



Example Mapping



About Me

River

Currently working as a dept lead, and also a speaker and volunteer in the DDDTW community. Years of software development experience. Like to study kinds of open source tools and bring them to work to increase efficiency. Believe that smart laziness is the most important characteristic of engineers.



Knowlege

		Known	Unknown
Developer / Tester	Known	Know Kno	Unknown Known
	Unknown	wn known	Unknown Unknown
		Bussines Analyst	

Traditional Specifications

Discovery Workshop



開發人員
Dev

領域專家
BA

測試人員
Tester

UX

任何與專案
有關係的人

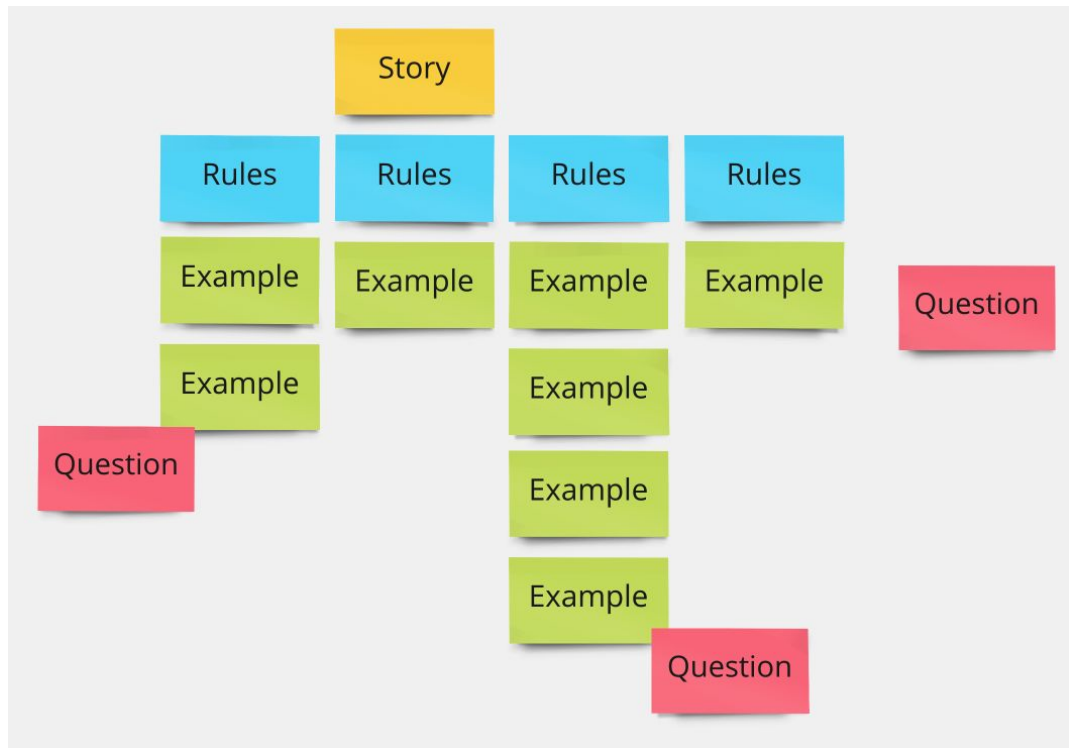
Example Mapping

故事
Story

規則
Rule

範例
Example

問題
Question



Example Mapping

- 小河 想喝啤酒
- 小河 未滿 18

- <前題>
- <做了什麼事>
- <預期結果>

- 假設 A1
- 當我想買
- 我得到 B1-10

以買啤酒

5 歲了

- 他坐公車可以使用敬老票

身障手冊的人搭公車呢??

在這個功能尊榮會員有那些特殊待遇??

訂單要保留

我們該用那種方式來安排坐位?

Discovery workshop 要準備的東西



平整的桌面

4 色卡片

計時器

粗字簽字筆 (不要用原子筆)

