建立第一個 **CIOROD** 應用程式

Android Version

Version	Codename	API	Distribution
1.6	Donut	4	0.2%
2.1	Eclair	7	2.2%
2.2	Froyo	8	8.1%
2.3 - 2.3.2	Gingerbread	9	0.2%
2.3.3 - 2.3.7		10	45.4%
3.1	Honeycomb	12	0.3%
3.2		13	1.0%
4.0.3 - 4.0.4	Ice Cream Sandwich	15	29.0%
4.1	Jelly Bean	16	12.2%
4.2		17	1.4%



Data collected during a 14-day period ending on February 4, 2013

模擬器是用電腦去模擬一隻手機 可以用來測試我們的程式

建立與啟動ANDROID模擬器

- 按畫面上方Android Virtual Device Manager(虛擬裝置管理員)
- 或 Window→AVD Manager



• 按下視窗右邊的New(新增)

J	Android Virtual Dev	vice Manager					
ł	Android Virtual Devices	Device Definitions					
	List of existing Android Virtual Devices located at C:\Documents and Settings\sean\.android\avd						
	AVD Name	Target Name	Platform	API Level	CPU/ABI		New
		No AVD available					Edit
							Delete
							Repair
							Details
							Start
						ſ	Refresh

- AVD Name 可以自取,名稱隨便輸入都可以
- Device:可以選不同的裝置,差別只是畫面大小
 - 手機常用的為 HVGA(320X480)
- Target: 選擇Android的版本(2.3.3或4.0)
- RAM : 512MB
- SD Card : 512MB
- 按下OK→右側點擊Start,點擊Launch啟動模擬器(啟動時間依不同電腦速度不同)
- 可以建立多個支援不同 Android 作業系統版本 和硬體的多個模擬器

AVD Name:	Test			
Device:	3.2" HVG	A slider (A	DP1) (320 × 4	80: mdpi) 🔻
Target:	Android 2	2.3.3 - API	Level 10	•
CPU/ABI:	ARM (arm	neabi)		-
Keyboard:	✓ Hardwa	are keyboa	ard present	
Skin:	✓ Display	a skin witl	h hardware cor	ntrols
Front Camera:	None			-
Back Camera:	None			•
Memory Options:	RAM: 5	12	VM Heap:	16
Internal Storage:	200			MiB 👻
SD Card:				
	Size:	512		MiB 👻
	⊙ File:			Browse
Emulation Options:	Snaps	hot	Use Host Gl	PU
Override the exist	ing AVD w	ith the sar	ne name	
			ОК	Cancel

() Edit Android Virtual Device (AVD)

X

Android Virtual	Device Manager					
Android Virtual D	evices Device Defin	itions				
List of existing A	ndroid Virtual Device	s located at C	:\Users\csim\.aı	ndroid\avd		
AVD Name	Target Name		Platform	API Level	CPU/ABI	New
✓ Test	Android 2.3.3		2.3.3	10	ARM (armeabi)	Edit
						Delete
						Panair
Launch Options	×					Repair
Clin. 220-400						Dataile
Density: Medium (16	0)				(Start
Scale display to re	al size					
Screen Size (in): 3.2					
Monitor dpi:	96 ?					
Scale:	default					
Wipe user data						Refresh
Launch from snaps	hot	A repairable	Android Virtua	l Device.		
Save to snapshot		ed to load. C	lick 'Details' to s	see the error.		
		-				
Launch	Cancel					



建立第一個ANDROID應用程式

- 點選右上角New→Android Application Project
- 開啟一個新的Android APP專案

File <u>E</u> dit Refactor	<u>Run Navigate</u> Searc	h <u>P</u> roject <u>W</u> indow <u>H</u> elp	
<u>N</u> ew	Alt+Shift+N	🕨 🏄 Java Project	
Open File <u>.</u>		魓 Android Application Project	
Close	Ctrl+W	T Project	
Close All	Ctrl+Shift+W	Package	
및 Save	Ctrl+S		
Save As		🕡 Interface	
Save All	Ctrl+Shift+S	🞯 Enum	
Revert		@ Annotation	
Move		🛱 Source Folder	
Rename	F2	🔚 Java Working Set	
a Refresh	F5	😭 Folder	
Con <u>v</u> ert Line Delir	niters To	File	
💼 Print	Chtl+P	Untitled Text File	
200 202203	97 (112) (1	Android XML File	
Switch <u>W</u> orkspace		JUnit Test Case	
Restart		— <mark>F</mark> f E <u>x</u> ample	
🔤 Import		E [¶] Other C	`trl+N
🛃 Export			
Properties	Alt+Enter		
Exit			

