
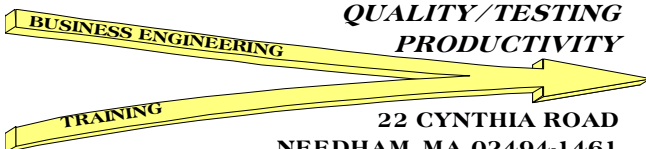



Write Right Agile User Story Acceptance Tests Right

Robin F. Goldsmith, JD
GO PRO MANAGEMENT, INC.
 SYSTEM ACQUISITION & DEVELOPMENT
 QUALITY/TESTING
 PRODUCTIVITY

22 CYNTHIA ROAD
 NEEDHAM, MA 02494-1461
 INFO@GOPROMANAGEMENT.COM
 WWW.GOPROMANAGEMENT.COM
 (781) 444-5753

©2019 GO PRO MANAGEMENT, INC. - 1 Write Right Agile User Story Acceptance Tests Right

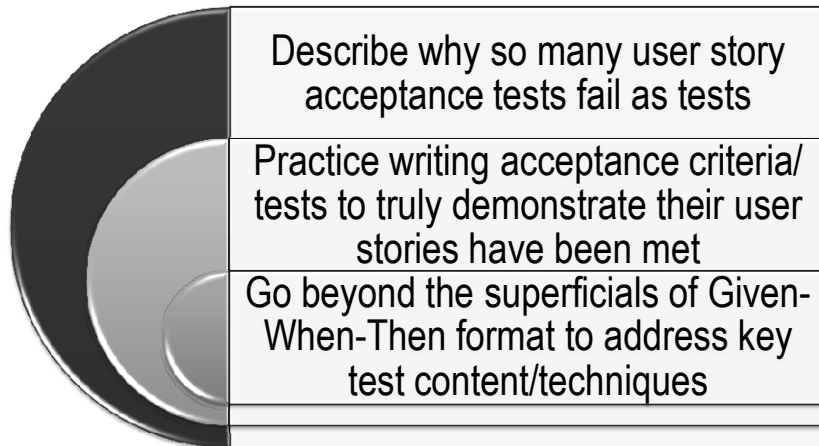


Your Issues and Objectives

- .

©2019 GO PRO MANAGEMENT, INC. - 2 Write Right Agile User Story Acceptance Tests Right

|||| Objectives



|||| Special Info about this Session

- User stories' and their acceptance tests' very simplicity can create all sorts of complexities that trip up project teams, often without anyone realizing what actually is happening or why.

- In this **very interactive true workshop**, participants do the bulk of the work, actively identifying, writing, and evaluating user story acceptance tests' content and format.

It's a risky presentation approach. Are you willing?

Requirements in Agile Generally Are Considered to Be User Stories

As a <type of user>
I <want/can/am able to/need to/etc.>
so that <some reason>

Mike Cohn
“User Stories, Epics and Themes”

<http://www.mountaingoatssoftware.com/blog/stories-epics-and-themes>

Exercise 1: User Story


Your team is assisting SQGNE to improve its performance. *Working together in a group, quickly write a user story for SQGNE’s main requirement.*

As a .
I want .
so that .



**User story acceptance tests
can be no better than their user
stories, which too often are
inappropriate/inadequate.**

©2019 GO PRO MANAGEMENT, INC. - 7 Write Right Agile User Story Acceptance Tests Right



User Stories Actually Are a Bit More

- Card
 - As a <role>
 - I want <something>
 - So that <benefit>
- **Conversation** → **Working code**
- Confirmation
 - User story acceptance criteria, tests

“Placeholder, reminder for a conversation”

©2019 GO PRO MANAGEMENT, INC. - 8 Write Right Agile User Story Acceptance Tests Right

//// User Story Acceptance Criteria

- How to tell whether story has been implemented adequately
- Translates directly into executable tests
- Often expressed in format:
 - **Given**, pre-conditions that must be present before test can start
 - **When**, inputs and/or actions
 - **Then**, expected results

Note: User story acceptance tests are executable instances that demonstrate criteria have been met, criterion vs. test often not distinct

//// Exercise 2: Write Acceptance Criteria

Working together in your group, quickly write the three most important acceptance criteria for the user story:

As a .

I want .

So that .

