ANDROID TEST AUTOMATION

yqin@thoughtworks.com

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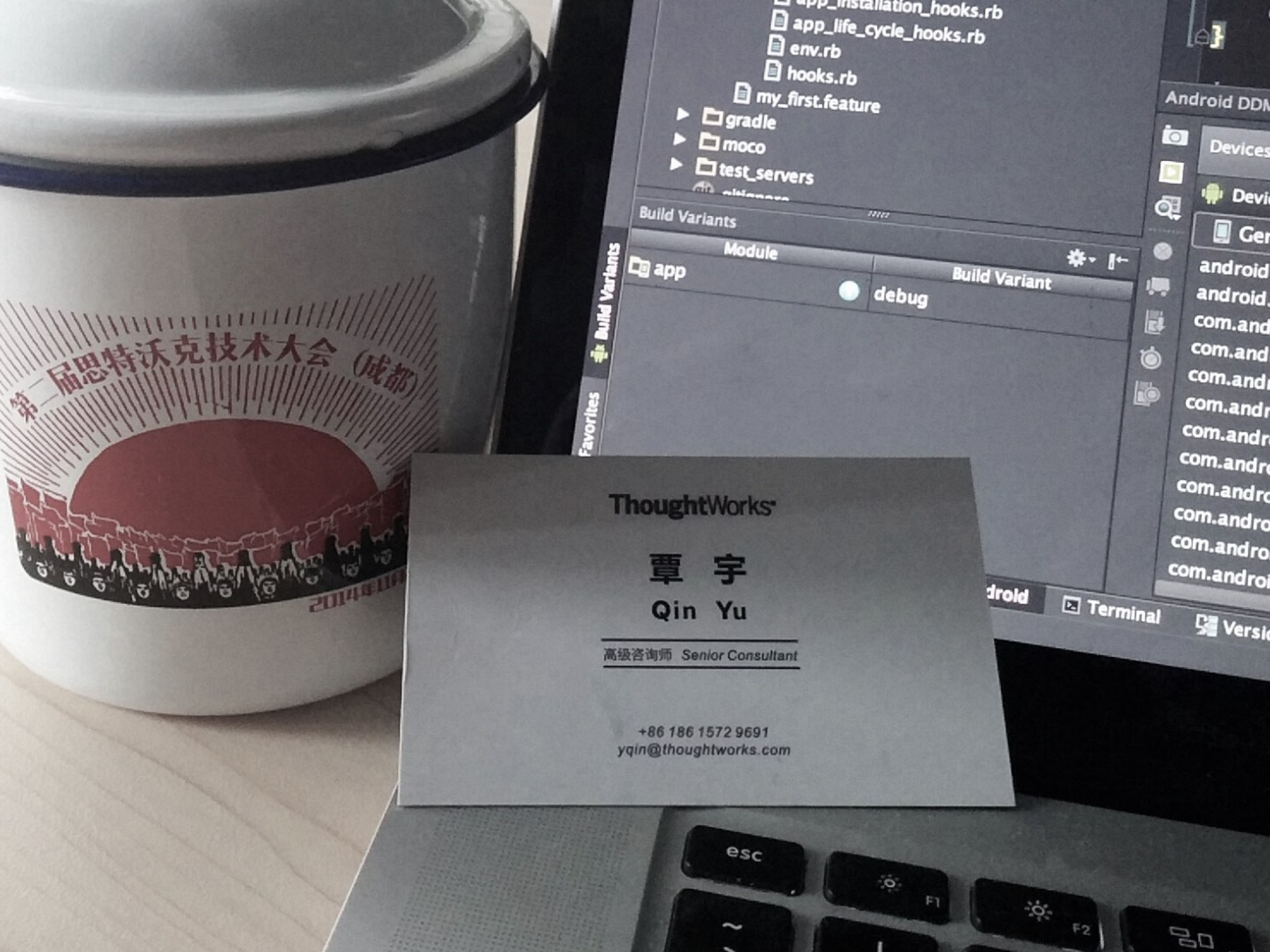

app_installation_hooks.rb
app_life_cycle_hooks.rb
env.rb
hooks.rb
my_first.feature
gradle
moco
test_servers
Build Variants
Module
app
Build Variant
debug
Build Variants
Favorites
Android DDM
Devices
Terminal
第二届思特沃克技术大会（成都）
ThoughtWorks
覃 宇
Qin Yu
高级咨询师 Senior Consultant
+86 186 1572 9691
yqin@thoughtworks.com
esc
F1
F2

