

# 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.

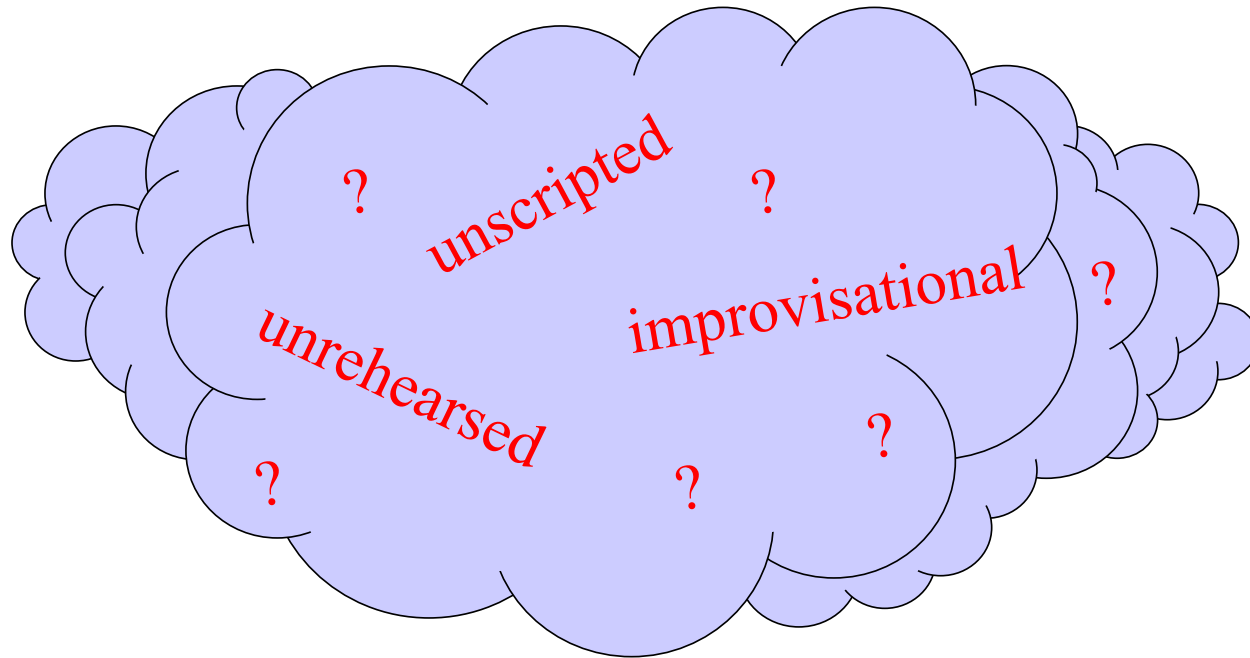
**Benefits:**

- \* **Unscripted**
- \* **Unrehearsed**
- \* **Improvisational**

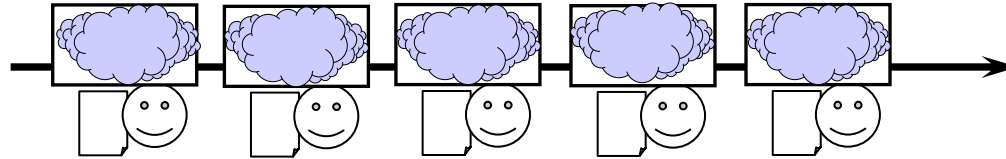
**Drawbacks:**

- \* **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 littler clouds



## **The “Session”**

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

# Time Box:

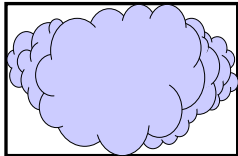
*Focused test effort of fixed duration*

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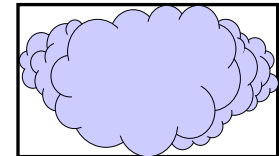
Short: 60 minutes (+-15)

