

A Case Study in Rapid Test Management

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STP Con
October 22, 2009

The Satisfice logo consists of the word "SATISFICE" in a bold, sans-serif font, positioned to the right of a vertical line.

What is Rapid Testing?

The skill of testing anything, any time, under conditions of uncertainty, such that your work stands up to scrutiny. It's a mental martial art.

Backstory

Start Date: About one year ago

Projects: Four desktop applications

Methods: Agile, Waterfall, “Agile-fall”

Staff: 15

- *12 onsite, 3 offsite;*
- *10 full-time, 5 contract;*
- *third test manager in 6 months*

Conditions I found

- *Tasks needed more time than ALL of their time*
- *Everything seemed to be Priority 1*
- *People had multiple duties*
- *No specs, just meetings and emails*
- *Little time for training*
- *Cubicles / team wasn't sharing info with each other*
- *Heavy tools*
- *Interruptions / emergent event*
- *They were wary of managers*

Questions

- *Who's on my team?*
- *How do they find time to learn?*
- *How does exploration fit?*
- *What's my test approach?*
- *What are they doing right now?*
- *Where are we? How are we doing?*
- *How did you do that?*
- *Can we do this differently?*

Ideas

- *Surveys*
- *Open-Book Testing*
- *Dawn Patrol – SBTM*
- *Color-aided Test Design*
- *Testing Pyramid*
- *Hybrids*
- *Daily status*
- *Drive-by Learning*
 - *Lightning Talks*
 - *Combo Locks*
 - *Show and tell*
- *Tools: WME, SWP, PK*

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Surveys

What time works for you for a one-on-one with me this week?

Do you have any ideas of how to dogfood?

What are your working hours?

What's your biggest annoyance when working?

What's the name of your spouse / children?

What are 3 aspects of your ideal manager?

What's the best business / testing book you've read?

What's the best overall book you've read?

What one project problem do you wish was solved NOW?

What aspect of working here is most important to you?

Survey Says...

The results were conducted in a team meeting ...
revealing the answers as a team, one at a time --
Family Feud style

Speed round...

- 1) Name a customer that tends to be mentioned a lot in meetings.
- 2) Jon has one full row of books on the bookshelf in his cube (standard size). How many books are on it?
- 3) Name the genre of book that most of the staff says they like.
- 4) Name the most interesting project codename we've used (any project).
- 5) Name a popular first name for staff on all four project teams.
- 6) Name a test management tool we use.
- 7) Name a neighboring state to our HQ.
- 8) What would you say is the average amount of emails each person on Jon's staff gets per day?
- 9) Name another state (other than Washington) where Home-Based Employees are based?
- 10) Name the resolution category for bugs most assigned back to you.

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OBT

The act of creating open-ended questions such that...

Testers	Managers
...are immersed in the product right away, building a model or mind map.	...create test “charters”, or missions that seek to reveal many bugs instead of one (akin to using scenarios and personas).
...learn how they are provoked into critical thinking by being exposed to many types of questions (test ideas).	...learn how their staff is provoked; to know how they can perform critical thinking.
... quickly find bugs and raise issues in answering the questions they are given	...evaluate tester skill and test coverage.

Samples

Excerpts from Flight Sim Ground School exam:

- Which airplanes are equipped with slotted flaps?
- Describe the steps needed to start the engine of the DC3.
- If the vacuum system failed in the 172, what instruments would no longer function?
- Joe, an aviation history fanatic, buys Combat FS and complains to tech support that the P-51 flight model is “all wrong” because in a dogfight, “the airplane stalls at 200 MPH.” Joe flies with the Realism Settings set to Hard and he knows that the P-51 should stall at about 100 MPH. Explain to Joe how it is possible for an airplane to stall at twice its published stalling speed.

The answer matters less than how it was derived.

For example, the question:

“Which airplanes are equipped with slotted flaps?”

