

Chukong Technologies

# Cocos3D Getting Started

MAC-Android

Cocos3D Team

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# 1 Preparations

- Software:
  1. Mac OS (In this case, we use OS X 10.9.1)。
  2. JDK (In this case, we use jdk-7u40-macosx-x64)。  
Download: <http://www.java.com/en/download/manual.jsp>
  3. adt-bundle (In this case, we use adt-bundle-mac-x86\_64-20131030 and unzip it at /Users/zhukai/Documents/SDK/adt-bundle-mac-x86\_64-20131030)。  
Download: <http://developer.android.com/sdk/index.html>
  4. NDK (In this case, we use android-ndk-r9b-darwin-x86\_64.tar and unzip it at /Users/zhukai/Documents/SDK/android-ndk-r9b)。  
Download: <http://developer.android.com/tools/sdk/ndk/index.html>
  5. Ant (In this case, we use apache-ant-1.9.3, and unzip it at /Users/zhukai/Documents/SDK/apache-ant-1.9.3)。  
Download: <http://ant.apache.org>
- Get cocos3d-x source from GitHub: <https://github.com/cocos2d/cocos3d-x> (in this case, we put the source into the Desktop), directory structure is shown as below。

名称	修改日期
▶ 文件夹 cocos	昨天 下午6:36
▶ 文件夹 cocos3d	昨天 下午6:39
▶ 文件 cocos3d-win32.vc2010.sln	昨天 下午6:39
▶ 文件夹 CocosDenshion	昨天 下午1:21
▶ 文件夹 Doc	今天 上午9:46
▶ 文件夹 EngineDemo	昨天 下午4:31
▶ 文件 README.md	今天 上午9:36
▶ 文件夹 template	昨天 下午1:21
▶ 文件夹 tools	昨天 下午1:21

## 2 Create fishJoy project

Open a terminal and navigate to cocos3d-x\tools\project-creator directory

```
localhost:tools zhukai$ cd ~
localhost:~ zhukai$ cd Desktop/cocos3d-x/tools/project-creator/
localhost:project-creator zhukai$
```

Input "Python ./create\_project.py -project fishjoy -package com.chukong.fishJoy"

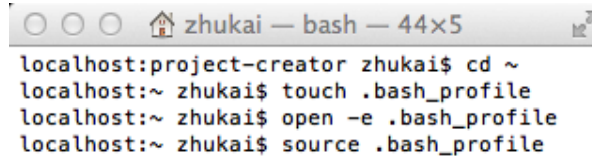
```
localhost:project-creator zhukai$ python ./create_project.py -project fishjoy -package com.chukong.fishJoy
proj.android      : Done!
proj.win32        : Done!
proj.ios          : Done!
New project has been created in this path: /Users/zhukai/Desktop/cocos3d-x/projects/fishjoy
Have Fun!
localhost:project-creator zhukai$
```

Finally, the newly created project will be located in cocos3d-x\projects.

## 3 Compile Android project

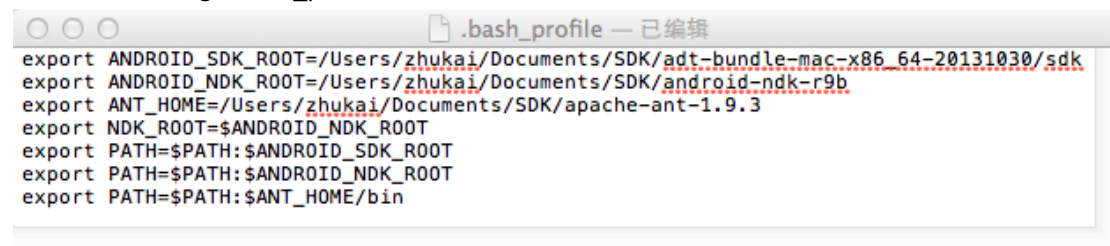
### 3.1 Configuration environment variable

1. Open a terminal
2. `cd ~`
3. `touch .bash_profile`
4. `open -e .bash_profile`



```
localhost:project-creator zhukai$ cd ~
localhost:~ zhukai$ touch .bash_profile
localhost:~ zhukai$ open -e .bash_profile
localhost:~ zhukai$ source .bash_profile
```

