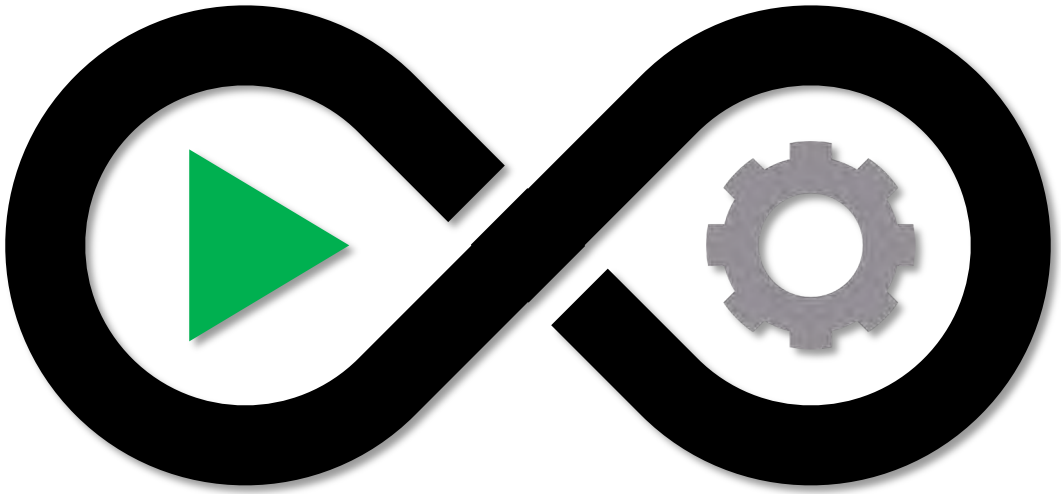
Example Mapping

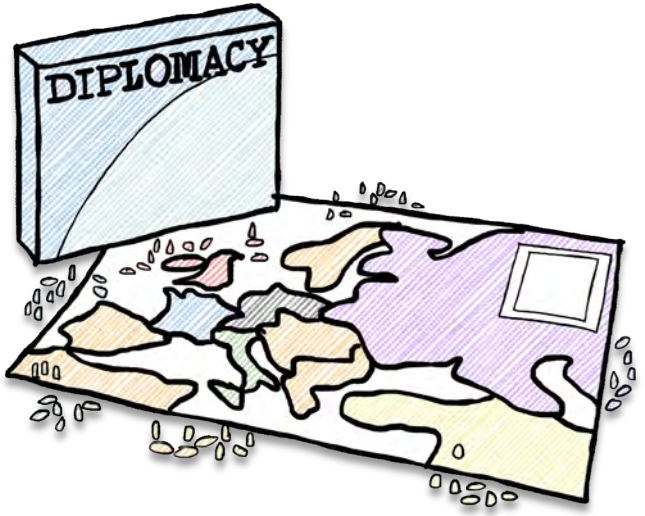
The New Three Amigos

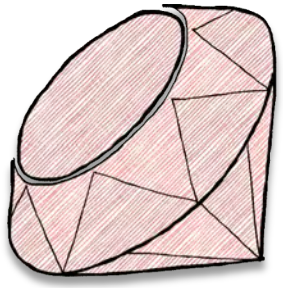


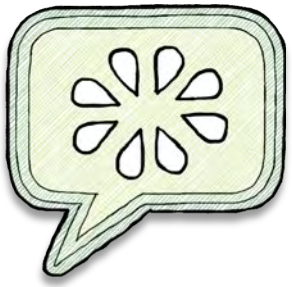
About Me

@COGSfun

https://red-green-refactor.com/

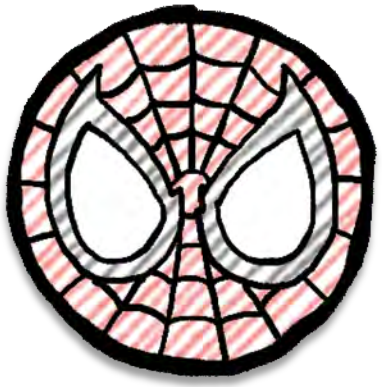


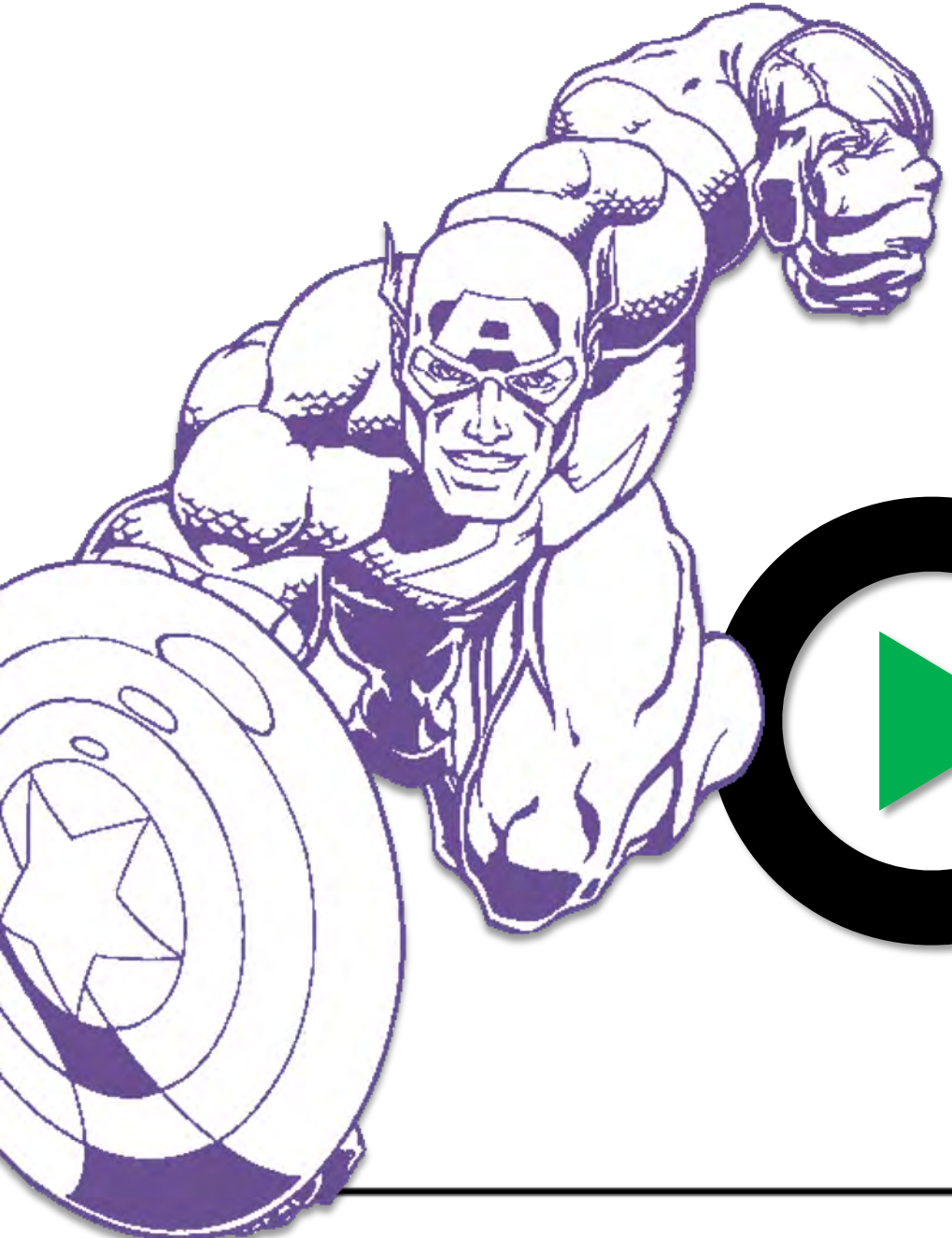




Ground Rules for Today

- There will group activities
- Participation in our activities is voluntary
- Questions are welcome at any time





Rules and Examples with a Blockbuster Movie

Group Activity | Blockbuster Movie

- Form teams with the people sitting closest to you.

As a big-time Hollywood movie executive

I want to create the next blockbuster movie

In order to make a lot of money

- Write three **RULES** for a blockbuster
- Don't share your rules with other attendees
- Sample rule: "Comic Book character is featured"

Adapted from Matt Wynne, "Stories, Rules, and Examples." (BDDx, 2014)

Group Activity | Blockbuster Movie

- Create three **EXAMPLES** that illustrate your rules

The movie is released on the July 4th weekend

Will Smith starring alongside Aliens

Group Activity | Blockbuster Movie

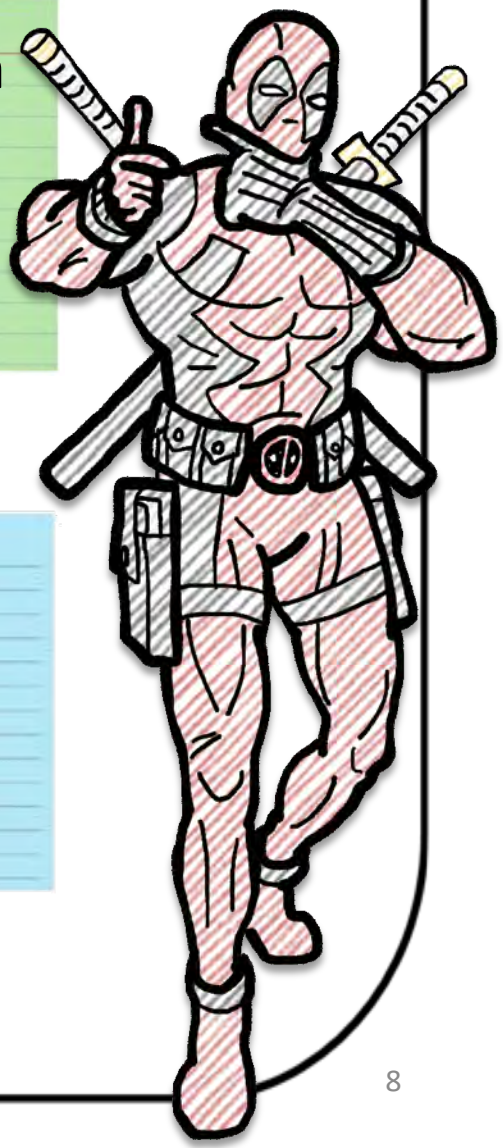
- Share your **EXAMPLES** with another team.
- Attempt to guess the other team's rules.
- Your team may create new **EXAMPLES** and ask the other team to confirm the examples meet the **RULES**.
- **How many examples did it take to guess the rules correctly?**

Group Activity | Blockbuster Movie

The movie is released on the July 4th weekend

Robert Downey Jr is the lead actor

Deadpool kills Ryan Reynolds before he can star in the Green Lantern



Must release on a Holiday

Must feature an established Hollywood Star

The movie breaks the fourth wall

Group Activity | Blockbuster Movie

Why do we need both **RULES** and **EXAMPLES**?