...can lead to the following strategies to find the answer:

- Select aircraft / spot plane view should show me the type
- Aircraft details: should tell me the type of flaps
- Flap function (shortcut key, panel icon, keyboard) can be tested to verify the flap animation is consistent with model
- Flight model affect (whether the flaps *behave* as slotted) can be tested in flight

The **primary** purpose of Open-Book Testing is to drive better learning about the product and therefore, better testing.

(Reverse OBT, too)

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Dawn Patrol

A SWAT team of dedicated testers who do exploratory testing when no one is awake yet.

Some Exploration Skills and Tactics

“MR.Q COMP GRABC R&R?”

Modeling

Resourcing

Questioning

Chartering

Observing

Manipulating

Pairing

Generating/Elaborating

Refocusing

Alternating

Branching/Backtracking

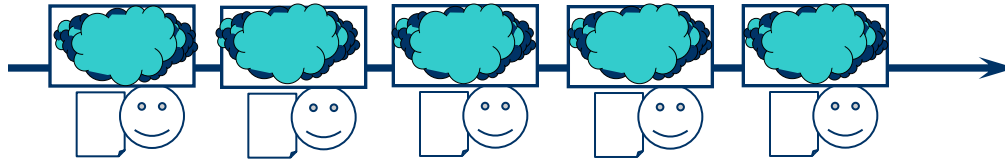
Conjecturing

Recording

Reporting

Exploratory testing is a mindset using this skillset.

Session-Based Exploration



The “Session”

- 1) **Time Box**
- 2) **Reviewable Result**
- 3) **Debriefing**

Session Report

- **Charter**

- #AREAS

- **Metrics**

- #DURATION
- #TEST DESIGN AND EXECUTION
- #SESSION SETUP
- #BUG INVESTIGATION AND REPORTING
- #CHARTER / OPPORTUNITY

```
CHARTER
-----
Analyze MapMaker's View menu functionality and
report on areas of potential risk.

#AREAS
OS | Windows 2000
Menu | mE-jpb-010417-c_sesView
Strategy | Function Testing
Strategy | Functional Analysis
Sample
START
-----
5/30/00 03:20 pm

TESTER
-----
Jonathan Bach

TASK BREAKDOWN
-----

#DURATION
short

#TEST DESIGN AND EXECUTION
65

#BUG INVESTIGATION AND REPORTING
25

#SESSION SETUP
20
```

- **Notes**

- **Bugs**

- #BUG

- **Issues**

- #ISSUE

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- **Capabilities: Green:** (Often the beginning tests) Does the app do what it's supposed to do.
- **Failure Modes: Red:** ("What if" questions) Challenge the expected outcome.
- **Inputs/outcomes: Purple:** (Boundaries tests) push the limits on all input fields with string lengths (min/max)
- **White box testing White:** Reviewing design code and data schemas. Exercising the decisions and paths through the program.
- **Quality Factors: Yellow:** Performance, scalability, usability
- **Usage Scenarios: Blue:** Extremely high value tests: Ask not what the app does for the user, but what the user does for the app. View these from the perspective of the specific users. Can the user do their job with the application?
- **Creative Testing: Gold:** Soap opera testing. Do what the user would normally do, but much more dramatically. What if the user goes through things in the wrong order?

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RELEASE CHECKLIST:
SIGNOFF THAT TAKES ABOUT AN HOUR THAT WE CAN DO AS OUR VERY LAST TASK TO BUTTON UP THE RELEASE

BVT:
TAKES ABOUT AN HOUR TO DO EVERY TIME WE GET A NEW BUILD

DAY TESTS:
LIST OF TESTS THAT COVER THE PRODUCT IN ONE DAY (OR SO)

5-ERS:
LIST OF TESTS THAT ARE A BIT DEEPER. THIS MAY TAKE THREE TO FIVE DAYS

CYCLE TESTS:
TESTS THAT SPAN A FULL TEST CYCLE

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Testing Hybrid

A test document that combines exploratory and matrix-driven verification testing.

