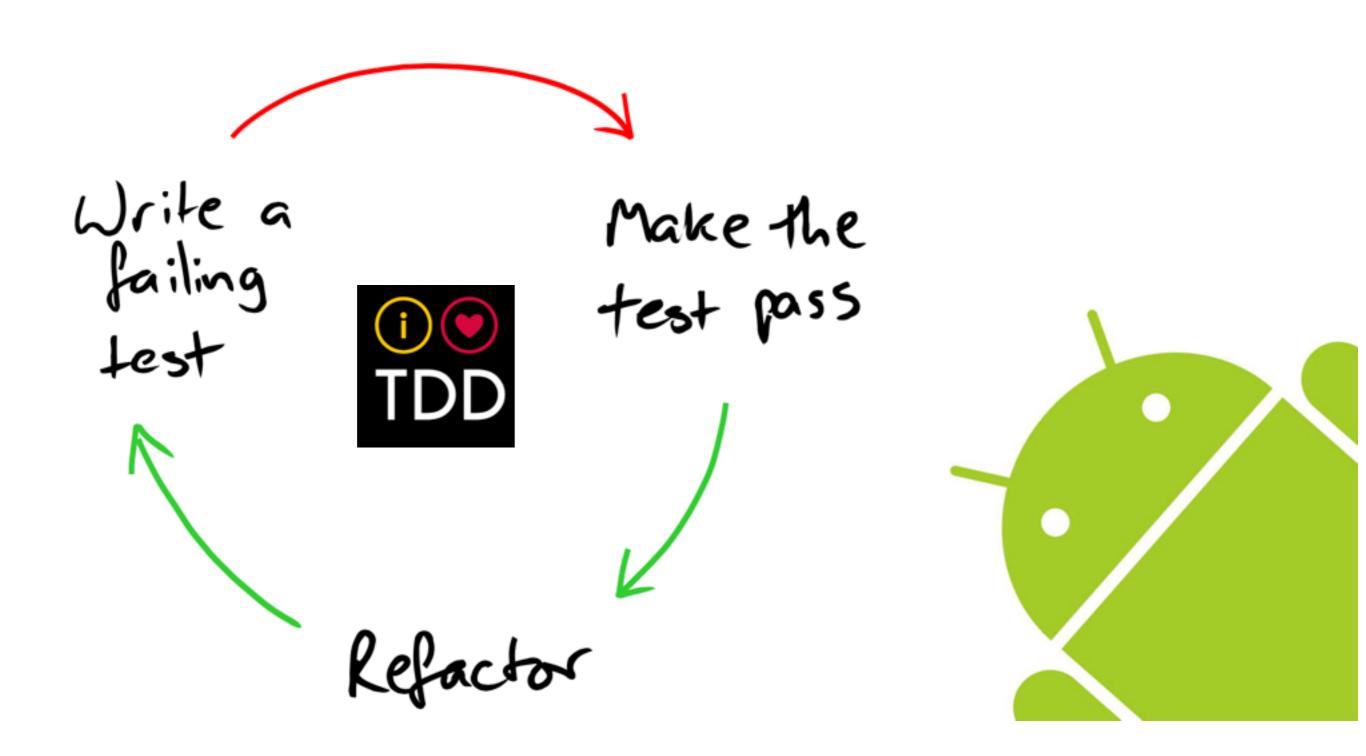
# การติดตั้ง Software

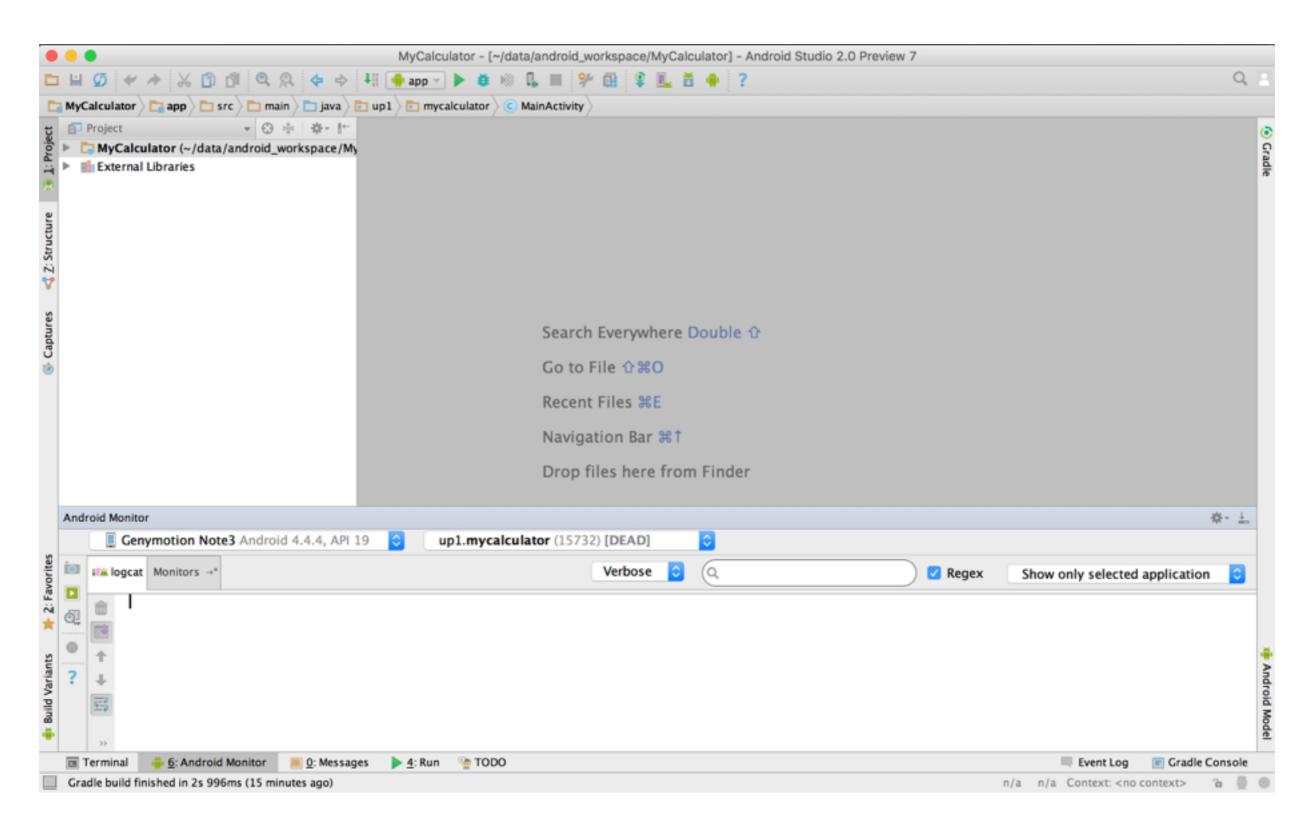


#### SPRINT3R

# Softwares requirement

- 1. Android SDK
- 2. Android Studio
- 3. Genymotion

#### 1. Android Studio



#### 1. Android Studio

เป็น IDE ที่ใช้ในการพัฒนา Android application

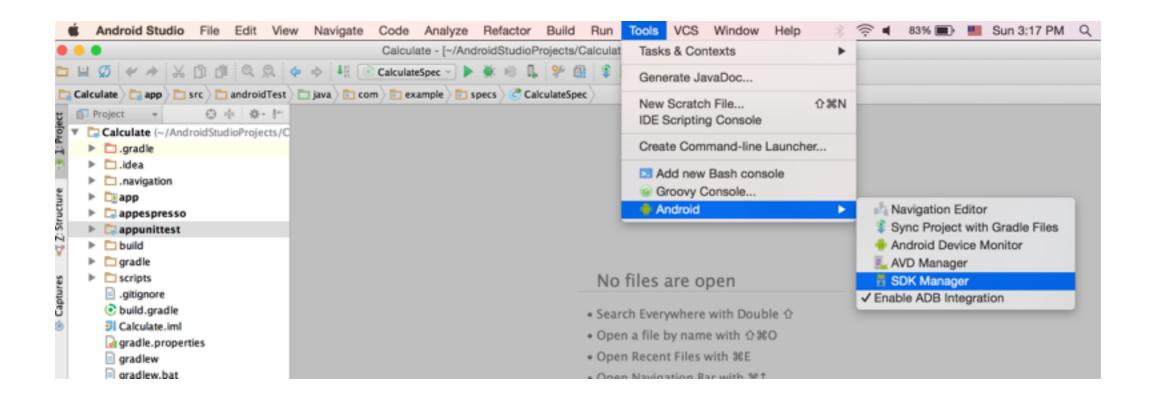
https://developer.android.com/sdk/index.html

หรือถ้าต้องการ version ล่าสุด ไปที่

http://tools.android.com/download/studio/canary/latest