Use the **EXAMPLES** to illustrate the **RULES** of **USER STORIES**

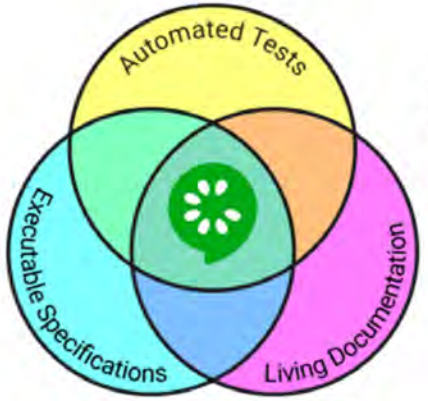
Examples

Examples

- Examples can take various forms: input-output data pairs, sketches of the user interface, bulleted lists of different steps of a user workflow or even an Excel workbook illustrating a calculation or a report.
- All examples describe a behavior as a combination of **context**, **action**, and **outcome**.

- Some examples are **formulated** into scenarios when a user story is ready. BDD tools turn these scenarios into executable tests *before* the related behavior has been implemented in the application itself.

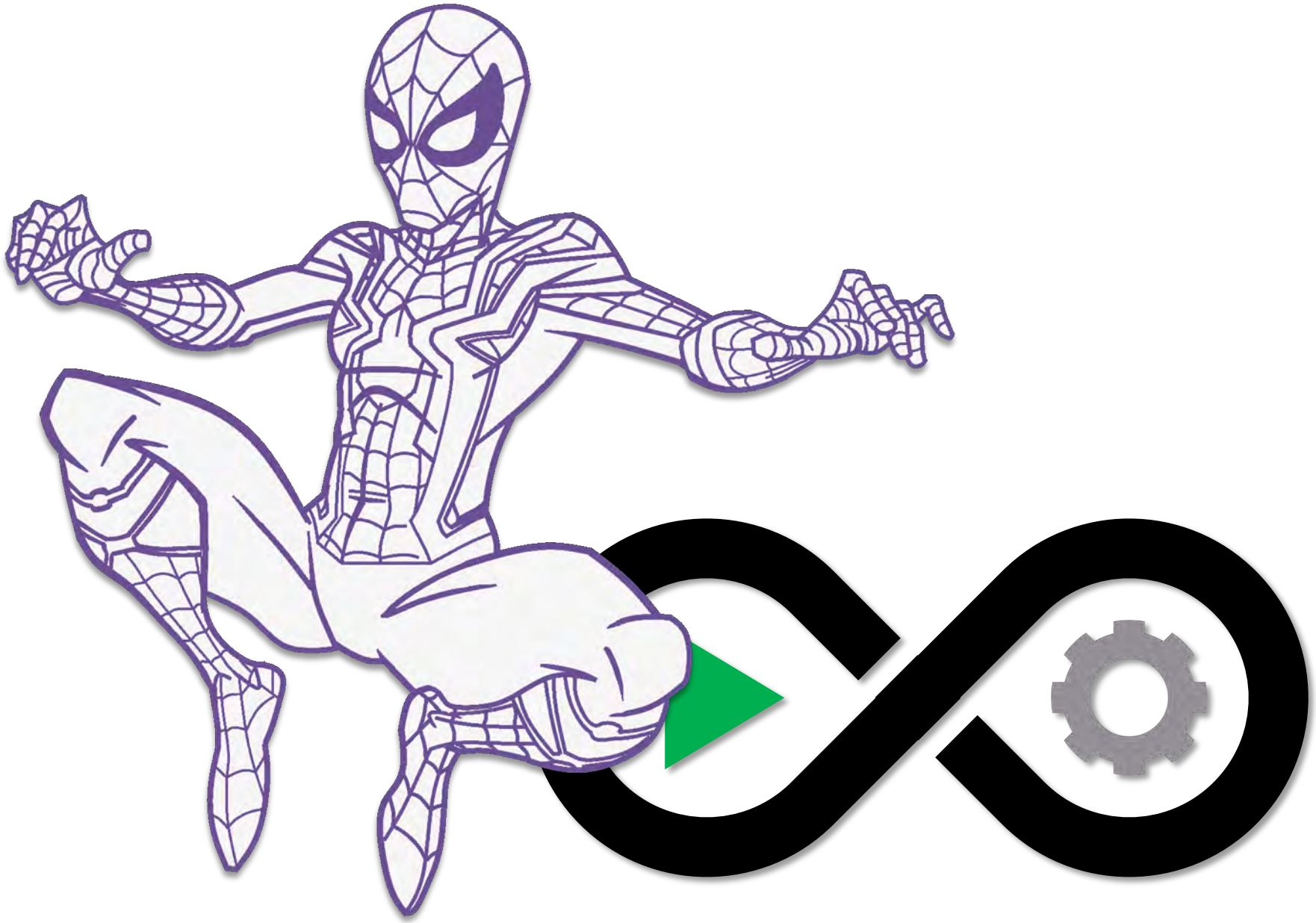
specflow



cucumber

Questions

?



BDD

User Stories | Convention

- Rachel Davies is credited with inventing:

As a [type of user]

I want [some particular feature]

so that [some benefit is received]

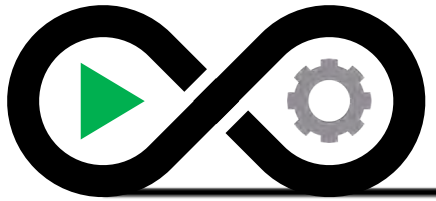
- Example:

As a bank customer

I want to view my current account balance

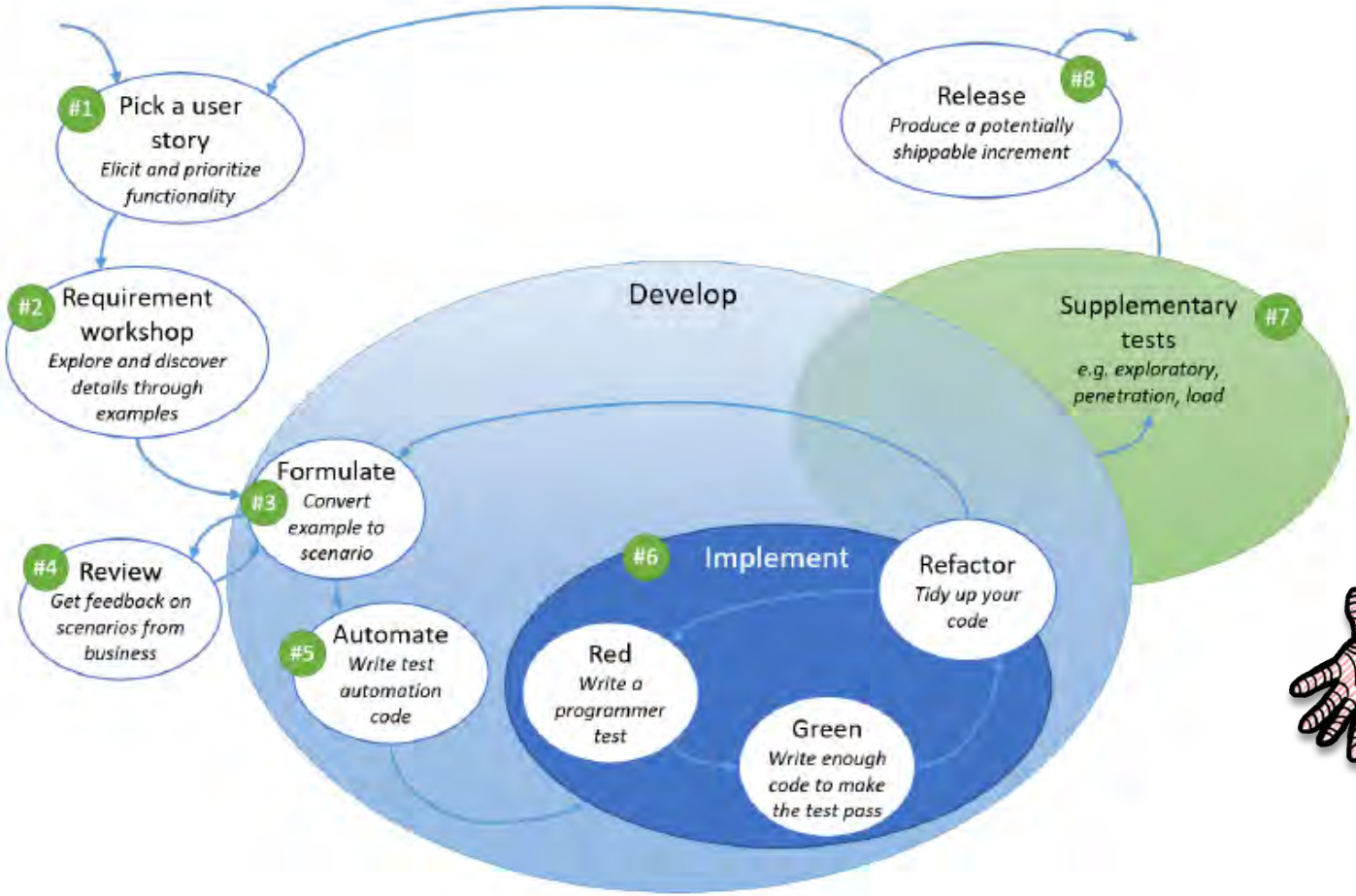
so that I know my recent deposit went through.