[Sample](#)

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- *Drive-by learning*
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From: Brodsky-Porges, Benjamin M.
To: Bach, Jon
Cc:
Subject: Status 2/4/09

Wednesday February 4th 2009

Highlights:

- *CM-744: Manage Docs - List All Docs In Case*
- *CM-469: Clip Annotation Video - Database Changes*
- *Performed Test Review of Brian's 759: Create Replica Wizard - Rework as Wizard 97 Flow*
- *Sent test script to Brian for Test review. CM-753: Linked Files Issues and Unit Tests*
- *Logged bug 40862*
- *Logged bug 40865*
- *Logged bug 40874*
- *Logged bug 40876*
- *Regressed bug 40876*
- *Regressed bug 40874*

Blocking issues:

- *None at this time.*

Sprint hours burned:

- *burned 6 hours*

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- PerfectKey*

Taskboard View: All Tasks My Tasks

Today's Date: 9/30/08

View Product:

Sample Product

View Sprint:

7/20/07 - 8/4/07

Show Sprints only for Teams to which I belong

Taskboard: All Tasks

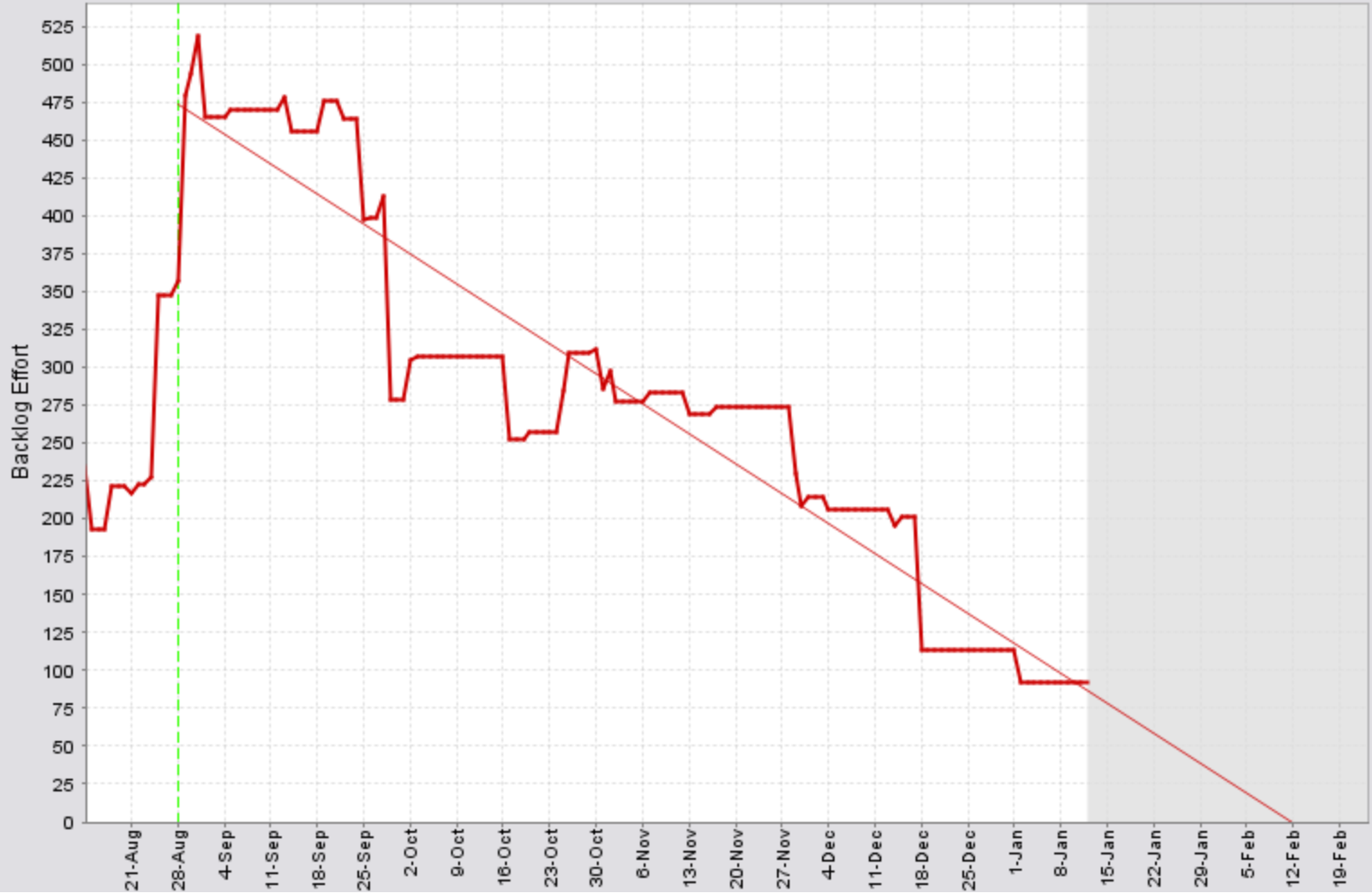
Collapse Backlog Item rows when all Tasks are done

