

Top Ten Tendencies That Trap Testers

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Traps?!?

- Unidentified problems that limit or obstruct us in some way
- *“You’ve done well to keep so much hair, when so many’s after it.”*
-- “Bear Claw” Chris Lapp to mountain man Jeremiah Johnson (1972)
- Be like a Kung Fu master
- Indiana Jones
(<http://www.youtube.com/watch?v=egPgU5kAjKE>)

Why avoid traps?

IF...

- ... you want to earn credibility
- ... you want others to be confident in you
- ... you want respect
- ... you want more autonomy
- ... you want less workload

THEN ...

- ... be cautious
- ... be curious
- ... think critically

Tendency #10: Stakeholder Trust

- “Ah, don’t worry about that for now...”
- “It’s fixed.”
- Programmer: “I’ll take care of it, no bug needed”

Confirmation Bias: the tendency to search for or interpret information in a way that confirms one's preconceptions

Ok, but what if your preconceptions are wrong?

- Spec
- Remedies:
 - Trust, but verify
 - Don’t answer right away
 - Think about trade-offs / opportunity costs
 - What *else* might be broken?

Tendency #9: Compartmental thinking

- Thinking only about what's proximate
- Remedies:
 - **Something in the other room?**
 - **Thinking of opposite dimensions**
 - **light-dark**
 - **small-big**
 - **fast-slow**
- Exercise: "Brute Cause Analysis"

Tendency #8: Definition Faith

- “Test this” (what does “test” mean)
- Exercise (States)
- 0 – 100 Exercise
- **Remedies:**
 - **What is your mission?**
 - **Is there another interpretation?**
 - **What is this test meant to find?**
- **Results:**
 - Avoids the “bring-me-a-rock game”
 - Builds respect because of clarity

Tendency #7: Inattentional Blindness

- From wikipedia: “the inability to perceive features in a visual scene when the observer is not attending to them.”
- Video -- how many times do people in white shirts touch the ball?
(<http://viscog.beckman.illinois.edu/flashmovie/15.php>)
- Magic Tricks
- Mind-Reader
- **Remedy:**
 - **Situational Awareness**
 - **Focusing / Defocusing: Managing the scope and depth of your attention. Looking for different things, looking at different things in different ways.**

Tendency #6: Dismissed Confusion

- It's probably working, it's just something I'm doing wrong
- **Remedy:**
 - **Know that your confusion is important**
 - **Confusion Confidence**

Tendency #5: Performance Paralysis

Uhh... I have no ideas for this slide...

- Look at bug database
- Talk with testers (paired testing)
- Talk with Programmers (different domain expertise)
- Look at design docs
- Web – MSN Search
- Look at discussions for similar or competing products
- User documentation
- Help files
- Manuals
- Tech support
- Customer issues
- Side of the box -- claims made by marketing

Remedy:

*** Try a PIQ cycle**

Test Planning Checklist

Test Plan Evaluation Model

Tendency #4: Function Fanaticism

- Yes, Function tests are good, but what about:

Structure tests

Data tests

Platform tests

Operations tests

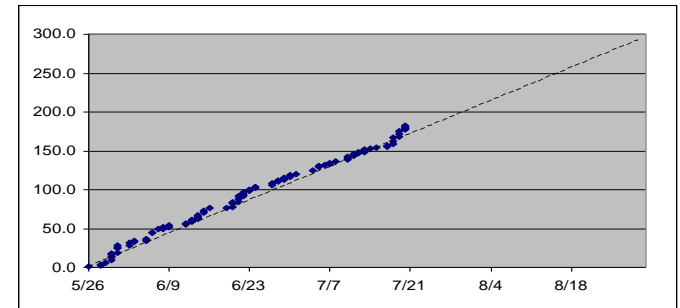
Time tests

- Different *techniques*
- *Combinations* of techniques or test approaches
- **Remedy:**
 - **Use (or invent) heuristics**

Satisfice Heuristic Test Strategy Model

Tendency #3: Yourself, untested

- Malformed tests
- Misleading bug titles
- Complacency with testing knowledge
- Imprecise / too precise notes
- No notion of equivalence classes
- Bugs that report failures not faults
- Not learning more about testing



Link: [Session Notes](#)

Scrutiny agenda:

- P**ast
- R**esults
- O**bstacles
- O**utlook
- F**eelings

Tendency #2: Bad Oracles

- A principle or mechanism we use to recognize a problem

Exercise (What is a legal triangle?)

- Remedies:
 - File issues as well as bugs
 - MIP (mention-in-passing) things that might be bugs

Tendency #1: Premature Celebration

“Wahoo! I got it! This is definitely a showstopper!”

Exercise: Triangle repro

Remedies:

- Jump to conjectures, not conclusions
- Use the “Rumble Strip” heuristic
- There may be a bigger bug just one step away
- Find the fault, not just the failure -- IP address exercise
- Verbage to use:
 - “It seems like...”
 - “It appears as if...”
 - “It could be...”

Summary

(slides posted up on Quardev.com)

<i>Tendency</i>	<i>Remedy</i>
10) Stakeholder Trust	Question missions and tasks
9) Compartmental Thinking	Try Brute Cause Analysis
8) Definition Faith	Words have different meanings
7) Inattentional Blindness	Situational Awareness
6) Dismissed Confusion	Confusion Confidence
5) Performance Paralysis	Try a PIQ cycle: plunge in / quit
4) Function Fanaticism	Use (or invent) heuristics
3) Yourself, untested	Test your testing
2) Bad Oracles	MIP / Raise “issues”
1) Premature Celebration	Jump to conjectures