找到足夠的人參加

開放的心胸

或是

Miro

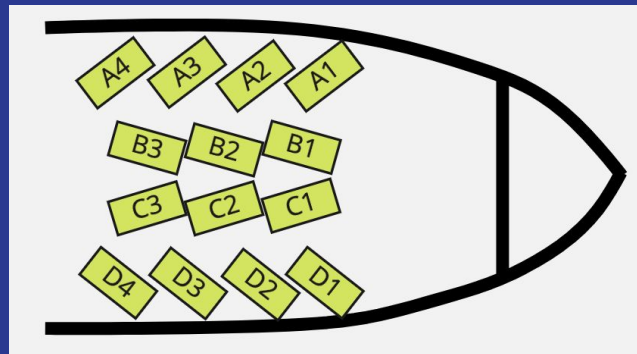
Story

Book Flight Ticket

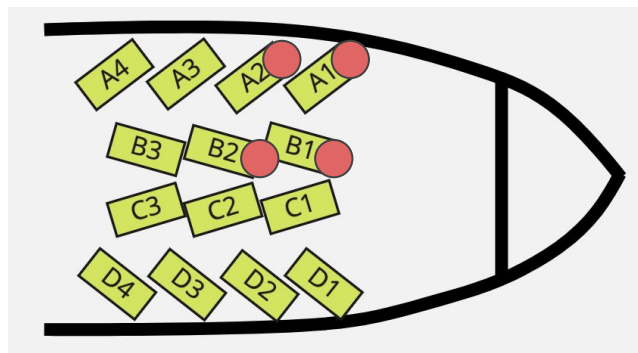
身為一個旅客，我想要在 Trip Service 上購買機票，這樣子我可以找到合適的機票並旅行到其他國家。