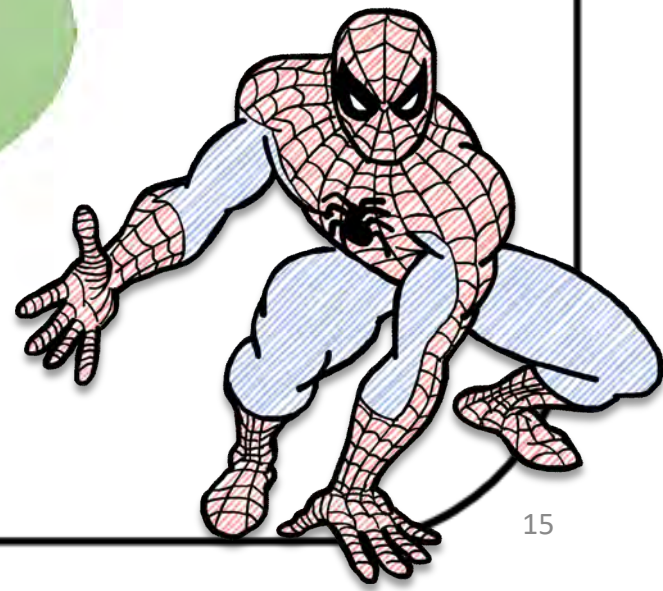
- Sometimes features that describe technology updates or UI changes don't really work with the model.



Behavior Driven Development

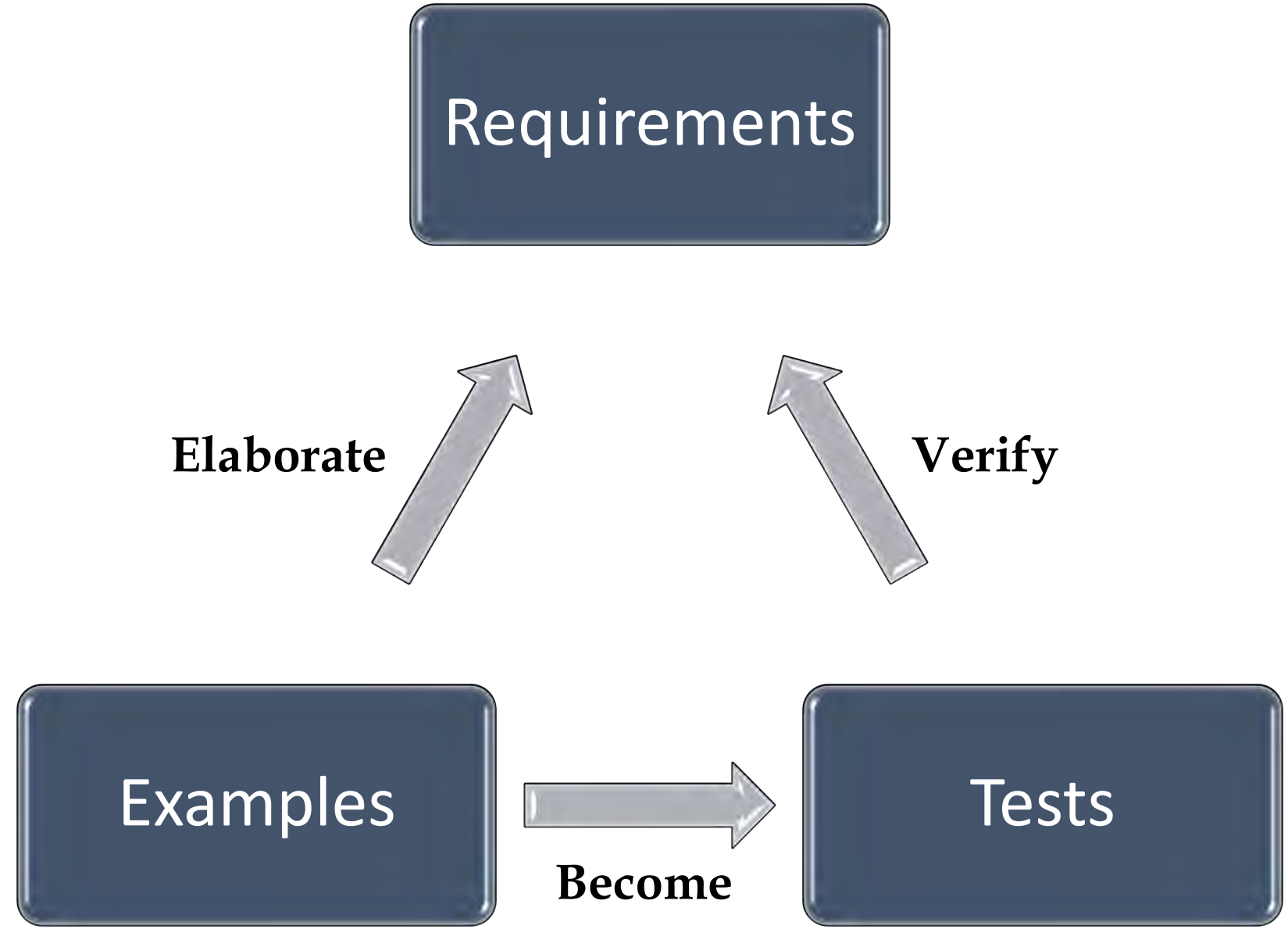
BDD promotes requirements by example, collaboration, lower cost in resolving defects, and automation in the form of business value.





John Ferguson Smart, "Serenity BDD", https://www.thucydides.info, accessed 2018-04-25.

http://bddbooks.com/


Requirements
Elaborate
Verify
Examples
Become
Tests

Encourages Collaboration

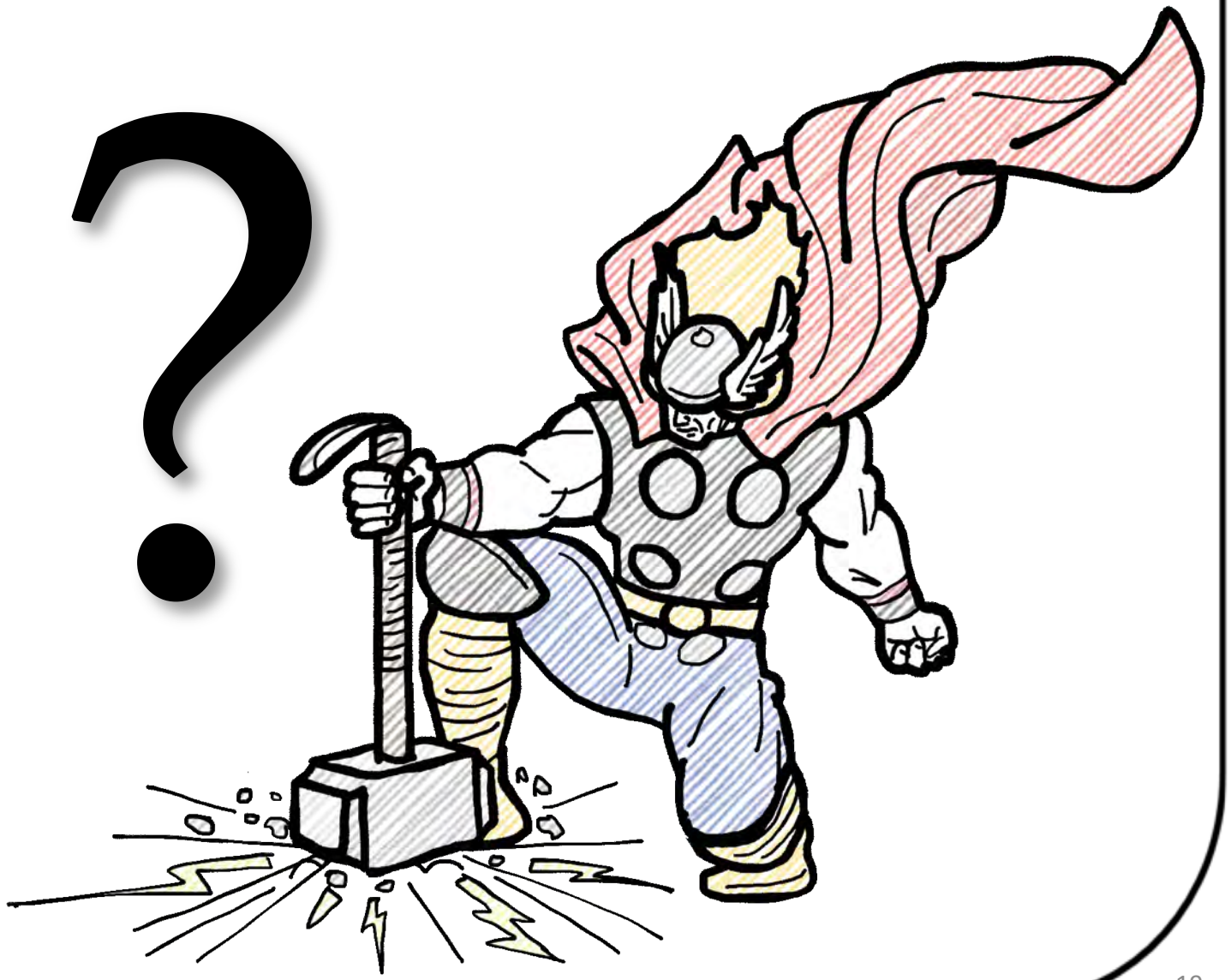
BDD requires people to work together to create the requirements / tests. All roles balance each other.

