

Appium-阶段一 - appium框架搭建及环境准备

第一节课程,环境配置搞到熟透,如果一个开发的环境你都搞不清楚,估计你会花很大一部分时间,停留要search on baidu,bing等上面,然后可能停止不前。

内容一: Appium环境 Maven项目开发环境 eclipseIDE环境 ADT的环境

内容二: 识别apk,adt的一些简单实用的命令 , appium的inspector AppiumDriver->AndroidDriver的配置 开发一个简单的脚本

1) 安装Appium

我们首先要去下载appium,解压后安装,可能需要安装.net 4.5如果是这个版本的那就需要强制安装的。之后打开的话就会有第2张图一样的画面

https://bitbucket.org/appium/appium.app/downloads 如果下载不了可以去Terry的云盘下载,最新为Appium1.3.4.1 链接, http://pan.baidu.com/s/1sjPVSOd 密码: lign

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2) 安装ADT

如果你希望自己安装ADT的捆绑的活可以通过如下链接去下载ADT http://developer.android.com/sdk/index.html

或者

链接 http://pan.baidu.com/s/1c0IpE72 密码: c9tw

另一种如果你的pc上已经有了eclipse那么可以不需要再下载一个ADT(其实这个ADT就是eclipse+ADT plugins)你可以去eclipse marketplace

Eclipse Marke	tplace		X					
Eclipse Marketplace (i) One solution selected for install								
Search Recen	Search Recent Deputer Installed Q July 07/21							
Find: android	Q All Markets ▼ All Categories	•	Go					
	The Android for Maven Eclipse (m2e-android) is an M2E connector that adds Maven support for Android Developer Tools (ADT) and the Maven Android Plugin. It brings more info							
	by Gladwell Consultants Ltd., EPL							
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* 37	Installs: 50.4K (1,245 last month)	Install)					
	Android Development Tools for Eclipse		-					
0	Android Development Tools (ADT) is a plugin for the Eclipse IDE th designed to give you a powerful, in tegrated environment in which Android <u>more info</u>	nat is to build						
	by Google, Inc., Apache 2.0 android Mobile smartphone Mobile app tat							
* 80	Market Installs: 231K (4,533 last month) Terry:对于已经 eclipse (keple	有了 er以上)						
	Android ADT extentions 3.5.0 Quickly new Activity/Service/BroadcastRece Project with a wizard and configure in Andre	DT插件 G网下载						
	New more info							
	by li.jamling@gmail.com, Apache 2.0 android tools							
* 22	Installs: 58.6K (1,902 last month)	Install	•					
One solution selected								
Marketplaces								
?	< Back Install Now > Finish	Cance						

下载后一般的在cmd输入路劲是%userprofile%\android-sdks既可以打开默认安装的路劲了(你也可以自己变更改路劲在eclipse->windows->preference->Android "SDK Location")

打开SDK Manager

然后tools->proxy设置你的vpn能连接到google的代理否则你将不能下载需要的packages 或者按照如下设置:

Android SDK Manager - Settings					
Proxy Settings					
HTTP Proxy Server	HTTP Proxy Server mirrors.neusoft.edu.cn				
HTTP Proxy Port	80				
Manifest Cache					
Dire	ctory: C:\Users\sunjian\.android\cache				
Current	Current Size: 601 KiB				
✓ Use download cache					
Others					
Force https:// s	ources to be fetched using http://				
Ask before resta	arting ADB				
Enable Preview Tools					
	Close				



这里最好再下载一个intel HAXM Packages

📫 Name	API	Rev.	Status	-
🔺 🔲 🧰 Extras				
🔲 📻 Android Support Repository		6	Not installed	
🔲 🖬 Android Support Library		19.1	🗊 Update available: rev. 20	
🔲 📻 Google Play services for Fit Preview		1	Not installed	
🔲 📻 Google Play services for Froyo		12	Not installed	
📃 📻 Google Play services		19	Not installed	
🔲 📻 Google Repository		11	Not installed	
🔲 💼 Google Play APK Expansion Library		3	Not installed	
📃 📻 Google Play Billing Library		5	Not installed	
🔲 📻 Google Play Licensing Library		2	Not installed	
🔲 📻 Google USB Driver		10	Not installed	
🥅 📻 Google Web Driver		2	Not installed	=
📝 💼 Intel x86 Emulator Accelerator (HAXM installer)		4	😿 Installed	

