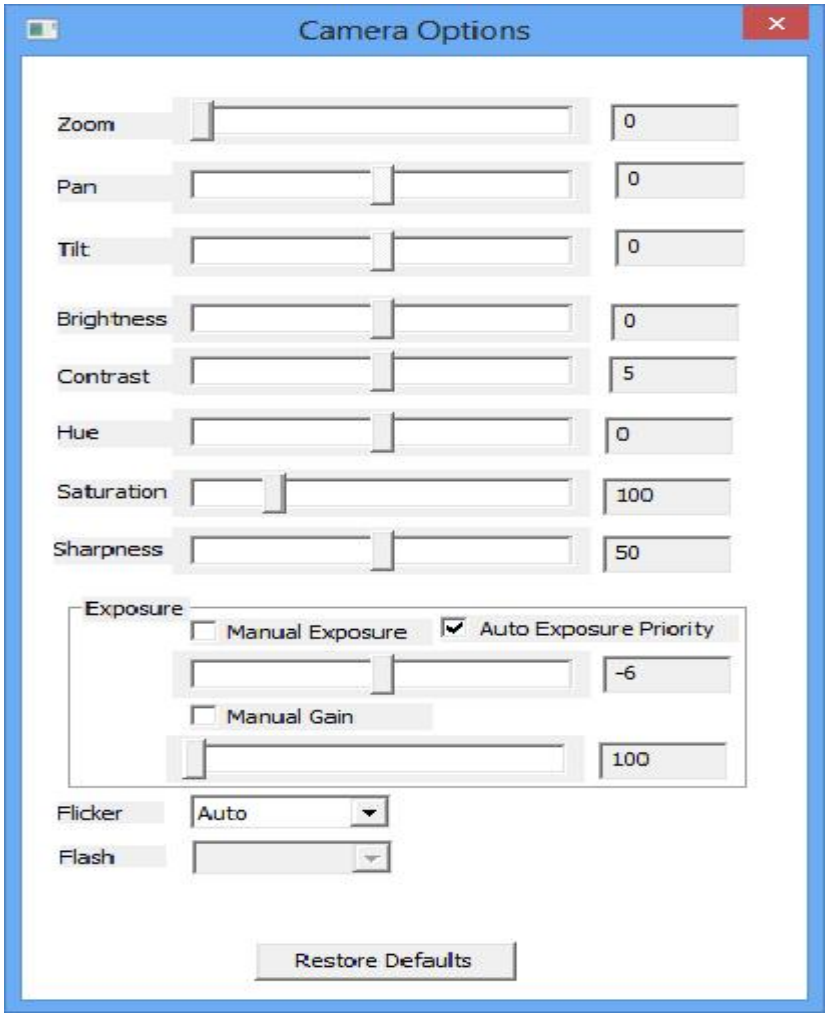
Front Camera



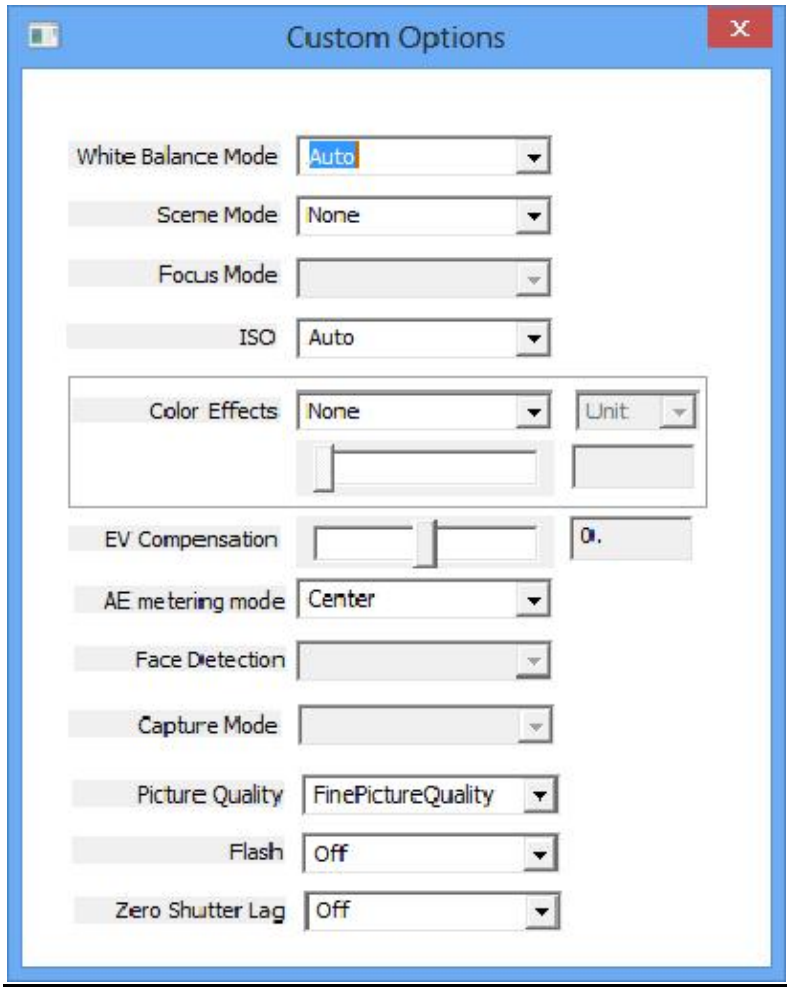
Back Camera


Capture Application
Capture
Raw
Raw + Jpeg
Start Recording
640 X 360 4200, 1:1
Photo
HalfPress Off
Camera Options
Custom Options
FIRST STEPS
TO BECOMING AN ARTIST