**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

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- **Charter**

- #AREAS

- **Breakdown**

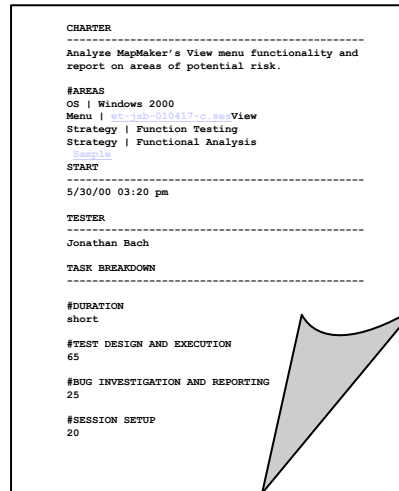
- #DURATION

- #TEST DESIGN AND EXECUTION

- #SESSION SETUP

- #BUG INVESTIGATION AND REPORTING

- #CHARTER / OPPORTUNITY



- **Notes**

- **Bugs**

- #BUG

- **Issues**

- #ISSUE

# 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

# Two Key Session Elements...

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## 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*

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- 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

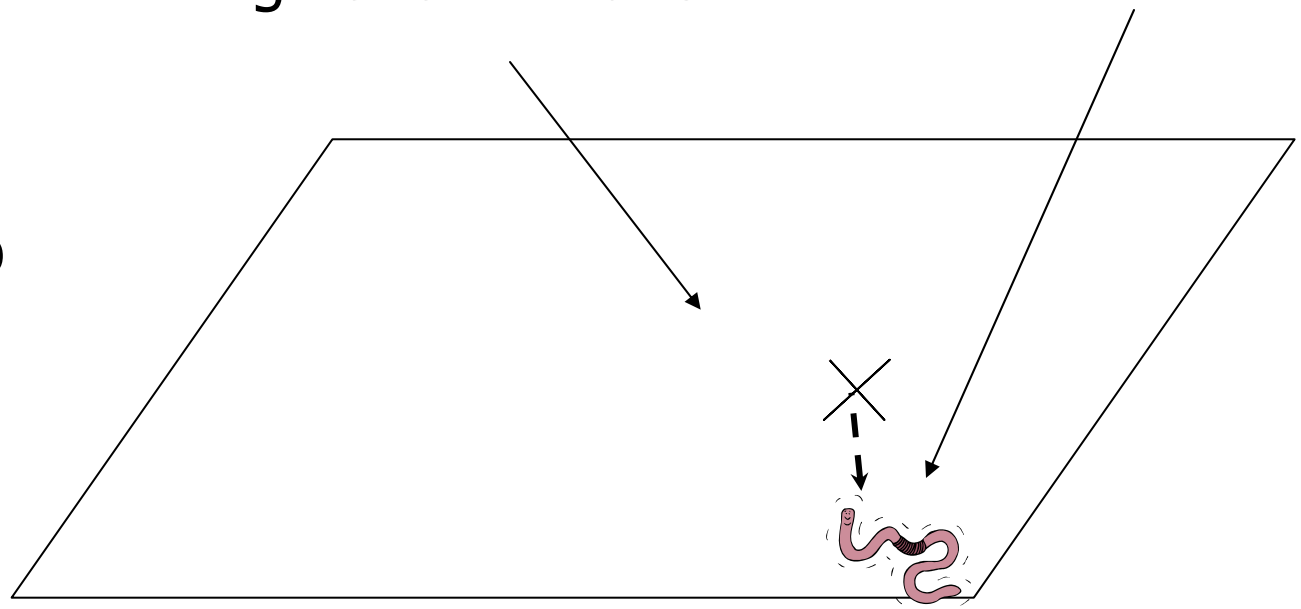
*Testing is like looking for worms*



Test Design and Execution

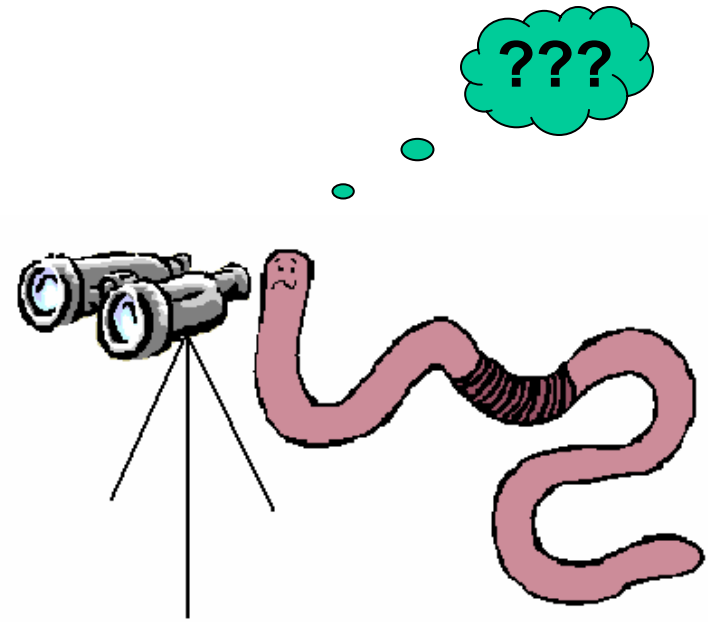
Bug Investigation  
(and Reporting)

Session Setup



# 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

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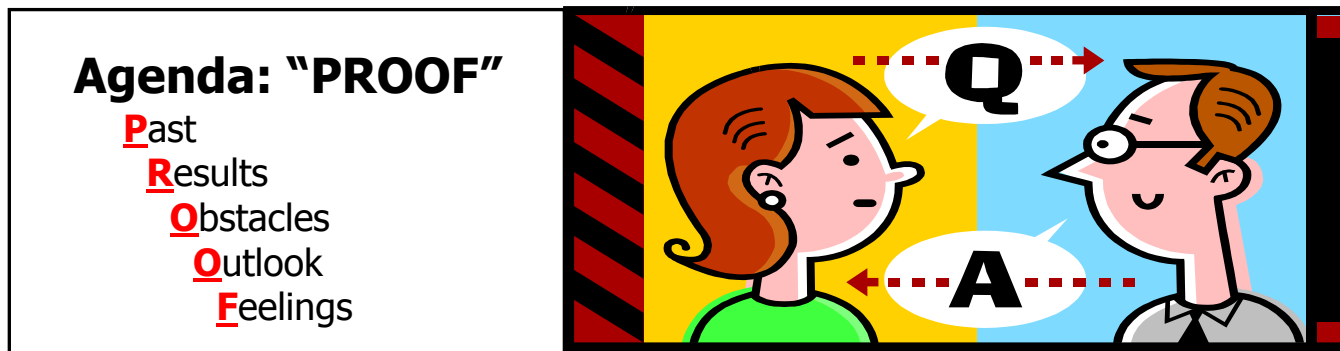
Mission A: What happened during the session?