Rule

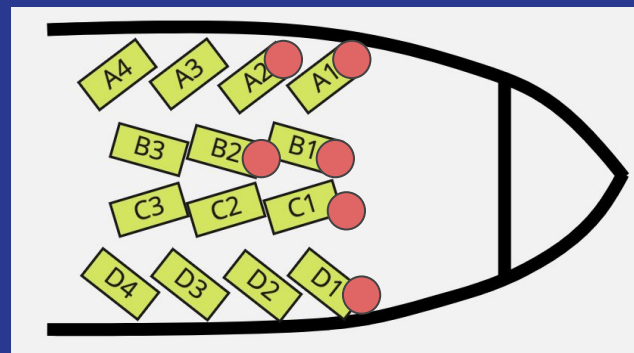
- 線上訂位最多只能訂到 60% 的位子



Example - 1



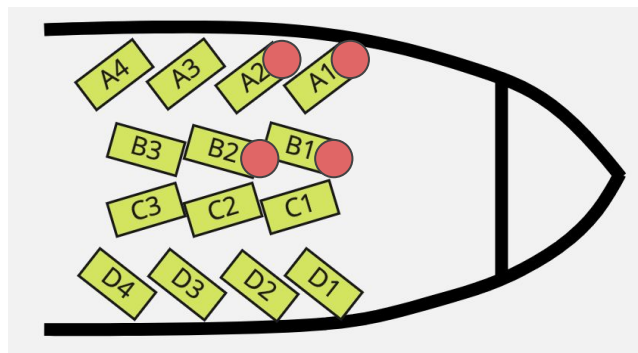
→ Book 2 →



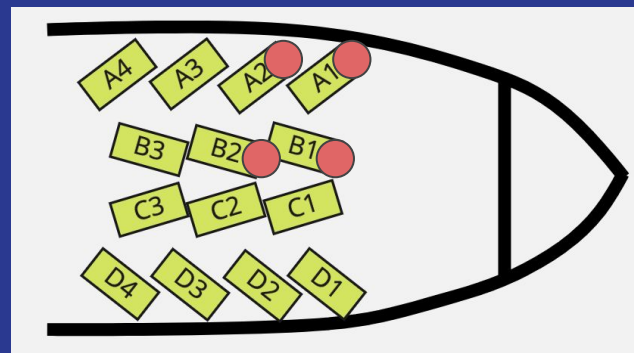
- 線上訂位最多只能訂到 60% 的位子

在 A1, A2, B1, B2 已被訂位的時後，
有人訂了 2 個位子。那會得到
C1, D1

Example - 2



→ Book 4 →



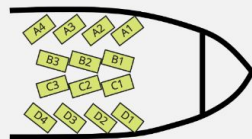
- 線上訂位最多只能訂到 60% 的位子

在 A1, A2, B1, B2 已被訂位的時後,
有人訂了 4 個位子。那訂位會失敗

$\text{total} / \text{booked} < 60\%$,

變成 Example Mapping

順便把想到的問題寫下來



Book Flight
Ticket

Rules