Living Documentation

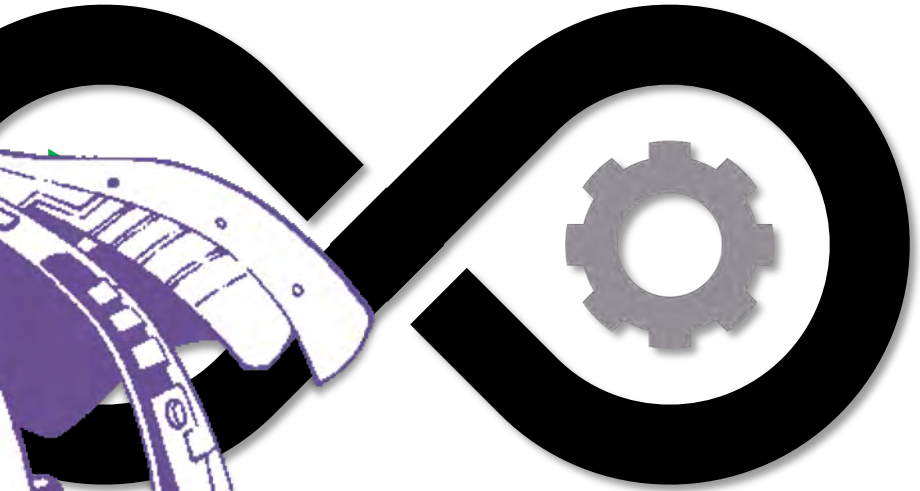
Living Documentation is a form of documentation that represents the current state of the application, which is updated in real-time.

- Scenarios make up the living documentation, which should be understandable by everyone.
- Scenarios should be written in domain-specific terms to describe the behavior of the application.

Questions

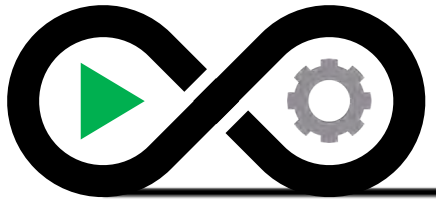


Example Mapping



From a User Story to Specifications

- Before development starts, have a conversation to **Clarify** and **Confirm**
- The Three C's
  - **Card**
  - **Conversation**
  - **Confirmation**



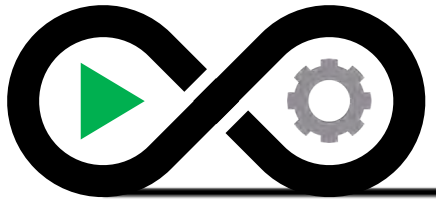
https://ronjeffries.com/xprog/articles/expcardconversationconfirmation/

Card

- User stories are written on cards.
- The card does not contain all the information in the requirement.
- The card has just enough content to identify the requirement.
- The card is a **token** that represents the requirement.

As a customer, I want to be able to search for flights between two cities to see which ones have the best price and route.
Estimate: 1.0 points
Priority: 2 - High

Example Story Card



Conversation

- The conversation is an **exchange of ideas** and opinions.
- This conversation takes place **over time**: during estimation and planning before implementation.
- The conversation is **verbal** and often supported by documentation. The best supplements are examples – specifically executable examples.

Confirmation

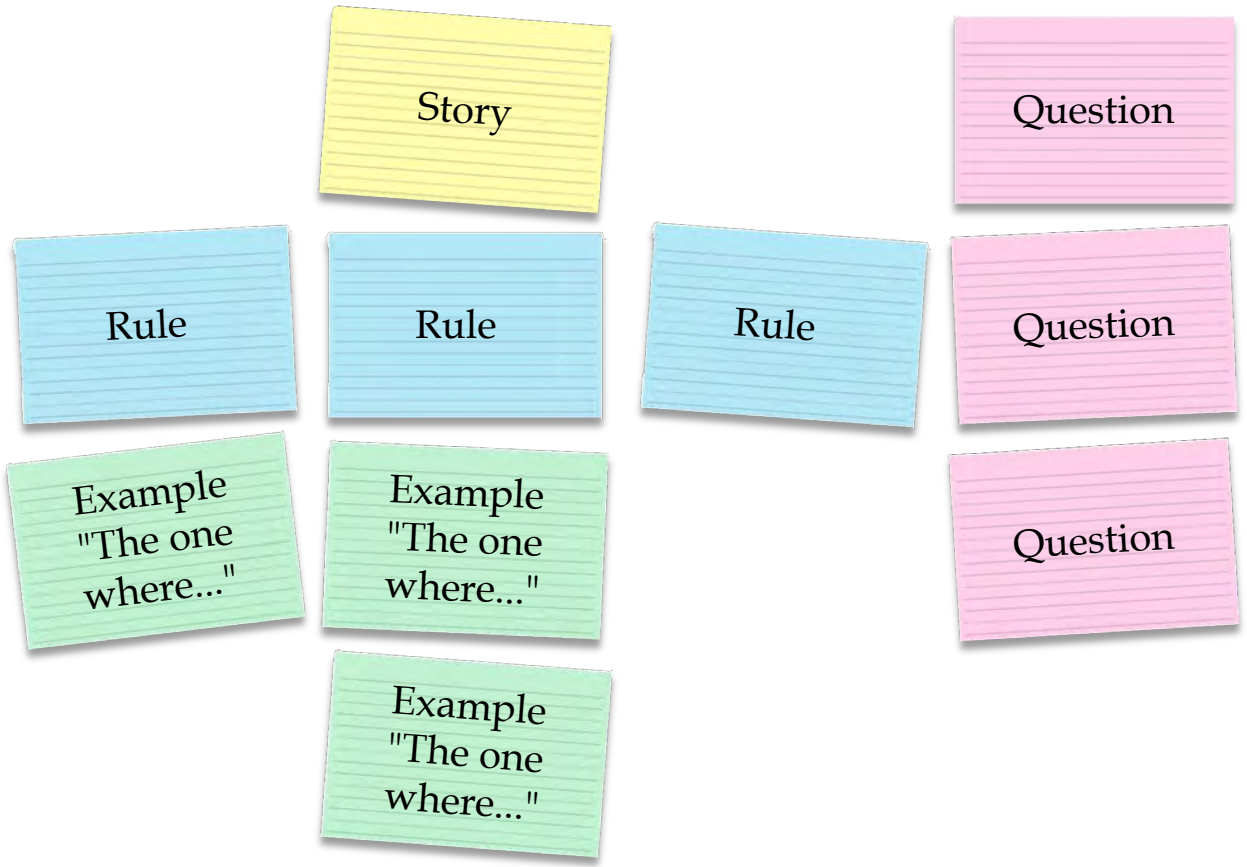
- An acceptance test.
- For complex stories, confirmation using examples (and automation) is preferred.
- The confirmation provided by the **executable specification** steers the approach of card and conversation.

Structured Conversation

Structured Conversation is a facilitated exchange of ideas that conform to a predefined form.

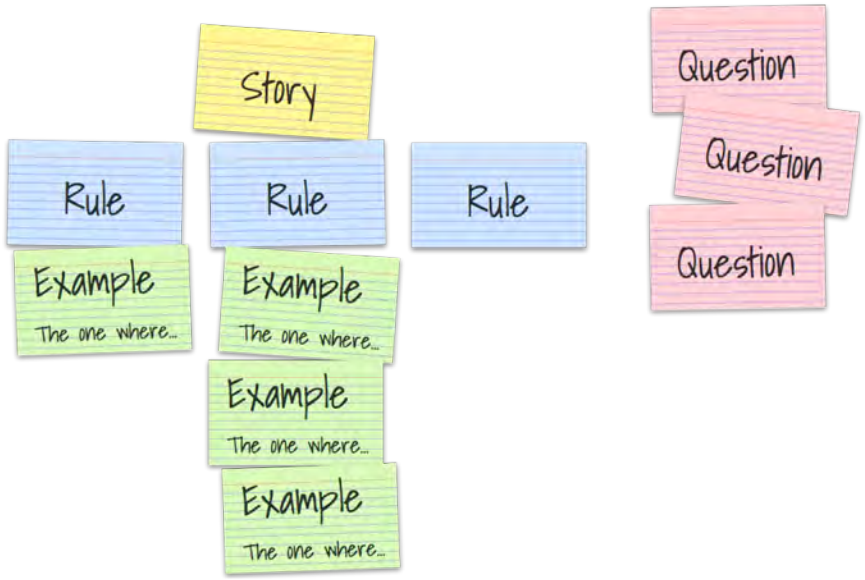
- A structured conversation is:
  - **Collaborative** - all attendees participate actively
  - **Diverse Perspectives** - all primary areas of a team are represented
  - **Short** – regular workshops in a time-box so the feedback loop is quick
  - **Progressive Focus** – capture the progress of the workshop in real-time
  - **Consensus** – agreed concrete examples measure the workshop's success

The Example Map by Matt Wynne



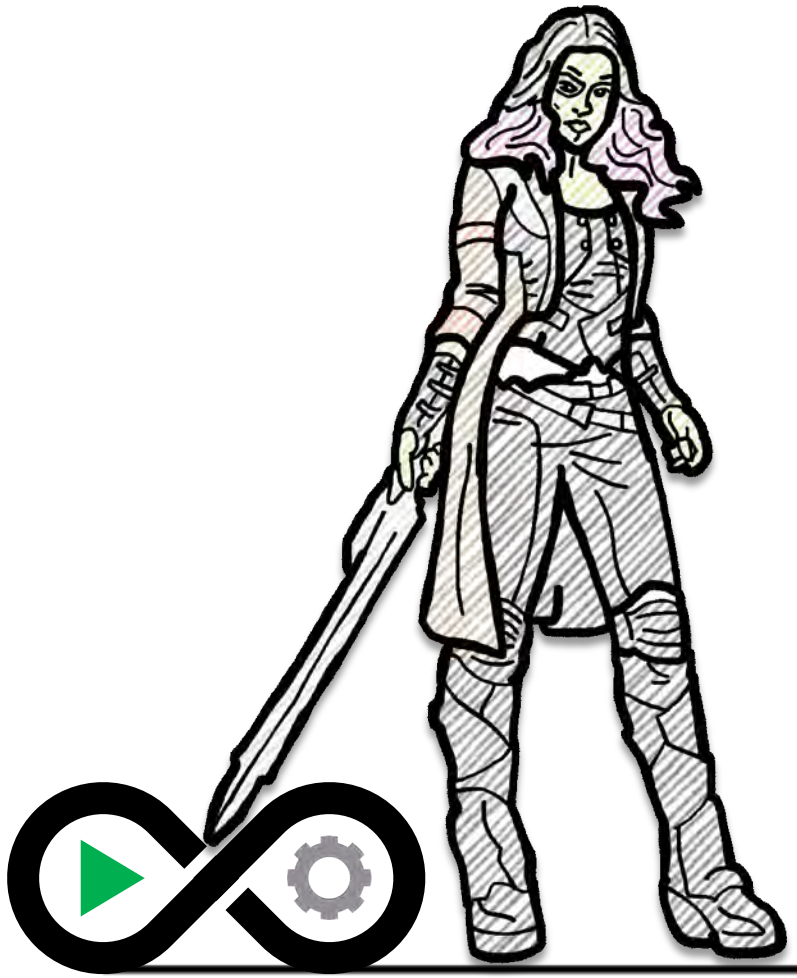
https://speakerdeck.com/mattwynne/rules-vs-examples-bddx-london-2014
https://cucumber.io/blog/2015/12/08/example-mapping-introduction

Process



- The single **USER STORY** is written on **YELLOW** card and placed at the top of the map.
- The acceptance criteria as a **RULE** is written on a **BLUE** card placed below the User Story.
- Create one or more **EXAMPLES** written on **GREEN** cards placed below each rule.
- Any **QUESTION** that no one in the workshop can answer is written on a **RED** card.
- Continue the session until a **Time-box** is met or everyone believes the story is elaborated sufficiently.

