

```

using System.Collections;
using System.IO;
using UnityEngine;
using UnityEngine.UI;
using DG.Tweening;

//must be placed in the main raw image GO;
public class camerademo : MonoBehaviour
{
    #region INPUTS
    string Patientname;
    string ID;
    int date;
    float x=0.6249899f;
    float y=0.42497f;

    string gender;
    string age;
    string year;
    int months;

    string[]
monthARRAY={"JAN","FEB","MAR","APR","MAY","JUN","JUL","AUG","SEP","OCT","NOV","DEC"
};

    const string ToastClassName = "android.widget.Toast";

    [Header("ESSENTIALS")]
    public RawImage _rawimage;
    public GameObject toggle;
    public GameObject image;

    public Material material;

    Texture2D texture;

    [Header("SLIDERS")]
    public Slider BlackandwhiteSlider;
    public Slider powerSlider;
    public Slider contrastSlider;

    [Header("USER INPUTS")]
    public InputField patientnameinput;
    public InputField idinput;
    public InputField ageinput;
    public InputField yearinput;
    public Toggle maleToggle,femaleToggle,otherToggle,REDFREE_FilterToggle;
    public Toggle graphtoggle;
    public Toggle savetoggle;

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```
[Header("GOs")]
public GameObject uicanvasGO;

public GameObject controlsGO;
public GameObject detailsGO;
public GameObject closebuttonGO;
public GameObject PIC;
public GameObject IMPORT;
public GameObject EXPORT;
public GameObject graph;
```

```
[Header("BUTTONS AND TOGGLES")]
public Button savetodevicebtn;
public Button sharebtn;
```

```
public Toggle odToggle;
public Toggle osToggle;
```

```
public Dropdown monthdropdown;
public Dropdown datedropdown;
```

```
[Header("TEXTS")]
public Text datetimeText;
```

```
public Text odostext;
```

```
#endregion
```

```
////////////////////////////////////
private void Start()
{
    Vibration.Init();
    _rawimage=GetComponent<RawImage>();
    uicanvasGO.GetComponent<Canvas>().enabled=true;
    controlsGO.SetActive(false);
    detailsGO.SetActive(false);
    material.SetFloat("Redfreefilter",0);

    BlackandwhiteSlider.value=1;
    powerSlider.value=1.089286f;

    monthdropdown.value=0;
    datedropdown.value=0;

    datetimeText.enabled=false;
    odostext.enabled=false;
    savetodevicebtn.enabled=false;
```

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        sharebtn.enabled=false;

    }

    //////////////////////////////////////
private void Update()
{
    date=datedropdown.value;
    date+=1;

    months=monthdropdown.value;
    months+=1;

    Debug.Log(monthARRAY[months]);

    material.SetFloat("BW",BlackandwhiteSlider.value);
    material.SetFloat("power",powerSlider.value);
    material.SetFloat("contrast",contrastSlider.value);

    if(toggle.GetComponent<Toggle>().isOn==true)
    {
        toggle.transform.DOLocalMoveX(50f,0.2f);

        controlsGO.gameObject.SetActive(true);
        material.SetFloat("graph",1);

        EXPORT.gameObject.SetActive(false);
    }
    if(toggle.GetComponent<Toggle>().isOn==false)
    {
        toggle.transform.DOLocalMoveX(-50f,0.2f);

        controlsGO.gameObject.SetActive(false);

        EXPORT.gameObject.SetActive(true);

        material.SetFloat("graph",0);
    }

    if(REFREE_FilterToggle.isOn)
    {
        material.SetFloat("Redfreefilter",1);
    }
    else
    {
        material.SetFloat("Redfreefilter",0);
    }

    if(graphtoggle.isOn)
    {
        material.SetFloat("graph",1);
    }

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        image.gameObject.SetActive(true);
    }
    else
    {
        material.SetFloat("graph", 0);
        image.gameObject.SetActive(false);
    }

    if(odToggle.isOn)
    {
        odostext.text="OD";

    }
    if(osToggle.isOn)
    {
        odostext.text="OS";