AGENDA

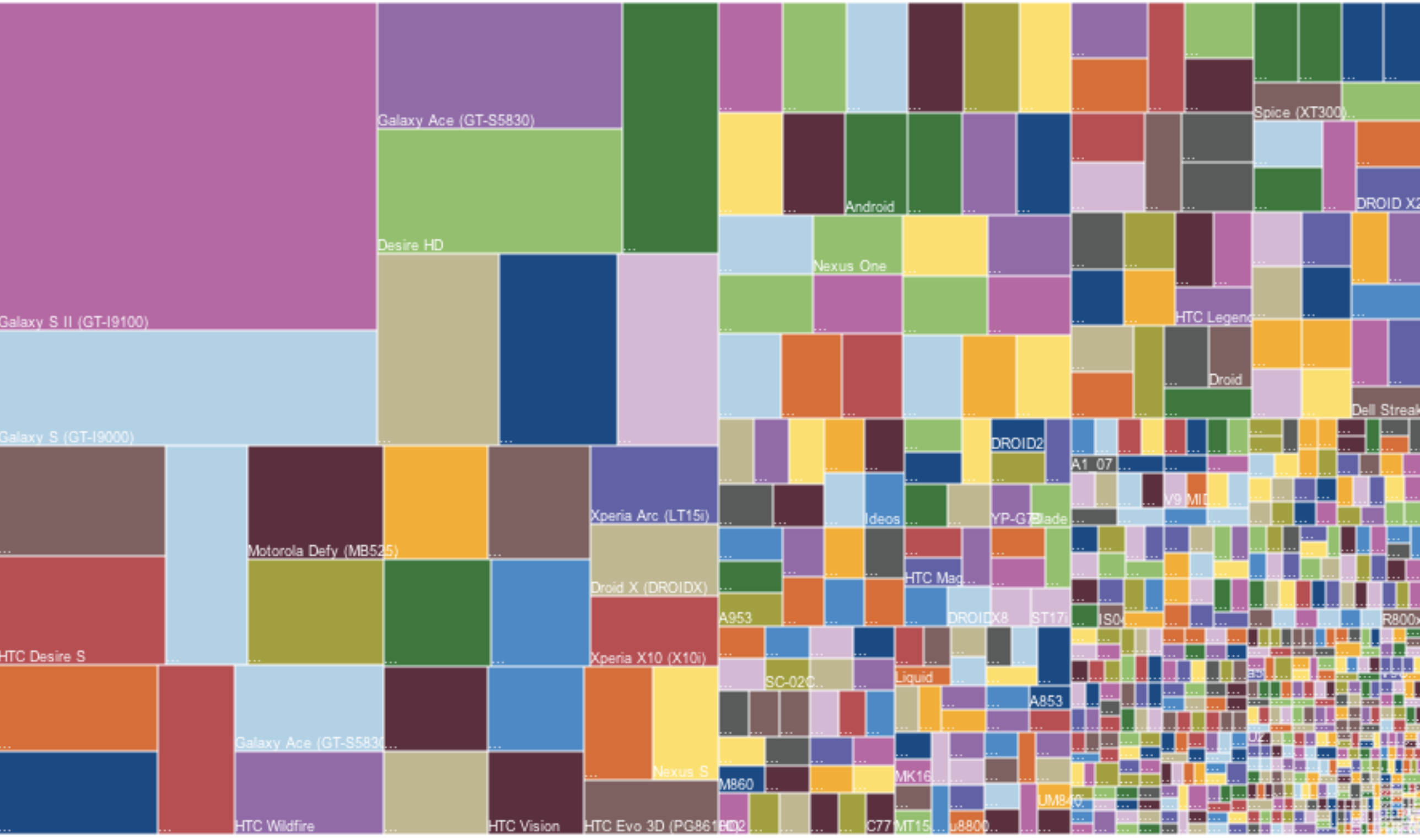
Principles

Tools

DEMO

