



Cucumber

小黃瓜驗收測試工具

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about me

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Q: 你為什麼會在這裡？

In order ...

As a COSCUP 2009 attendee

I want ...

Q: 你為什麼會在這裡？

In order ... [business value]

As a COSCUP 2009 attendee [role]

I want ... [feature]

你的驗收準則是?
What's your acceptance criteria?

許我們一個測試情境：

Scenario: 認真的 COSCUP 2009 與會者

Given 一群與會者

When ihower 在講演

Then 每個人學到一點新東西

And 沒有人打瞌睡

“I believe that the hardest part of software projects, the most common source of project failure, is **communication** with the customers and users of that software.

By providing a clear yet precise language to deal with domains, a DSL can help improve this communication.”

Martin Fowler

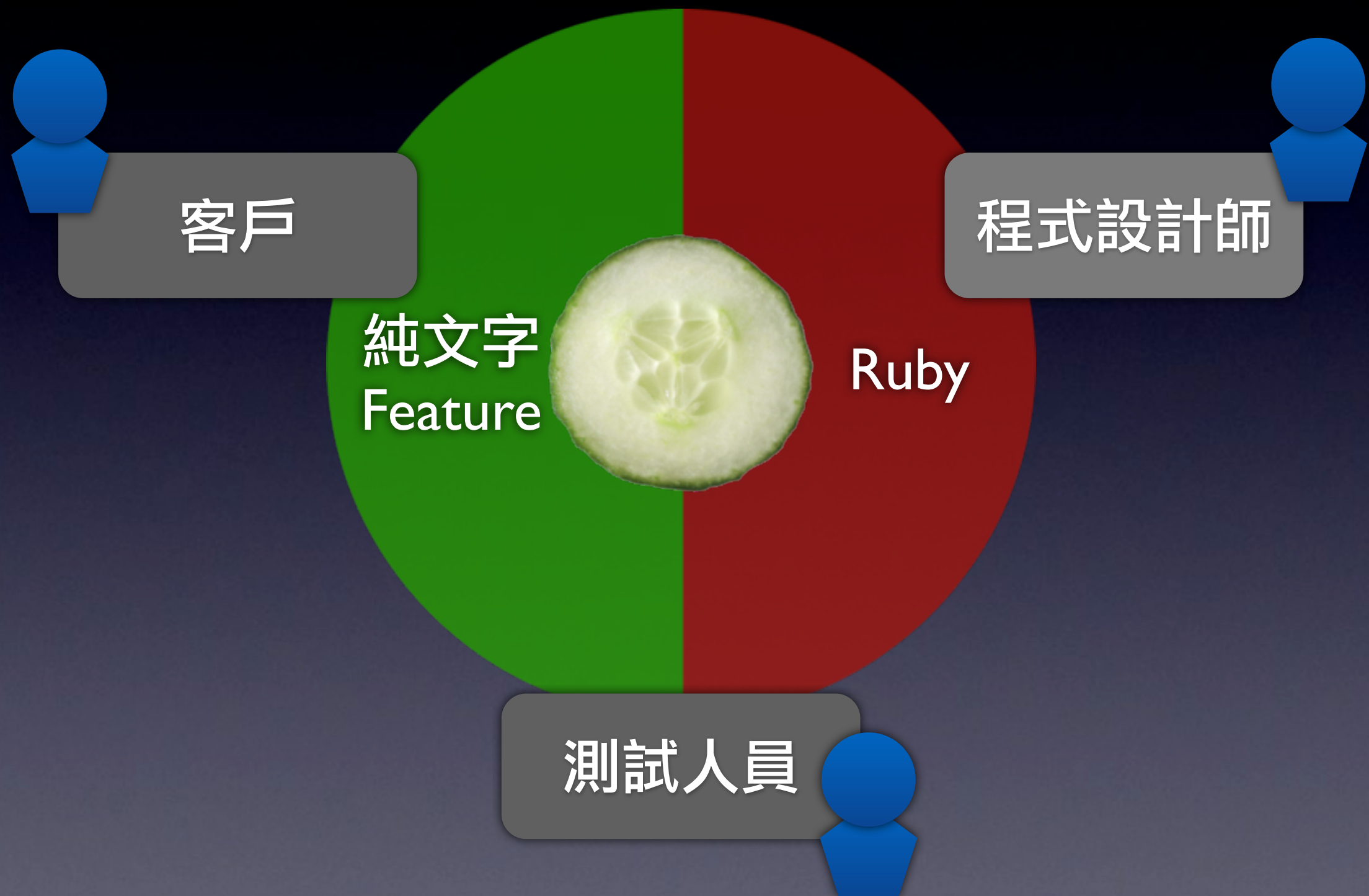
“我相信軟體專案最困難的部份、最常見的專案失敗原因，就是與客戶、使用者之間的溝通。

