

Do Testers Have to Code ... to be useful?

SQDG

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With input from Lisa Crispin



A little about me

Agile Testing; 2009

More Agile Testing: Oct 2014

Agile Testing Collection July 2015

Website:

www.agiletester.com

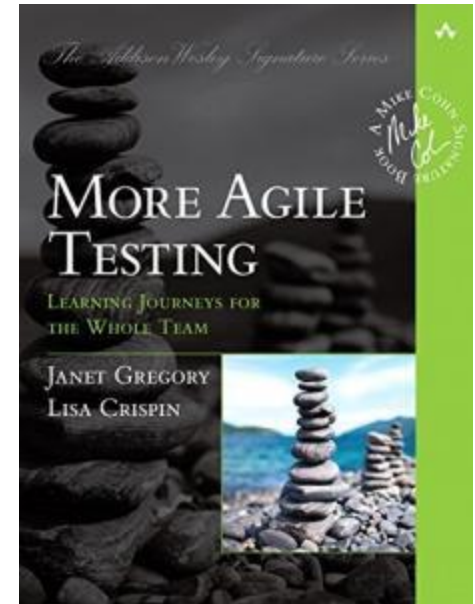
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We've heard it since the dawn of "agile"...

Everyone on the team should be able to do everything, including writing production code



*We need to automate everything!
Let's hire some SDETs!*

But shouldn't we be trying to
build quality in?



In the land of unicorns



- Testing skills such as exploratory testing are a must
- Competencies trump roles
- The whole team must take responsibility for quality
- Testing starts at the beginning
- There is no room for zombie testers!



In reality ...

Many (if not most) job ads ask for programming skills

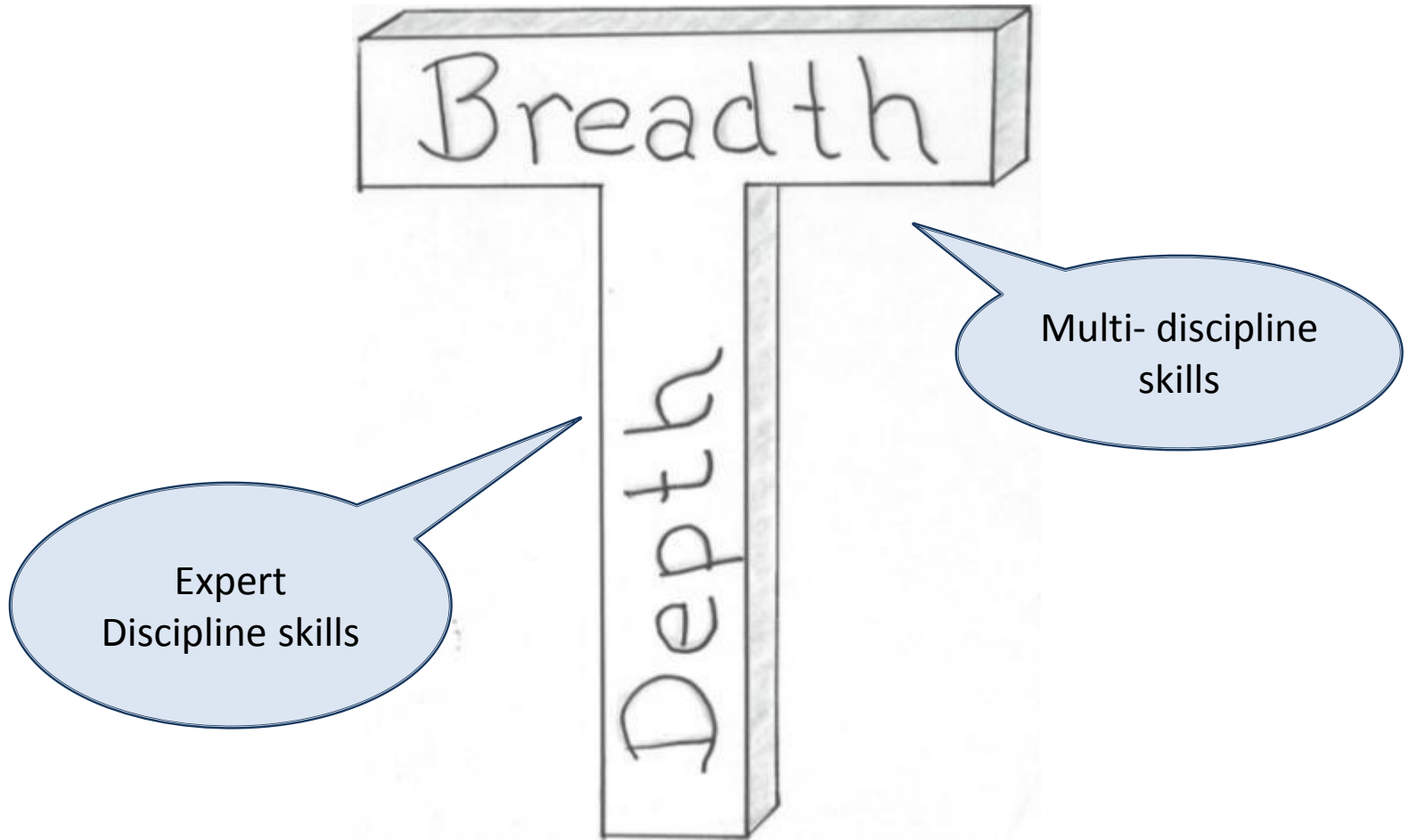
Managers often think test automation is a silver bullet