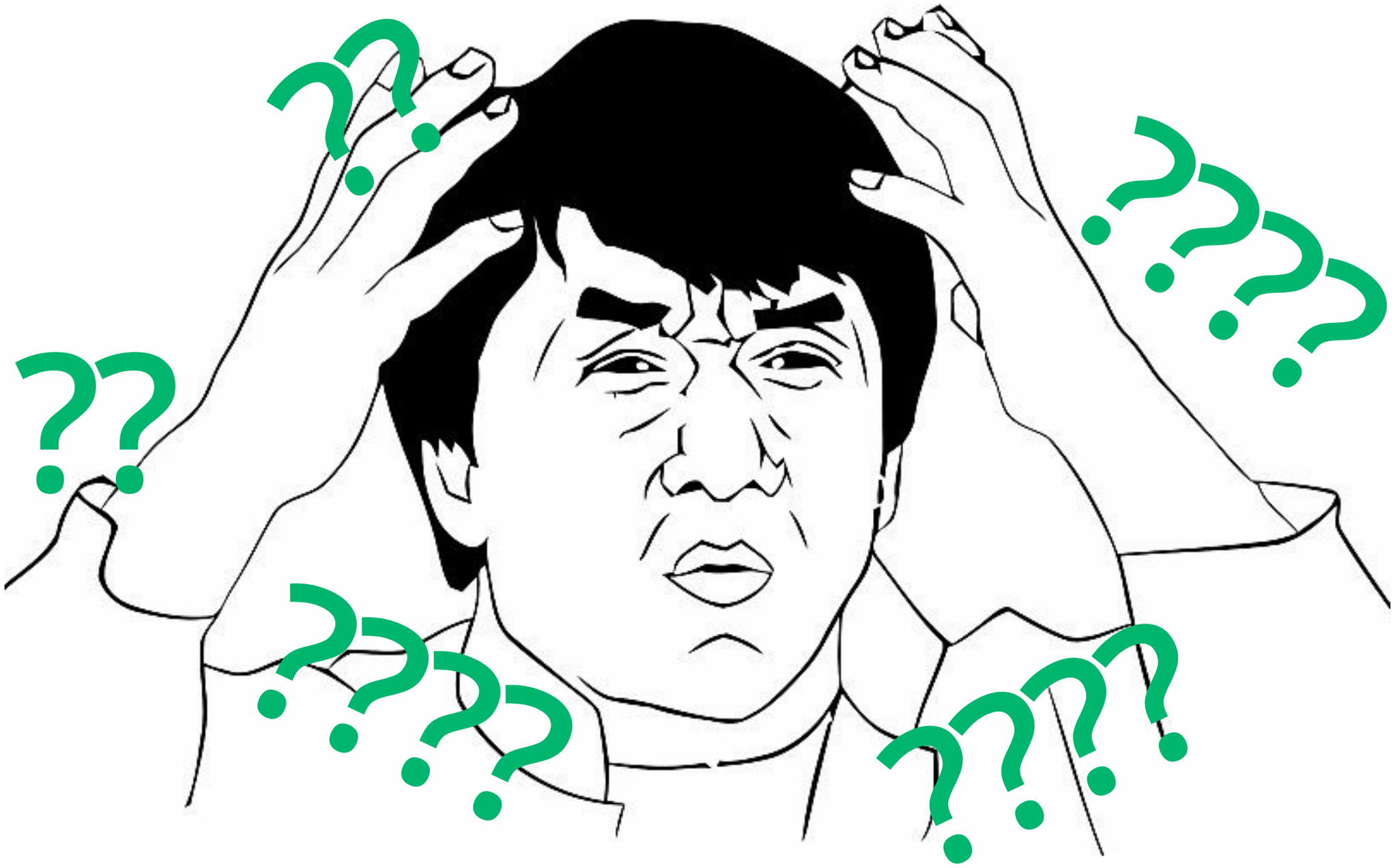
Q&A

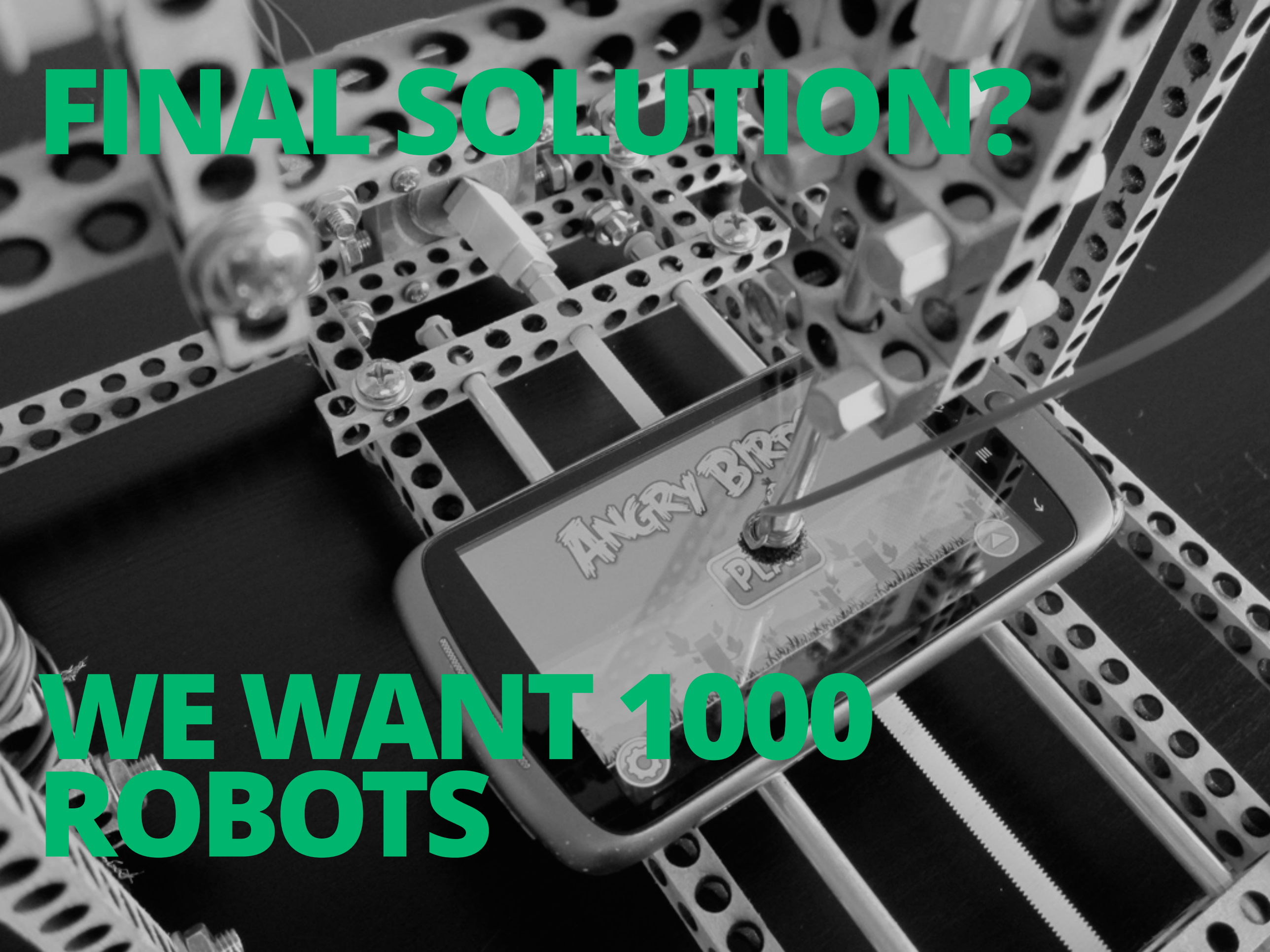
BIGGEST PROBLEM



http://www.idownloadblog.com/2013/07/30/the-terrible-state-of-android-fragmentation/