Name

🔯 intelhaxm.exe

t×t Release Notes.txt

source.properties

波 Intel® Hardware Accelerated Execution Manager Setup	
Installing Intel® Hardware Accelerated Execution Manager	(intel)
Please Manag Status: This computer meets the requirements for HAXM, but Intel Virtualization Technology (VT-x) is not turned on. HAXM cannot be installed until VT-x is enabled. Please refer to the Intel HAXM documentation for more information.	
Back Next	Cancel

http://www.cnblogs.com/csulennon/p/4178404.html

接下来我们要建立一个AVD	当然你也可以自知	定义你自己的device,注意	意分辨率不要:	太大 , 选择(小的,然后sta	rt,就会看到模拟	<u> 器开</u> 启了
2 5554Samsung	5:03					<u>8</u>	拖拽上传
Q Google				Edit Android Virte	ual Device (AVD)		×
				AVD Name:	Samsung		
	Manage AVDs		1	Target:	Android 4.4.2 - API Level	19	•
🗮 Android Virtu	I Device (AVD) Manager	0.0.0		CPU/ABI:	Intel Atom (x86)		-
Tools				Keyboard:	Hardware keyboard pr	esent	
Android Virtual	Devices Device Definitions			Skin:	HVGA		-
List of existing	Android Virtual Devices locate	d at C:\Users\u123485\.android\avd		Front Camera:	None		-
AVD Name	Target Name	Platfor API Le CPU/ABI	Create	Back Camera:	None		-
Samsu	ng Android 4.4.2	4.4.2 19 Intel Atom (x86)	Start.	Memory Options:	RAM: 2048	VM Heap: 64	
	Terry:诸选择改		Repair	Internal Storage:	512	N	AiB ▼
	cpu.		Delete	CD C1			
			Details	SD Card:	Size:	Mil	8 -
					© File:	Bro	
							1003C
				Emulation Options:	Snapshot Us	e Host GPU	
				Override the exis	ting AVD with the same na	me	
			Refres	X No device selec	ted		
🔺 A repairab	e Android Virtual Device. 🗙 🤉	An Android Virtual Device that failed to load. Click	'Details' to see the error				
			1 1			OK Car	icel

3)设置appium settings 设置好了后我们就可以用appium去连接该AVD了,我们看一下appium怎么去连接android的模拟器的

windows 环境配置: ANDROID_HOME放入你的adt路径 Path中添加 %ANDROID_HOME%\tools; %ANDROID_HOME%\platform-tools; %ANDROID_HOME%\build-tools\19.0.0

配置好后运行如下命令:

C:\Users_____db devices List of devices attached emulator-5554 device

我们需要安装被测试的项目,该项是美团,大家可以到官网www.meituan.com去下载,选择下载的apk,如下的三点需注意,上课重点 讲解。



5554:avd2				
			³⁶ 🖡 6:09	Basic Controls
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望湘园	小辉哥	火锅	很高兴遇见你	
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#### Android Settings Application ✓ Application Path Choose C:\Users\sunjian\Desktop\group-221_0-meituan_.apk 🗸 Package com.sankuai.meituan • 🔽 Wait for Package com.sankuai.meituan Ŧ 🗸 Launch Activity com.sankuai.meituan.activity.Welcome Ŧ Wait for Activity com.sankuai.meituan.activity.GuideLineActivity • Use Browser Full Reset 📃 No Reset Chrom Intent Action android.intent.action.MAIN Intent Category android.intent.category.LAUNCHER Intent Flags 0x10200000 Intent Arguments Launch Device 5 🗘 Launch AVD: avd2 Device Ready Timeout: s Arguments: Capabilities Platform Name Android Automation Name Appium • PlatformVersion 4.4 KitKat (API Level 19) • ☑ Device Name emulator-5554 - 🖸 Locale US Language en Advanced 📃 SDK Path Coverage Class 0 🌲 🔲 Selendroid Port 0 🗘 Bootstrap Port 0 🌲 🔲 Chrome Driver Port

好了后就可以点击开始了之后你会发现会有很多debug log日志可以看到,然后就会在你的android模拟器中显示安装的程序。 点击那个放大镜icon按钮



## 4) maven项目的配置开发一个简单的脚本

大家可以去Terry老师的放的代码地去下载使用,如下链接,只要你装了github就可以导入可以享受更新服务。当然你也可以自己打包下载使用。

https://gitshell.com/alwaysterry/



#### 导入的maven项目如上图appiumtraining项目,我们打开pom.xml文件

<properties> <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding> </properties>

--上面这段以后在代码中有中文情况下可以在jenkins job运作下正常显示中文。

appium需要的jar如下是io.appium,这个就是我们的需要的,它同时也会去下载selenium对应版本的,如要要最新的可以在version中用LATEST;

<dependency>
<groupId>io.appium</groupId>
<artifactId>java-client</artifactId>
<version>LATEST</version>
</dependency>