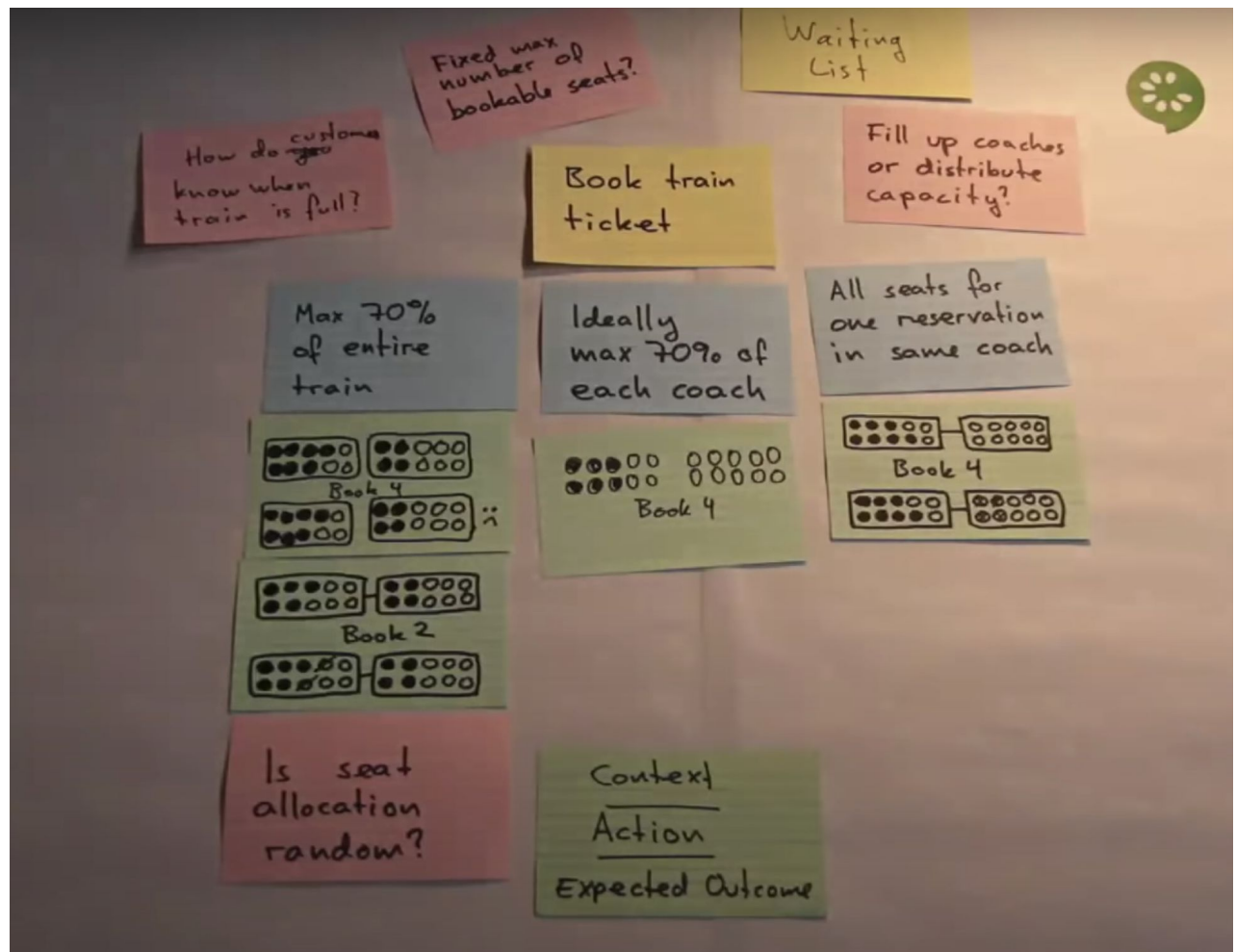
線上訂位最多只能訂到
60% 的位子

在 A1, A2, B1, B2
已被訂位的時後,有人訂了
2 個位子。那他會得到
C1,D1

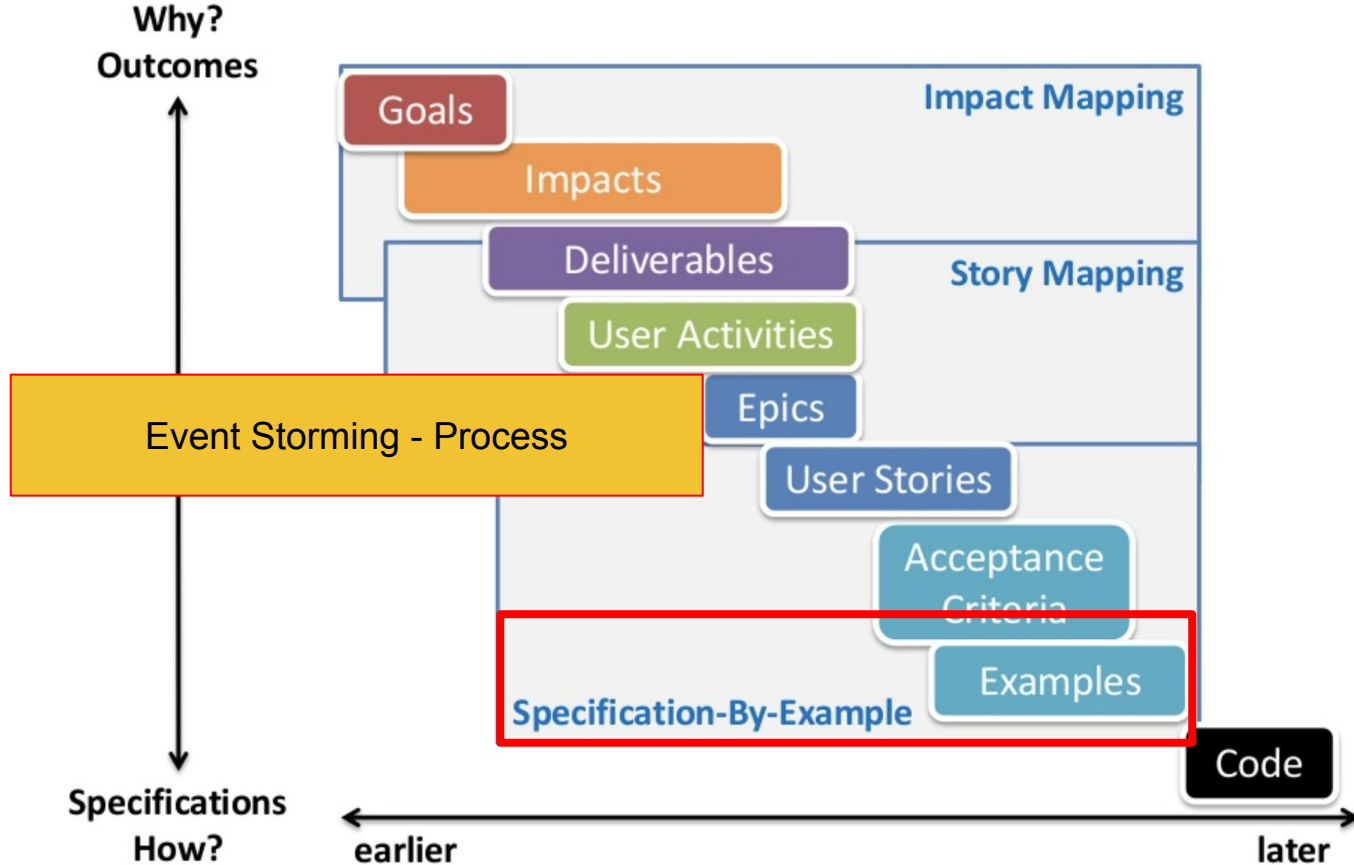
在 A1, A2, B1, B2
已被訂位的時後,有人訂了
4 個位子。那訂位會失敗

C1, D1
是如何決定的?

Introducing Example Mapping



Agile Product Ownership



最後

BA

- 這些是你全部要傳達給 Developers 的資訊了嗎?
- 有沒有還沒說到的?

Tester

- 這些資訊足夠我進行測試系統, 並且確認系統如預期的運行?

Developer

- 這些資訊足夠我開發了嗎?
 - 我是不是能夠在一個 Sprint 中完成他
-

動手時間： 找出系統中 Example 及 Rule

20 minutes

Exmaple Mapping 是一個很短的活動，記得先訂下一個小鬧鐘，不要太長(30分鐘以內)!!!