#### 2. Android SDK

ทำการติดตั้ง Android SDK และ Library เพิ่มเติม ไปที่ Android Studio -> Tools -> Android -> SDK Manager



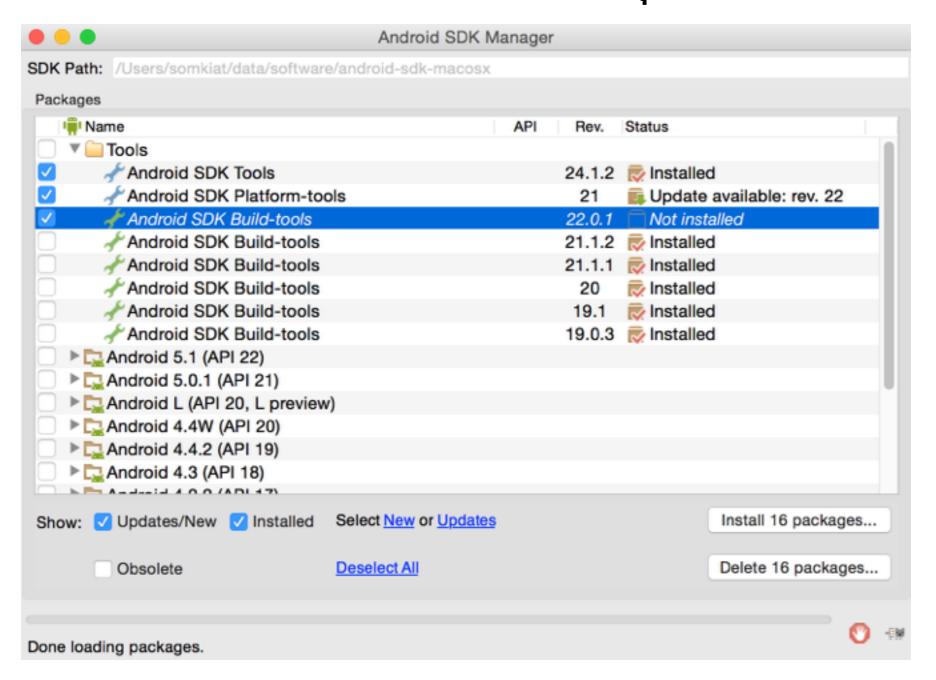
#### 2. Android SDK

#### ใน Android SDK manager ประกอบไปด้วย Tools, Android APIs และ Extras

• • •	Android SDK Manager				
SDK Path: /Users/somkiat/data/softwar	e/android-sdk-macosx				
Packages					
I i Name		API	Rev.	Status	
► Tools	v)				
Show: Updates/New Installed Obsolete	Select New or Updates  Deselect All				Install 15 packages  Delete 15 packages
Done loading packages.					<b>○</b> -9₩