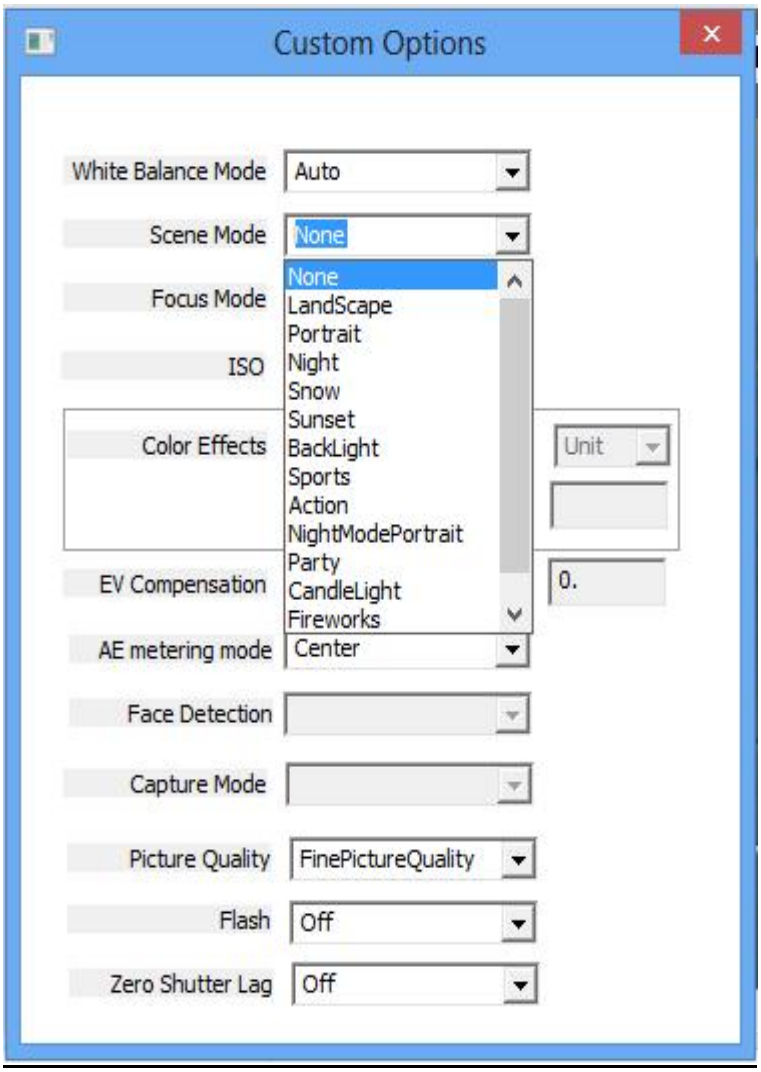
Camera Option



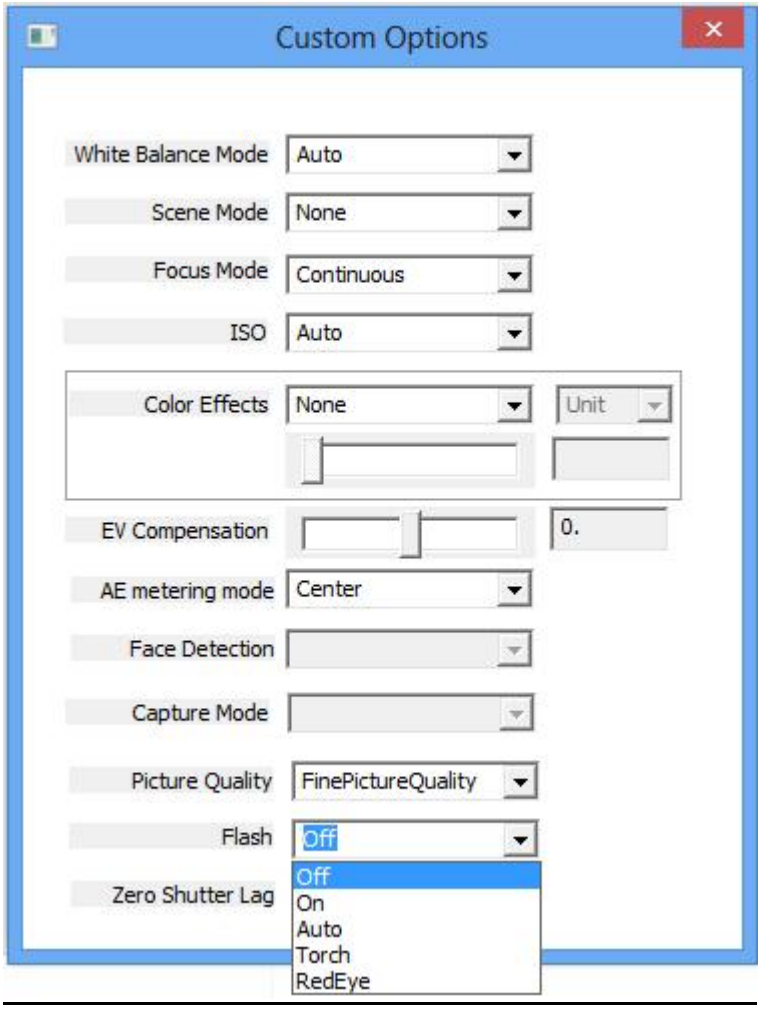