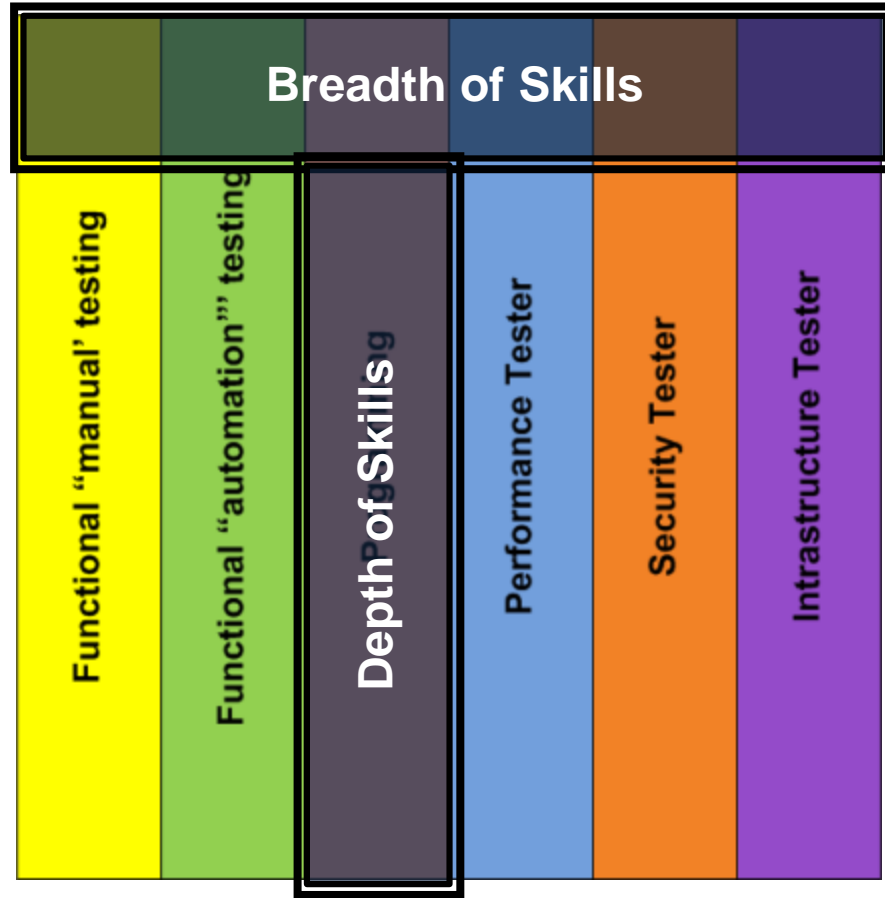
I prefer to live in a land with
unicorns and dragons
and think there is a place for that world in our reality