#### 2.1 Tools

# SDK Tool, Android platform และ build tool ให้เลือก version ล่าสุด



#### 2.2 Android APIs

### ให้เลือกเวอร์ชัน 4.0 ขึ้นไปทั้งหมด เลือก SDK platform + Google API ...

• • •	Android SDK Manager					
SDK Path: /Users/somkiat/data/software	/android-sdk-macosx					
Packages						
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		API	Rev.	Status		
▶ in Tools				,012.02		
▼						
Documentation for Android	SDK	22	1	Not installed		
SDK Platform Android 5.1.	1	22	2	Not installed		
✓ Samples for SDK		22	5	Not installed		
Android TV ARM EABI v7a	System Image	22	1	Not installed		
Android TV Intel x86 Atom	System Image	22	1	Not installed		
ARM EABI v7a System Ima	ge	22	1	Not installed		
III Intel x86 Atom_64 System	-	22	1	Not installed		
✓ Intel x86 Atom System Ima	ge	22	1	Not installed		
✓ Google APIs		22	1	Not installed		
■ Google APIs ARM EABI v7	a System Image	22	1	Not installed		
■ Google APIs Intel x86 Aton	n_64 System Image	22	1	Not installed		
☑ Google APIs Intel x86 Atom	System Image	22	1	Not installed		
Sources for Android SDK		22	1	Not installed		
■ Landroid L (API 20, L preview	)					
■ Landroid 4.4W (API 20)						
► Natroid 4.4.2 (API 19)						
Show: Updates/New Installed	Select New or Updates				Install 12 packages	
Obsolete	Deselect All				Delete 6 packages	
Done loading packages.					<b>◎</b> -5₩	

#### 2.2 Extras

#### ให้เลือกทั้งหมด

• •		Android SI	DK Mana	ager			
SDK Pat	th: /Users/somkiat/data/software/a	android-sdk-macosx					
Packag	98						
1	Name		API	Rev.	Status		
□ ▶	Android 4.3 (API 18)						
	Android 4.2.2 (API 17)						
	Android 4.1.2 (API 16)						
<b>□</b> ▶	Android 4.0.3 (API 15)						
	Android 3.0 (API 11)					0	
<b>□</b> ▶	2.3.3 (API 10)						
	Android 2.2 (API 8)						
₩	Extras						
V	Android Support Repository	/		12	📑 Update available: r	ev. 14	
$\overline{}$	Android Support Library			20	📠 Update available: r	ev. 22.1.	
✓	Google Play services			23	Not installed		
$\overline{\mathbf{V}}$	,			14	update available: rev. 16		
<b>✓</b>	Google Play APK Expansion	Library		3	Not installed		
<u> </u>	🖸 Google Play Billing Library			5	Not installed		
✓	🖸 Google Play Licensing Librar			2	Not installed		
	Android Auto API Simulators			1	Not installed		
✓	🖸 Google USB Driver			11	Not compatible with	n Mac OS	
✓	🖸 Google Web Driver			2	Not installed		
✓	☐ Intel x86 Emulator Accelera	tor (HAXM installer)		5.2	update available: r	ev. 5.3	
Show:	✓ Updates/New ✓ Installed S	Select New or Updates				Install 18 packages	
	Obsolete	Deselect All				Delete 6 packages	
Done loa	ading packages.					<b>◎</b> -@₩	

