안도로이드 소개

코틀린 안드로이드 앱 개발

강사: 배정만

안드로이드 역사

2003	앤디 루빈 Android Inc. 설립
2005	Google Android Inc. 인수
2007	안드로이드 오픈소스화 (개방형 휴대 전화 동맹)
2008	version 1.0
2009	versions 1.1, 1.5 (Cupcake), 1.6 (Donut), 2.0 (Eclair)
2010	versions 2.2 (Froyo), 2.3 (Gingerbread)
2011	3.0 (Honeycomb), 4.0 (Ice Cream Sandwich)
2012	version 4.1 (Jellybean)
2013	version 4.4 (KitKat)
2014	versions 5.0 5.1 (Lollipop); Android became 64-bit
2015	version 6.0 (Marshmallow)
2016	version 7.0-7.1.2 (Nougat)
2017	version 8 (Oreo)

통계

- 72 억
- @ 3년
- ◎ 150 만

- © 2,617
- @ 20 억
- ø 87%

email APPLICATIONS browser your apps **MANAGERS** content providers APPLICATIONS location notification activity package FRAMEWORK view window telephony resource system android LIBRARIES runtime webkit, media framework, open media libc, etc core libraries memory process hardware power LINUX KERNEL etc mgt mgt mgt drivers

플랫폼 아케텍처

안드로이드 구성요소

Version	Codename	API level
1.0		1
1.1		2
1.5	Cupcake	3
1.6	Donut	4
2.0-2.1	Eclair	5–7
2.2.x	Froyo	8
2.3-2.3.7	Gingerbread	9–10
3.0 - 3.2	Honeycomb	11–13
4.0-4.0.4	Ice Cream Sandwich	14–15
4.1 - 4.3	Jelly Bean	16-18
4.4	KitKat	19-20
5.0-5.1	Lollipop	21–22
6.0	Marshmallow	23
7.0	Nougat	24
7.1-7.1.2	Nougat	25

Hardly anyone uses these versions anymore

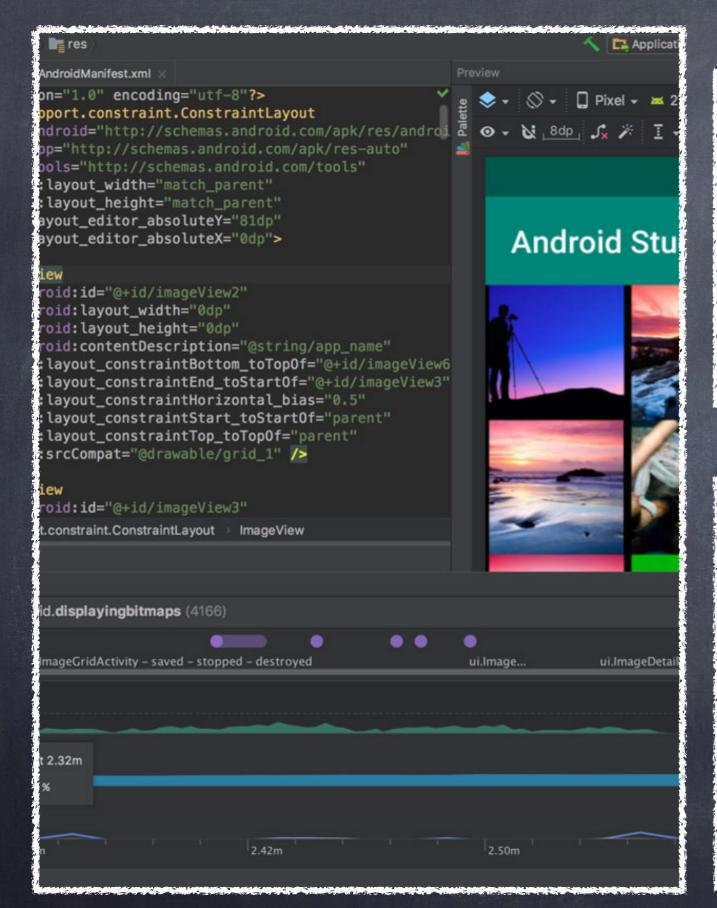
Most devices use one of these APIs.