User Story from your backlog

列出所有的 Rule

列出想的到的範例

提出疑問、挑戰所有的假設、展開更多的 example

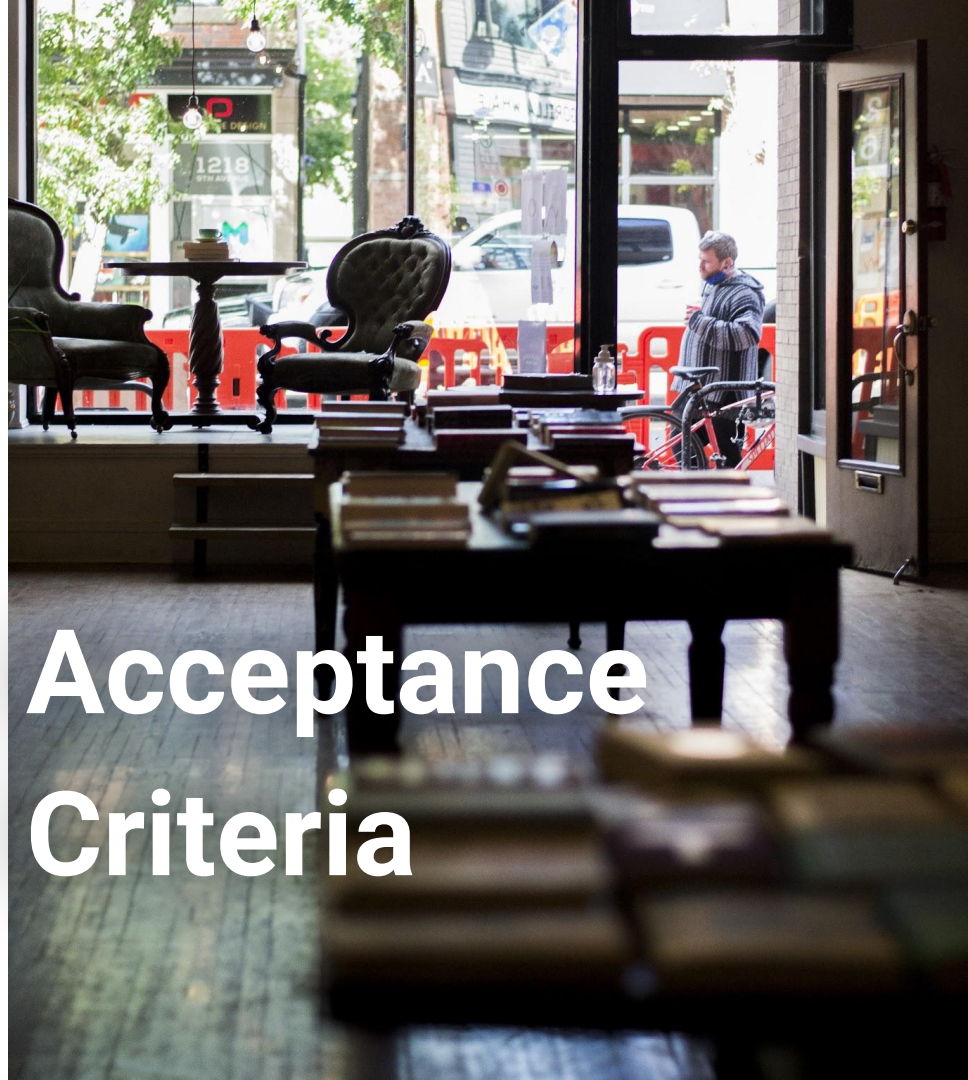
建議的部份

- 解釋一下 ES 還有 bussiness / process level 的部份
- 不要讓使用者花太多時間在上面
- 這是在開發之前最後的發想, 要在業務範圍
- Example mapping 中的數字應該要明確一點
- Example 要有前提、執行、預期結果
- 要 recall 一下, 讓 sbe , aggregate, 更完整 (購物的 discount , 票務)
- 關鍵 Example !!