### 3. Genymotion

Emulator สำหรับการทดสอบระบบงาน

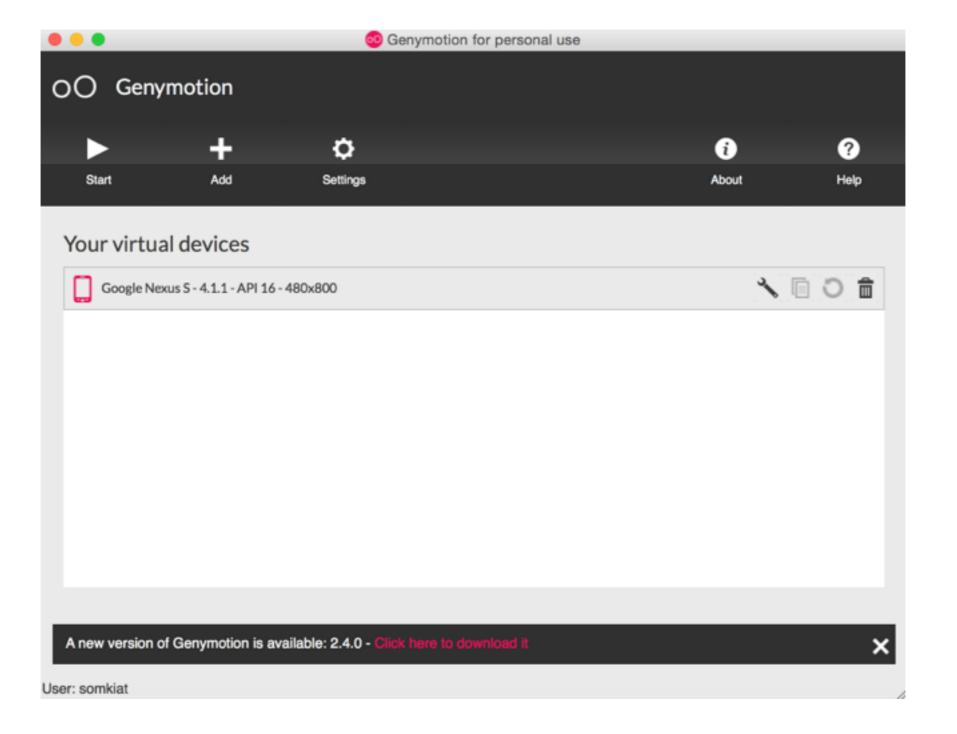
https://www.genymotion.com/#!/download

ทำการ Download + ติดตั้ง + สมัครสมาชิก

GENYMOTION

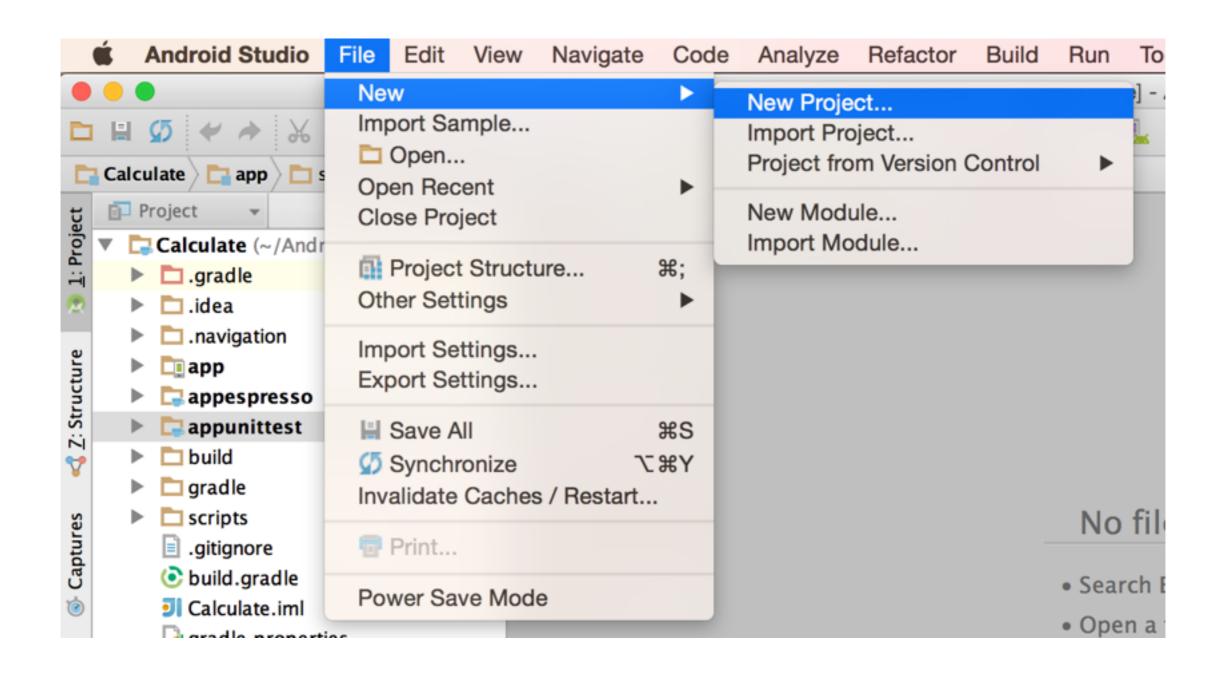
### 3. Genymotion

ทำการเพิ่ม Device ที่ต้องการทดสอบ จะมีทั้งฟรี และ เสียเงิน