- Application Name:應用程式名稱,出現在APP標題列(Test)
- Project Name:設定專案的名稱,和Application Name同名
- Package Name:使用小寫英文字母開頭,以相反的網域名稱作為套件名稱
- csim.scu.test
- Minimum Required SDK:最小可執行版本(2.3.3)
- Target SDK: 選擇Android 作業系統的版本(4.0)
- 新版作業系統會支援舊版作業系統的應用程式
- 如果選4.0版,表示之前的版本不能執行此程式
- 若是要下載其他Android的版本
- 可以按畫面上方Windows→
 Android SDK Manager裡去下載

🕡 New Android Application				
New Android Application Creates a new Android Application	New Android Application Creates a new Android Application			
Application Name:0 Test	est			
Project Name:0 Test				
Package Name:0 csim.scu	.test			
Minimum Required SDK:0 API 10: A	Android 2.3.3 (Gingerbread)			
Target SDK:0 API 18	PI 18 🔹			
Compile With:0 API 10: A	PI 10: Android 2.3.3 (Gingerbread)			
Theme:0 None		-		
♀ Choose the base theme to use for the application				
0	< Back Next >	Finish	Cancel	

接著要做一些設定 我們不要搞得太複雜,一直按下一步就好

🕖 New Android Application			
New Android Application Configure Project			0
✓ Create custom launcher icon ✓ Create activity			
Mark this project as a library			
Create Project in Workspace			
Location: D:\Android\workspace\test			Browse
Working sets			
Add project to working sets			
Working sets:		S <u>e</u>	lect
?	< <u>B</u> ack <u>N</u> ext >	<u> </u>	Cancel

() New Android Application	
Configure Launcher Icon Configure the attributes of the icon set	0
Foreground: Image Clipart Text Image File: launcher_icon Brows Trim Surrounding Blank Space Additional Padding: Foreground Scaling: Crop Center Shape None Square Circle Background Color:	Preview: mdpi: hdpi: whdpi: whdpi: whdpi: whdpi: whdpi: whdpi: whdpi: whdpi:
(?) < <u>Back</u> Next>	<u>Finish</u> Cancel

🚯 New Android Application	
Create Activity Select whether to create an activity, and if so, what kind of activity.	P
Create Activity	
Blank Activity Fullscreen Activity Master/Detail Flow	
	(■ ~~~~ :
Blank Activity Creates a new blank activity, with an action bar and optional navigational eleme	ents such as tabs or horizontal swipe.
(?) (<u>Back</u> <u>Next</u> >	Finish Cancel

Finash

🚯 New Android	Application.	- 🗆 🔀
Blank Activity Creates a new blar	ak activity, with an action bar and optional navigational elements such as tabs or horizontal swipe.	0
	(■ ~~~~ :	
Activity Name 🛛	MainActivity	
Layout Name 🙃	activity_main	
Navigation Type 🛙	None	
🕜 The name of the	activity class to create	
?	< Back Next > Finish C	ancel

• android專案預設程式



- 做字串更改 •
- 1. 打開Values底下的 strings.xml的檔案
- 2. 切換到原始碼
- 3. 發現Hello world!的字串

📲 Packag

🖃 💋 te:

÷

± 2 0.2

No No Đ

- 把Hello world!改成Hello ۲ CSIM! 吧
- 改完之後記得存檔(ctrl+S) •
- 1. 關閉原來的 activity_main.xml
- 2. 再次開啟 activity_main.xml
- 3. 畫面上的字串已改為 Hello CSIM!

ge Explorer 🕄 📃 🗖	🗖 🚺 activity_main.xml	d strings.xml
日 🕏	xml versi</td <td>on="1.0" encoding="utf-8"?></td>	on="1.0" encoding="utf-8"?>
st	<pre><resources></resources></pre>	
B sm:		
sen [Generated Java Files]	<string< td=""><td>name="app_name">test</td></string<>	name="app_name">test
Android 4 2 2	<string< td=""><td>name="action_settings">Settings</td></string<>	name="action_settings">Settings
Android Dependencies	<string< td=""><td>name="hello world">Hello world!</td></string<>	name="hello world">Hello world!
acceto		
hin	<td>> _</td>	> _
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7 HDS		
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arawabie-mapi		
arawable-xhapi		
drawable-xxhdp1		
- 🔁 layout		
activity_main.xml		
- 🧀 menu		
values		
dimens.xnl		
🔄 strings xml		
🔁 values-sw600dp		
🔁 values-sw720dp-land		
- 🔁 values-v11		
- 🧀 values-v14		
Android Manifest.xml		
] ic_launcher-web.png		
proguard-project.txt		
project.properties		
		2
		<u> </u>
	🔳 Resources 🗐 strin	gs.xml