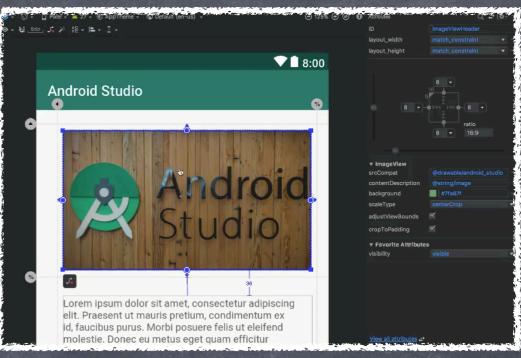
API 레벨 ≠ 코드이름

진저브레드, 젤리빈, 롤리팝, 누가

Android Studio 설치하기

https://developer.android.com/studio/

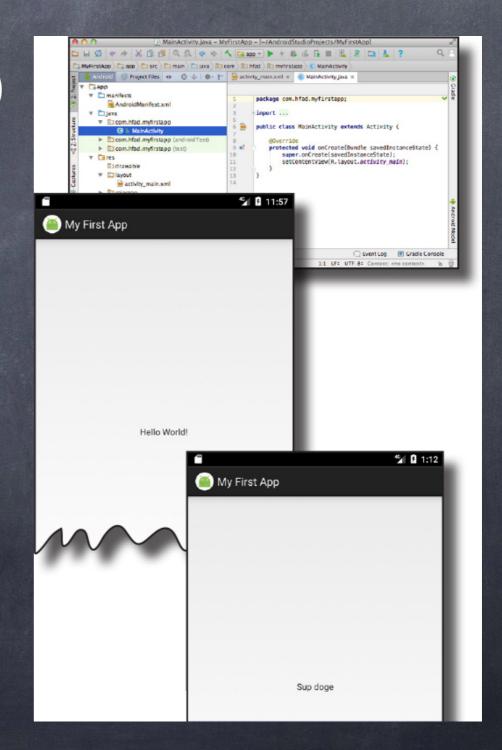




```
dle project sync in progress...
 apply plugin: 'com.android.application'
 ext.densityList = ['mdpi', 'hdpi', 'xhdpi', 'xxhdpi', 'xxxhdpi']
 ext.abiList = ['armeabi', 'armeabi-v7a', 'x86']
 android {
     compileSdkVersion rootProject.ext.compileSdkVersion
    buildToolsVersion rootProject.ext.tools
     defaultConfig {
         applicationId "com.google.android.apps.santatracker"
         minSdkVersion rootProject.ext.minSdkVersion
         targetSdkVersion rootProject.ext.targetSdkVersion
         versionCode 40120000
         versionName "4.0.12"
         vectorDrawables.useSupportLibrary = true
         testInstrumentationRunner 'android.support.test.runner.AndroidJUnitRunner'
    buildTypes {
         debug {
             applicationIdSuffix ".debug"
             versionNameSuffix "-debug'
             // Enabling multidex support.
             multiDexEnabled true
         release {...}
```

안도로이드 앱 시작하기

- ☞ 개발 환경 설정 (Android Studio)
- ◈ 새 프로젝트 생성 (New Project)
- ∅ 에뮬레이터 앱 실행





Welcome to Android Studio



Android Studio

Version 2.3

Click on this option to start >> Start a new Android Studio project a new Android Studio project.

- Den an existing Android Studio project
- Check out project from Version Control +
- Import an Android code sample

☆ Configure → Get Help →

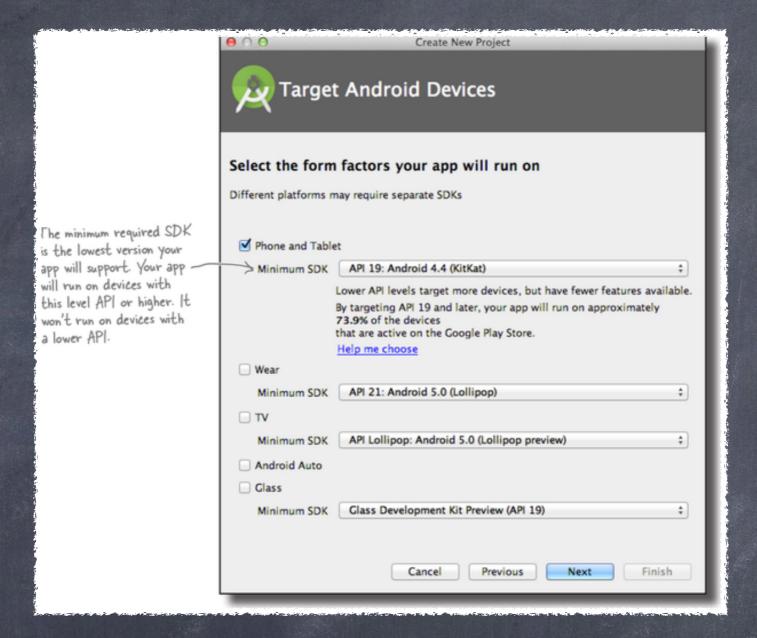
Any projects you create will appear here. This is our first project, so this area is currently empty.

