Testing in Session

How to measure exploratory testing

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**Exploratory testing** (AKA “ad hoc” testing) relies on tester intuition. Like playing 20 Questions, each new test idea depends on results from the previous test.

**Benefits:**
- Unscripted
- Unrehearsed
- Improvisational

**Drawbacks:**
- Unscripted
- Unrehearsed
- Improvisational
So, how can I, as test manager, understand what’s happening, so I can direct the work and explain it to my clients?
One Solution:
Break the cloud into little clouds

The “Session”

1) Time Box
2) Reviewable Result
3) Debriefing
Time Box:
Focused test effort of fixed duration

Short: 60 minutes (+-15)
**Normal:** 90 minutes (+-15)
Long: 120 minutes (+-15)

- **Brief enough:**
  - for accurate reporting
  - to allow flexible scheduling
  - to allow course correction

- **Long enough:**
  - to get solid testing done
  - for efficient debriefings
Reviewable Result:
A "scannable" session sheet

• Charter
  – #AREAS

• Breakdown
  – #DURATION
  – #TEST DESIGN AND EXECUTION
  – #SESSION SETUP
  – #BUG INVESTIGATION AND REPORTING
  – #CHARTER / OPPORTUNITY

• Notes
  – #BUG

• Bugs

• Issues
  – #ISSUE

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Debriefing: A conversation with the lead

The Manager reviews session report to assure that they understand it and that it follows protocol

**Agenda: “PROOF”**

- Past
- Results
- Obstacles
- Outlook
- Feelings

**What happens**

- The tester answers questions
- Session metrics are checked
- Charter may be adjusted
- Session may be extended
- New sessions may be chartered
- Coaching happens

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Two Key Session Elements...

**Charter**
Suggests what should be tested, how it should be tested, and what problems to look for

**Metrics**
Three measurable elements of testing effort during a session
Charter:
A clear mission for the session

- General charters may be necessary at first:
  - “Analyze the Insert Picture function”
- Specific charters provide better focus, but take more effort to design:
  - “Test clip art insertion. Focus on stress and flow techniques, and make sure to insert into a variety of documents. We’re concerned about resource leaks or anything else that might degrade performance over time.”
The Breakdown Metrics

Testing is like looking for worms

Test Design and Execution

Session Setup

Bug Investigation
(and Reporting)
Testing is like looking for words…

E  G  O  L
I  X  P  R
O  T  A  E
F  N  S  W

(10 minutes)
Debriefing

Mission A: What happened during the session?
Mission B: How many words did you find?
Mission C: What obstacles did you face?
Mission D: Do you think you found all the words?
All groups: How did you feel about your mission?
Reporting the TBS Breakdown

A guess is okay, but follow the protocol

• Test, Bug, and Setup are orthogonal categories, but all we’re only tracking interruptions to testing

• Nearest 5% or 10% is good enough

• If activities are done simultaneously, report the highest precedence activity: T, B, then S

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Work Breakdown: Diagnosing the **productivity**

- Do these proportions make sense?
- How do they change over time?
- Is the reporting protocol being followed?
Using the Data to Estimate a Test Cycle

1. How many perfect sessions (100% on-charter testing) does it take to do a cycle? (*let’s say 40*)
2. How many sessions can the team (of 4 testers) do per day? (*let’s say 3 per day, per tester = 12*)
3. How productive are the sessions? (*let’s say 66% is on-charter test design and execution*)
4. Estimate: \( \frac{40}{12 \times 0.66} = 5 \text{ days} \)
5. We base the estimate on the data we’ve collected. When any conditions or assumptions behind this estimate change, we will update the estimate.
More info

- SBTM article – www.quardev.com
- Scan tool -- www.quardev.com
- James Lindsay -- http://www.workroom-productions.com/papers/STAREast_AiSBT_slides.pdf