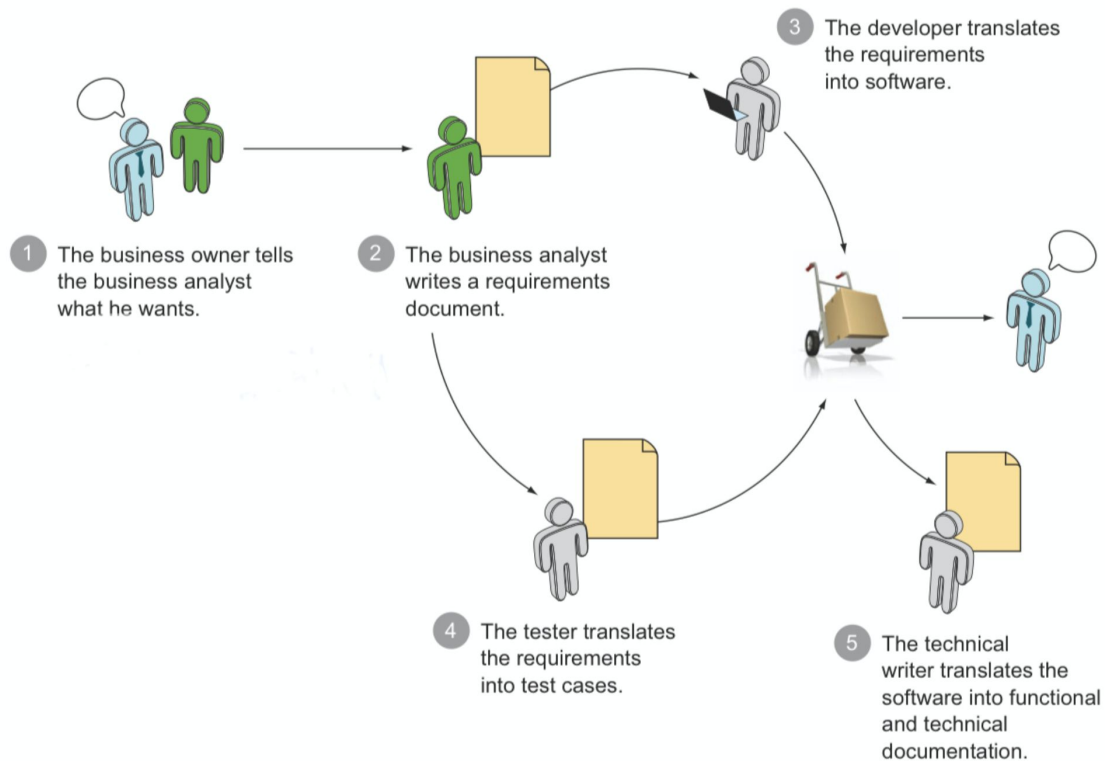


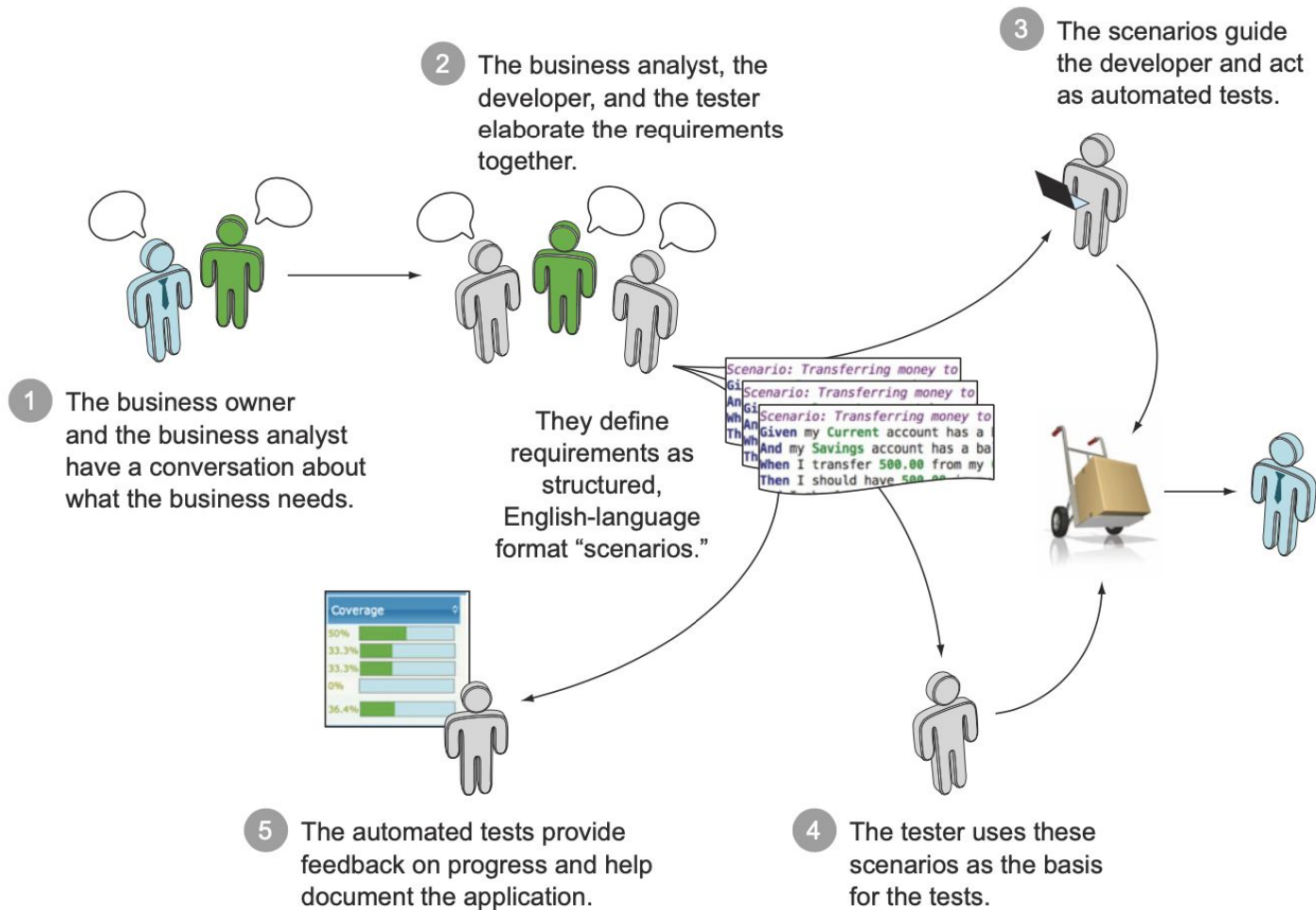
What Next?