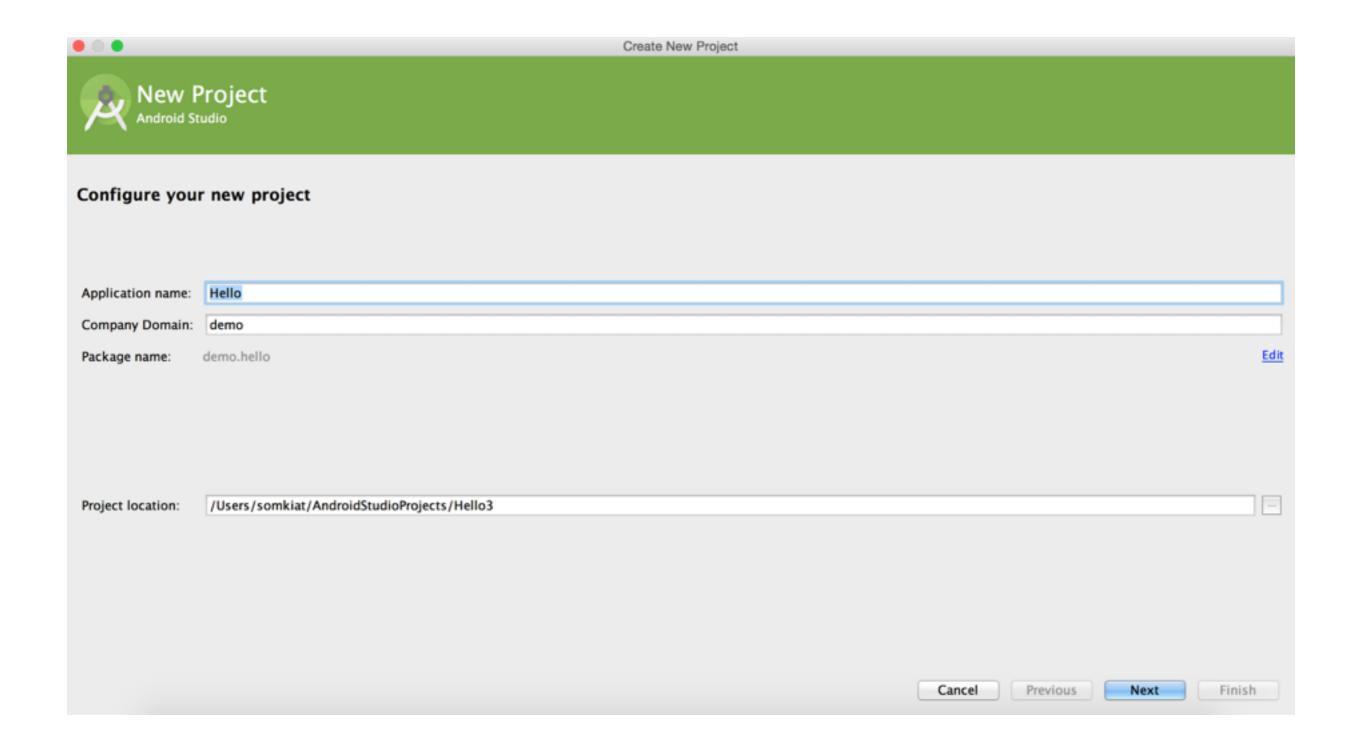


# Hello Android Application

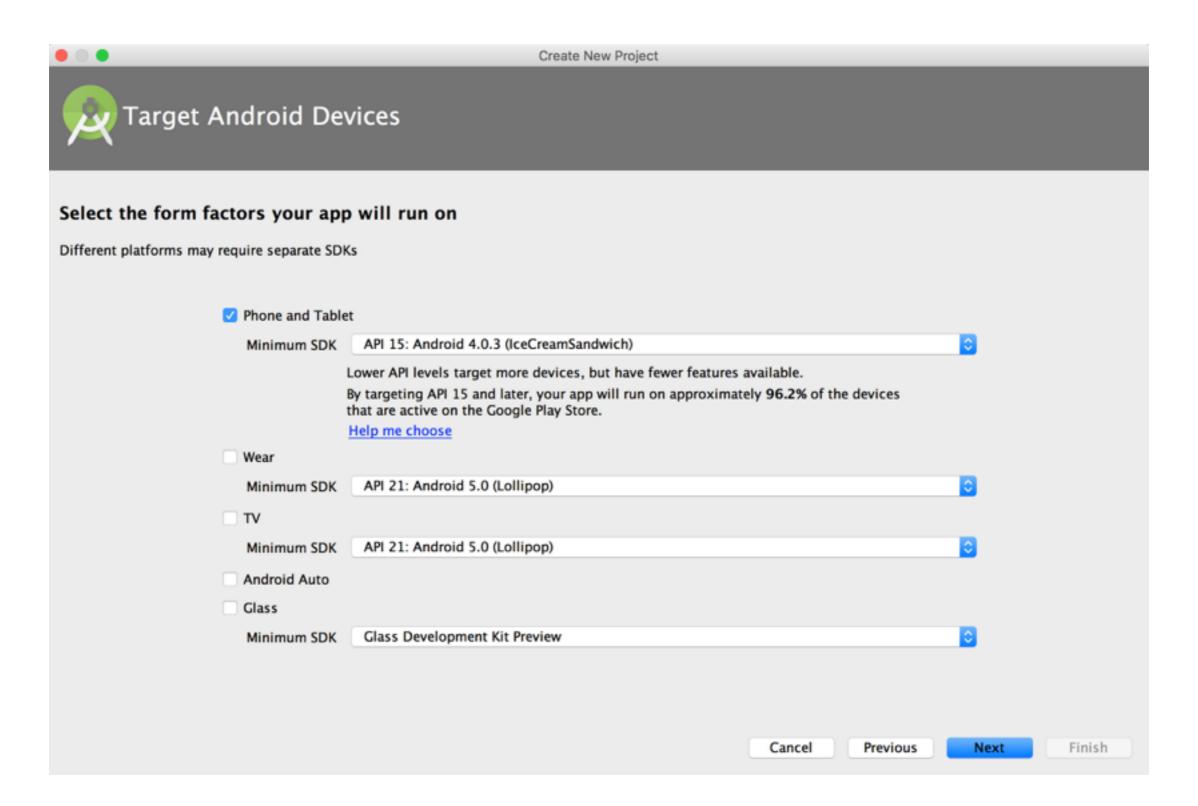
## Create new project



# ตั้งชื่อ project

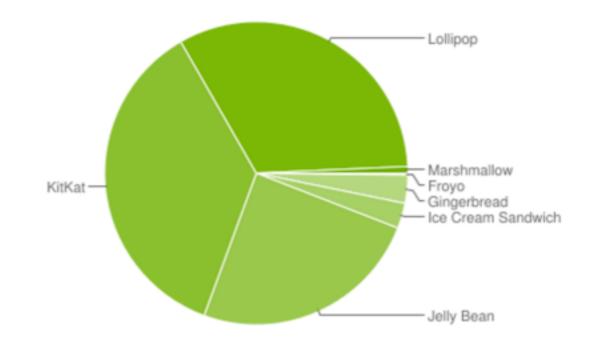


# เลือก Target android device ?



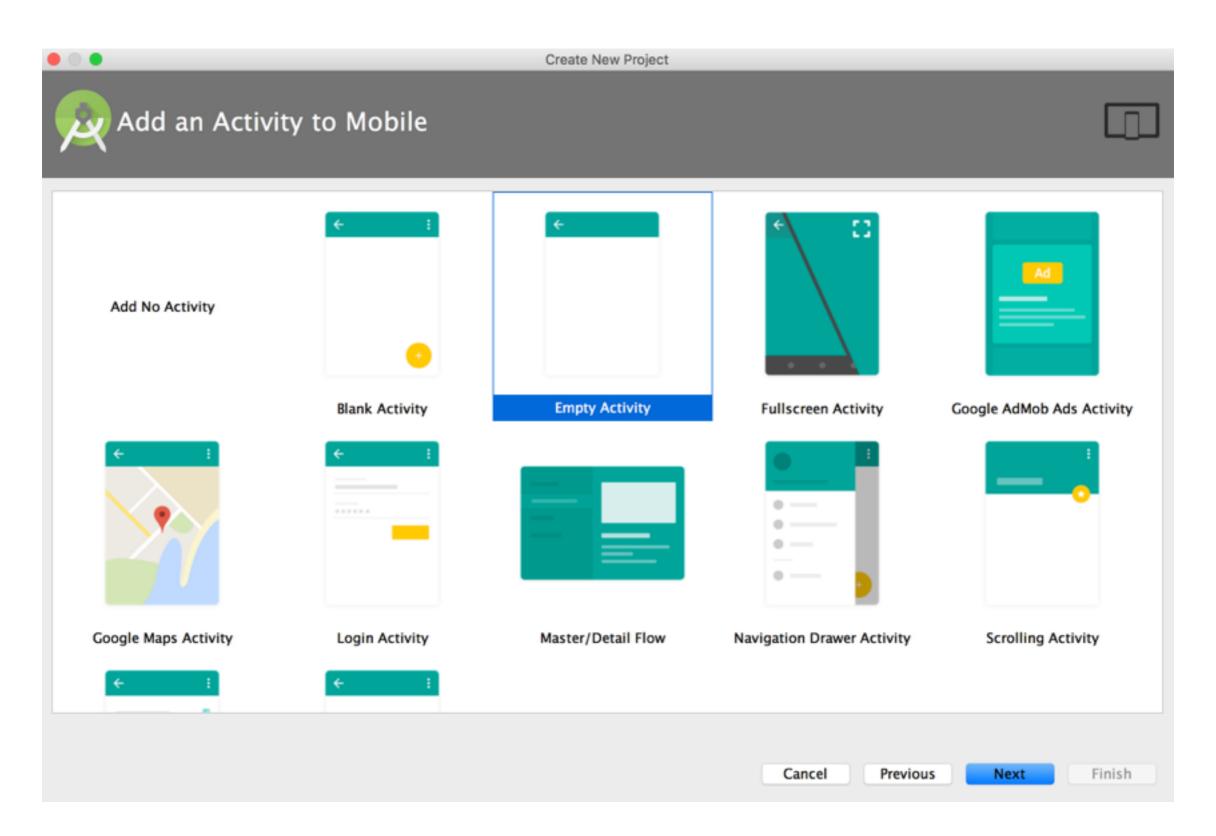
# เลือก Target android device ?

Version	Codename	API	Distribution
2.2	Froyo	8	0.2%
2.3.3 - 2.3.7	Gingerbread	10	3.0%
4.0.3 - 4.0.4	Ice Cream Sandwich	15	2.7%
4.1.x	Jelly Bean	16	9.0%
4.2.x		17	12.2%
4.3		18	3.5%
4.4	KitKat	19	36.1%
5.0	Lollipop	21	16.9%
5.1		22	15.7%
6.0	Marshmallow	23	0.7%