T-Shaped Skills



Square-shaped Team



See links for more by Rob Lambert and Adam P. Knight



Testing is a Team Problem

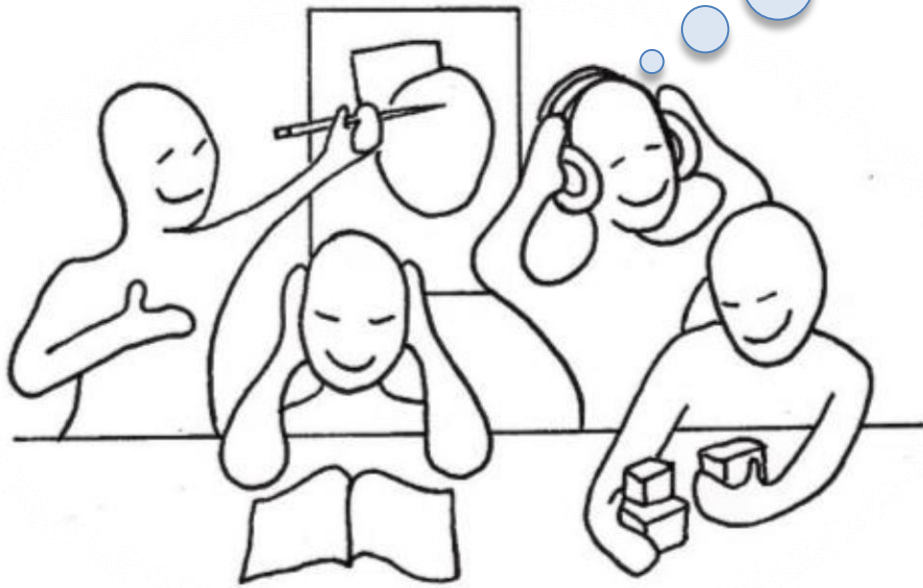


- Tests provide fast feedback
- Tests show desired behaviour
- Testers think about the big picture
- Multiple skill sets mean better solution

What skills should testers have?



Thinking Skills



Examples of thinking skills

- Collaboration
- Eliciting examples
- Asking questions



- Getting and delivering information:
Using tools like “Show me”





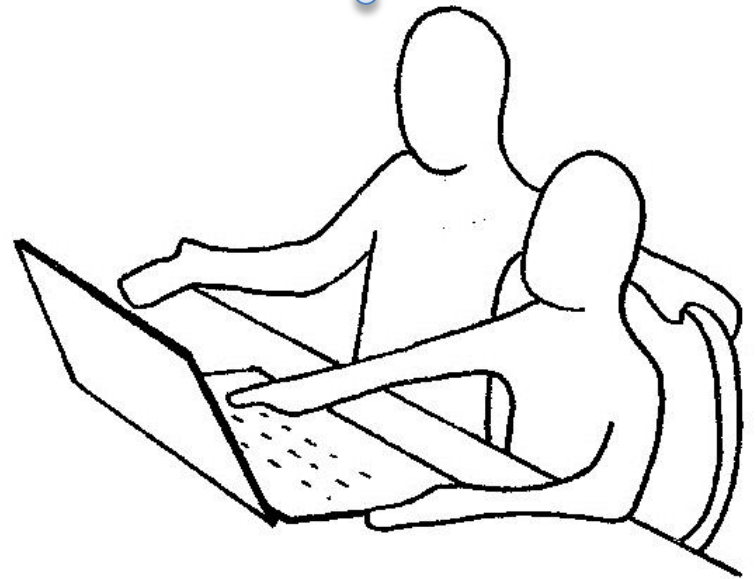
**an example
would be handy
right about now**

www.exampler.com

Agile teams already have coders, but...

Testers need
Technical Awareness

Technical skills help
testers communicate
with programmers, ops,
others



This means learning

- Testing framework your team selects
 - and the DSL (domain specific language)
- Code to read & understand
- Code to write? – can't hurt, but not absolutely required
- Domain knowledge – know the language of your customers