透過提供一個清楚又精準的領域專屬語言 (DSL)，
將可以改善這個問題”

Martin Fowler

剛剛的測試情境(DSL) 如何執行?

Cucumber 是程式設計師與客戶之間的溝通媒介



Cucumber Feature 寫法

Feature: 要很酷
功能描述

步驟



Scenario: 厲害的標題
Given <某個情境條件>
And <更多情境條件>
When <某個動作>
And <另一個動作>
Then <某個期望結果>
And <更多期望結果>

步驟

客戶

純文字

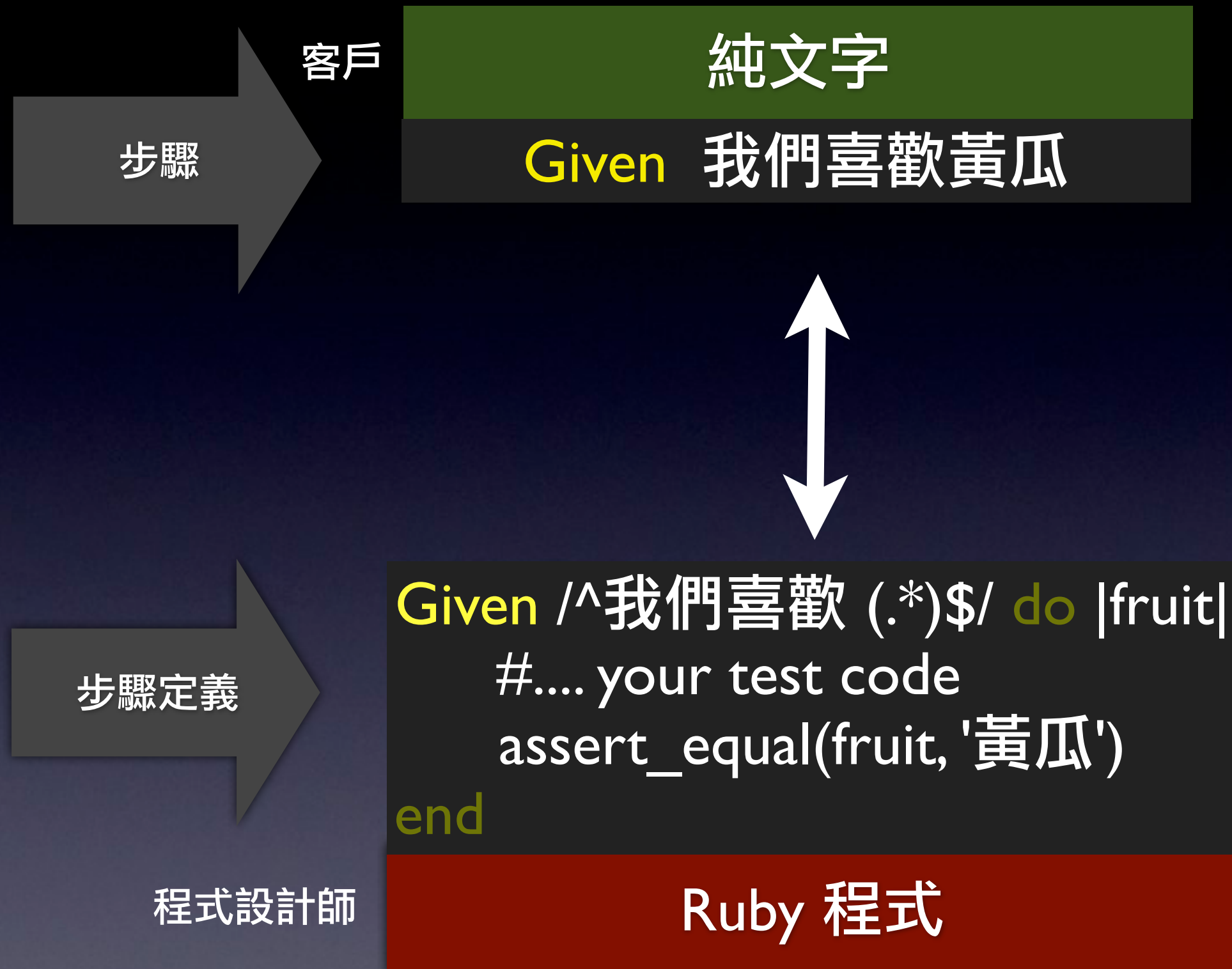
Given 我們喜歡黃瓜

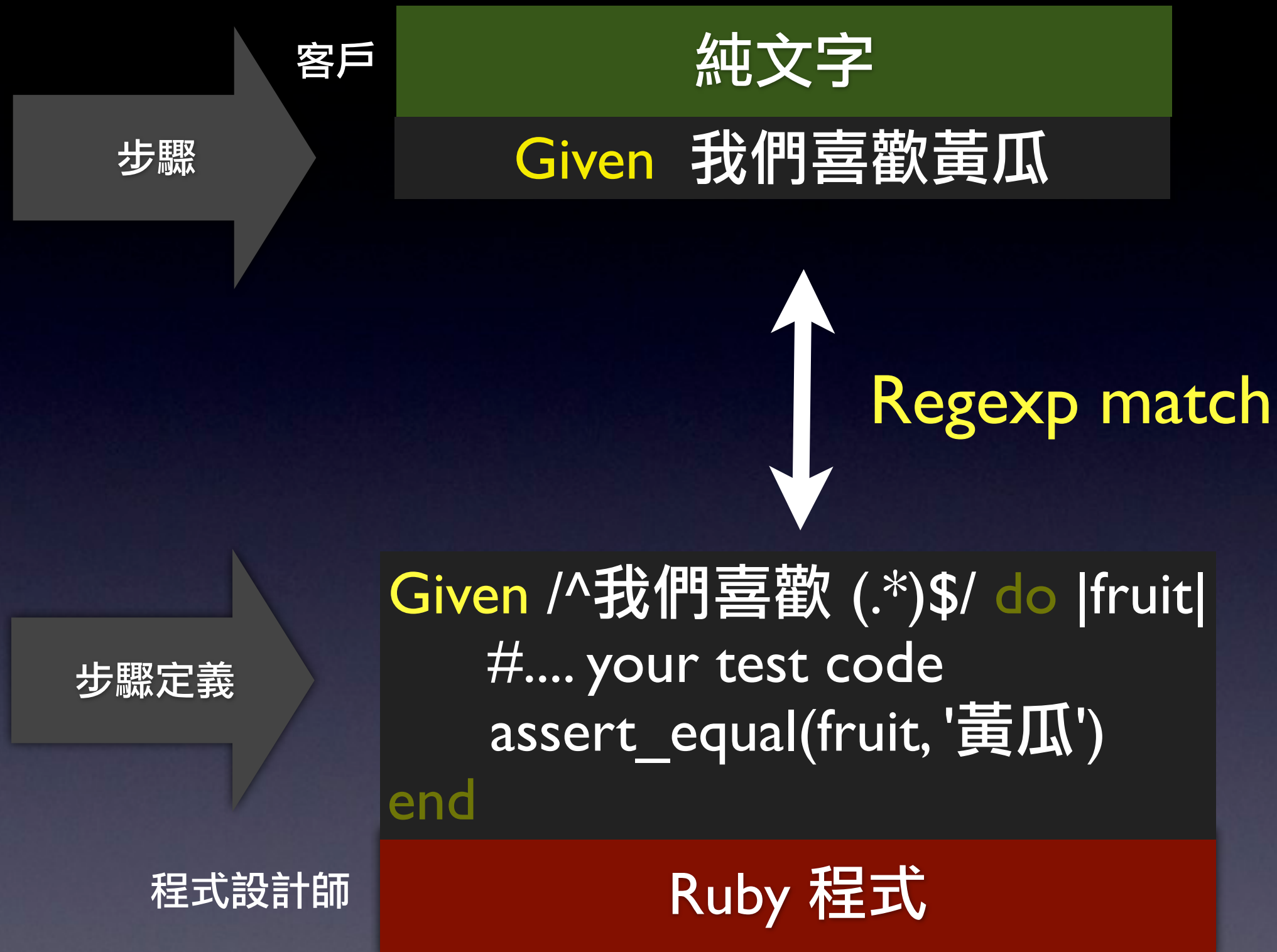
步驟定義

```
Given /^我們喜歡 (.*)$/ do |fruit|  
  #... your test code  
  assert_equal(fruit, '黃瓜')  
end
```