Given

When

Then

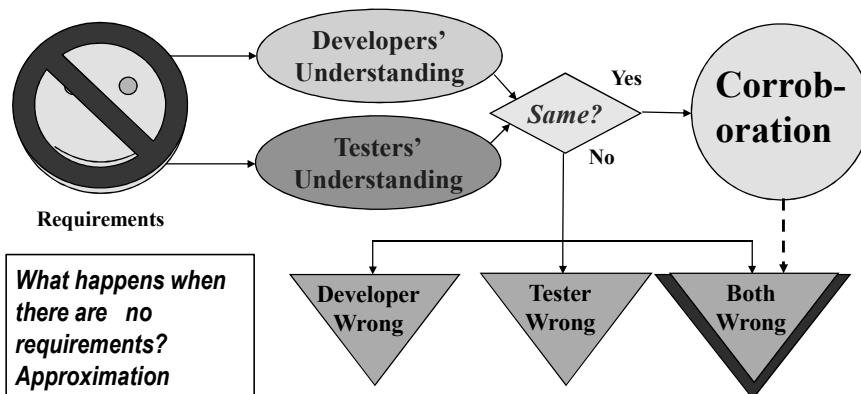
- 1.
- 2.
- 3.

Acceptance Test Driven Development (ATDD) Per Ken Pugh

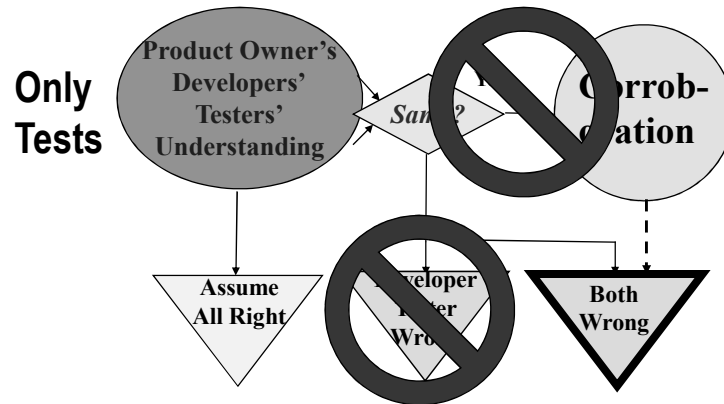
- Emphasizes Requestor/Developer/Tester *triad*
 - Defines thorough “single version of truth” set of User Story Acceptance Tests of functionality prior to coding
 - *For every business rule and use case scenario to implement each user story as it is worked on*
 - Drives test-first unit tests too
- *The tests constitute a precise requirements definition*

Passing all User Story Acceptance Tests necessary but not sufficient to ensure system meets customer needs

Requirements Drive Both Development and Testing



When Requirements Are Left Out: What's the Impact?



Swimming at J.P. McCaskey High



- Built during Depression
 - Swimming pool!!!
- Serves entire city
 - Diverse hygiene
- Shower, inspection (acceptance tests)
 - Hands and inner wrist
 - Back of neck

Tests = Requirements?

Tests Help Define Requirements, but ..

- Adequacy of User Story Acceptance Criteria
 - Too easily just “**See if it is correct**”
 - Overlooks important criteria not readily apparent from user story, especially
 - Integrations/interfaces and quality factors
- Adequacy of User Story Acceptance Tests
 - Missing scenarios, missing risk conditions
 - Not applying proven test design techniques
 - Redundant, non-value-adding insensitive tests
 - Poor/no risk analysis prioritization


Common Guidance on Defining User Story Acceptance Criteria

- Some say they are to add detail to the user story's requirement
- Others say they are the way to define *non-functional* requirements related to the user story

NO!


Primarily, must describe how to demonstrate objectively that the user story has been satisfied

Concrete examples--can help clarify but are not sufficient or thorough



User story acceptance tests too often are inadequate substitutes for user story/requirements added content.

©2019 GO PRO MANAGEMENT, INC. - 17 Write Right Agile User Story Acceptance Tests Right



Exercise 3: Write Acceptance Criteria Again

Working together in your group, quickly write the three most important acceptance criteria for the user story:

As a .
I want .
So that .

<u>Given</u>	<u>When</u>	<u>Then</u>
1.		
2.		
3.		

What's different? Is it important?

©2019 GO PRO MANAGEMENT, INC. - 18 Write Right Agile User Story Acceptance Tests Right



Exercise 4: Write Acceptance Tests

Working together in your group, quickly write the three most important acceptance tests for the user story acceptance criterion:

Given	When	Then
<hr/>		
1.		
2.		
3.		

Are you applying proven test design techniques? So what?



Issues Writing Tests for User Story Acceptance Criteria

- *Executable instances that demonstrate criterion is met*
- *Often not distinguishable from criteria*
- Missed and unclear user story acceptance criteria
- Weak and missed tests, too much assumed
- How many tests really needed?
 - Valid, positive
 - Invalid, negative *at least....*
- Are they reviewed and refined?

What must we demonstrate to be confident it works?

Lessons Learned?

- .

***Was this understandable? Helpful?
I truly welcome your feedback, now or by email***

Objectives