Custom Option



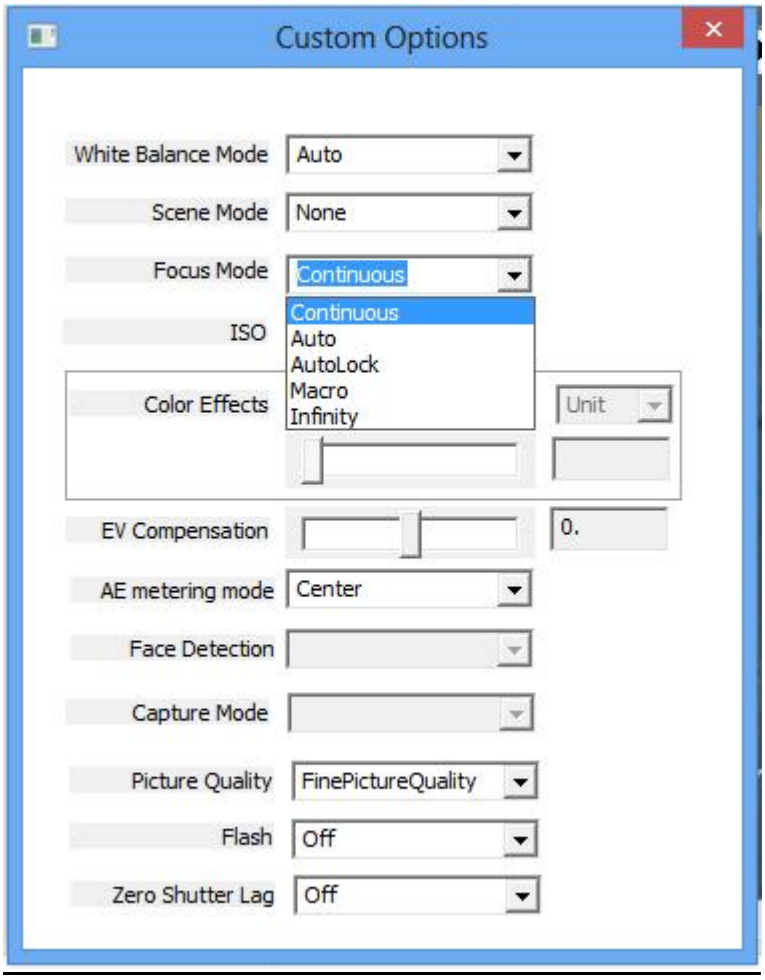
Custom Option



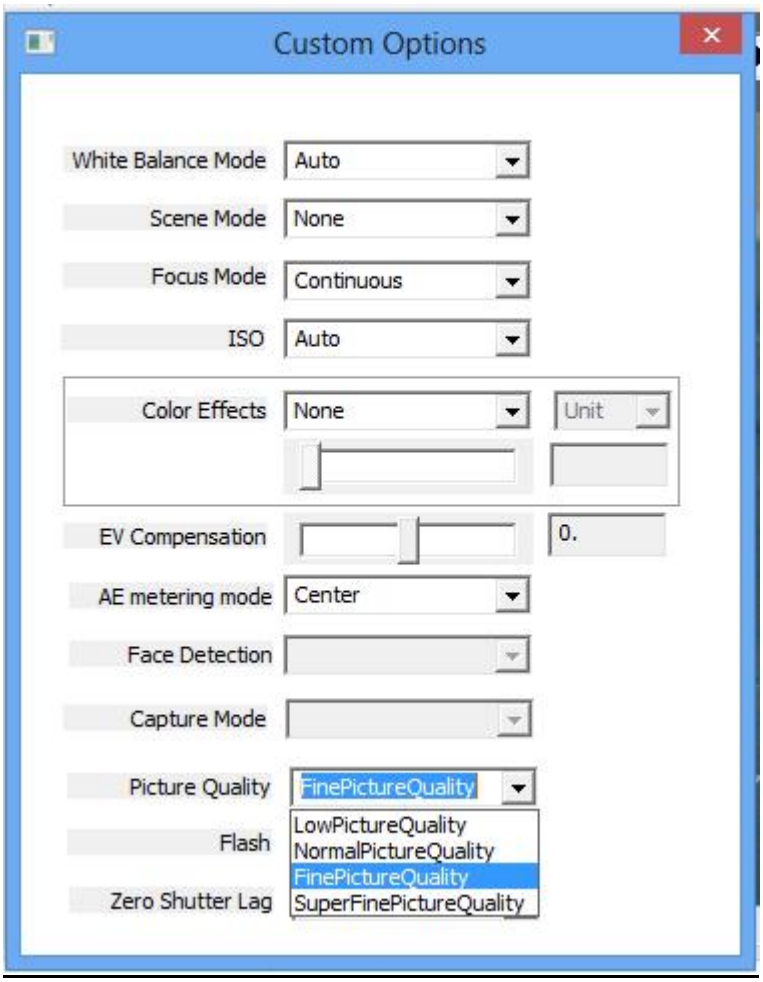
