```
2. 用Android Studio导入Unity导出的Android工程,并导出为AAR文件
  3. 在原生工程导入AAR文件并打包测试
详细步骤:
1.用Unity准备一个测试工程,测试工程中最好添加一个脚本,监听安卓返回键,可以退出当前Unity场景.
具体代码为:
Public class SupportBackScript : MonoBehaviour
 void Update()
    If(Application.platform == RuntimePlatform.Android)
      if(Input.GetKey(KeyCode.Escape))
        Application.Quit();
然后准备导出Unity工程, 打开Player Build Settings界面, 呼出路径为, 左上角File>BuildSettings, 记得把测试场景添加上.
平台选择Android, 勾选上Google Android Project 选项如图:
  Build Settings
   Scenes In Build

✓ Scene/Main

                                                                       Add Open Scenes
   Platform
                                             Android
        PC, Mac & Linux Standalone
         ios
                                                                Don't override
                                        Texture Compression
        Android
                                €
                                        Development Build
        WebGL
   ⊈t∨ tvos
        Xbox 360
    Switch Platform | Player Settings...
                                                                       Build And Run
                                                             Export
点击Player Settings, 可以按照如图稍微设置一下., Bundle Identifer不能用默认的, 随便写一个就行,设置完毕后, 就可以点击Export导出了.
  Inspector
       PlayerSettings
   Company Name
   Product Name
   Default Icon
                                                                 欧美思
                                                                   Śelect
   Default Cursor
                                                                 (Texture
                                                                   2D)
                                                                    Select
   Cursor Hotspot
                                                               9
         ₹
  Settings for Android
    Resolution and Presentation
    Icon
    Splash Image
    Other Settings
    Rendering
    Rendering Path*
                              Forward
                              ✓
    Auto Graphics API
    Static Batching
    Dynamic Batching
                              \overline{\mathbf{v}}
    GPU Skinning*
    Graphics Jobs (Experimental)*
    Virtual Reality Supported
    Protect Graphics Memory
    Identification
    Bundle Identifier
    Version*
                              1.0.0
    Bundle Version Code
                              20170605
    Minimum API Level
                              Android 4.0 'Ice Cream Sandwich' (API level 14)
    Configuration
    Scripting Backend
                              Mono2x
    Mute Other Audio Sources
    Disable HW Statistics*
                              \checkmark
                              ARMv7
    Device Filter
                              Prefer External
    Install Location
    Internet Access
                              Auto
                              Internal
    Write Permission
    Android TV Compatibility
    Android Game
    Android Gamepad Support Leve Works with D-pad
    Scripting Define Symbols*
    AB_MODE; TMP_PRESENT
    Optimization
                              .NET 2.0 Subset
    API Compatibility level*
    Prebake Collision Meshes*
    Preload Shaders
   ▶ Preloaded Assets
    Stripping Level*
                              Strip Assemblies
    Enable Internal Profiler
                              Mixed ...
    Vertex Compression*
                              \checkmark
    Optimize Mesh Data*
    Logging*
    Log Type
                                         None
                                                    ScriptOnly Full
                                          V
    Error
                                          ✓
    Assert
                                          V
    Warning
                                         \checkmark
    Log
    Exception
    * Shared setting between multiple platforms.
    Publishing Settings
2.目前Unity版本只能导出为Eclipse工程, 所以需要用Android Studio导入然后自动转化一下, 第一次导入的时间比较长.
导入完毕后:
   • 打开Mainfest, 首先在activity中增加配置: android:process=":unity", 这个属性的意思是把UnityActivity当成一个新的进程处理.
   • 由于UnityActivity退出的时候会杀掉当前进程, 所以把UnityActivity放在新进程就算被杀掉了也不会影响原生App的进程.
   • 然后注释掉以下代码:
      <?xml version="1." encoding="utf-8"?>
      <menifest xmlns:android="http://schemas.android.com/apk/res/android" package="com</pre>
        <supports-screens adroid:smallScreens="true" android:normalScreens="true" andro</pre>
         (application android:theme="@style/UnityThemeSelector" android:icon="@drawable/
          <activity android:process=":unity" android:label="IntegrationUnity" android:so
            <!--<intent-filter>-->
               <!--<action android:name="android.intent.action.MAIN" />-->
               <!--<category android:name="android.intent.category.LAUNCHER" />-->
            <!--</intent-filter>-->
             <meta-data android:name="unityplayer.UnityActivity" android:value="true" />
           </activity>
        </application>
        <uses-sdk android:minSdkVersion="19" android:targetSdkVersion="25" />
        <uses-feature android:glEsVersion="0x00020000" />
        <uses-permission android:name="android.permission.INTERNET" />
        <uses-feature android:name="android.hardware.touchscreen" android:required="fal</pre>
        <uses-feature android:name="android.hardware.touchscreen.multitouch" android:red</pre>
        <uses-feature android:name="android.hardware.touchscreen.multitouch.distinct" android:name="android.hardware.touchscreen.multitouch.distinct" android.hardware.touchscreen.multitouch.distinct</pre>
       </manifest>
   • 如图, 打开build.gradle文件, 第一行注掉改成第二行的样子, 然后把defaultConfig里面注释掉 applicationId这样.
                                                          ⊕ + | ★ | ←
                                                                         import-summary.txt ×
                                                                                                🔯 AndroidManifest.xml 🗴 🜔 IntegrationUnityTest
        ndroid 🖷
                                                                                 //apply plugin: 'com.android.application'
         급 арр
                                                                                 apply plugin: 'com.android.library'
          manifests
          ▶ ☐ java
                                                                                  android {
          assets
                                                                                      compileSdkVersion 25
          ▶ ☐ jniLibs
                                                                                   buildToolsVersion "26.0.1"
          ▶ 🛅 res
       ▼ ③ Gradle Scripts
                                                                                      defaultConfig {
             build.gradle (Project: IntegrationUnityTest)
                                                                                            applicationId " ----- ' · · · ·
            build.gradle (Module: app)
                                                                                          minSdkVersion 19
             gradle-wrapper.properties (Gradle Version)
                                                                                          targetSdkVersion 25
            to settings.gradle (Project Settings)
             local.properties (SDK Location)
                                                                                      buildTypes {
                                                                                          release {
                                                                                               minifyEnabled false
                                                                                               proguardFiles getDefaultProguardFile('prog
   • 接着就可以点击Build>Make Project, 完毕后, 如图就能看到outputs下打包好的文件了.
         Project
                                                           Ð 🖶 🖊 🔭 🗜
          IntegrationUnityTest D:\_Work\IntegrationUnity\Android\Native\Integra
           ▶ □ .gradle
           ▶ 🗀 .idea
           ▼ 🛅 app
              ▼ 🗀 build
                generated
                ▶ intermediates
                ▼ □ outputs
                   ▼ 🗀 aar
                         🛾 app-debug.aar
                   ▶ 🗖 logs
                ▶ 🗖 tmp
3.打开一个原生Android应用的工程, 点击File > New Module >Import JAR/AAR Package, 选择你之前Build好的AAR文件.
   ● 确保settings.gradle文件内是: include ':app', ':your_aar_file_name'
   • 如图, 打开build.gradle(Module:app), 添加红框内的内容: compile project(":your_aar_file_name"), 然后会提示Sync gradle, 点击同步即可
        ■ WebGLTest-debug
                                                                       apply plugin: 'com.android.application'
```

