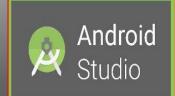
Becoming a Pro Mobile Applications Testing





What is Android Studio?

Android Studio?

Android Studio is the official integrated development environment (IDE) for **Android** platform development.

The official language for Android development is **Java**. Large parts of Android are written in **Java** and its APIs are designed to be called primarily from **Java**.

It is possible to develop C and C++ apps using the Android Native Development Kit (NDK), however it isn't something that Google promotes.



What is ADB LOCATS?

Verbose - Show all log messages (the default).

To set a LOG LEVEL : in the log level MENU Select the Following Options Debug - Show debug log messages that are useful during development only, as well as the message levels lower in this list.

Info - Show expected log messages for regular usage, as well as the message levels lower in this list.

Warn - Show possible issues that are not yet errors, as well as the message levels lower in this list.

Error - Show issues that have caused errors, as well as the message level lower in this list.

Assert - Show issues that the developer expects should never happen.

What is ADB LOCATS?

HOMEWORK : http://adbshell.com/commands/adb-logcat

adb logcat *: V or adb logcat :* V lowest priority, filter to only show Verbose level

Some most useful commands

adb logcat *: D or adb logcat :* D filter to only show Debug level

adb logcat *: I or adb logcat :* I filter to only show Info level

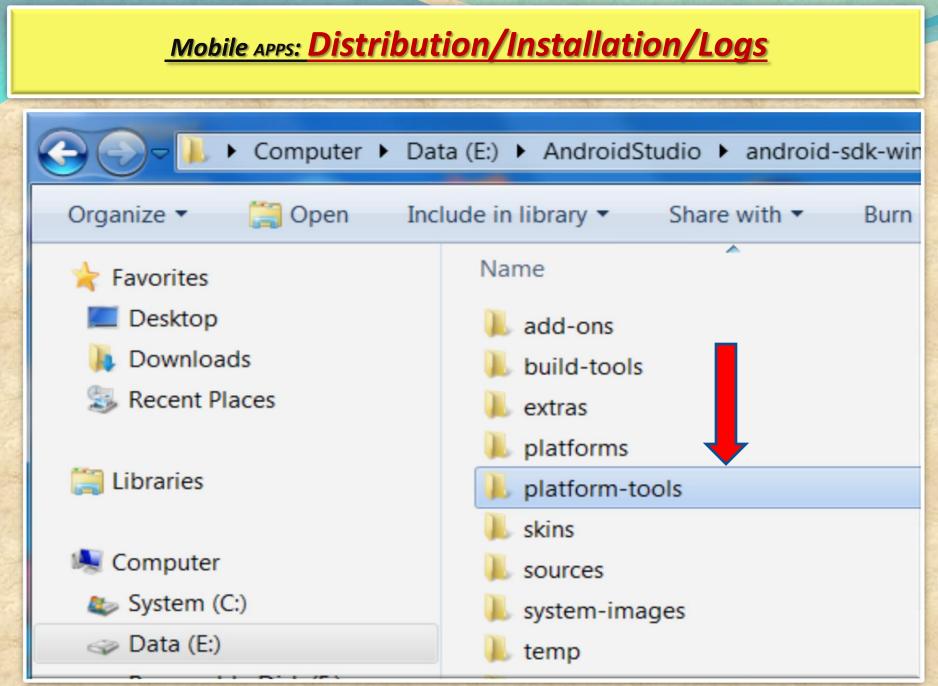
adb logcat *: W or adb logcat :* W filter to only show Warning level

adb logcat *: E or adb logcat :* E filter to only show Error level

adb logcat *: F or adb logcat :* F filter to only show Fatal level

adb logcat *: T or adb logcat :* T filter to show steps leading up to errors and warnings

Mobile APPS: Distribution/Installation/Logs Computer > Data (E:) > AndroidStudio > [Open Organize • Include in library • Share with • New folder Burn ٨ Name Date modified Type Favorites Desktop android-sdk-windows 11/17/2016 1:58 PM File folder Downloads android-studio 6/17/2015 5:47 PM File folder 🔊 Recent Places Projects 6/18/2015 10:16 A... File folder Libraries



