# Android++

Do I need to learn Java to become an Android developer?

Alex Cohn alexc@viber.com



### Historical perspective

Android OS is a Linux distribution according to the Linux Foundation

System Code: C++ and JavaPublic Beta (with Java SDK) November2007

Build System: gnu make + lots of conventions for **Android.mk** 

Mostly, we only need JNI libraries for our apps. **Bionic** instead of **glibc** 

Public NDK Revision 1: June 2009, ARM5. Windows, Linux, Mac

Fclipse CDT and **ndk-build** 

### NDK, June 2018: r.17b

Stable releases on a roughly quarterly basis

Integrated in Android Studio since v.2.2 needs latest gradle plugin don't use "experimental plugin" anymore

Supported ABIs: ARMv7, x86, ARMv8\_64, x86\_64 deprecated MIPS, older ARM

clang, libc++, CMake

### **Public Native API**

Don't use non-public Native API. It won't work on recent OS.

NativeActivity Log ASharedMemory Assets NdkMedia NdkCamera OpenSL, AAudio *CrashlyticsNDK* 

#### Standalone Toolchain

Port existing C++ projects to Android

Will become obsolete soon

Use CMake if you can

Play Store will require 64-bit support in August 2019

#### Some Links

https://developer.android.com/ndk

http://docs.oracle.com/javase/7/docs/technotes/guides/jni/spec/jniTOC.html https://github.com/googlesamples/android-ndk http://android.mk https://github.com/android-ndk/ndk http://groups.google.com/group/android-ndk https://stackoverflow.com/questions/tagged/android-ndk



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