参考链接:https://medium.com/@davidbeloosesky/embedded-unity-within-android-app-7061f4f473a

软件环境:

整体步骤:

1. Unity5.4.5f1

2. Android Studio 2.3.3

1. 导出Unity工程为Android工程

• 添加mainfest tag: xmlns:tools="http://schemas.android.com/tools" • 添加application tag: tools:replace="android:icon, android:theme" • 效果就是如下:

由于aar文件内含有unity的mainfest文件, 当run工程的时候会尝试合并mainfest, 但是默认会出现Manifest merger failed with multiple error, see logs错误,

android {

compileSdkVersion 26

defaultConfig {

💡 buildTypes {

dependencies {

release {

buildToolsVersion "26.0.1"

minSdkVersion 19

versionName "1.0"

versionCode 1

targetSdkVersion 26

minifyEnabled false

compile project(":WebGLTest-debug")

testCompile 'junit:junit:4.12'

compile fileTree(dir: 'libs', include: ['*.jar'])

applicationId "com.puhanda.nativeappaar"

testInstrumentationRunner "android.support.test.runner.AndroidJUnitRunner"

androidTestCompile('com.android.support.test.espresso:espresso-core:2.2.2', { exclude group: 'com.android.support', module: 'support-annotations'

compile 'com.android.support.constraint:constraint-layout:1.0.2'

proguardFiles getDefaultProguardFile('proguard-android.txt'), 'proguard-rules.p

```
<manifest xmlns:android="http://schemas.android.com/apk/res/android"</pre>
   xmlns:tools="http://schemas.android.com/tools"
   package="com.yourpackage.name">
```

급 арр

▼ 🖿 java

▶ 🛅 res

Gradle Scripts

▼ 🖿 manifests

AndroidManifest.xml

▼ in com.puhanda.nativeappaar

▶ 🖸 com.puhanda.nativeappaar (androidTest)

com.puhanda.nativeappaar (test)

build.gradle (Project: NativeAppAAR)

gradle.properties (Project Properties)

© settings.gradle (Project Settings) local.properties (SDK Location)

需要在原生Android App中的Mainfest中稍微设置一下.

build.gradle (Module: WebGLTest-debug)

gradle-wrapper.properties (Gradle Version)

proguard-rules.pro (ProGuard Rules for app)

C & MainActivity

build.gradle (Module: app)

<application android:allowBackup="true" tools:replace="android:icon,android:theme" android:icon="@mipmap/ic launcher" android:label="@string/app name" </application> </manifest>

// DON'T CALL IT FROM YOUR MAIN ACTIVITY - SEE ABOVE INSTRUCTIONS! startActivity(intent);

dependencies {

最后就剩下添加打开UnityActivity的方法了, 打开Activity的代码如下:

import com.yourpackage.name.UnityPlayerActivity;

Intent intent = new Intent(mContext, UnityPlayerActivity.class); 备注: 如果出现以下为题:

Error:org.gradle.api.internal.tasks.DefaultTaskInputs\$TaskInputUnionFileCollection cannot be cast to

org.gradle.api.internal.file.collections.DefaultConfigurableFileCollection

可以在Unity导出的Android的工程中的proguard-rules.txt文件中加入:-keep public class my.package.** { public *;}即可

classpath 'com.android.tools.build:gradle:2.2.0'

Possible causes for this unexpected error include:Gradle's dependency cache may be corrupt (this sometimes occurs after a network connection timeout.) 2. 如果任何人在将Unity活动导入主项目时遇到问题,可能是因为在构建期间类文件不会导出到AAR文件。

1.出现这个错误, 高版本Unity导出工程的时候会有Gradle选项, 这个相当于是Android studio工程的目录结构. 但是Unity默认的

Gradle是2.1.0版本的,如果出现以下错误,则只需要把版本改成2.2.0即可,路径是build.gradle (app module):