    }

    if(maleToggle.isOn)
    {

        gender="M";
    }
    if(femaleToggle.isOn)
    {

        gender="F";
    }
    else if(otherToggle.isOn)
    {

        gender="OTHER";
    }

    if(_rawimage.texture!=null)
    {
        if(savetoggle.isOn==true)
        {
            detailsGO.gameObject.SetActive(true);

            PIC.gameObject.SetActive(false);
            IMPORT.gameObject.SetActive(false);
            graph.gameObject.SetActive(false);
            closebuttonGO.gameObject.transform.DOLocalMoveX(320,1.5f);

            closebuttonGO.gameObject.GetComponent<RawImage>().DOFade(1,1.5f);

        }
        if( savetoggle.isOn==false)

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```

    {
        detailsGO.gameObject.SetActive(false);

        PIC.gameObject.SetActive(true);
        IMPORT.gameObject.SetActive(true);
        graph.gameObject.SetActive(true);

        closebuttonGO.gameObject.transform.DOLocalMoveX(-140,1.5f);
    }

    if((Patientname.Length!=0) && (ID.Length!=0) && (gender.Length!=0)
        && (year.Length!=0) && (age.Length!=0) )
    {
        savetodevicebtn.enabled=true;
        sharebtn.enabled=true;
    }

}

}

public void clearbutton()
{
    Vibration.VibratePop();

    patientnameinput.text="";
    idinput.text="";
    yearinput.text="";

    monthdropdown.value=0;
    datedropdown.value=0;

    maleToggle.isOn=false;
    femaleToggle.isOn=false;
    otherToggle.isOn=false;

    odToggle.isOn=false;
    osToggle.isOn=false;

}

public void closebutton()
{
    detailsGO.gameObject.SetActive(false);

    savetoggle.isOn=false;

```

```
}
```

```
void myfunc()
{
    if((Patientname.Length!=0) && (ID.Length!=0) && (gender.Length!=0)
        && (year.Length!=0) && (age.Length!=0) )
    {
        savetodevice();
    }
}
```

```
public void Patientnamebutton(string s)
{
    Patientname=patientnameinput.text;
}
```

```
public void IDbutton(string s)
{
    ID=idinput.text;
}
```

```
public void yearbutton(string s)
{
    year=yearinput.text;
}
```

```
public void agebutton(string s)
{
    age=ageinput.text;
}
```

```
public void savetodevice()
{
    StartCoroutine(TakeScreenshotAndSave());
    Vibration.VibratePop();
}
public void share()
{
    StartCoroutine(TakeScreenshotAndShare());
    Vibration.VibratePop();
}
public void rotate_Y_button()
{
```

```
    y=-y;
    _rawimage.rectTransform.localScale=new Vector3(x,y,1);
}
```

```
public void rotate_X_button()
{
    x=-x;
    _rawimage.rectTransform.localScale=new Vector3(x,y,1);
}
```

```

    }

    private void OnDrawGizmos() {

    }

    public void sharebutton()
    {
        StartCoroutine( TakeScreenshotAndShare() );
    }
    private IEnumerator TakeScreenshotAndShare()
    {

        uicanvasGO.GetComponent<Canvas>().enabled=false;
        detailsGO.GetComponent<Canvas>().enabled=false;

        datetimeText.text=System.DateTime.Now.ToString();
        datetimeText.enabled=true;
        odostext.enabled=true;

        yield return new WaitForEndOfFrame();

        Texture2D ss = new Texture2D( 710,1000 , TextureFormat.RGB24, false );
        ss.ReadPixels( new Rect( 0,605,605*2,920*2 ), 0, 0 );
        ss.Apply();

        string filePath = Path.Combine( Application.temporaryCachePath, "shared
img.png" );
        File.WriteAllBytes( filePath, ss.EncodeToPNG() );

        new NativeShare().AddFile( filePath )
            .SetSubject( "Subject goes here" ).SetText("(" +gender+")" +
Patientname+ " _ "+ ID+"_"+age).SetUrl(
"https://github.com/yasirkula/UnityNativeShare" )
            .SetCallback( ( result, shareTarget ) => Debug.Log( "Share result: " +
result + ", selected app: " + shareTarget ) )
            .Share();

        datetimeText.enabled=false;
        odostext.enabled=false;

        uicanvasGO.GetComponent<Canvas>().enabled=true;
        detailsGO.GetComponent<Canvas>().enabled=true;