OTHER PROBLEMS



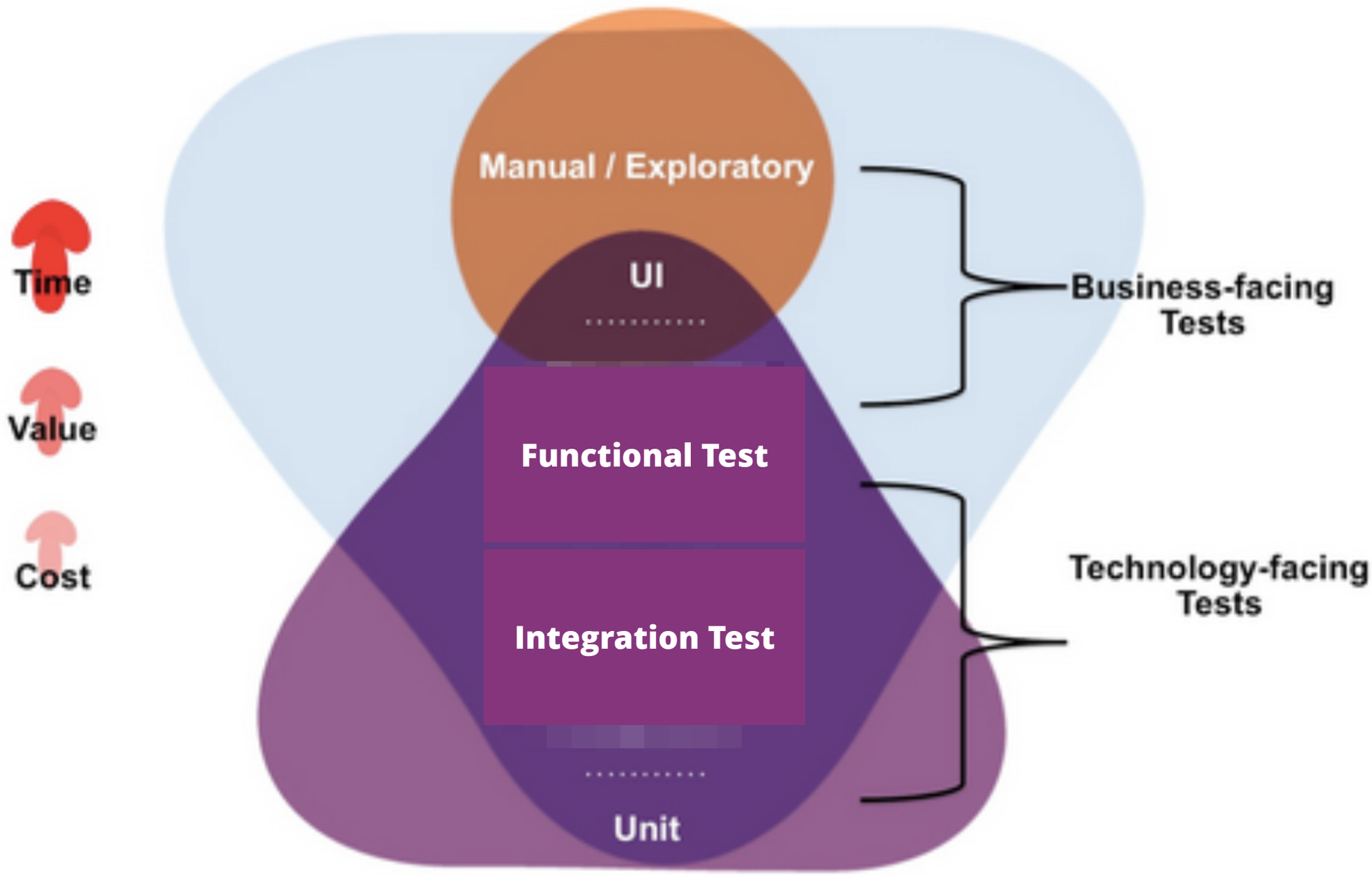


FINAL SOLUTION?

WE WANT 1000 ROBOTS

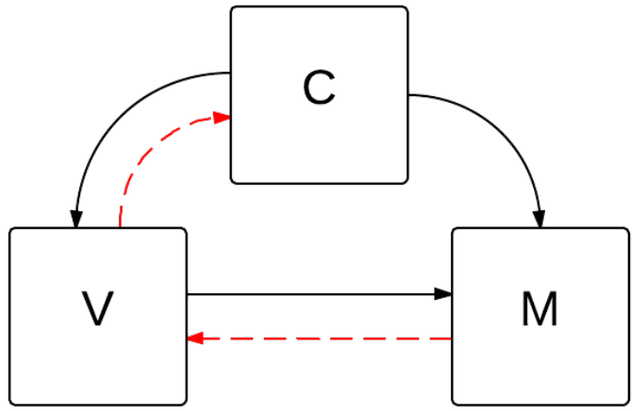
PRINCIPLES

TEST AUTOMATION PYRIMAD

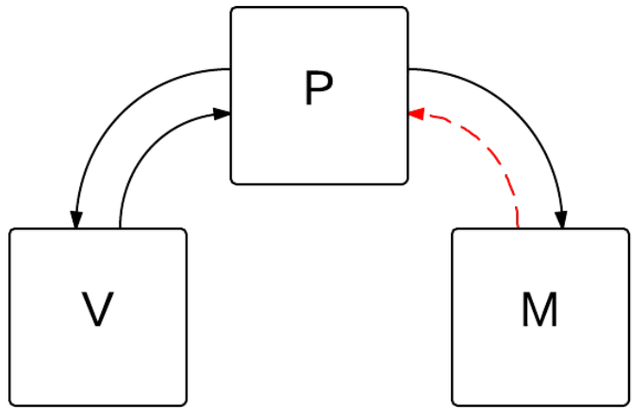


PRINCIPLE - MVC/MVP/MVVM

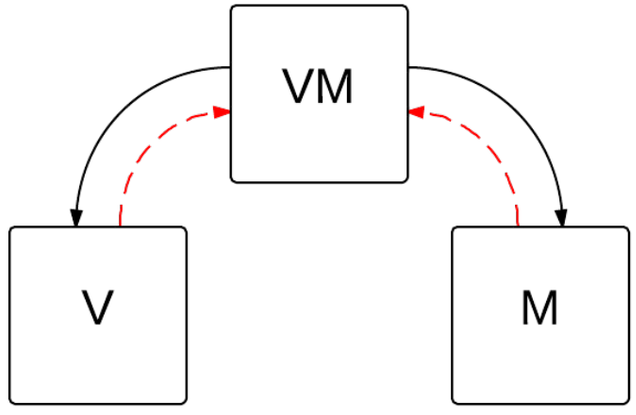
MVC



MVP



MVVM



Mv??