Highlight Tasks Luke Werner(luke)



Backlog Items	Tasks / Status							
	Not Started	17 Tasks	Impeded	1 Tasks	In Progress	5 Tasks	Done	6 Tasks
(S-1445) BUG: Themes behaving s... Estimate: 4 <input type="checkbox"/> Done								
(S-1387) Batch Assignment of Us... Description: * Make it easier to assign multiple users to roles One possible solution is to m... Estimate: 4 <input type="checkbox"/> Done + Task					UATs Hrs: 2 Luke Werner (...) Documentation Hrs: 2 Luke Werner (...) Implement it Hrs: 2 Zoltan Szuns...		Mockup Hrs: 3 Luke Werner (...) 	
(S-916) Batch import users User story: as an administrator I would rather be able to import a bunch of new users in bulk rat... Estimate: 6 <input type="checkbox"/> Done + Task	Documentation Hrs: 2 (unspecified)		Fix tests Hrs: 0 Kelley Liun...		UATs Hrs: 2 Kelley Liun... Import users mockup & ... Hrs: 4 Luke Werner (...) 		Add a disabled, checke... Hrs: 2 Luke Werner (...) 	
	Do import Hrs: 6 (unspecified)							
	Re-order pages Hrs: 1 Luke Werner (...) 							

Release Burndown - ScrumWorks
Release: 2.0 - Stable (ScrumWorks Pro) - 7/3/2006 - 1/12/2007 **Date: 7/24/2009**





Then they laid everybody off...

Even me.

Transition

- *The test vendor asked for our test procedures*
- *We came up with the curriculum*
- *12 weeks: with Shadow, Share, Lead*
- *Onsite training / Some offsite staff*
- *Recordings with LiveMeeting*
- *“Doing Business with India”*
- *Four 2-hour classes per day*
- *KT documents, MOMs*
- *Test Case Writing and Review*

I'm their manager

- *Map of India*
- *Makeshift test lab / classroom*
- *Open-Book testing*
- *James' came in to do drive-by learning*
- *Assigned features and roles to the team
(what are your top 3 favorites?)*
- *Session-Based Testing*
- *Feature Analysis exercise (p&c)*

Conclusions

- *Jon focused on people, not the methods*
- *Not one of his ideas came from a book or published methodology*
- *Ideas can be half-baked – THIS is the process of baking them*
- *An important component is to build credibility*
- *Try a pilot idea*
 - *Open-Book Testing*
 - *Dawn Patrol – SBTM*
 - *Color-aided Test Design*
- *You don't need permission; oppose bad ideas*

Bake Your Half-Baked Ideas

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