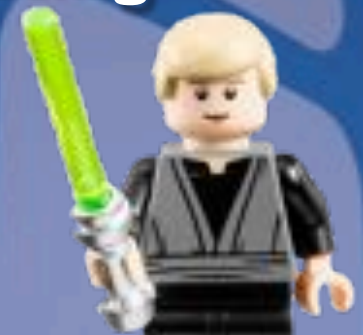




WHAT IS CONTEXT-DRIVEN TESTING ??

Or rather: exploring context-driven testing
A new hype or here to stay?



Huib Schoots

TestNet Najaarsevenement

31 Oktober 2013

WHERE?

WHAT?

WHY?

HYPE?



Think Different



Think Different

Here's to the crazy ones. The misfits. The rebels. The troublemakers. The round pegs in the square holes. The ones who see things differently. They're not fond of rules. And they have no respect for the status quo. You can quote them, disagree with them, glorify or vilify them. About the only thing you can't do is ignore them. Because they change things. They push the human race forward. And while some may see them as the crazy ones, we see genius. Because the people who are crazy enough to think they can change the world, are the ones who do.



Apple Inc.

Think Different

Here's to the crazy ones. The misfits. The rebels. The troublemakers. The round pegs in the square holes. The ones who see things differently. They're not fond of rules. And they have no respect for the status quo. You can quote them, disagree with them, glorify or vilify them. About the only thing you can't do is ignore them. Because they change things. They push **TESTING** forward. And while some may see them as the crazy ones, we see genius. Because the people who are crazy enough to think they can change the world, are the ones who do.



Apple Inc.

Think Different



Where did context-driven testing come from?

WHERE?

Where did context-driven testing come from?

- Testing Computer Software (1988)
- Collaboration Cem and James (1995)
- LAWST (1997)
- CDT School (November 21 1999)
- Yahoo mailing list (November 1999)
- Lessons Learned in SW Testing (2001)
- AST founded (2003)
- First CAST conference (2006)
- First Let's Test conference (2012)
- ISST founded (August 21 2013)
- **First Let's Test conference in NL (March 11 2014)**



What is context-driven testing?

WHAT?

The principles

1. The value of any practice depends on its context.
2. There are good practices in context, but there are no best practices.
3. People, working together, are the most important part of any project's context.
4. Projects unfold over time in ways that are often not predictable.
5. The product is a solution. If the problem isn't solved, the product doesn't work.
6. Good software testing is a challenging intellectual process.
7. Only through judgment and skill, exercised cooperatively throughout the entire project, are we able to do the right things at the right times to effectively test our products.



COMMON SENSE?

Principles

If you meet the seven principles, does that mean you are context-driven?

THE STORY OF ANAKIN SKYWALKER



A droid character, possibly a Star Wars character, is shown in a space suit against a dark, starry background. A bright white diagonal line cuts across the scene from the top right towards the center. The text is overlaid in large, bold, red letters with a black drop shadow.

**COMPLY WITH THE
PRINCIPLES
DOESN'T MAKE IT
CONTEXT-DRIVEN!**

The principles

1. The value of any practice depends on its context.
2. There are good practices in context, but there are no best practices.
3. People, working together, are the most important part of any project's context.
4. Projects unfold over time in ways that are often not predictable.
5. The product is a solution. If the problem isn't solved, the product doesn't work.
6. Good software testing is a challenging intellectual process.
7. Only through judgment and skill, exercised cooperatively throughout the entire project, are we able to do the right things at the right times to effectively test our products.

The principles

1. PEOPLE

1. No best practices exist. What works depends on its context.

2. There are good practices in context, but there are no best practices.

3. People working together are the most important part of any project's success.

2. SKILLS

4. Projects unfold over time in ways that are often not predictable.

3. SCIENCE

5. If a problem isn't solved, the product doesn't work.

6. Good software testing is a challenging intellectual process.

4. PROBLEM SOLVING

7. If you don't have the skills to solve a problem, you can't solve it.

8. We can't solve a problem until we know how to solve it.

9. We can't effectively test our products.

Jedi Knights

- Testing is a solution to a very difficult and complex problem
- It must be tailored to the context
- Therefore it is a human activity that requires a lot of skill
- That is why we need to study it seriously
- We must practice our craft

Context-driven testers strive to become **JEDI KNIGHTS OF TESTING**





How Do I Know I am Context-Driven?



- I understand, experience, value, explain and categorize good testing according to the principles of the Context-Driven School of software testing.
- I influence and am influenced by those who espouse the principles of the Context-Driven School of software testing.
- I use the Context-Driven approach in my test projects, via my methodology called Rapid Software Testing.



How Do I Know I am Context-Driven?



- I understand, experience, value, explain and categorize good **PARADIGM** in Context-Driven School of software testing.
- I influence and am influenced by those who espouse the **COMMUNITY** of software testing.
- I use the **APPROACH** of software testing, via...

Context-Driven testing is...

HASHED



Michael Bolton – CAST 2011

Context-Driven testing is...



