

Top Ten Tendencies That Trap Testers

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STAR East

May 16, 2007



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.uiuc.edu/grafs/demos/15.html>)
- 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

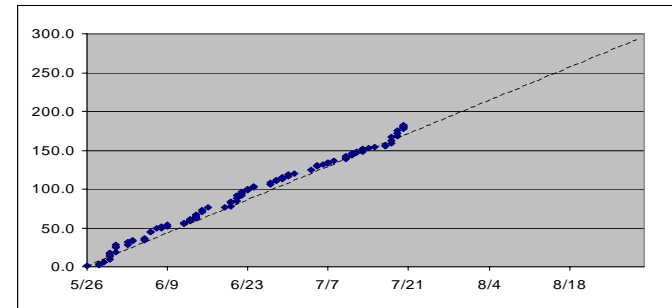
Time tests

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

Satisfice Heuristic Test Strategy Model

Tendency #3: Yourself, untested

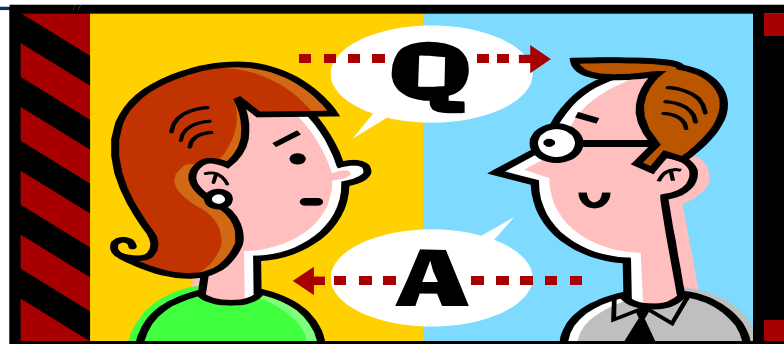
- Malformed tests
- Misleading bug titles
- Complacency with testing knowledge
- Imprecise / too precise notes
- No notion of equivalence classes
- Bugs that report failures not faults
- Not learning more about testing



Link: [Session Notes](#)

Scrutiny agenda:

Past
Results
Obstacles
Outlook
Feelings



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 |

5/16/2007