你在本地仓库中也会看到目前最新的版本是2.1.0,如果下载不了,可以自己下载链接:http://pan.baidu.com/s/1mgDVANe密码: Oofo

然后解压替换到自己的本地maven路径,如下图路径

.m2 + repository + io + appium +	java-client 🕨 2.1.0			
工具(T) 帮助(H)		_		
共享 ▼ 刻录 新建文件夹				
名称	修改日期	类		
remote repositories 2014/12/6 15:48				
📓 java-client-2.1.0.jar	2014/12/6 15:15	E:		
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📄 java-client-2.1.0.pom.lastUpdated	2015/1/17 21:09	U		
📄 java-client-2.1.0.pom.md5	2014/12/6 15:15	N		
java-client-2.1.0.pom.sha1	2014/12/6 15:15	S		
📓 java-client-2.1.0-sources.jar	2014/12/6 15:48	E		
java-client-2.1.0-sources.jar.md5	2014/12/6 15:48	N		
java-client-2.1.0-sources.jar.sha1 2014/12/6 15:48				
m2e-lastUpdated.properties	2014/12/6 15:48	PI		

自此以上环境都已经配置完毕,不过鉴于现在流行的模拟器,当然你可以使用真机,我们教学中将使用Genymotion Genymotion环境构建

去genymotion官网下载模拟器,需要注册一下就可以 https://www.genymotion.com/#!/download

🥹 Genymotion for personal use					
🥺 Virtual device creation wizard	8 23				
Select a new virtual device					
Android version: All • Device model: All •	Q				
Available virtual devices					
<ul> <li>Samsung Galaxy Note 2 - 4.1.1 - API 16 - 720x1280</li> </ul>	*				
<ul> <li>Samsung Galaxy Note 2 - 4.2.2 - API 17 - 720x1280</li> </ul>					
Samsung Galaxy Note 2 - 4.3 - API 18 - 720x1280					
✓ Samsung Galaxy Note 3 - 4.3 - API 18 - 1080x1920					
<ul> <li>Samsung Galaxy Note 3 - 4.4.4 - API 19 - 1080x1920</li> </ul>					
<ul> <li>Samsung Galaxy S2 - 2.3.7 - API 10 - 480x800</li> </ul>	-				
Cancel	Next				
User: your_sky@126.com					

O Genymotion	n for person	al use - Samsun	g Galaxy Note	3 - 4.4.4 - API 19	
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	Gallery	Gestures Builder	Messaging	Movie Studio	$\Diamond$
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4.1下面我们就用一个计算器来开始我们第一个自动化之旅: 打开我们的appium server然后锁定package和activity名 注意android自动化要了解被测时象的package和activity名

如果不知道package和activity怎么办?

安装apk后打开,用%android_home%/tools下的hierachyviewer.bat来查看



Android Settings	
Application	
Application Path: Choose C:\Users_gua_sha_t	03\git\appium\sample-code\apps\ContactManager\ContactManager.apk
Package com.android.calculator2	Launch Activity com.android.calculator2.Calculator
Full Reset	Wait for Activity
🔲 No Reset	Wait for Package
Use Browser Chrome	•
Intent Action: android.intent.action.MAIN	Intent Category: android.intent.category.LAUNCHER
Intent Flags: 0x10200000	Intent Arguments:
Launch Device	
Launch AVD: avd1	Device Ready Timeout: 5 \$ s
Arguments:	
Capabilities	ANDROID HOME已经没置好
Platform Name Android	了的话可以不用选择此项。
PlatformVersion 4.4 KitKat (API Level 19)	注意你的package,activity
☑ Device Name avd1	
✓ Language en	Locale US
Advanced	
SDK Path	
Coverage Class	
🔲 Bootstrap Port 0 🗘 🔲 Selendr	roid Port 0 🗘 🖸 Chrome Driver Port 0 🗘

#### 然后重要的一点是怎么样抓到元素呢?

## 我们可以使用%ANDROID_HOME%/tools/UIAutomator Viewer来抓取

Node Detail	
index	0
text	DELETE
resource-id	com.android.calculator2:id/del
class	android.widget.Button
package	com.android.calculator2
content-desc	delete
checkable	false
checked	false
clickable	true
enabled	true
focusable	true
focused	false
scrollable	false
long-clickable	true
password	false
selected	false
bounds	[813,456][1080,646]

脚本中需要设置一堆capabilities具体可以参看: http://appium.io/slate/en/master/#caps.md

```
public class TestAppium {
     private WebDriver driver;
      @BeforeMethod
     public void setUp() throws Exception {
    DesiredCapabilities capabilities = new DesiredCapabilities();
          capabilities.setCapability("platformName", "Android");
capabilities.setCapability("deviceName", "Samsung");
driver = new RemoteWebDriver(new URL("http://172.28.57.49:4723/wd/hub"), capabilities);
     }
     @Test
      public void testCalculator(){
           try{
    driver.findElement(By.name("DELETE")).click();
                                                                                                  Terry:注意为什么加个
           }catch(Exception e){
                 driver.findElement(By.name("CLR")).click();
                                                                                                  异常处理呢? 好好想
           }
                                                                                                  想各位
           driver.findElement(By.name("1")).click();
driver.findElement(By.name("+")).click();
driver.findElement(By.name("2")).click();
driver.findElement(By.name("=")).click();
      }
      @AfterMethod
      public void tearDown() throws Exception {
          driver.quit();
      }
}
```