Optical Character Recognition for Android

Plugin will allow developers to add OCR capability for their Unity android applications. Plugin provides a simple C# interface for the Optical Character Recognition. Please read the document carefully.

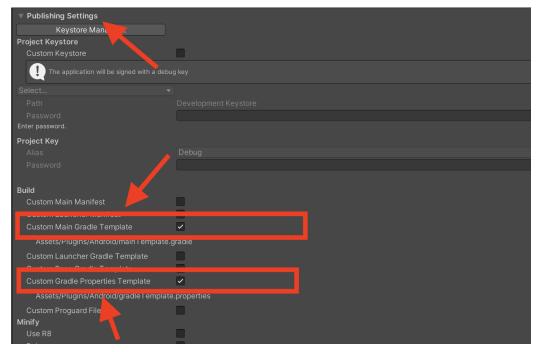
<u>SetUp</u>

Import the asset package in the assets folder. Ensure that following files exists in OcrUnity/Plugins/Android/ folder:

1. OcrManager.aar

Now follow below steps:

1. Open Player Settings of Android and select "Custom Main Gradle Template" and "Custom Gradle Properties Template" as show in screenshot below:



- 2. Above step will create a Plugins/Android folder inside the Asset folder. Now move OcrManager.aar from OcrUnity/Plugins/Android to Assets/Plugins/Android folder.
- Then open "gradleTemplate.properties" from Assets/Plugins/Android and add "android.useAndroidX=true" in

it as shown below in screenshot:

```
org.gradle.jvmargs=-Xmx**JVM_HEAP_SIZE**M
org.gradle.parallel=true
android.enableR8=**MINIFY_WITH_R_EIGHT**
unityStreamingAssets=_unity3d**STREAMING_ASSETS**
android.useAndroidX=true
**ADDITIONAL_PROPERTIES**
```

4. Then open "mainTemplate.gradle" from Assets/Plugins/Android and add implementation 'com.google.android.gms:play-services-vision:20.1.3' in dependencies section of it as shown below in screenshot:

```
apply plugin: 'com.android.library'
**APPLY_PLUGINS**

dependencies {
   implementation fileTree(dir: 'libs', include: ['*.iar'])
   implementation 'com.google.android.gms:play-services-vision:20.1.3'
**DEPS***
```

How Plugin Works:

Plugin requires camera permission for scanning and taking images. First developers should check whether the camera permissions are given or not. If not then developers can request the user for the same. After that developers can scan any document to fetch text from it.

<u>API</u>

To set callback method:

OcrBridge.SetUnityGameObjectNameAndMethodName(string gameObject,string methodName);

In above code **gameObject** represents the name of gameObject which will receive the message from native and **methodName** represents the name of the method present in the script attached to above gameObject which will receive message from native.

To take screenshot and read characters from it use below api:

StartCoroutine(OcrBridge.takeScreenshotAndReadCharacters())

Use this api to take a screenshot of the current scene and read characters from it. Before invoking this api developers first need to use

OcrBridge.SetUnityGameObjectNameAndMethodName() api described above to set the callback channel. This callback method will receive all the characters which are present in the scene one by one.

To take image from camera and read characters from it use below api:

OcrBridge.captureImageAndReadCharacters();

Through this api developers can add functionality to read characters from the real world. Users need to take a picture of anything from the real world and then the plugin will read characters from it and send it back to unity via a callback channel.

To take image from device library and read characters from it use below api:

OcrBridge.selectImageFromGalleryAndReadCharacters();

Through this api developers can add functionality to read characters from an image of the library. Users need to select the picture from the library and then the plugin will read characters from it and send it back to unity via callback channel.

To start live feed from device camera and read characters from it use below api:

OcrBridge.liveFeedAndReadCharacters(string textToDisplay);

Through this api developers can start live camera feed and then the plugin will read characters from camera feed and send it back to unity via callback channel. This api expects a parameter textToDisplay which adds a text at the bottom of the camera. Developers can keep it empty if bot required.

OcrBridge.stopLiveFeed();

Please share your valuable feedback on asset store and in case of any query or clarifications contact us at guptamayank516@gmail.com