        // if( NativeShare.TargetExists( "com.whatsapp" ) )
        //     new
NativeShare().AddFile( filePath ).AddTarget( "com.whatsapp" ).Share();
    }

```

```

public void saveimagebutton()
{
    detailsGO.gameObject.SetActive(true);
    myfunc();

}

private IEnumerator TakeScreenshotAndSave()
{
    uicanvasGO.GetComponent<Canvas>().enabled=false;
    detailsGO.GetComponent<Canvas>().enabled=false;

    datetimeText.text=System.DateTime.Now.ToString();
    datetimeText.enabled=true;
    odostext.enabled=true;

    Vibration.VibratePop();

    yield return new WaitForEndOfFrame();

    Texture2D ss = new Texture2D( 710,1000, TextureFormat.RGB24, false );

    ss.ReadPixels( new Rect( 0, 605, 605*2,920*2 ), 0, 0 );

    ss.Apply();

    NativeGallery.Permission permission = NativeGallery.SaveImageToGallery( ss,
    "Retinography","("+gender+")" + Patientname+ " _ "+ ID+"_"+age+".png", ( success,
    path ) => Debug.Log( "Media save result: " + success + " " + path ) );

    datetimeText.enabled=false;
    odostext.enabled=false;

    uicanvasGO.GetComponent<Canvas>().enabled=true;
    detailsGO.GetComponent<Canvas>().enabled=true;

    StartCoroutine(OnMyButtonClick());
}

// IMAGE SAVED TOAST
IEnumerator OnMyButtonClick()
{
    yield return new WaitForSeconds(0.5f);

    var toastJavaClass = new AndroidJavaClass	ToastClassName);

    const int duration = 1; // LENGTH_LONG in Android API
    const string text = "IMAGE SAVED "; // C# string is automatically
converted to java.lang.String

```



```

        var context = GetUnityActivity();
        var javaToastObject =
            toastJavaClass.CallStatic<AndroidJavaObject>("makeText", context,
text, duration);
        javaToastObject.Call("show");

        toastJavaClass.Dispose();
    }

    AndroidJavaObject GetUnityActivity()
    {
        using (var unityPlayer = new
AndroidJavaClass("com.unity3d.player.UnityPlayer"))
        {
            return
unityPlayer.GetStatic<AndroidJavaObject>("currentActivity");
        }
    }
    // IMAGE SAVED TOAST \\\\\\\\\\\\\\\\\\\\\\\

    public void loadbutton()
    {
        LoadImage(512);
        Vibration.VibratePop();
    }

    private void LoadImage( int maxSize )
    {
        NativeGallery.Permission permission =
NativeGallery.GetImageFromGallery( ( path ) =>
        {
            Debug.Log( "Image path: " + path );
            if( path != null )
            {
                // Create Texture from selected image
                Texture2D texture = NativeGallery.LoadImageAtPath( path,
maxSize );
                if( texture == null )
                {
                    Debug.Log( "Couldn't load texture from " + path );
                    return;
                }

                _rawimage.texture=texture;
                material.SetTexture("_MainTex",_rawimage.texture);
                _rawimage.gameObject.SetActive(true);

            }
        } );
    }

    public void TakePicturebutton()
    {

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```

        TakePicture(512);
        Vibration.VibratePop();
    }

    private void TakePicture( int maxSize )
    {
        NativeCamera.Permission permission = NativeCamera.TakePicture( ( path ) =>
        {
            if( path != null )
            {
                // Create a Texture2D from the captured image
                texture = NativeCamera.LoadImageAtPath( path, maxSize );
                if( texture == null )
                {
                    return;
                }

                _rawimage.texture=texture;
                material.SetTexture("_MainTex",_rawimage.texture);
                _rawimage.gameObject.SetActive(true);

            }
        }, maxSize );
    }
}

```