In this case change `.bash_profile` as below:



```
export ANDROID_SDK_ROOT=/Users/zhukai/Documents/SDK/adt-bundle-mac-x86_64-20131030/sdk
export ANDROID_NDK_ROOT=/Users/zhukai/Documents/SDK/android-ndk-r9b
export ANT_HOME=/Users/zhukai/Documents/SDK/apache-ant-1.9.3
export NDK_ROOT=$ANDROID_NDK_ROOT
export PATH=$PATH:$ANDROID_SDK_ROOT
export PATH=$PATH:$ANDROID_NDK_ROOT
export PATH=$PATH:$ANT_HOME/bin
```

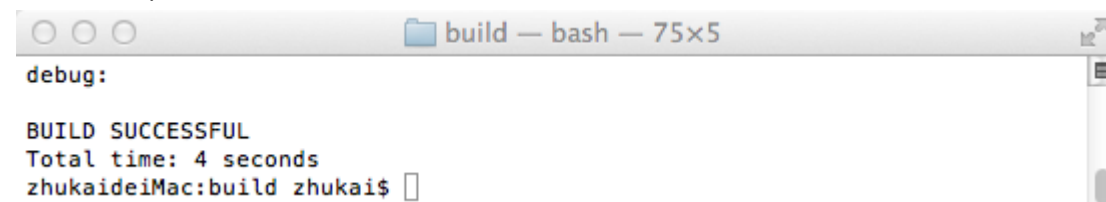
5. save and exit `.bash_profile`
6. `source .bash_profile`

### 3.2 Compile fishJoy

1. Open a terminal, navigate to `cocos3d-x/build` directory, and run `android-build.py`:

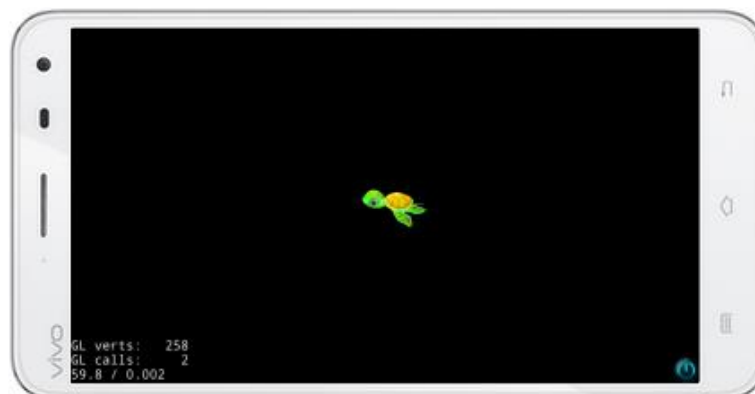
```
zhukaideiMac:build zhukai$ cd ~
zhukaideiMac:~ zhukai$ cd Desktop/cocos3d-x/build/
zhukaideiMac:build zhukai$ python ./android-build.py -p 19 fishJoy
```

The output as follows:



```
debug:
BUILD SUCCESSFUL
Total time: 4 seconds
zhukaideiMac:build zhukai$
```

You will find the apk file at `cocos3d-x/projects/fishJoy/proj.android/bin/fishJoy-debug.apk`.



### 3.3 Compile EngineDemo

```
build — bash — 75x5
BUILD SUCCESSFUL
Total time: 4 seconds
zhukaideiMac:build zhukai$ cd ~
zhukaideiMac:~ zhukai$ cd Desktop/cocos3d-x/build/
zhukaideiMac:build zhukai$ python ./android-build.py -p 19 EngineDemo
```



## 4 Tips

If you run the demo at java vm , please open eclipse and select menu “Window->Andorid Virtual Device Manage” to create a avm( check “Use Host GPU”)

Create new Android Virtual Device (AVD)

AVD Name: Default

Device: Nexus One (3.7", 480 × 800: hdpi)

Target: Android 4.4 – API Level 19

CPU/ABI: ARM (armeabi-v7a)

Keyboard: ☒ Hardware keyboard present

Skin: ☒ Display a skin with hardware controls

Front Camera: None

Back Camera: None

Memory Options: RAM: 512 VM Heap: 32

Internal Storage: 200 MiB


SD Card:

☒ Size: MiB

☐ File: Browse...

Emulation Options: ☐ Snapshot ☒ Use Host GPU

☐ Override the existing AVD with the same name

 The AVD name 'Default' is already used.  
Check "Override the existing AVD" to delete the existing one.

Cancel OK

Finally, start the avm