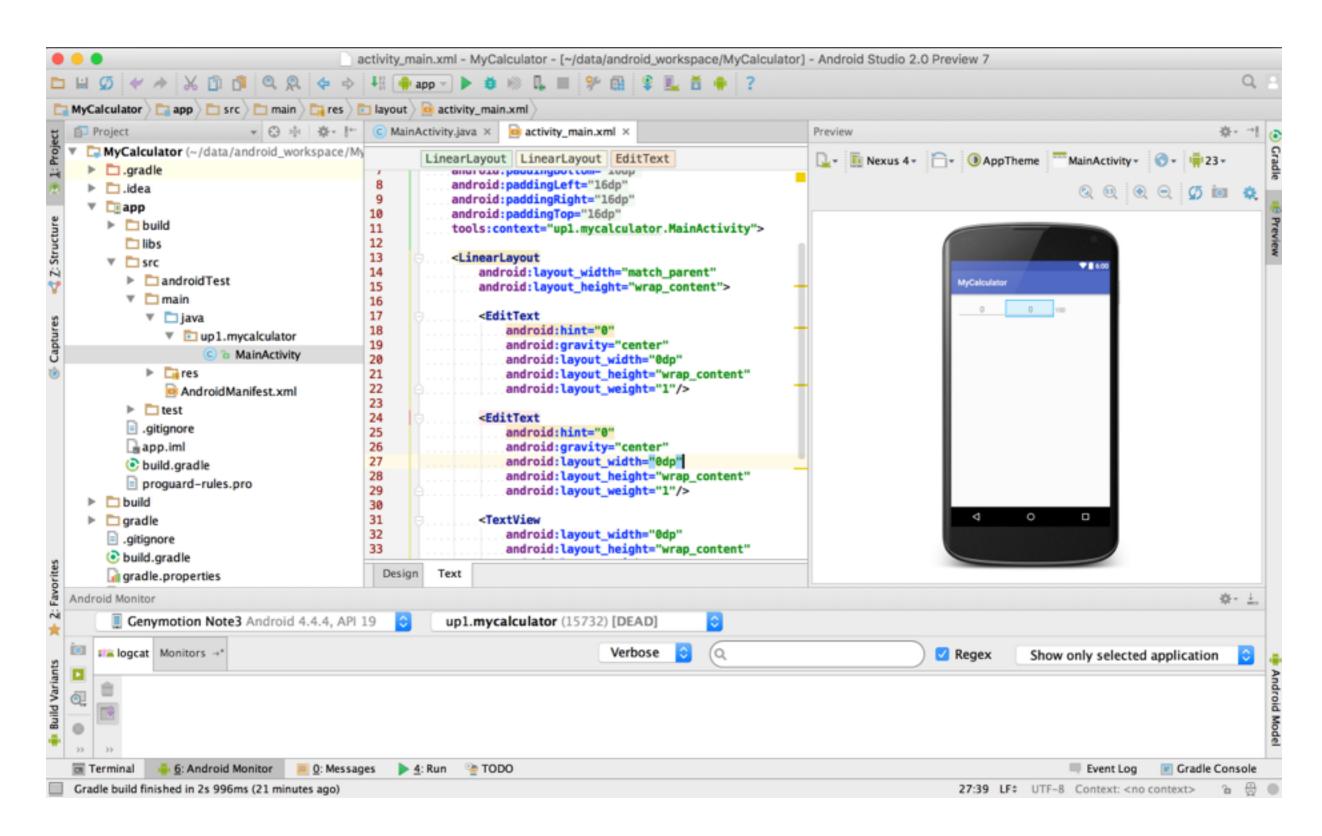


http://developer.android.com/about/dashboards/index.html#Platform

# เลือก activity แรกที่จะสร้าง

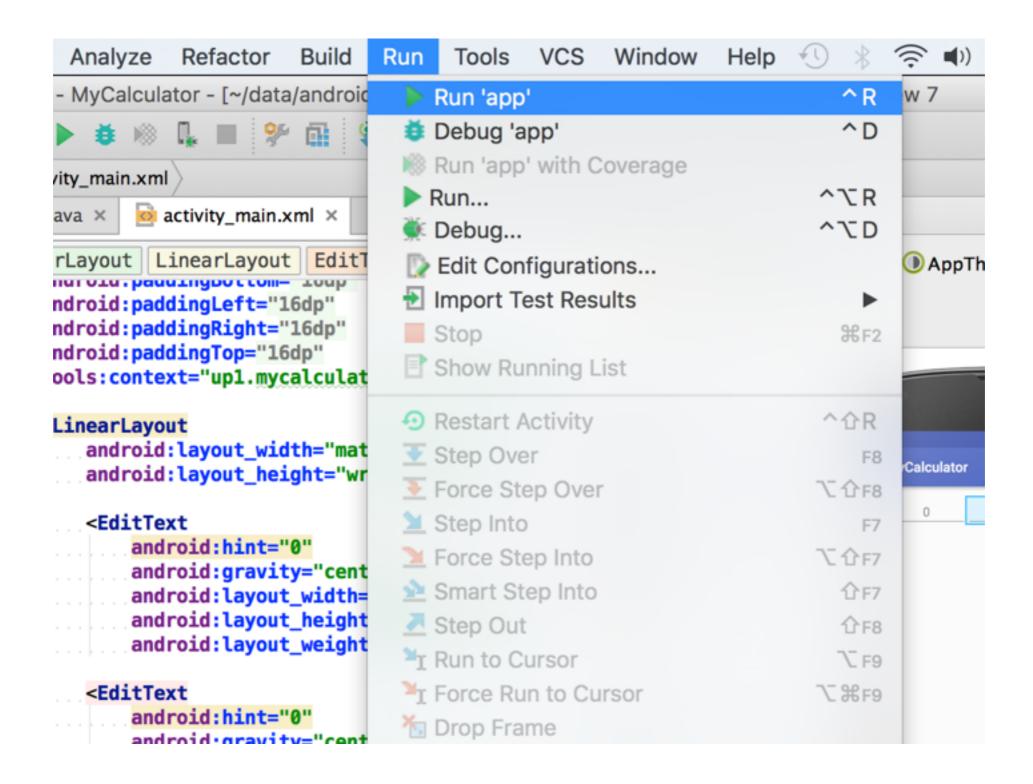