사 프로젝트 만들기

	● ○ ○ Create New Project
	New Project Android Studio
	Configure your new project The application name is shown in the Google Play Store and various other places, too.
	Application name: My First App
The wizard forms the	Company domain: hfad.com
package name by combining ——————————————————————————————————	Package name: com.hfad.myfirstapp Use a company domain Include C++ support of hfad.com.
	Uncheck the option to include C++
	support If prompted, also uncheck
	the option to include Kotlin support.
	Project location: /Users/dawng/AndroidStudioProjects/MyFirstApp
	All of the files for your project will be stored here.
	Cancel Previous Next Finish

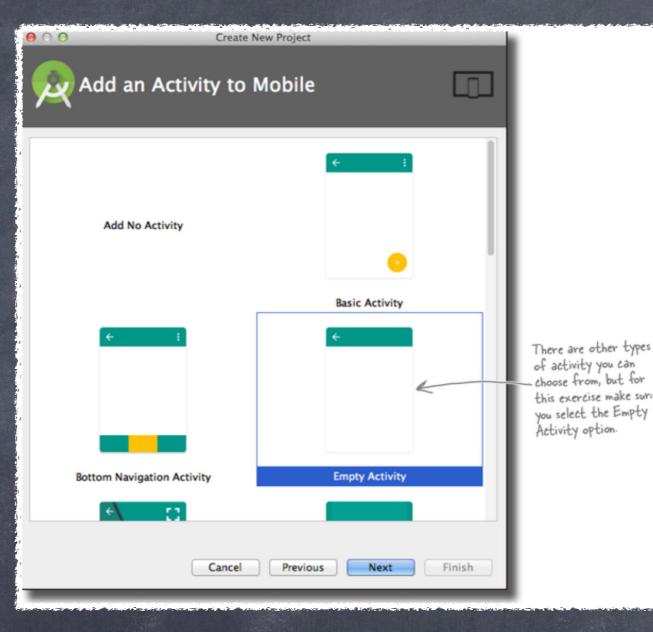
프로젝트 설정

application name: 앱 이름 Package name: 앱의 고유한 이름 (도메인주소 활용)

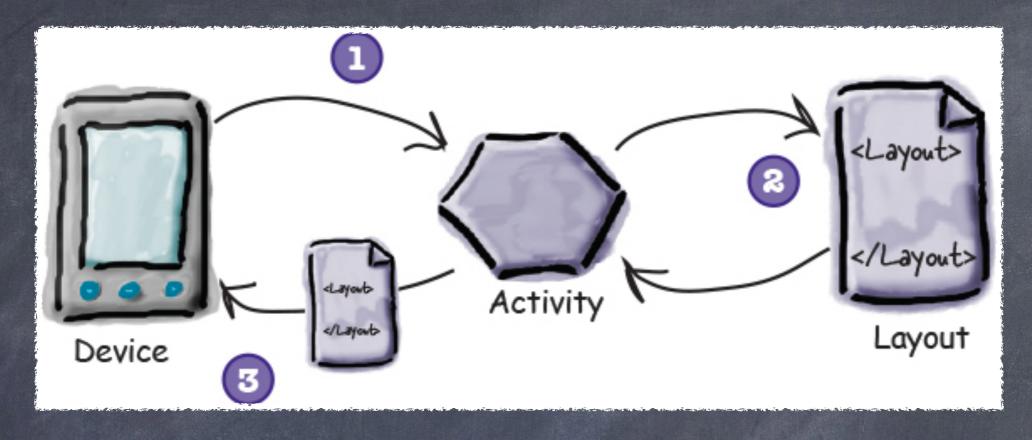


최소 SDK 설정 및 사용 디바이스 설정

* SDK 선택시 현재 시장 점유율 정보를 제공합니다.



액EIHIEI 추가





안드로이드 동작 순서

Kotlin Android 앱 개발

- Ø Kotlin의 모던 프로그래밍 기능을 사용하면 작성된 코드가 적어 지므로 테스트하고 유지 보수하는 코드 가 줄어 듭니다.
- Ø Kotlin은 일반적인 프로그래밍 실수를 피하는 데 도움이되는 많은 언어 기능을 제공합니다. (Null-safe)
- Ø Kotlin은 Java 프로그래밍 언어와 100 % 상호 운용이 가능하므로 원하는만큼 프로젝트에서 Kotlin을 사용할 수 있습니다.