PRINCIPLE - S. O. L. I. D

S ingle responsibility principle

O pen/closed principle

L iskov substitution principle

I nterface segregation principle

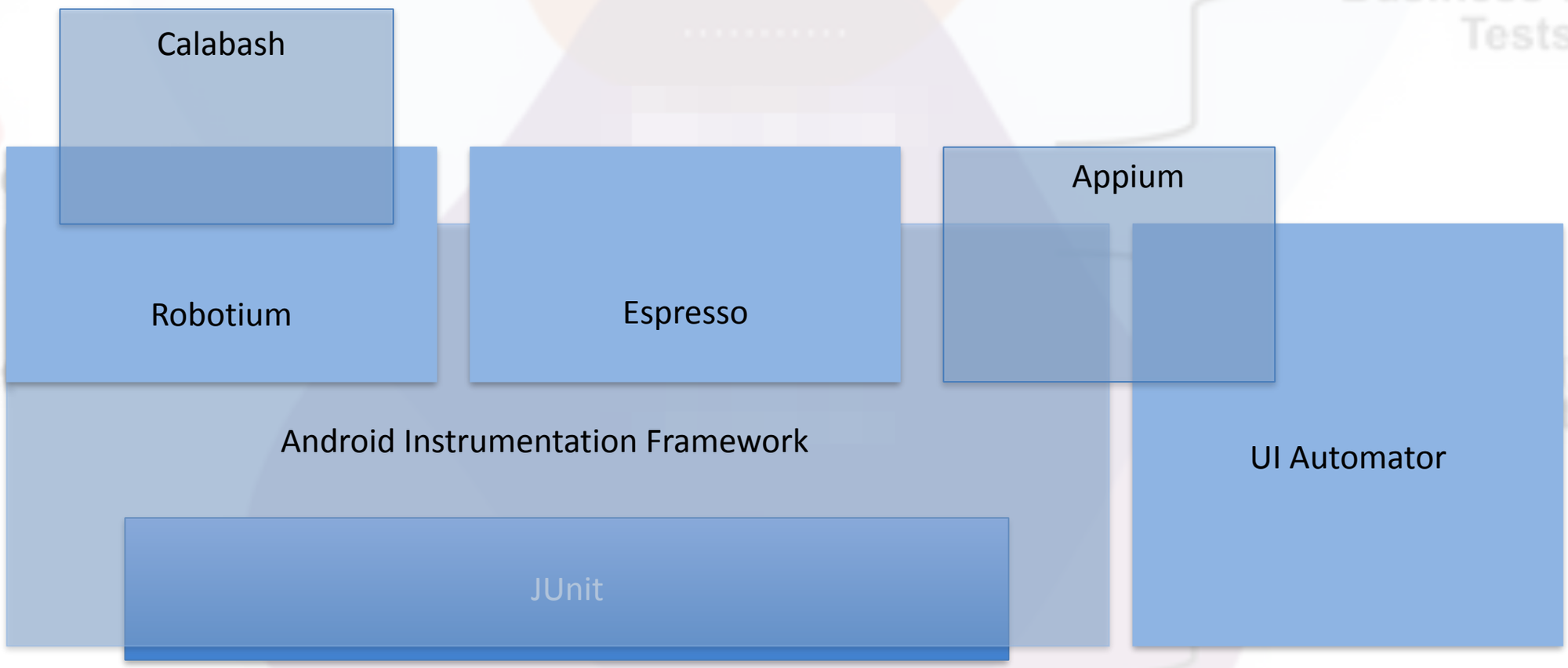
D ependency inversion principle

TOOLS

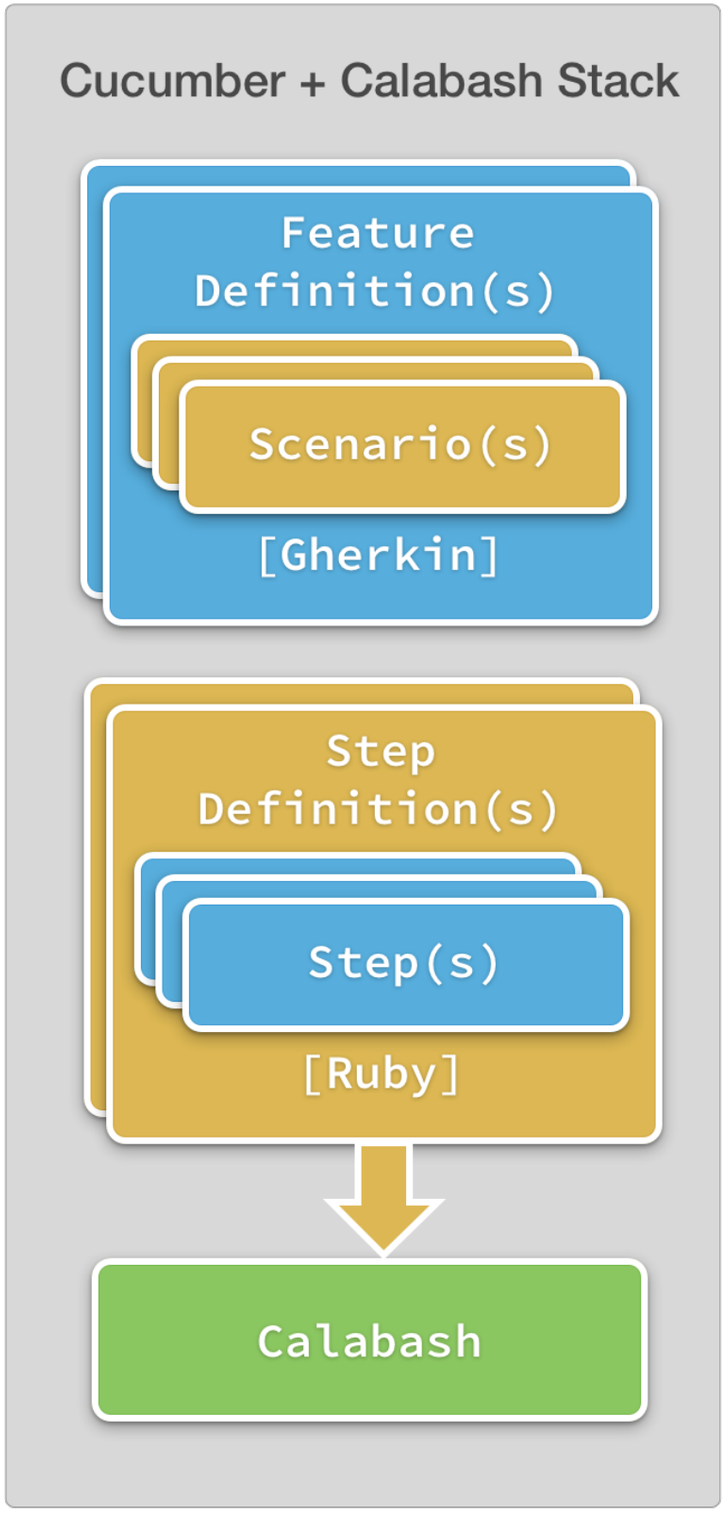
UNIT TEST

```java
public class CoffeeMakerTest {
  @Inject CoffeeMaker coffeeMaker;
  @Inject Heater heater;

  @Before public void setUp() {
    ObjectGraph.create(new TestModule()).inject(this);
  }

  @Module(
      includes = DripCoffeeModule.class,
      injects = CoffeeMakerTest.class,
      overrides = true
  )
  static class TestModule {
    @Provides @Singleton Heater provideHeater() {
      return Mockito.mock(Heater.class);
    }
  }

  @Test public void testHeaterIsTurnedOnAndThenOff() {
    Mockito.when(heater.isHot()).thenReturn(true);