Feedback



Understanding of the User Story

Question	Development work is not ready to begin
Rule	User Story might be too large
Example "The one where..."	Rule might be too dense

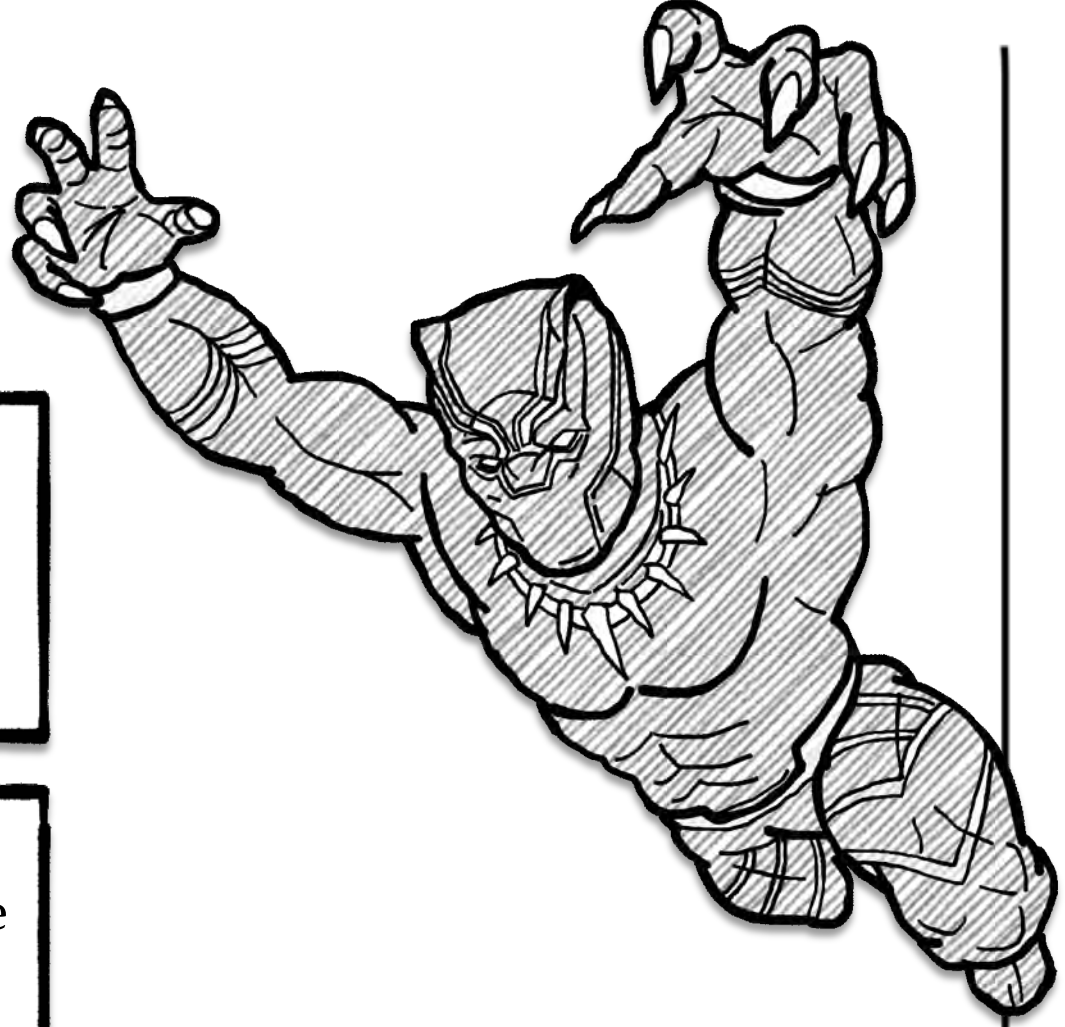
Benefits

Creates a shared understanding

Examples become user scenarios

Rules become acceptance criteria

Reduces rework of large or unclear stories

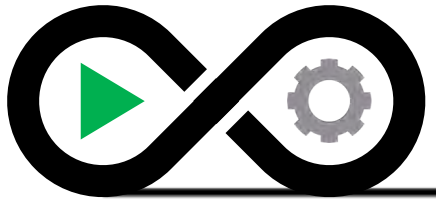


An *Example* Example Map

Present at a Virtual Conference

- Presentation must be stored in an accessible location
- Speaker must have a machine capable of AV
- Conference must have means to record presentation
- Slideshare is valid
- Lenovo ThinkPad has a built-in speaker / microphone
- GoTo Meeting is valid
- Youtube is valid
- MacBook Pro has a built-in speaker / microphone
- Confide is not valid

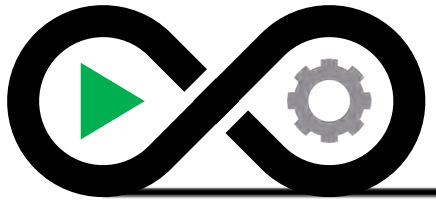
- How do you address hands-on activities virtually?
- Will the session be live for attendees?
- Will the session be edited afterward?
- Will the recorded presentation only be available to paid attendees?



A Word of Advice

Good Examples should be BRIEF:

- **B**usiness Language – enables collaboration and feedback
- **R**eal Data – helps to discover white spots in requirements
- **I**ntention revealing – way to describe the tests by focusing on what we wanted to achieve and not how
- **E**ssential – include only relevant details in the scenario
- **F**ocused – the scenarios should illustrate a single rule only



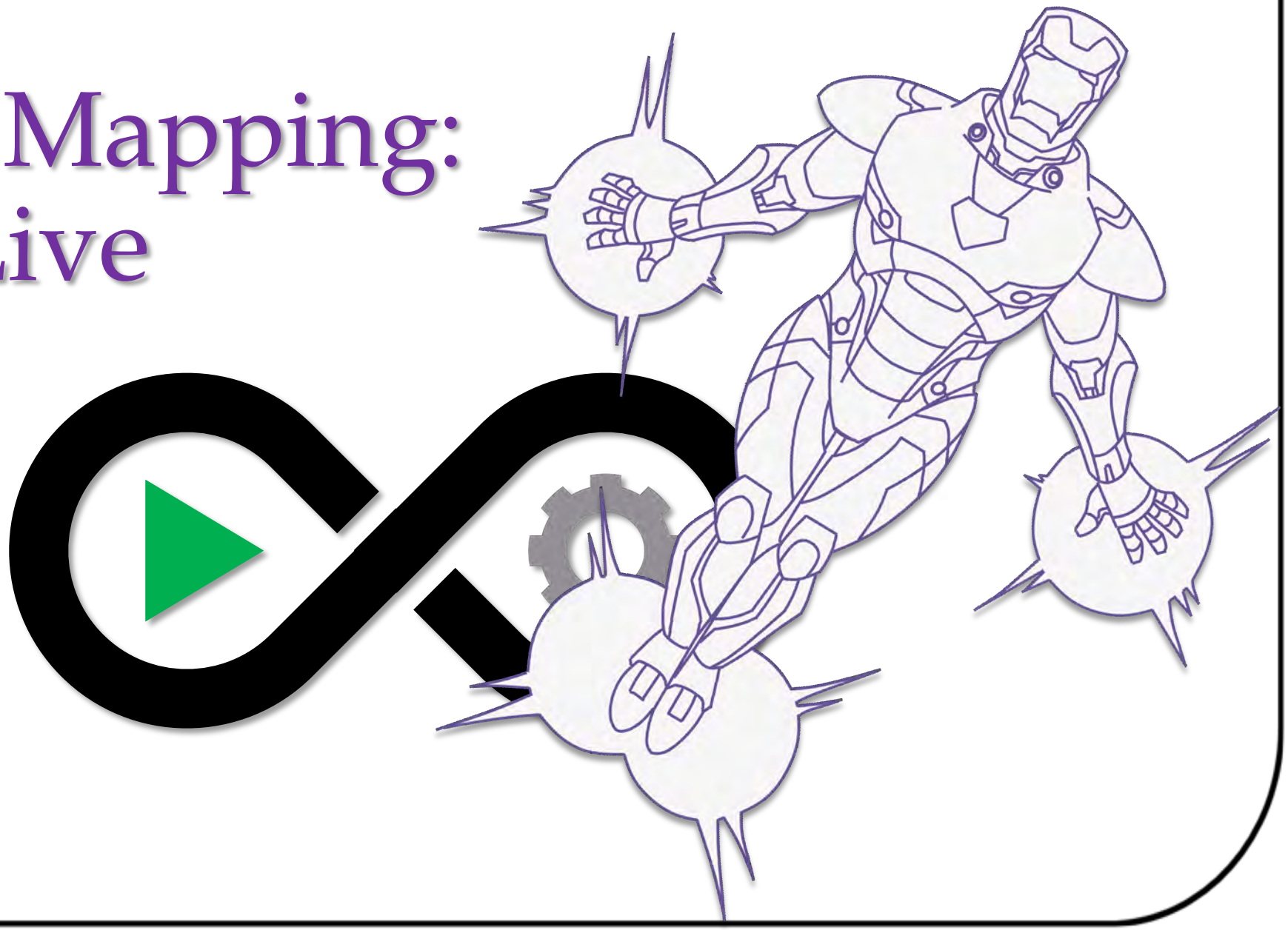
Other Common Refinement Activities

- Three Amigos
- Specification Workshop
- Discovery Workshop

Whichever method is used, these activities must be done regularly!

