# 基于源代码的测试

## 部署被测程序的服务器端与客户端

### 1.创建数据库

mysql 客户端或者命令行

进入mysql\bin目录下

mysql -uroot -p 回车

输入密码123456

create database market\_db;

use market\_db;

拷贝粘贴 market\_db.sql 中的内容即可

### 2.启动服务器端，启动tomcat

http://localhost:8080/Supermarket

### 3.导入客户端程序

#### 常见问题的解决

1. 需要修改Server的IP地址

注意，不能是localhoat,127.0.0.1

2.app/lib 复制粘贴两个jar包

robotium-solo-5.6.3.jar

robotium-solo-5.6.3-javadoc.jar

1. 创建测试类

.使用robotium进行测试脚本的编写

报错1：



解决办法：在以下代码添加至build.gradle的dependencies中

在 dependencies {

androidTestCompile 'com.android.support.test:rules:0.4.1'

androidTestCompile 'junit:junit:4.12'

}

报错2

junit.framework.AssertionFailedError: No tests found in net.onest.portablecheckoutdevice.AddSh

解决办法：把这句话添加至build.gradle的defaultConfig中

testInstrumentationRunner "android.support.test.runner.AndroidJUnitRunner"

## 基于源代码的测试

**public class** FindPrice {  
  
 @Rule  
 **public** ActivityTestRule<CheckoutActivity> **activityTestRule** =  
 **new** ActivityTestRule<>(CheckoutActivity.**class**);  
  
 **private** Solo **solo**;  
 @Before  
 **public void** setUp() **throws** Exception {  
 **solo** = **new** Solo(InstrumentationRegistry.*getInstrumentation*(),  
 **activityTestRule**.getActivity());  
 }  
  
 @After  
 **public void** tearDown() **throws** Exception {  
  
 **solo**.finishOpenedActivities();  
 }  
  
 @Test  
 **public void** testAddShop(){  
 **solo**.typeText((EditText) **solo**.getView(R.id.***goods\_code***),**"123456"**);  
 **solo**.clearEditText((EditText) **solo**.getView(R.id.***goods\_count***));  
 **solo**.typeText(1,**"2"**);  
 **solo**.clickOnButton(**"添　加"**);  
 **solo**.sleep(15);  
 **boolean** notesFound = **solo**.searchText(**"结账"**);  
 *assertTrue*(**"Note 1 and/or Note 2 are not found"**, notesFound);  
 **solo**.takeScreenshot();  
 }  
  
}

或者以下的方式

**public class** FindPrice1 **extends** ActivityInstrumentationTestCase2 {  
  
 **private** Solo **solo**;  
  
 **public** FindPrice1() {  
 **super**(CheckoutActivity.**class**);  
 }  
  
 @Before  
 **public void** setUp() **throws** Exception {  
 **solo** = **new** Solo(getInstrumentation(),getActivity());  
 }  
  
 @After  
 **public void** tearDown() **throws** Exception {  
  
 **solo**.finishOpenedActivities();  
 }  
  
 @Test  
 **public void** testAddShop(){  
 **solo**.typeText((EditText) **solo**.getView(R.id.***goods\_code***),**"2222"**);  
 **solo**.clearEditText((EditText) **solo**.getView(R.id.***goods\_count***));  
 **solo**.typeText(1,**"34"**);  
 **solo**.clickOnButton(**"添　加"**);  
 **solo**.sleep(15);  
 **boolean** notesFound = **solo**.searchText(**"结账"**);  
 *assertTrue*(**"Note 1 and/or Note 2 are not found"**, notesFound);  
 }  
  
}

# 基于APK的测试

采用Robotium录制，建议采用Junit4的框架或者testng

修改依赖方式  
androidTestCompile **'junit:junit:4.12'**

找出包名和入口的Activity的两种方式

adb shell

logcat |grep START

进入目录

D:\Users\think\AppData\Local\Android\sdk\build-tools\21.1.1

命令行输入

或者aapt dump badging D:\qq.unar\_debug.apk查看包名和版本号

在清单文件中增加

<instrumentation android:name="android.test.InstrumentationTestRunner" android:targetPackage="com.tencet.mobileqq.activity"/>