# สวัสดี Hello application

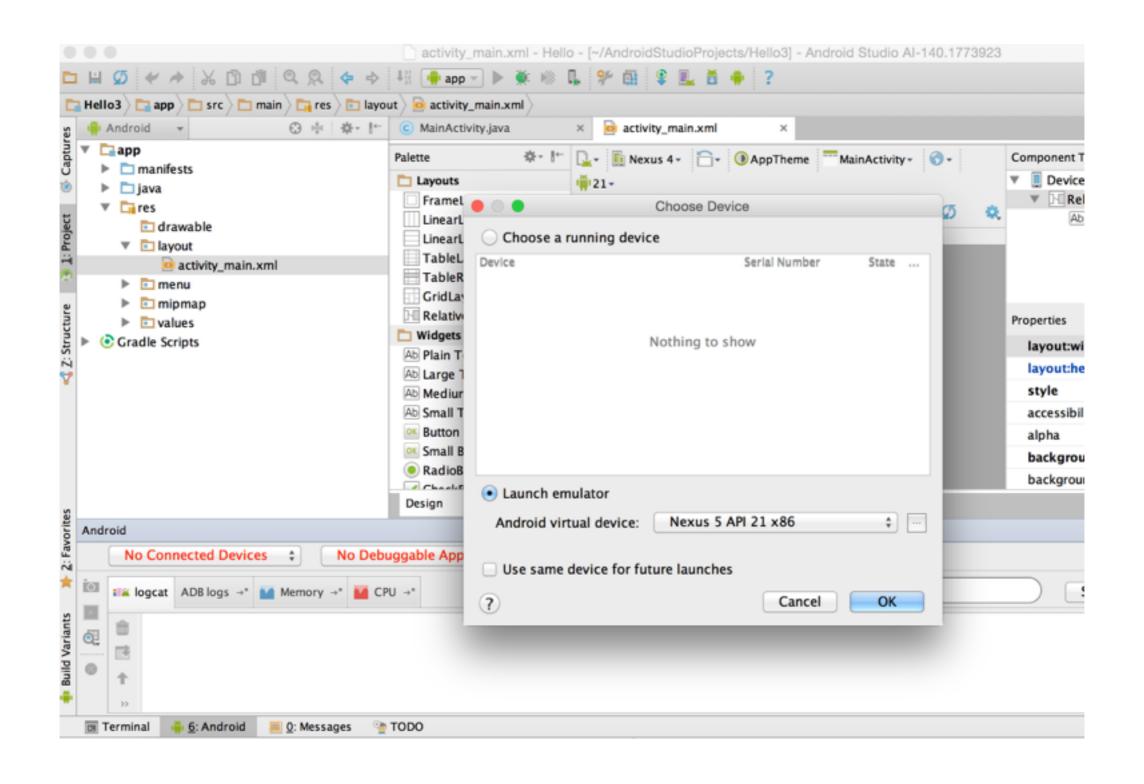


#### SPRINT3R

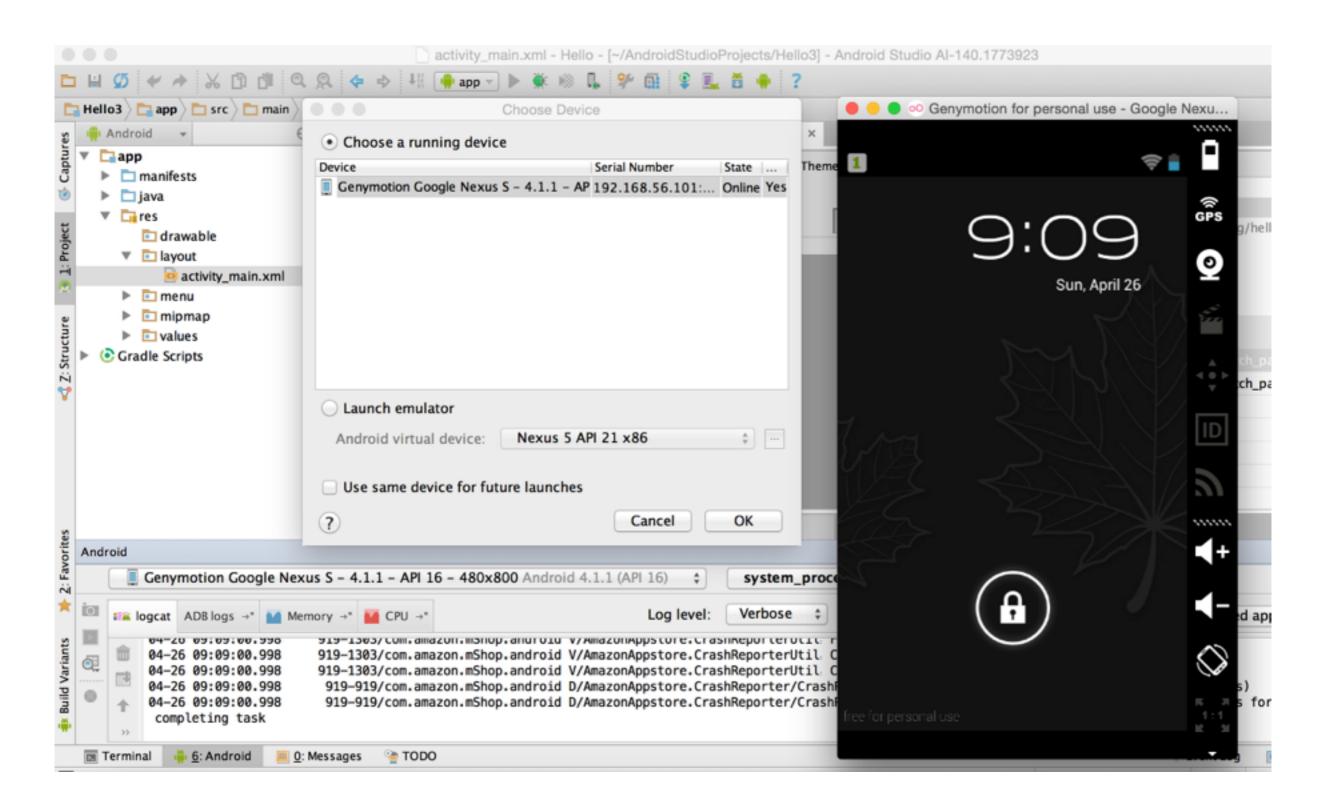
## Run application



### No device or Emulator



# Need to start Genymotion



# Congratulation!!