Workshop Background Materials:
http://www.velocitypartners.net/blog/2014/02/11/the-3-amigos-in-agile-teams/
https://gojko.net/2008/11/12/specification-workshops-an-agile-way-to-get-better-requirements/
https://dannorth.net/2010/08/30/introducing-deliberate-discovery/

Example Mapping: Do It Live

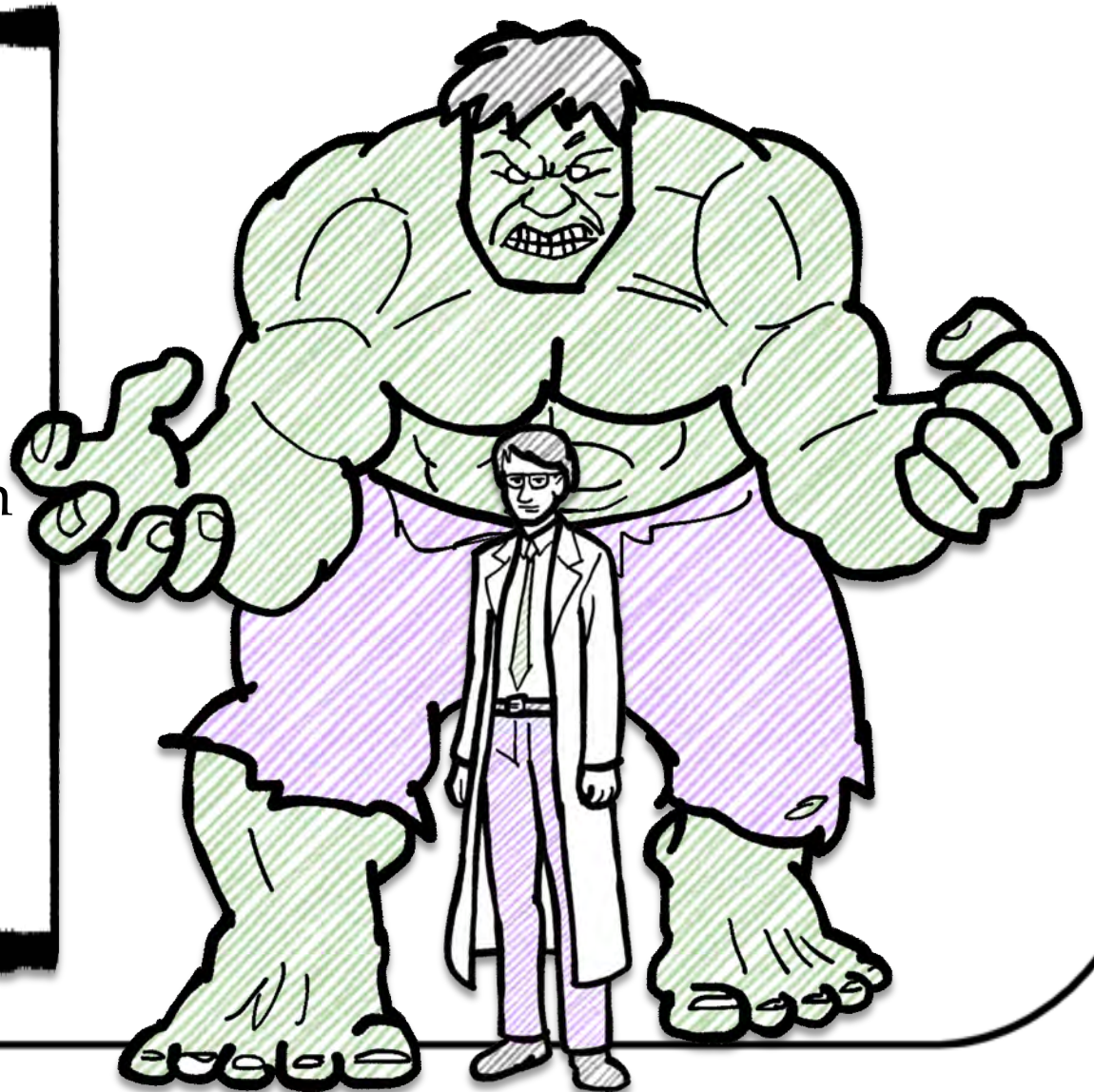


Example Mapping Group Activity

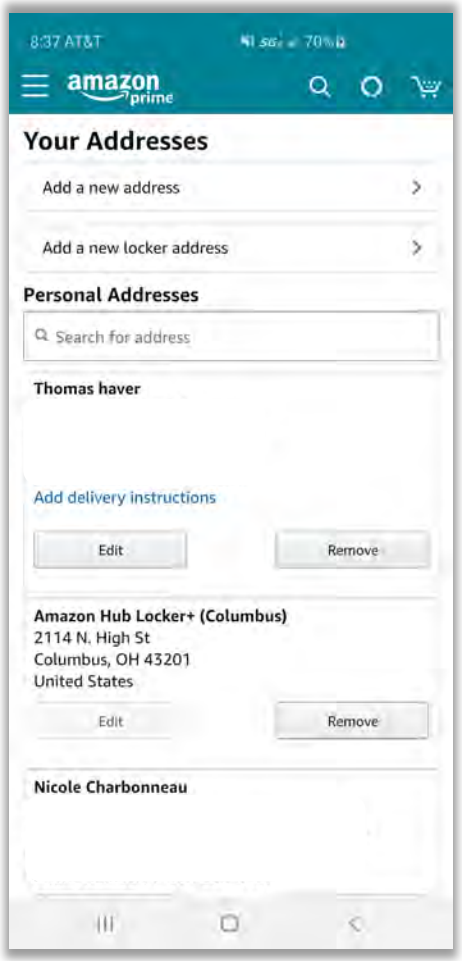
Group Activity (15-minute time-box)

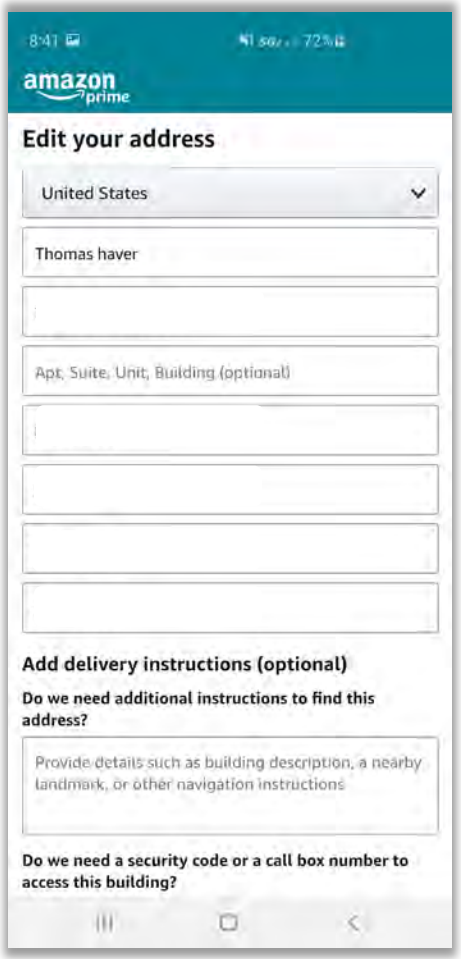
As a group, we'll conduct an example mapping session with an active User Story

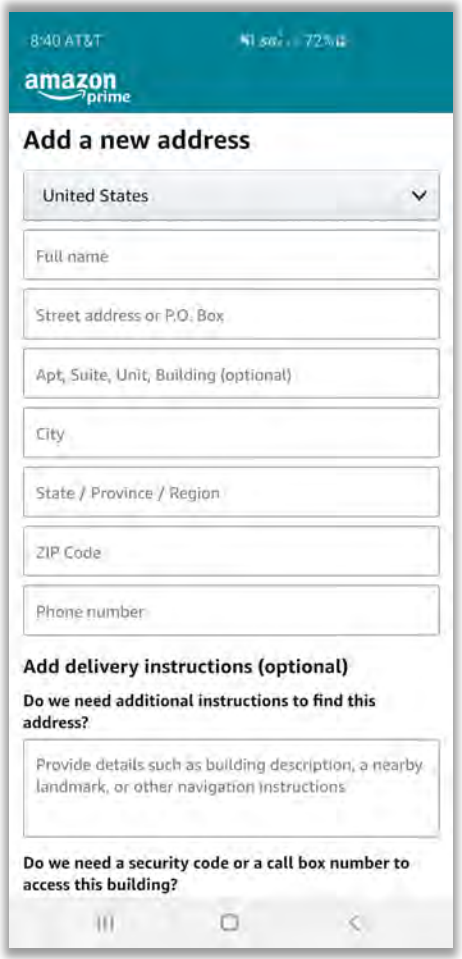
We'll review as a group



User Story Candidate





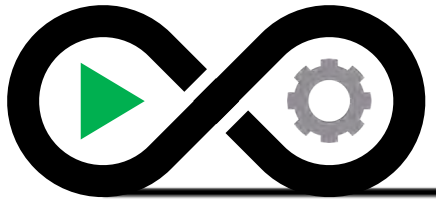


As a user

I want to add and edit my contact details

so I can keep it up to date

- Amazon Mobile App
- This is not intended to be an ideal story.