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*

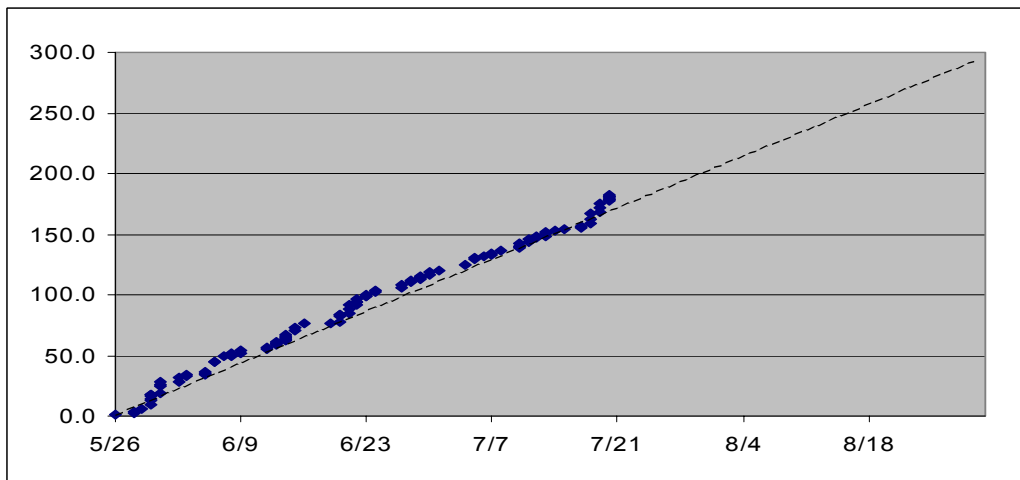
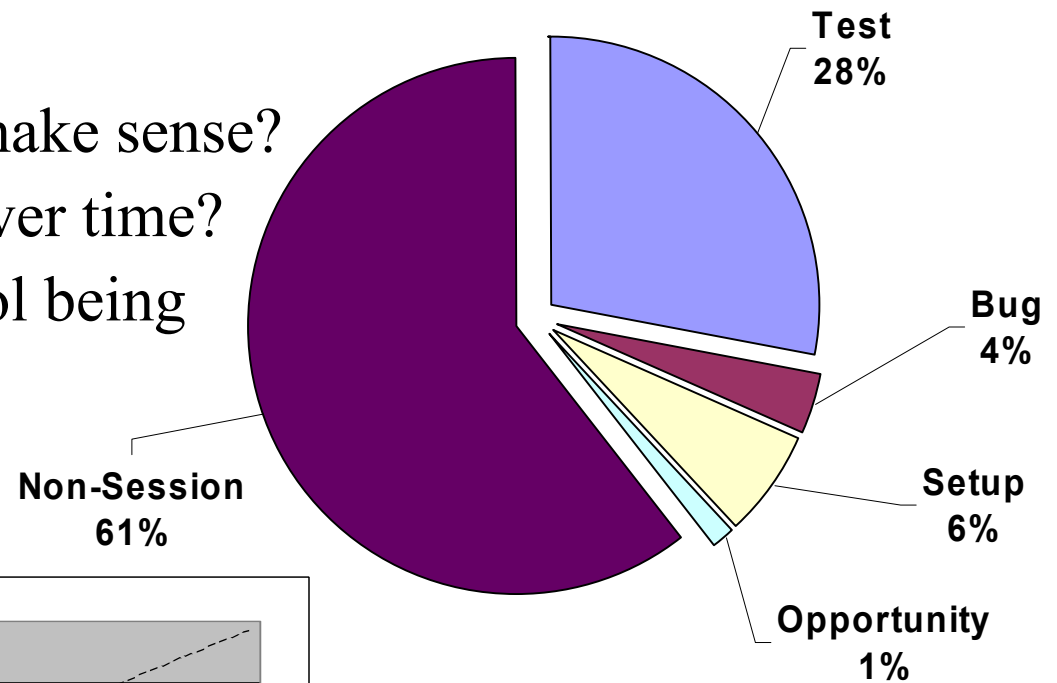
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- Test, Bug, and Setup are orthogonal categories, but all we're only tracking **interruptions to testing**
- Nearest **5%** or **10%** is good enough
- If activities are done simultaneously, report the highest precedence activity: **T, B, then S**

# 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

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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:  $40 / (12 * .66) =$  **5 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

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- SBTM article – [www.quardev.com](http://www.quardev.com)
- Scan tool -- [www.quardev.com](http://www.quardev.com)
- James Lindsay -- [http://www.workroom-productions.com/papers/STAREast\\_AiSBT\\_slides.pdf](http://www.workroom-productions.com/papers/STAREast_AiSBT_slides.pdf)
- More about Exploratory Testing – <http://www.satisfice.com/articles.shtml>