    coffeeMaker.brew();
    Mockito.verify(heater, Mockito.times(1)).on();
    Mockito.verify(heater, Mockito.times(1)).off();
  }
}
```

ANDROID TEST FRAMEWORKS



FUNCTIONAL TEST



Cucumber

Feature:

In order to purchase it later
As a consumer
I want to add a book to my shopping cart

@single

Scenario: Consumer can add a book to shopping cart

- Given I open "**http://www.360buy.com/**"
- When I search for "**The Lean Startup**"
- And I buy the book
- Then I should see the book in my shopping cart

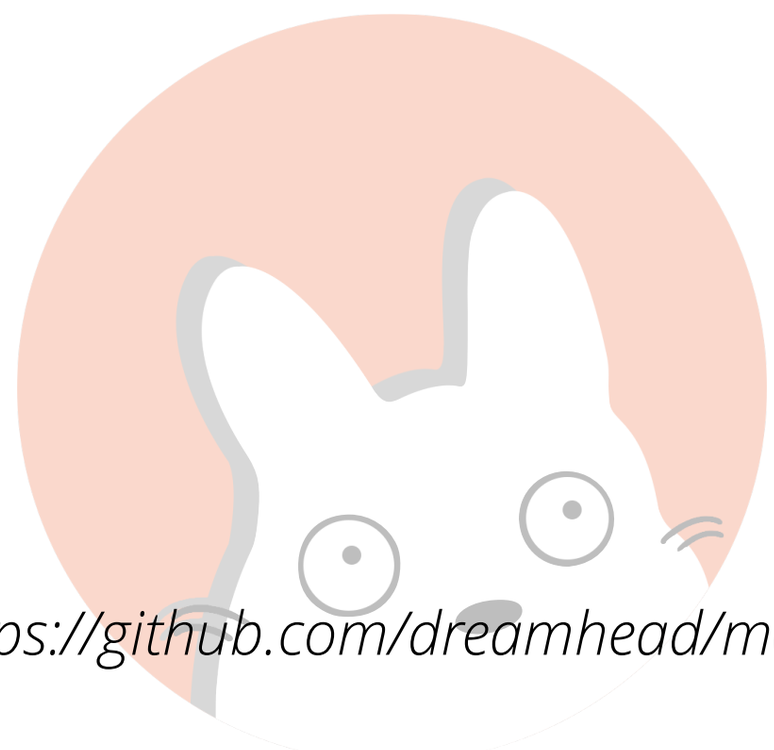
Calaba.sh

AUTOMATED ACCEPTANCE TESTING FOR MOBILE APPS

INTEGRATION TEST

```
[
{
"response" :
  {
    "text" : "Hello, Moco"
  }
}
]
```
(foo.json)

```
java -jar moco-runner-<version>-standalone.jar start -p 12306 -c foo.json
```