Questions

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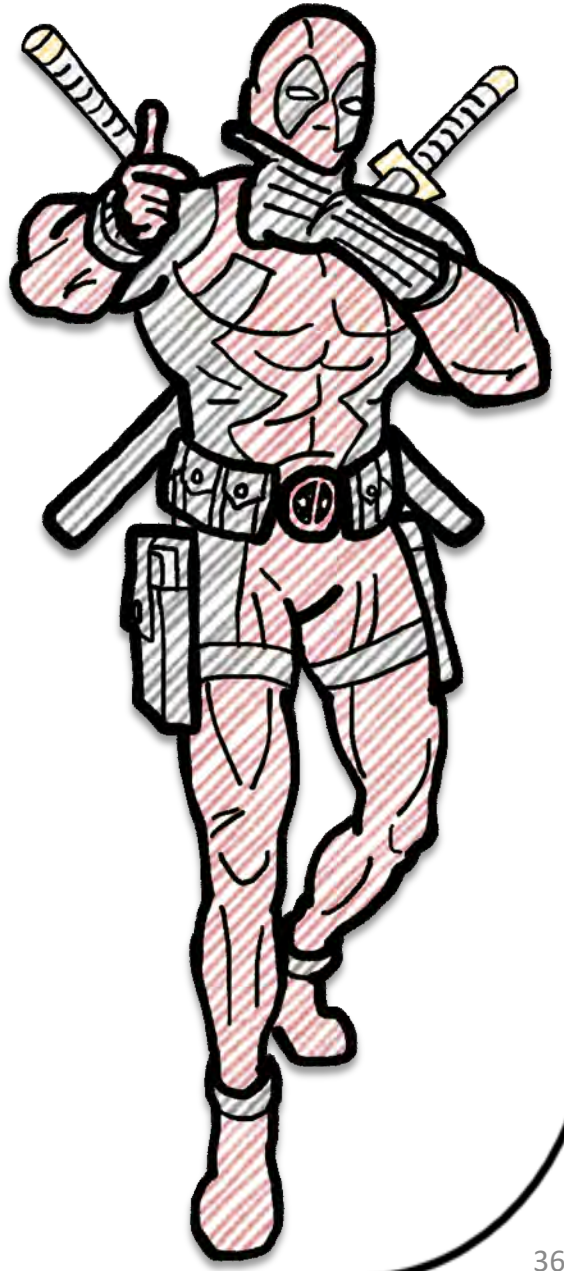
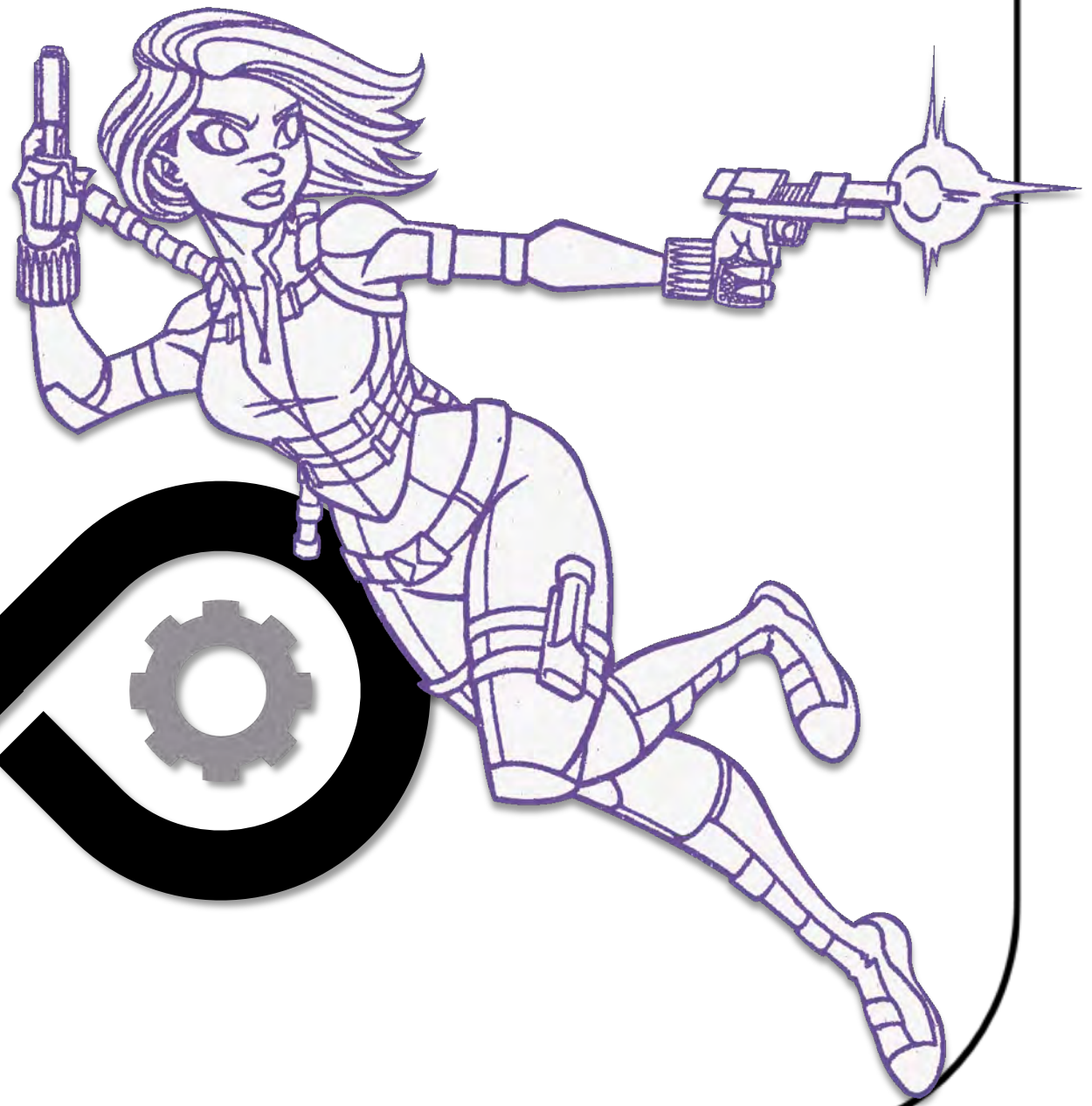