Custom Option



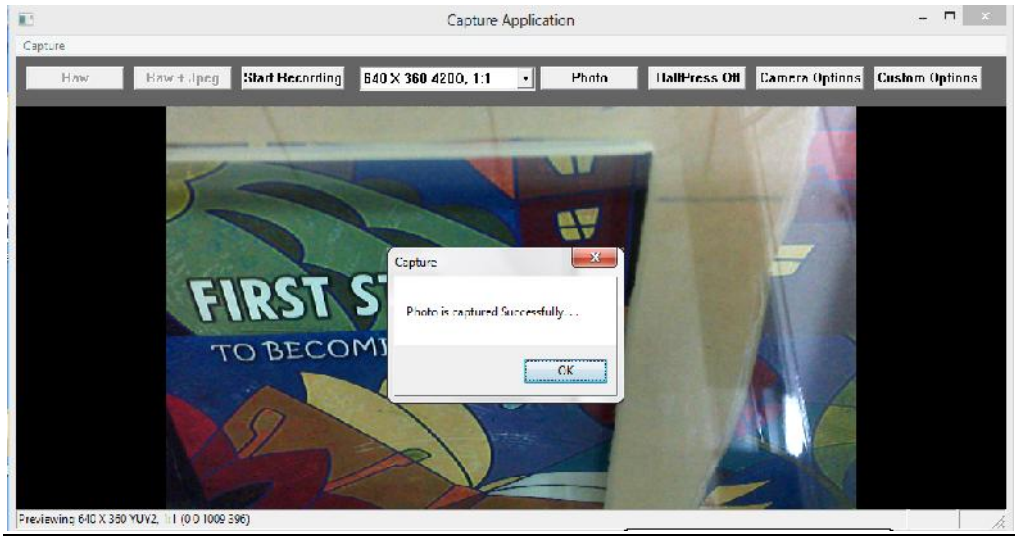
Custom Option



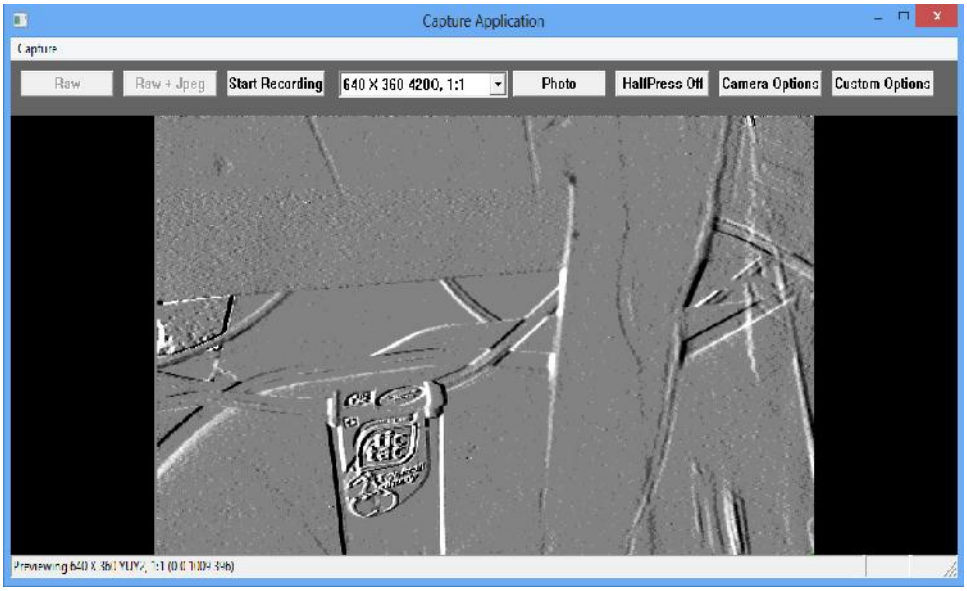