将 demo1的build.gradle进行复制，注意修改路径

## 源代码的实现

**public class** AddManagerTest **extends** ActivityInstrumentationTestCase2 {  
 **private** Solo **solo**;  
   
 **private static final** String ***LAUNCHER\_ACTIVITY\_FULL\_CLASSNAME*** = **"com.example.android.contactmanager.ContactManager"**;  
  
 **private static** Class<?> *launcherActivityClass*;  
 **static**{  
 **try** {  
 *launcherActivityClass* = Class.*forName*(***LAUNCHER\_ACTIVITY\_FULL\_CLASSNAME***);  
 } **catch** (ClassNotFoundException e) {  
 **throw new** RuntimeException(e);  
 }  
 }  
  
 **public** AddManagerTest() **throws** ClassNotFoundException {  
 **super**(*launcherActivityClass*);  
 }  
  
  
 **public void** setUp() **throws** Exception {  
 **super**.setUp();  
 **solo** = **new** Solo(getInstrumentation());  
 getActivity();  
 }  
   
 @Override  
 **public void** tearDown() **throws** Exception {  
 **solo**.finishOpenedActivities();  
 **super**.tearDown();  
 }  
  
 @Test  
 **public void** testRun() {  
 *//Wait for activity: 'com.example.android.contactmanager.ContactManager'* **solo**.waitForActivity(**"ContactManager"**, 2000);  
 *//Set default small timeout to 22314 milliseconds* Timeout.*setSmallTimeout*(22314);  
 *//Click on Add Contact* **solo**.clickOnView(**solo**.getView(**"addContactButton"**));  
 *//Wait for activity: 'com.example.android.contactmanager.ContactAdder'  
 assertTrue*(**"ContactAdder is not found!"**, **solo**.waitForActivity(**"ContactAdder"**));  
 *//Click on Empty Text View* **solo**.clickOnView(**solo**.getView(**"contactNameEditText"**));  
 *//Enter the text: 'lhz'* **solo**.clearEditText((android.widget.EditText) **solo**.getView(**"contactNameEditText"**));  
 **solo**.enterText((android.widget.EditText) **solo**.getView(**"contactNameEditText"**), **"lhz"**);  
 *//Click on Empty Text View* **solo**.clickOnView(**solo**.getView(**"contactPhoneEditText"**));  
 *//Enter the text: 'soft'* **solo**.clearEditText((android.widget.EditText) **solo**.getView(**"contactPhoneEditText"**));  
 **solo**.enterText((android.widget.EditText) **solo**.getView(**"contactPhoneEditText"**), **"soft"**);  
 *//Click on Empty Text View* **solo**.clickOnView(**solo**.getView(**"contactEmailEditText"**));  
 *//Enter the text: 'lhz@124.com'  
// solo.clearEditText((android.widget.EditText) solo.getView("contactEmailEditText"));  
// solo.enterText((android.widget.EditText) solo.getView("contactEmailEditText"), "lhz@124.com");* EditText et = (EditText) Util.*getIDFromName*(**"contactEmailEditText"**,**solo**.getCurrentActivity());  
 **solo**.enterText(et,**"qq12@qq.com"**);  
 *//Take screenshot* **solo**.takeScreenshot();  
 *//Click on Save* **solo**.clickOnView(**solo**.getView(**"contactSaveButton"**));  
 *//Press menu back key* **solo**.goBack();  
 }  
}

## 修改清单文件

增加

|  |
| --- |
| <instrumentation |
| |  | | --- | |  | | android:name="android.test.InstrumentationTestRunner" | | android:targetPackage="com.example.todolist" /> | |

|  |
| --- |
|  |
| 在manifest中增加 android:versionCode="1" android:versionName="1.0"被测应用的版本号 |