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Mobile APPS: Distribution/Installation/Logs MyApplication - [E:\AndroidStudio\Projects\MyApplication] - Android Studio 2.2 File Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help → み ① ① Q Q キ → < □ app - ▶ 林 山 G ■ </p> MyApplication &- ⊮-Captures Platfo 1: Project Android System Information Platform and Plugin Updates -4- I← Build Variants The following components are ready to update: A Module **Build Variant** Repository, Android SDK Platform-Tools 25.0.2, A v7a System Image, Android SDK Tools 25.2.4 Structure Terminal Microsoft Windows [Version 6.1.7601] Copyright (c) 2009 Microsoft Corporation. All rights reserved. E:\AndroidStudio\Projects\MyApplication>cd E:\AndroidStudio\android-sdk-windows\platform-tools Captures E:\AndroidStudio\android-sdk-windows\platform-tools>

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Mobile APPS: Distribution/Installation/Logs MyApplication - [E:\AndroidStudio\Projects\MyApplication] - Android Studio 2.2 **AVD** Edit View Navigate Code Analyze Refactor Build Run Tools VCS Window Help le C app MyApplication Android Virtual Device Manager Your Virtual Devices Android Studio Virtual devices allow you to test your application without having to own the physical devices. + Create Virtual Device...

Virtual Device Configuration



Select Hardware Android Studio

Choose a device definition

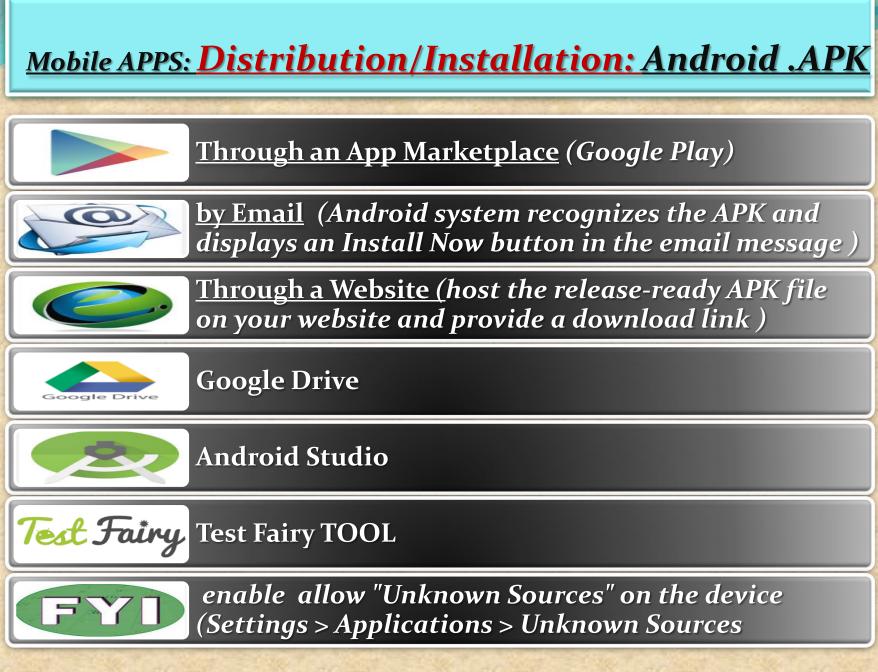
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Vear	Nexus One	3.7"	480x800	hdpi	Size: normal
hone	Nexus 6P	5.7"	1440x2560	560dpi	Ratio: long Density: 420dpi
ablet	Nexus 6	5.96"	1440x2560	560dpi	
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	Nexus 5	4.95"	1080x1920	xxhdpi	
	Nexus 4	4.7"	768x1280	xhdpi	
	Galaxy Nexus	4.65"	720x1280	xhdpi	
	5.4" FWVGA	5.4"	480x854	mdpi	
	5.1" WVGA	5.1"	480x800	mdpi	
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Virtual Device Configuration System Imag Android Studio Select a system image	e	<u>: Distr</u>	ibution/Insta	<u>illation/Lo</u>	Dgs
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Device Frame 🔽 Enable	Device Frame		Recommendation Virtual machine acceleration driver is out-of-date. Reinstall Haxm
Show Advanced Settings			
			Previous Next Cancel Finish