**Acceptance
Criteria**



我們習慣的方法





利用實例來溝通 - Cucumber.io

Gherkin Syntax



What is Gherkin

Gherkin 是一種可以解釋系統運作、可讀性高的語法，由 Cucumber 提出。它可以被 BDD 的自動化工具理解並執行。



What is Gherkin

@wip

Feature: Setup relevant payment information on mobile app

The added payment will be used to pay for virtual merchandise on MANOVA's headset

Background:

Given a user has logged in as Chousir on companion app

And Chousir has set region as TW

Given a user has logged in as Sakura on companion app

And Sakura has set region as JP

EBXRS-90

Scenario Outline: Choose payment to be bound to MANOVA account

Given a user as <role>

When <role> tends to bind a payment to his/her MANOVA account

Then the payment list that <role> can choose should be <payments>

Examples:

role	payments
<u>Chousir</u>	<u>tappay</u>
<u>Sakura</u>	<u>paypal_express</u>

Gherkin - 基本語法

```
Scenario: user should get category list with locale
  Given a user who is logged in the HMD
  When get category list with locale
  Then the result should contain correct category list
```

Given - Precondition

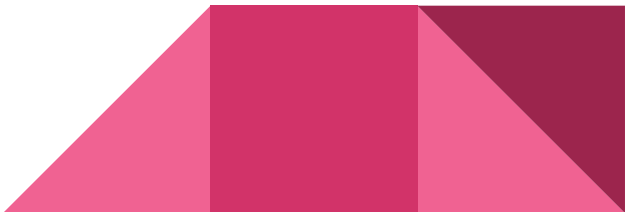
When - 執行動作

Then - 期待的結果

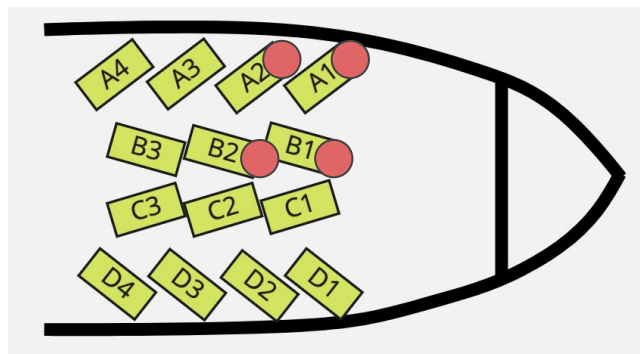
Scenario - 測試案例的名稱



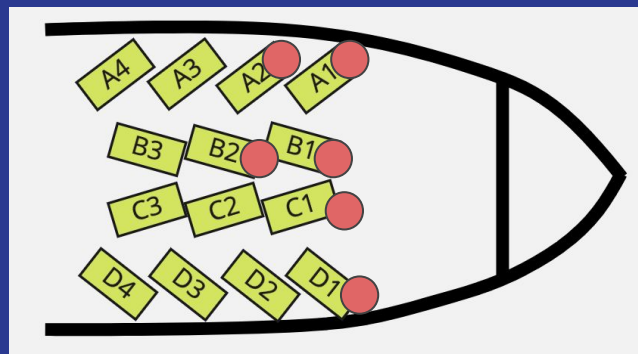
Gherkin - 的關鍵字

- Given
 - When
 - Then
 - And
 - But
 - Scenario
 - Feature
 - Background
 - Scenario Outline
 - Examples
- 