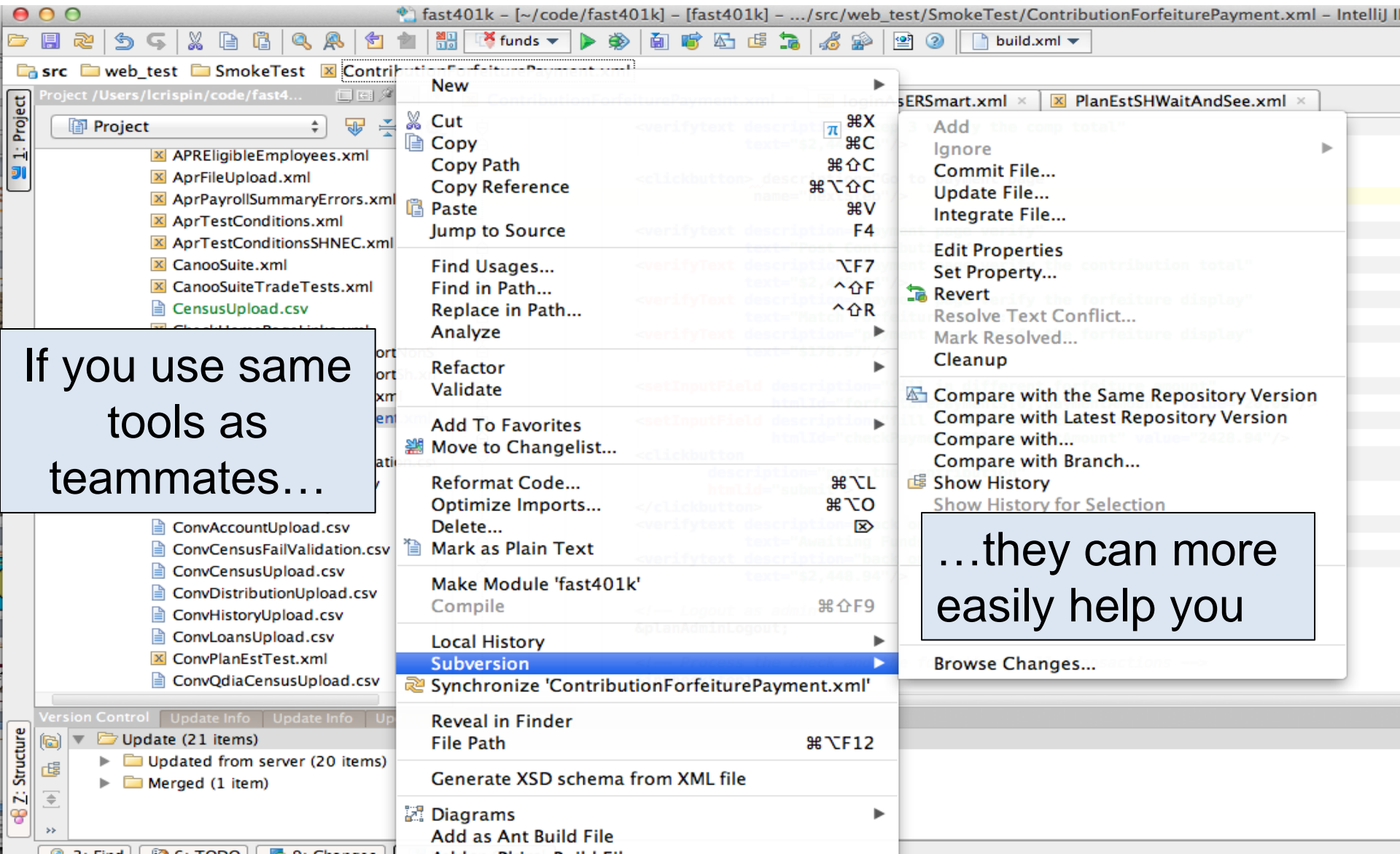
Understand Programming Concepts



You need to talk to,
and understand your programmers



IDEs (integrated development environment)