程式設計師

Ruby 程式





Cucumber 支援各種環境

- Ruby and Rails
- JRuby and Java
- IronRuby and .NET
- FunFX and Flex
- Web apps in any languages, with:
 - Watir, Selenium, Mechanize, Webrat 等瀏覽器測試工具

Cucumber 支援各種語言

огурец Russian
concombre French
キュウリ Japanese
Okurkový Czech
Gurke German
Cucumber English
pepino Spanish
cetriolo Italian
agurk Danish
الخيار Arabic
ketimun Indonesian
מלפפון Hebrew
Cogombre Catalan
CUCUMBR LOLCats
Agurk Norwegian
黄瓜 🥒 🥒 Korean
gurka Swedish
castravete Romanian
ogórek Polish
Kurk Estonian
dưa chuột Vietnamese
uhorka Slovak
gurķis Latvian
Agurkas Lithuanian
Salátauborka Hungarian
Kurkku Finnish
Краставица Bulgarian
Pepino Portuguese

🥒 🥒 Korean
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Краставица Bulgarian
Pepino Portuguese

來看範例

純文字 Feature

功能： 除法

為了避免愚蠢的錯誤
收銀機必須要能夠計算除法
而且必需能顯示非整數的結果

場景： 將兩個數相除

假設我已經在計算機上輸入 3
而且我已經在計算機上輸入 2
當我按下 divide
那麼螢幕上應該顯示 1.5

Ruby code

```
Given /我已經在計算機上輸入 (\d+)/ do |n|  
  @calc.push n.to_i  
end
```

```
When /我按下 (\w+)/ do |op|  
  @result = @calc.send op  
end
```

```
Then /螢幕上應該顯示 (.*)/ do |result|  
  @result.should == result.to_f  
end
```

整合測試

Web Integration Testing

Feature: 購物車

Scenario: 把書放進購物車

Given I am on the "1934356085" book page

When I press "Add to Cart"

Then I should see "Programming Ruby 1.9"

Ruby Code

```
Given /^I am on (.+)$/ do |page_name|  
  visit path_to(page_name)  
end
```

```
When /^I press "([^"]*)"$/ do |button|  
  click_button(button)  
end
```

```
Then /^I should see "([^"]*)"$/ do |text|  
  response.should contain(text)  
end
```