Example - 1



→ Book 2 →

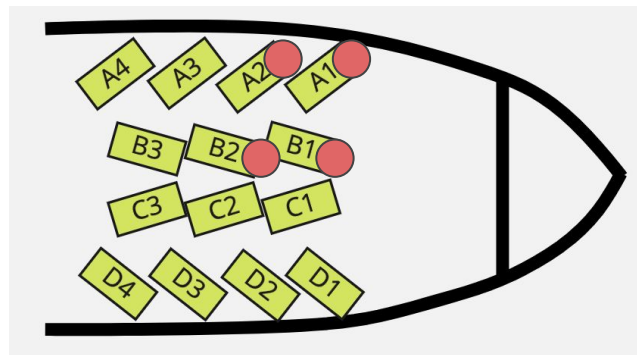


- 最多只能訂到 60% 的位子

在 A1, A2, B1, B2 已被訂位的時後,
有人訂了 2 個位子。那會得到
C1, D1

Scenario - User book seats

在 A1, A2, B1, B2 已被訂位的時後, 有人訂了 2 個位子。那他會得到 C1, D1



Scenario: User book seats

Given A user as River

And the seat on the flight A1, A2, B1, B2 has booked

When he book 2 seats

Then he should get the seat C1, D1

動手時間

10minutes

找出 Rule

找出 examples

找出 Rule - 複雜版



Rule - 僅顯示出發與目的地之間的航班 - Background

Background:

Given Flights as below

Flight number	Depart	From	To	Price
CI0220	2020-01-12 03:30:00	桃園(TPE)	函館(HKD)	1800
CI0220	2020-01-12 18:30:00	桃園(TPE)	函館(HKD)	2120
CI0501	2020-01-12 09:15	函館(HKD)	東京羽田(HND)	3301
MF9029	2020-01-13 17:35	高雄(KHH)	東京羽田(HND)	997
CA5514	2020-02-01 08:30:00	桃園(TPE)	高雄(KHH)	866

Scenario I

Search flight from TPE to HKD

Scenario: Search flight from TPE to HKD

Given A user as River

And he wants to flight from TPE to HKD

And depart time is 2020-01-12

When he search

Then flowing flights will show

Flight number	Depart	From	To	Price
CI0220	2020-01-12 03:30:00	桃園 (TPE)	函館 (HKD)	1800
CI0220	2020-01-12 18:30:00	桃園 (TPE)	函館 (HKD)	2120

Scenario II

Search flight from TPE to HKD in a time without any flights

Scenario: Search flight from TPE to HKD in a time without any flights

Given A user as River

And he wants to flight from TPE to HKD

And depart time is 2020-02-12

When he search

Then flowing flights will show

Flight number	Depart	From	To	Price
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Scenario III

Search flight to a airport without any flight fly to

Scenario: Search flight to a airport without any flight fly to

Given A user as River

And he wants to flight from TPE to DTT

And depart time is 2020-02-12

When he search

Then flowing flights will show

Flight number	Depart	From	To	Price
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Scenario III

Search flight to a airport without any flight fly to

Scenario: Search flight to a airport without any flight fly to

Given A user as River

And he wants to flight from TPE to DTT

And depart time is 2020-02-12

When he search

Then flowing flights will show

Flight number	Depart	From	To	Price
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各項秘訣

- Scenario: Scenario 通常代表著一個**業務規則**，因此一份 feature 檔案可能需要多個 Scenario。所以要簡單扼要的表達他的**重點**以及特殊之處
- Given : 可以用「過去完成式」、可以加上表格

Given 系統有一名使用者資料如下：

email	name	age
test@mail.com	test	20

- When: 描述「做什麼 (what to do) 」而非「怎麼做 (how to do)」
 - 「送出」(What to do) vs. 「游標移到送出送出按鈕, 然後按下」 (how to do)
- Then: 每一句都加上「Should」、「應該」
 - 「訂單應該要被建立」 vs. 「訂單被建立」
- 專注在**有價值**的行為, 減少 UI 細節或技術細節。



Thanks

請幫忙填填問券，讓我們可以把活動辦的更好