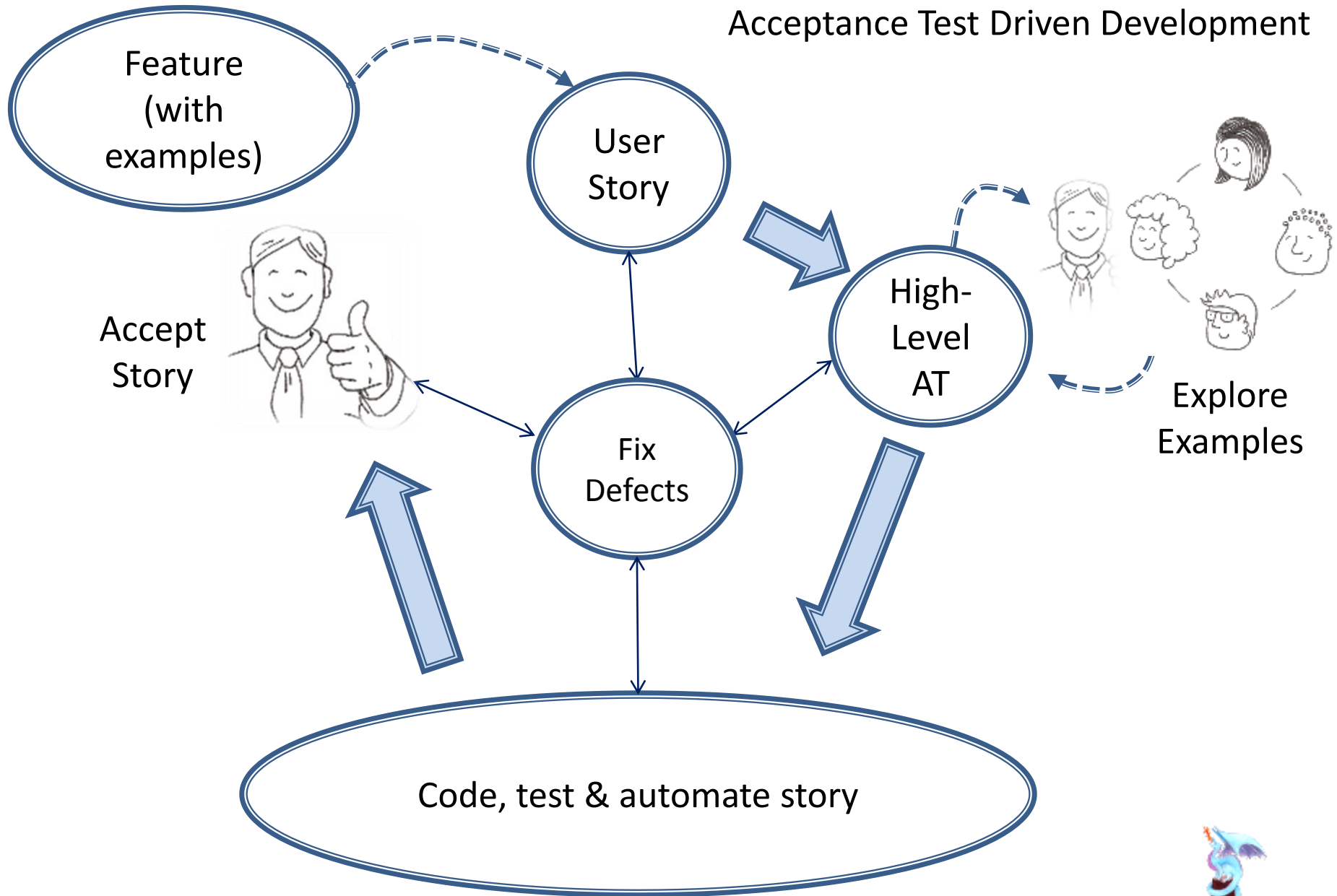


If you use same tools as teammates...

...they can more easily help you

ATDD

Acceptance Test Driven Development



Frameworks, Languages, Terminology

Example of BDD format

Given the user has no existing account

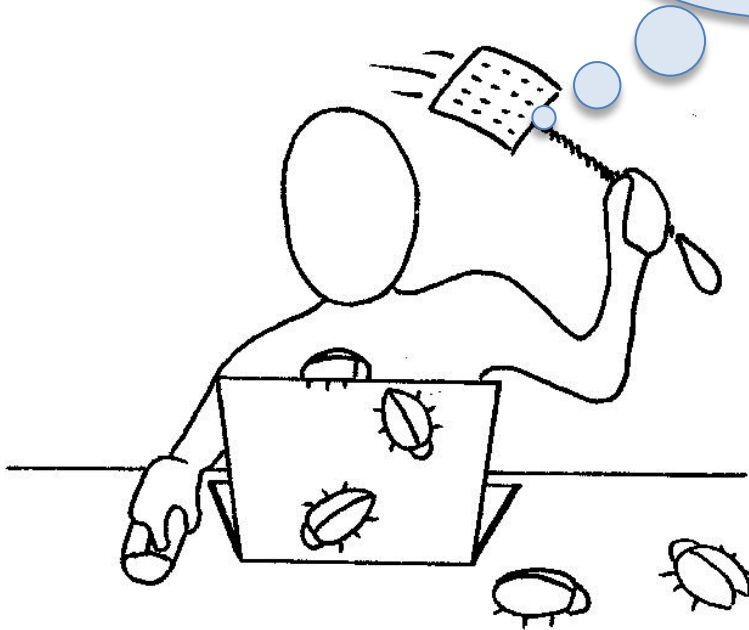
When she requests to *create a new account*

And she enters a valid user name [janet_gregory]
and valid password [passW0rd123]

Then the information is saved upon submitting.