Ruby Code

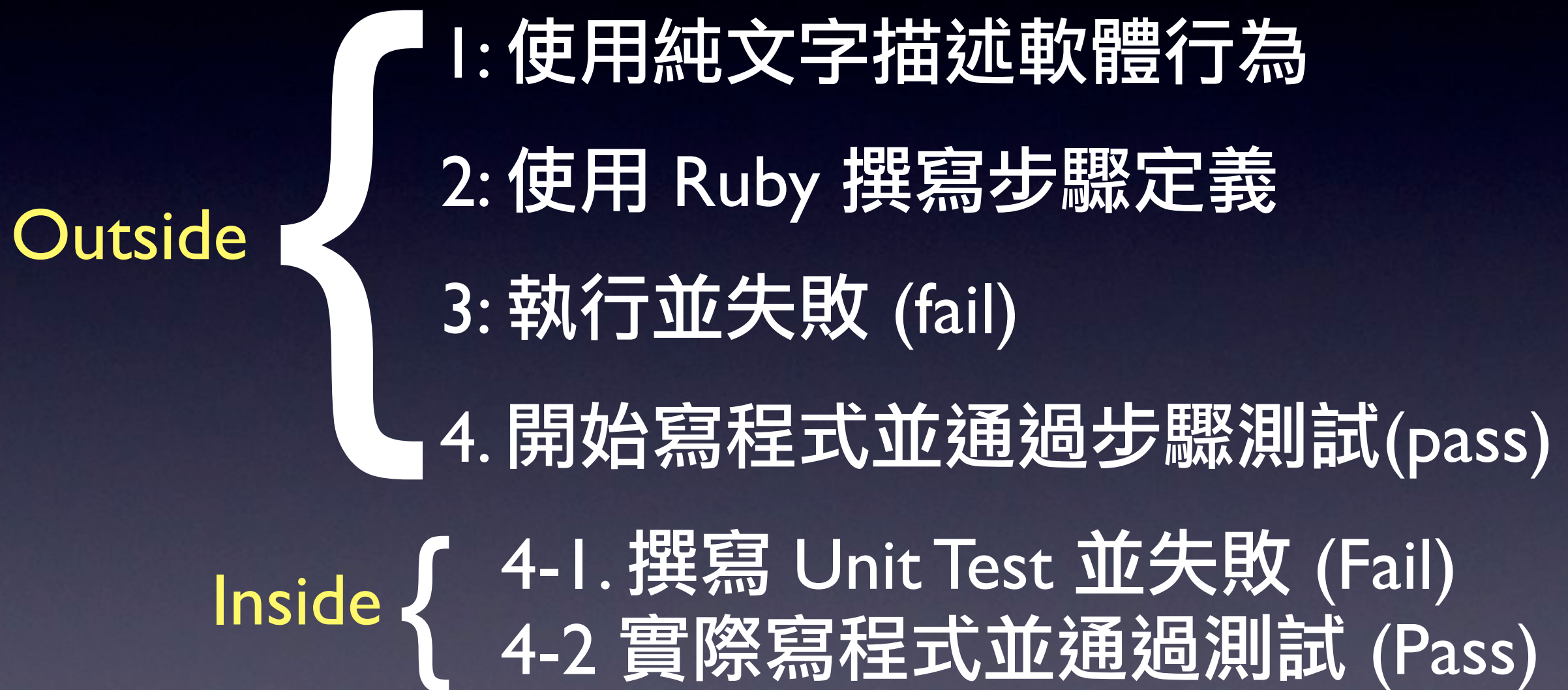
```
Given /^I am on (.+)$/ do |page_name|  
  visit path_to(page_name)  
end
```

```
When /^I press "([^"]*)"$/ do |button|  
  click_button(button)  
end
```

```
Then /^I should see "([^"]*)"$/ do |text|  
  response.should contain(text)  
end
```

每個步驟自然而然成為可重複使用的單元，鮮少需要重構測試碼。

由外而內的小黃瓜開發方式



thank you.

<http://cukes.info/>