Custom Option



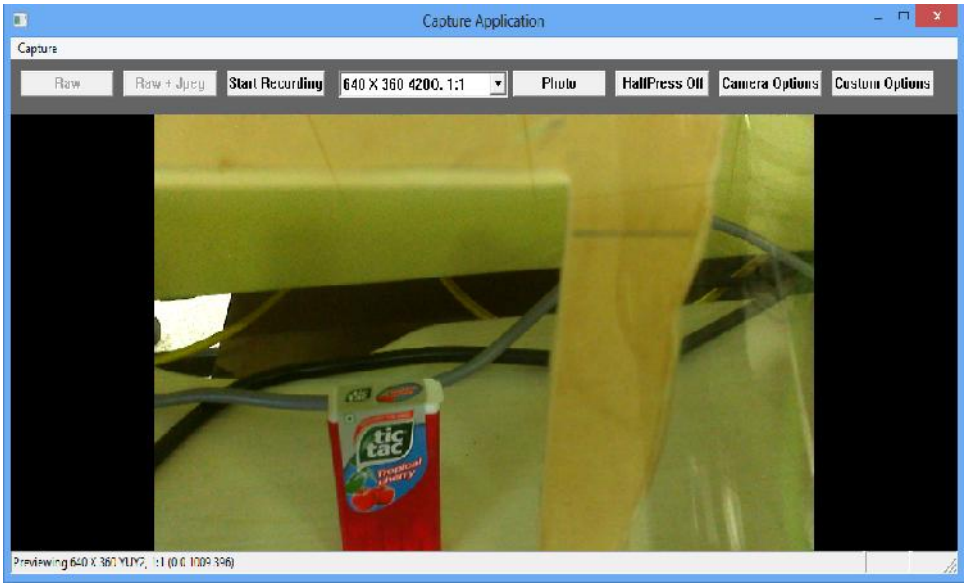
Output Screen (After capturing Photo)