Testing Skills



Exploratory Testing



Personas



Tours



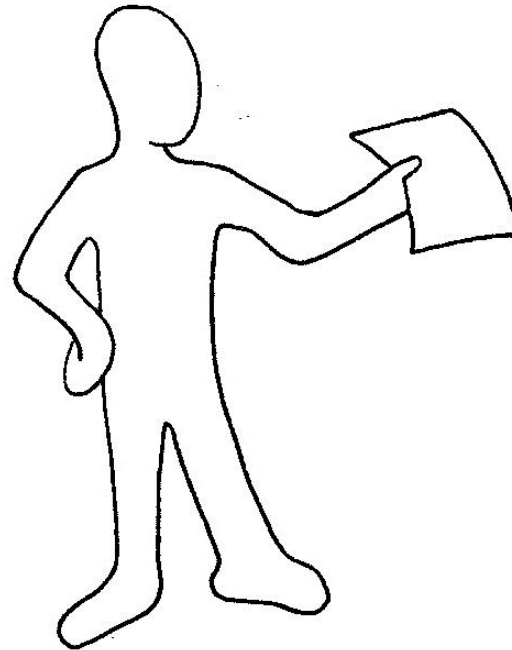
Risks



Workflows, Journeys

You also need to be able to articulate how you tested / what you tested / the risks you see

- Use charters
- Debrief notes



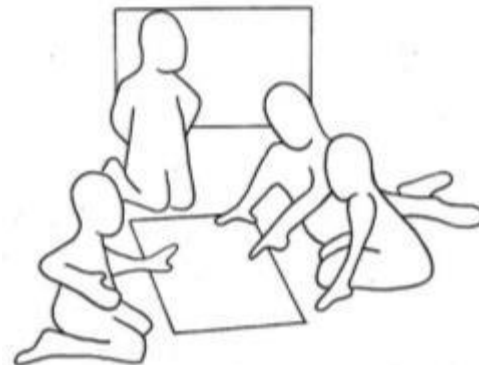
Tools in Your Toolkit

- 5 Whys
- Agile testing quadrants
- ATDD
- Brainstorming
- Estimating
- Heuristics
- Mind mapping
- Mnemonics
- Quality tools
- Root cause analysis
- Test design techniques
- Time management
- Tool evaluation techniques



Testers add unique value

- Delivery teams already have coders
- But may not have testing skills such as:
 - Exploratory testing
 - Specialties such as security, performance, UX testing
 - Eliciting examples from customers, turning into tests that guide coding



So, what do skills do testers need?

- Technical awareness is a must
- Thinking skills enable our contributions
- Specialized testing skills add huge value
- Ability to ask questions
- And ... curiosity



So be curious



Experiment!



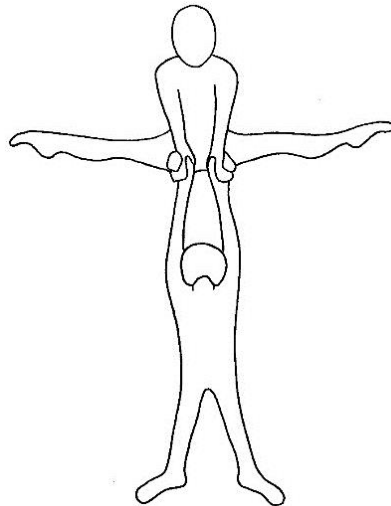
- Study group, book club
- Community of Practice
- Online resources
- What fits your learning style?
- Find the wonder!



There's not one right way

**Find ways testers can add value to your
team**

And then keep learning



Agile Testing: A Practical Guide for Testers and Agile Teams

More Agile Testing: Learning Journeys for the Whole Team

By Janet Gregory and Lisa Crispin

www.agiletester.ca

www.agiletester.com

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More Learning

- Adzic, Gojko, *Specification by Example: How Successful Teams Deliver the Right Software*, Manning, 2011
- Gärtner, Markus, *ATDD By Example: A Practical Guide to Acceptance Test-Driven Development*, Addison-Wesley, 2012a
- Karten, Naomi, "Are You Listening?", <http://www.agileconnection.com/article/are-you-listening>, Agile Connection, 2009
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- Knight, Adam P., "T-shaped Tester, Square Shaped Team", <http://thesocialtester.co.uk/t-shaped-tester-square-shaped-team/>, 2013
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