https://github.com/dreamhead/moco

DEMO

https://github.com/qinyu/gdgcd-demo

PRINCIPLES SUMMARY

Test Strategy

Model View Separated

Decoupled Models

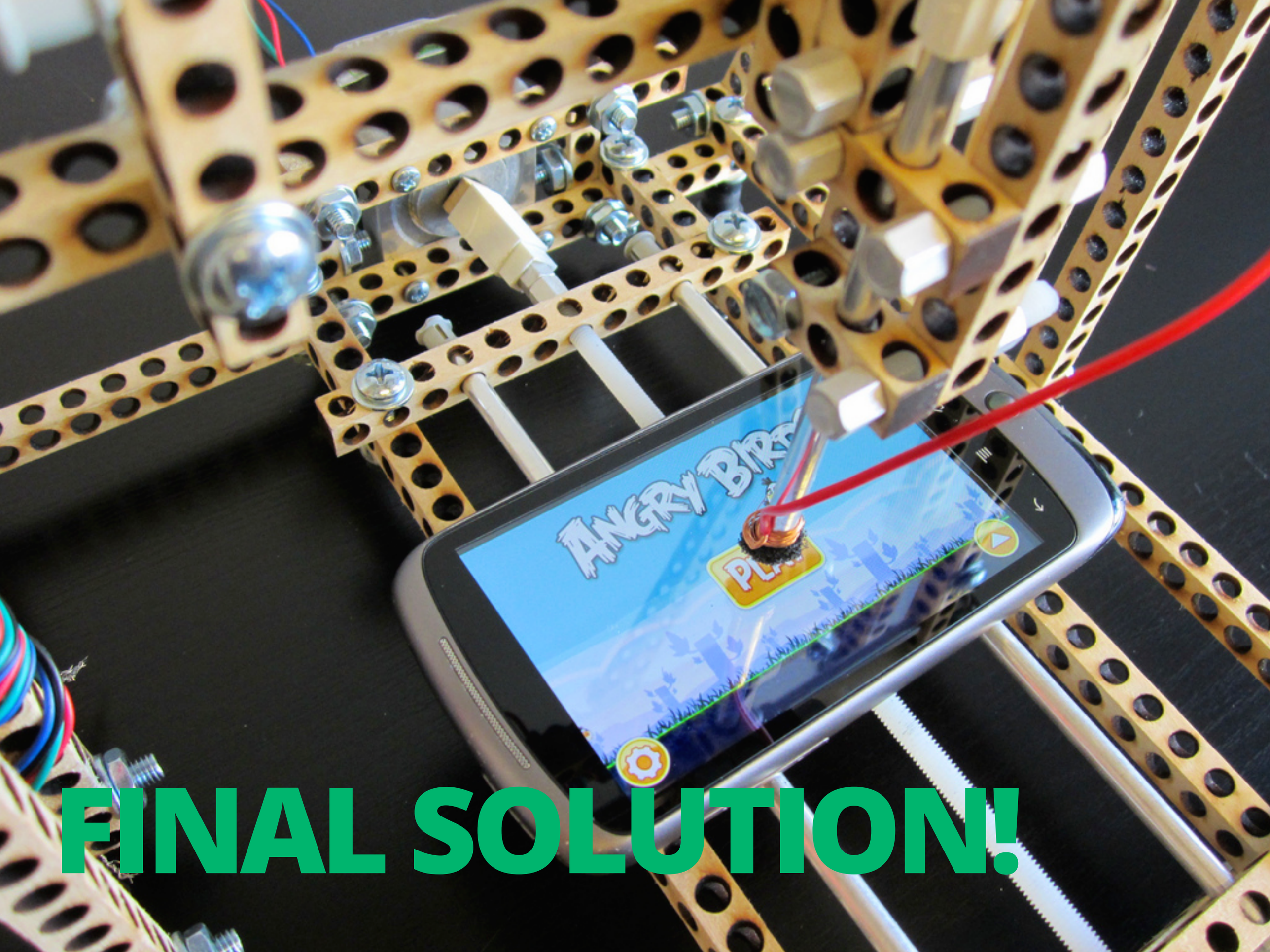
TOOLS SUMMARY

Injection

Mock

Live Document

JUST START



FINAL SOLUTION!

Q&A

THANK YOU

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