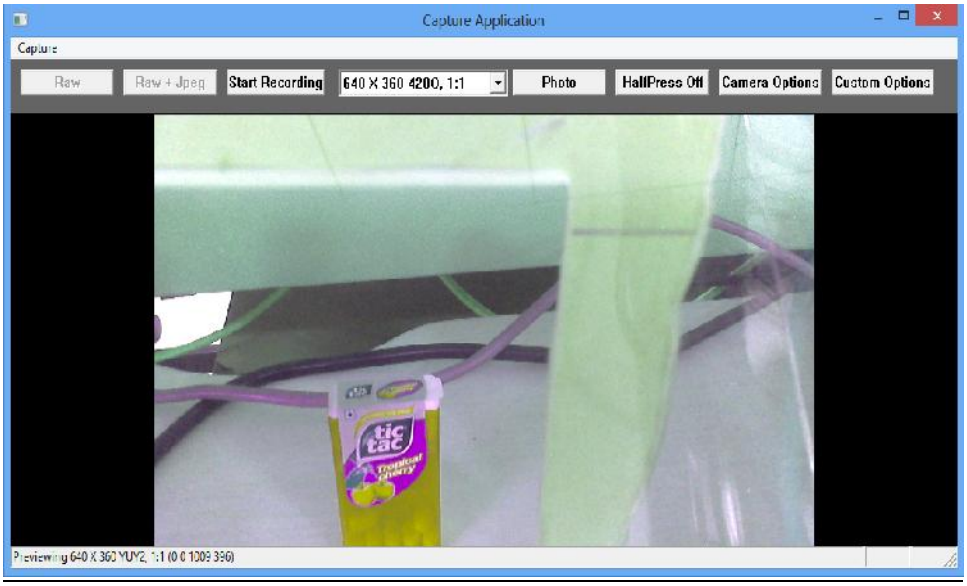
Output Screen (After applying Emboss)



Output Screen (After applying Daylight effect)



Output Screen (After applying Contrast & Hue)



Sample Program Code

```
voidOnCommand(HWND hwnd, int id, HWND /*hwndCtl*/, UINT
/*codeNotify*/)
    {



              // declaration of pProp
INvCameraPropInterface *pProp =
pCMFCameraController>GetCameraPropInterface();


CameraDataCollectioncdc;




if ( id >= 1 && id <= 50 )
{

nPreviewFormat = id - 1;

pCMFCameraController->StartPreview(nPreviewFormat); //this is async
so we need to wait for call back even before starting the preview
return;
        }



switch (id)
        {
case ID_CAPTURE_CHOOSEDEVICE:
OnChooseDevice(hwnd);
break;

case ID_CAPTURE_RECORD:
if (pCMFCameraController->IsRecording())
                {
OnStopRecord(hwnd);
                }
else
                {
OnStartRecord(hwnd);
                }
break;
```

```
case ID_CAPTURE_TAKEPHOTO:
case ID_CAPTURE_TAKEBAYERPHOTO:
case ID_CAPTURE_TAKEBAYER_JPEG_PHOTO:
       case ID_CAPTURE_PHOTO :


//--------------------*** Basic Options ***-------------------------
                            pCMFCameraController-
>SetCameraProperty(enumStdCameraPropertyZoom, true, 1);

              for(inti=0;i<=2;i++)
              {

pCMFCameraController->SetCameraProperty(enumStdCameraPropertyHue,
true, i);
pCMFCameraController->SetCameraProperty(enumStdCameraPropertyFlash,
true, i);
                     Delay(1000);
                     OnTakePhoto(hwnd, id);
                     Delay(1000);

                            }

//-------------------*** Basic Options ***-----------------------

//--------------------*** Custom Options ***---------------------

       for (inti=0;i<=9;i++)
       {
pProp->SetCameraFlashMode((ULONG)i);

pProp->SetCameraColorEffect((ULONG)2,&cdc);
                     Delay(1000);
                     OnTakePhoto(hwnd,id);
                     Delay(1000);
       } // End of For Loop
//--------------------*** Custom Options ***-----------------------
-



MessageBox(hwnd,_T("Photo is captured successfully. .
."),_T("Capture"),NULL);

break;
```

```
#define ID_CAPTURE_PHOTO                        40019
#define ID_CAPTURE_VIDEO                        40020


#define IDC_EDIT_ZOOM                   1013
#define IDC_EDIT_PAN                    1014
#define IDC_EDIT_TILT                   1015
#define IDC_EDIT_BRIGHTNESS             1016
#define IDC_EDIT_CONTRAST               1017
#define IDC_EDIT_HUE                    1018
#define IDC_EDIT_SATURATION             1019
#define IDC_EDIT_SHARPNESS              1020
```