## 修改build.gradle

|  |
| --- |
| buildscript { |
|  |

|  |
| --- |
|  |
| repositories { |
|  |
|  |
| mavenCentral() |
|  |
|  |
| flatDir { |
|  |
|  |
| dirs 'libs' |
|  |
|  |
| } |
|  |
|  |
| } |
|  |
|  |
| dependencies { |
|  |
|  |
| classpath 'com.android.tools.build:gradle:2.1.3' |
|  |
|  |
| } |
|  |
|  |
| } |
|  |
|  |
|  |
|  |
|  |
| apply plugin: 'com.android.application' |
|  |
|  |
| repositories { |
|  |
|  |
| mavenCentral() |
|  |
|  |
| flatDir { |
|  |
|  |
| dirs 'libs' |
|  |
|  |
| } |
|  |
|  |
| } |
|  |
|  |
|  |
|  |
|  |
| dependencies { |
|  |
|  |
| androidTestCompile 'com.jayway.android.robotium:robotium-solo:5.6.3' |
|  |
|  |
|  |
|  |
|  |
| androidTestCompile 'junit:junit:4.12' |
|  |
|  |
| } |
|  |
|  |
|  |
|  |
|  |
| android { |
|  |
|  |
| compileSdkVersion 'android-19' |
|  |
|  |
| buildToolsVersion '23.0.3' |
|  |
|  |
|  |
|  |
|  |
| android { |
|  |
|  |
| defaultConfig { |
|  |
|  |
| minSdkVersion 11 |
|  |
|  |
| } |
|  |
|  |
|  |
|  |
|  |
| lintOptions { |
|  |
|  |
| abortOnError false |
|  |
|  |
| } |
|  |
|  |
| sourceSets |
|  |
|  |
| { |
|  |
|  |
| androidTest |
|  |
|  |
| { |
|  |
|  |
| res.srcDirs = ['res'] |
|  |
|  |
| assets.srcDirs = ['assets'] |
|  |
|  |
| } |
|  |
|  |
| } |
|  |
|  |
| } |
|  |
|  |
| buildTypes { |
|  |
|  |
| release { |
|  |
|  |
| proguardFile getDefaultProguardFile('proguard-android.txt') |
|  |
|  |
| } |
|  |
|  |
| } |
|  |
|  |
| } |
|  |
|  |
|  |
|  |
|  |
| afterEvaluate { |
|  |
|  |
| task assembleDebug(overwrite: true) {} |
|  |
|  |
|  |
|  |
|  |
| task copyTask(type: Copy) { |
|  |
|  |
| from 'E:/demo/todolist\_debug.apk' |
|  |
|  |
| into 'build/outputs/apk/' |
|  |
|  |
| rename { |
|  |
|  |
| 'demo1-debug.apk' |
|  |
|  |
| } |
|  |
|  |
| } |
|  |
|  |
|  |
|  |
|  |
| assembleDebug.dependsOn copyTask |
|  |

|  |
| --- |
| } |

# 报错1

junit.framework.AssertionFailedError: No tests found in net.onest.portablecheckoutdevice.Test1

androidTestCompile **'junit:junit:4.12'**

androidTestCompile **'com.android.support.test:rules:0.4.1'**

testInstrumentationRunner **"android.support.test.runner.AndroidJUnitRunner"**

# 报错2

客户端连接服务器，只能是ＩＰ，不能是127.0.0.1

或者在客户端设置代理

# 点击

**solo**.clickOnView(**solo**.getView(R.id.***menu\_add***));  
**solo**.clickOnMenuItem(**"Edit title"**);

**solo**.clickOnButton(**"OK"**);

**solo**.clickLongOnText(***NOTE\_2***);

**solo**.clickOnText(**"Delete"**);

# 输入

**solo**.enterText(0, ***NOTE\_1***);  
**solo**.typeText(0, ***NOTE\_2***);

**solo**.clearEditText(0);

**boolean** notesFound = **solo**.searchText(***NOTE\_1***) && **solo**.searchText(***NOTE\_2***);  
*assertTrue*(**"Note 1 and/or Note 2 are not found"**, notesFound);

# 其他

**solo**.goBack();

**solo**.unlockScreen();非安全的锁  
**solo**.takeScreenshot();

**solo**.assertCurrentActivity(**"Expected NoteEditor Activity"**, NoteEditor.**class**);

# 待解决问题

androidTestCompile **'junit:junit:4.12'**

**t**estCompile **'junit:junit:4.12'区别**