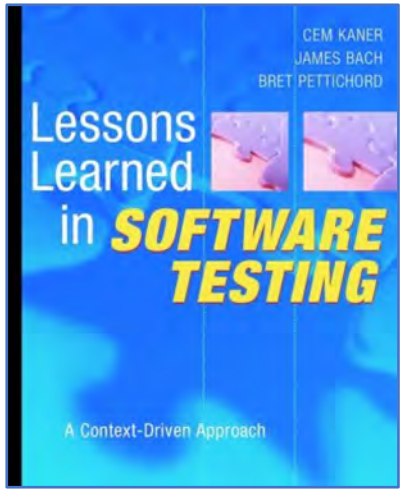
M&T Tech

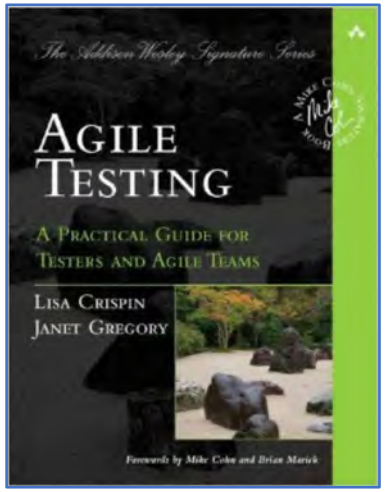
SCAN ME

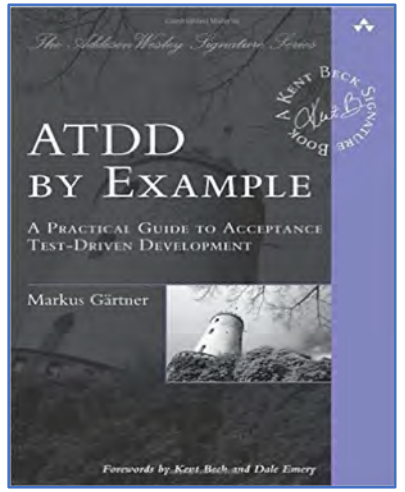
Resources

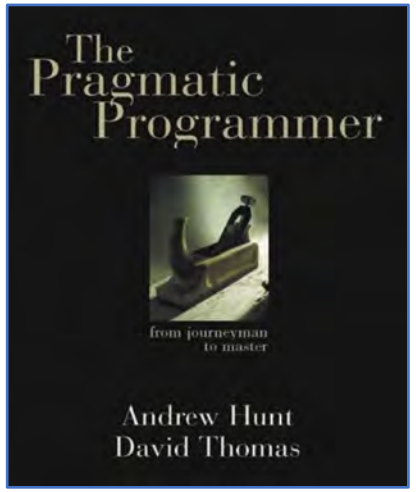


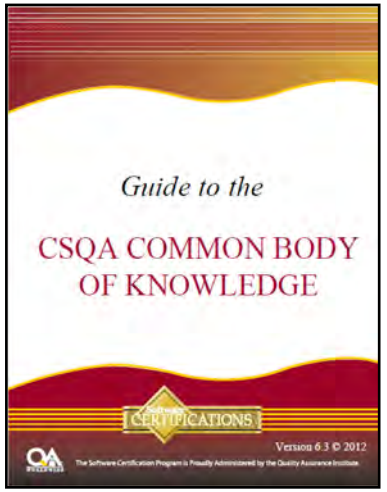
Resources | Quality

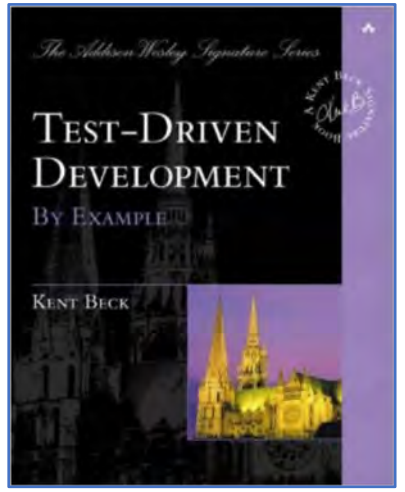




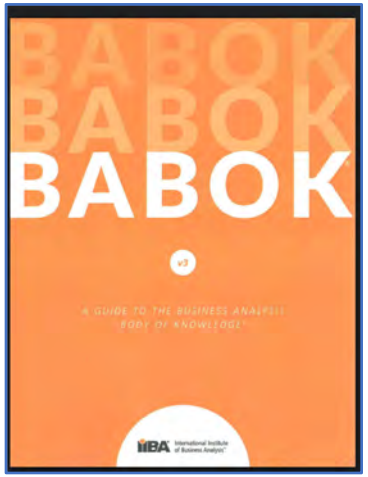


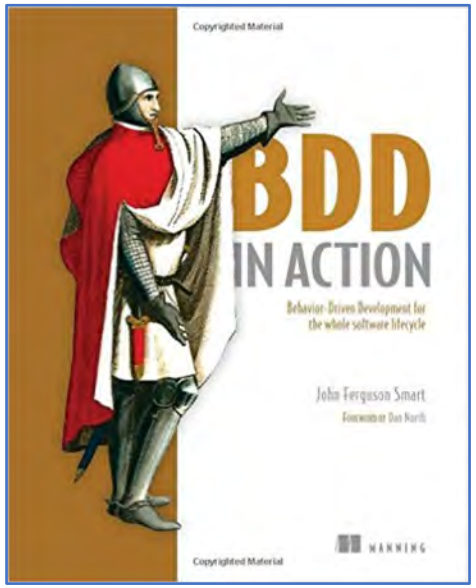


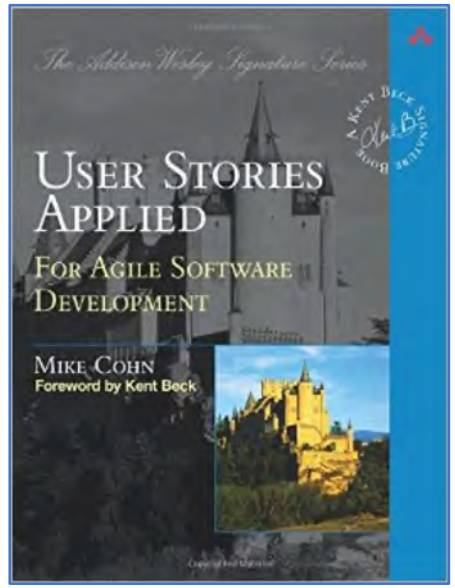


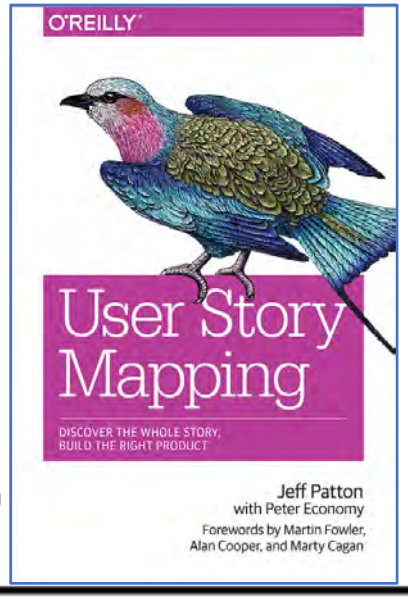


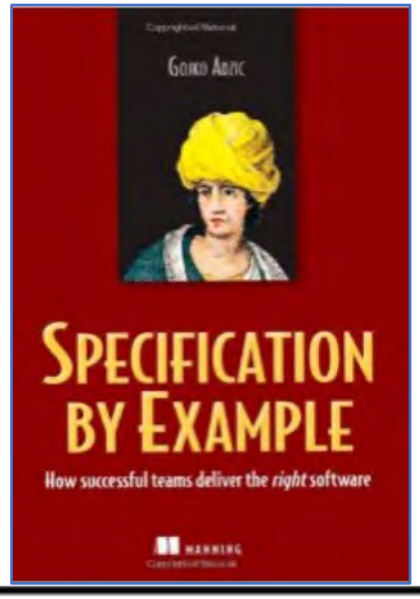
Resources | Requirements

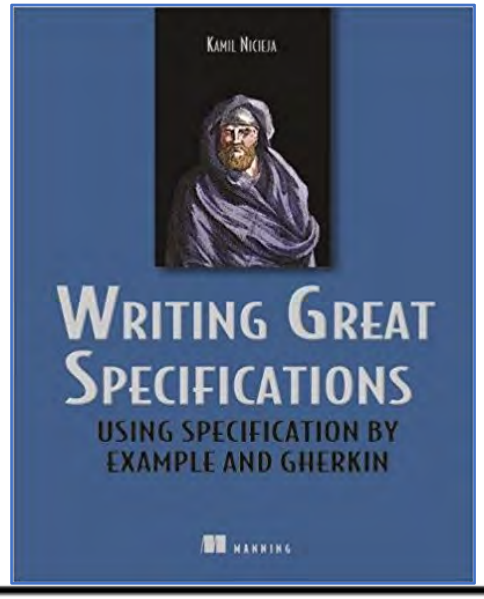


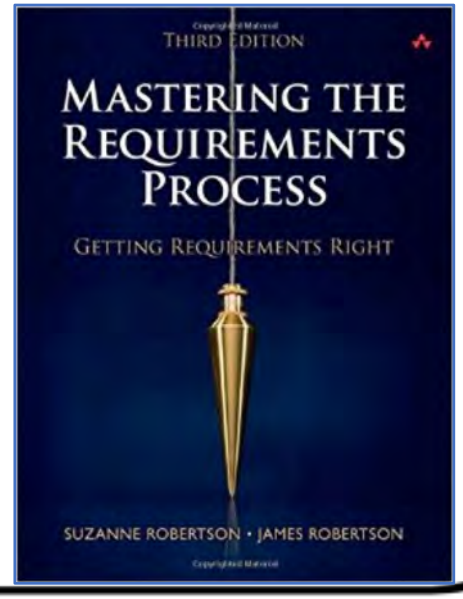




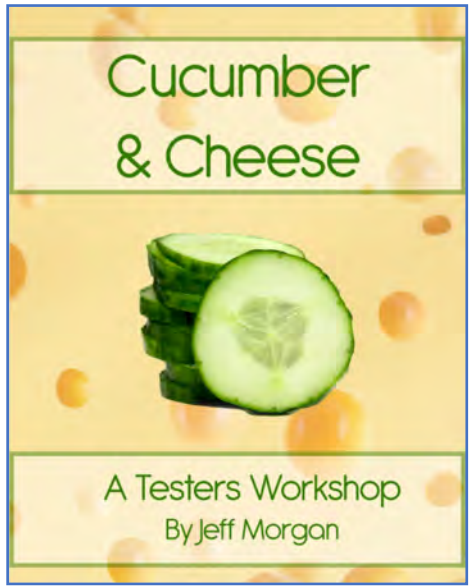


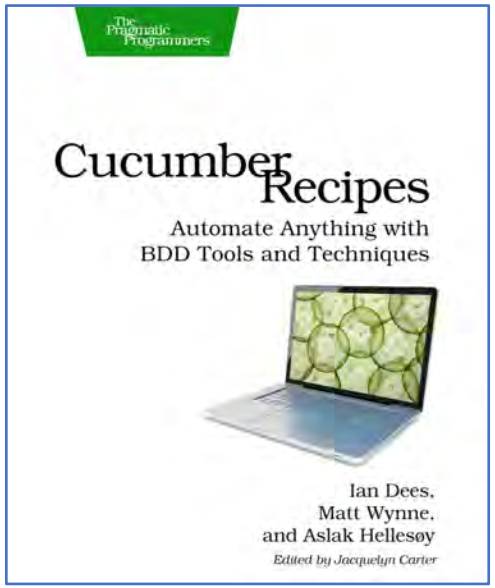


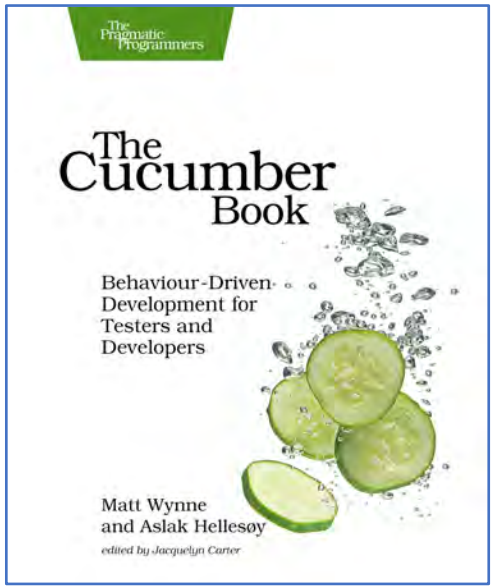


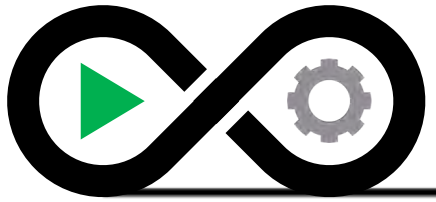


Resources | Automation









Metrics | Percent Business Rule

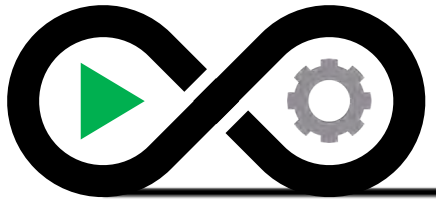
Percent business rule is the percent of business rules covered with specifications (test cases) for regression, project release, or deploy/patch validation (smoke tests).

$$PBR\ (\%) = \frac{SPE}{BR} = \frac{\#\ of\ business\ rules\ with\ specifications}{\#\ of\ total\ business\ rules}$$

PBR = Percent Business Rule

SPE = # of business rules with specifications

BR = # of total business rules

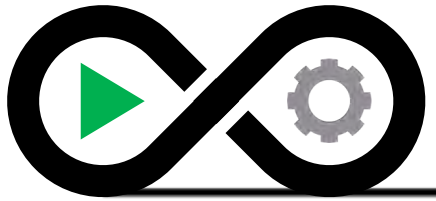


Metrics | Effective Automation

Effective automation is the percent of automation for an application's regression, project release, or deploy/patch validation (smoke tests) that can be automated from the total number of applicable automation candidates.

$$EA\ (\%) = \frac{ATC}{TC} = \frac{\#\ of\ test\ cases\ automated}{\#\ of\ total\ candidate\ test\ cases}$$

EA = Percent Automation

ATC = # of test cases automated

TC = # of total candidate test cases