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Manually Install APK in Android Studio Emulator

1. Verify the presence of X:\Program Files (x86)\Android \androidstudio\sdk\ platform-tools 2. Copy APK file into X:\Program Files (x86)\Android \androidstudio\sdk\ platform-tools

3. go to Android Studio > Run Android Virtual Device Manager (AVD) > Start emulator

In this session we will use APK file get from "Candy Crush"

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Android Virtual Devices Device Defin	itions				
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Cont. : Manually Install APK in Android Studio Emulator

4. Go to Start > Run > Cmd

- 1 Type cd "C:\Program Files (x86)\Android\android-studio\sdk\platform-tools"
- 2 Type adb install "Candy Crush Saga_1.21.0.apk"

5. After successfully installed, you will see result in command prompt like below

Administrator: C:\Windows\system32\cmd.exe

C:\Program Files (x86)\Android\android-studio\sdk\platform-tools}adb install "Ca ndy Crush Saga_1.21.0.apk" 79 KB/s (34518069 bytes in 422.868s)

pkg: /data/ĺocal/tmp/Candy Crush Saga_1.21.0.apk

Success

C:\Program Files (x86)\Android\android-studio\sdk\platform-tools>

It will take about 5-6 minutes to install successfully

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Manually Install APK in Android Studio Emulator

6.Go to the emulator and you will see Candy Crush install in the emulator like below

28 5554:instinctcoder-phone a s:05 **Basic Controls** APPS WIDGETS C -)) Hardware Buttons -API Demos Browser MENU Calculator Calculator + **DPAD** not enabled in AVD Calendar Camera Candy Crush Clock Saga Hardware Keyboard Dev Settings Use your physical keyboard to provide input Custom Dev Tools DownloadFile Locale Downloads Email Gallery Messaging Music People ProgressBar

What is TEST FAIRY ?

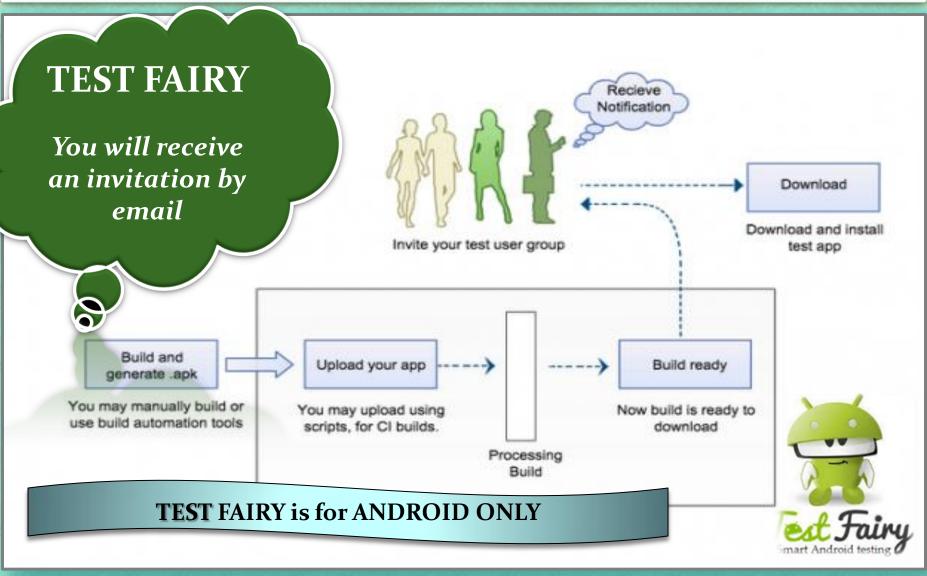
TestFairy offers some great features for app developers. One of the stand out features is client side Video recording and not just screen shots.

TestFairy provides a video recording of the exact test from the client side, including CPU, Memory, GPS, Network monitoring, logs, crash reports and more.

With Android apps you don't need to integrate any SDK or APIs into your app builds. You upload your APK (Android application file) to the TestFairy platform.