Heuristic
Adaptive
Skeptical
Humanist
Empiricist
Diversified

Implicit principles of the Context-Driven School of Testing

- **Context Primacy:** Context is not inert scenery, it embodies vital information, resources, constraints, and other agents that must inform all competent work.
- **Scientific Aspiration:** Folklore is not a basis for a respectable craft. Our work is informed by evidence, cleaned and tempered by skepticism and vigorous debate. Community status is accumulated through demonstrated and demonstrable merit. We avoid groundless and exaggerated claims.
- **Systems Non-Linearity:** Our systems are not practically predictable or reducible in terms of linear or statistical equations. We must use non-linear, cybernetic control methods, and learn to live with uncertainty.
- **Testing as Investigation:** Testing is not just fact checking and it is *not* quality improvement. It is an open-ended investigation and learning process focused on discovering problems.
- **Humanist Sensibility:** Technical workers are not interchangeable resources. All technical work is done by unique, unreliable people, and to be good at technical work we must develop as people.
- **Tester Autonomy:** We are not robots or slaves: we have *agency*. We manage the value of our time and bear responsibility for doing ethical work. We must cultivate the courage to do that.
- **Tester Responsibility:** We are not alone. We work within a social network in which value is constructed and responsibility is shared. This happens on project, corporate, professional, and societal levels.
- **Methodology Authorship:** Ignorantly mimicking behavior is not competent work. Competent testers must design (or adapt) and test their own practices and heuristics.
- **Skill Development:** Technical work is not brute labor. Methodology skill, in both tacit and explicit form, is absolutely required to fulfill our mission, and development of such skill is an ongoing obligation.

How to recognize a context-driven talk

Heuristics

Learning

Compare alternative methods

Cause and effect

Open systems

Social science

Humanist view

Craftsmanship

Explain context

Worldview of testing

Different opinions

Allows to change approach

Success / Failure

Chaos / Structure

Lack of evidence / Narrow research

Folklore

Numbers without context

Ignorance of social science

Contempt of humanism

IT & testing is like manufacturing

No context mentioned

Generalizing after one try

Use of averages without variance

Linearity

Why is it important to me?

WHY?

A personal story




New hype or here to stay?

HYPE?

New hype or here to stay?

- Context-driven isn't new
- Context-driven is no hype
- Context-driven is here to stay!



OH WELL
MAYBE TODAY
IT IS....

Hype = promote or publicize extravagantly

New hype or here to stay?

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OH WELL
MAYBE TODAY
IT IS....

Hype = promote or publicize extravagantly

Hype = Michael Bolton's pronunciation of "Huib"

#HUIB

#HYPE

Adaptability vs. Context-driven

Adaptability vs Context-Driven

June 29, 2012

Huib Schoots

Context-Driven

Exploratory Testing

General

35 Comments

Last week Rik Marzella send me an email pointing me to an article with the title "The adaptability of a perceptive tester" ([pdf is here](#)). He added: "Have you read this article? Should appeal to you!". The article is written by a couple of Dutch (Sogeti) testers. And they, so the introduction tells me, get together once in a while to discuss the profession of testing and quality assurance. This time they discussed some remarkable examples of their experience that perceptive testers (who are aware of the specific situation they're in) adapt their approach to fit the specific needs.

I replied to Rik with the following email:

Hey Rik,

Nice article, I had already seen it. But adaptive or perceptive is not context-driven. I also totally disagree with the conclusion:

"Together we concluded that although TMap NEXT was introduced some six years ago it still has a solid foundation for any testing project since the essence of adaptiveness makes sure that any perceptive tester can collaborate in doing the right things at the right moment in any project and ensure that the proper quality is delivered to solve the problem of the stakeholders."

TMap Next contains a number of dogmas (or rather is based on a number of dogmas) like: testing can be scheduled, the number of test cases is predictable, content of a test case is predictable, sequence of process, etc.

Therefore I think TMap Next is not usable in every situation. At least not effectively and efficiently. Being adaptive is good, but I can imagine

Adaptability vs. Context-driven

Interesting discussion on my blog...

<http://www.huibschoots.nl/wordpress/?p=825>



≠ CONTEXT-DRIVEN

You're next?

YOU???



How can I become context-driven?

- Rapid Software Testing
- BBST
- Become part of the community
 - Twitter
 - Conference: Let's Test, CAST, TestBash
- Learn, practice, explore
- Read blogs (<http://www.huibschoots.nl/wordpress/?p=1450>)
- Read books (<http://www.huibschoots.nl/wordpress/?p=1361>)



How can I become context-driven?

- Rapid Software Testing
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- Become part
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- Read blogs ([ht](#))
- Read books ([h](#))

Tasting Let's Test
11 Maart 2014



Let's Test
the context-driven way

DE FABRIQUE[®]
evenementenlocatie



Do. Or do not. There is no try.



Learn more



Rapid Software Testing:

- www.rapidsoftwaretesting.nl

Context-driven:

- <http://testingcurve.wordpress.com/2012/11/08/dewt2-becoming-a-context-driven-tester/>
- <http://kaner.com/?p=49>
- <http://www.satisfice.com/blog/archives/565>
- <http://testingreflections.com/node/8657>
- <http://www.developsense.com/presentations/2011-08-CAST-ContextDrivenTesting.pdf>
- <http://blog.utest.com/the-jedi-knights-of-context-driven-software-testing/2011/02/>
- My article in last TestNetNieuws (2013 - 2)

Social science:

- <http://www.huibschoots.nl/wordpress/?p=1173> (see list of resources in part 5)

Get better

BBST: <http://www.associationforsoftwaretesting.org/training/courses>

Testing Dojo: <http://www.testingdojo.org>

Weekend Testers: <http://weekendtesting.com>

Miagi Do: <http://miagido.org/blog>

Skype coaching: **google** “**Skype coaching tester**”

Rapid Software Testing: <http://www.rapidsoftwaretesting.nl>



Acknowledgements

Many of the ideas in this presentation were inspired by or augmented by other colleagues including [Joris Meerts](#), [Peter Schrijver](#), [Ray Oei](#), [Pascal Dufour](#), [Markus Gärtner](#), [Matt Heusser](#), [Henke Anderson](#), [Paul Holland](#), [Cem Kaner](#), [James Bach](#) and [Michael Bolton](#).

THANKS!



**MAY THE
FORCE BE
WITH YOU!!**

**QUESTIONS,
YOU HAVE,
HMM?**



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