TEST FAIRY is for ANDROID ONLY





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Installing THIRD PARTY APK

1. Go to the "Settings" application on your 2. Choose the "Security" option Android device located under the heading "Personal" Ê APPS WIDGETS Settings Ĥ Battery 0 🖄 Apps Play Movies & TV Play Games Play Music Play Newsstand Play Store Users Tap & pay ⊔‴ REC. PERSONAL Location SuperSU Quickoffice Rec. **ROM Manager** Settings Security Þ A. Language & input Voice Search YouTube • Backup & reset

Installing THIRD PARTY APK

~

3. Under "Device Administration" place a checkbox next to the option "Unknown Sources"

1	Security	:
	Enable widgets	
	Owner info	
	ENCRYPTION	
	Encrypt tablet Require a numeric PIN or password to decrypt your tablet each time you power on	it
	PASSWORDS	
	Make passwords visible	✓
	DEVICE ADMINISTRATION	
	Device administrators View or deactivate device administrators	
	Unknown sources Allow installation of apps from sources other than the Play Store	>

Verify apps

Disallow or warn before installation of apps that may cause harm

Verify apps CobAright NataliaS@boutuoor.com

This allows you to install applications on your Android device that are not downloaded directly from the Google Play store

Transferring APK to your Device

1. On your computer, attach the ".apk" file to an email and send it to an account that you can access via your Android device.



2. On the Android device, click on the ".apk" attachment in the e-mail in order to download it.



Install

3. Follow the onscreen instructions to install the application.

Do you want to install this application? It will get access to:



read phone status and identity



modify or delete the contents of your USB storage read the contents of your USB storage



find accounts on the device

DEVICE ACCESS

-

full network access

receive data from Internet

view network connections

view Wi-Fi connections

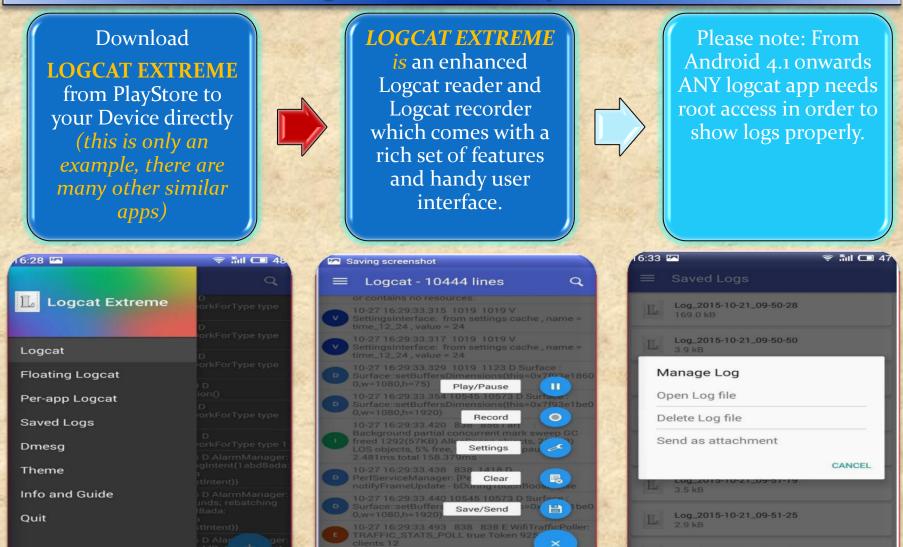
Cancel

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<u>Mobile APPS: Android LOGS : EXTRA</u>

Installing LOGCAT APP to your Device



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<u> Mobile APPS: Distribution/Installation: iOS .IPA</u>



Through an App Marketplace (APP STORE)













Mobile APPS: Distribution/Installation: .IPA



What is XCode?

What is XCode?

Xcode is an Intergrated Development Environment by Apple containing a suite of software Development Tools for macOS, iOS, WatchOS and tvOS

Xcode supports source code for programing languages C, C++, Objective-C, Objective-C++, Java, AppleScript, Python, Ruby, ResEdit (Re z), and Swift

Also supports variety of programming models, including but not limited to Cocoa, Carbon, and Java



Mobile APPS: Distribution/Installation: .IPA

Distributing .IPA through XCode ?

Connect the device to your Mac. In Xcode, choose Window > Devices and select the device under Devices.

In the dialog that appears, choose the iOS App file and click Open. In the Installed Apps table, click the Add button (+) below the table.

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