

# Testing in Session

*Making exploratory testing accountable*

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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.

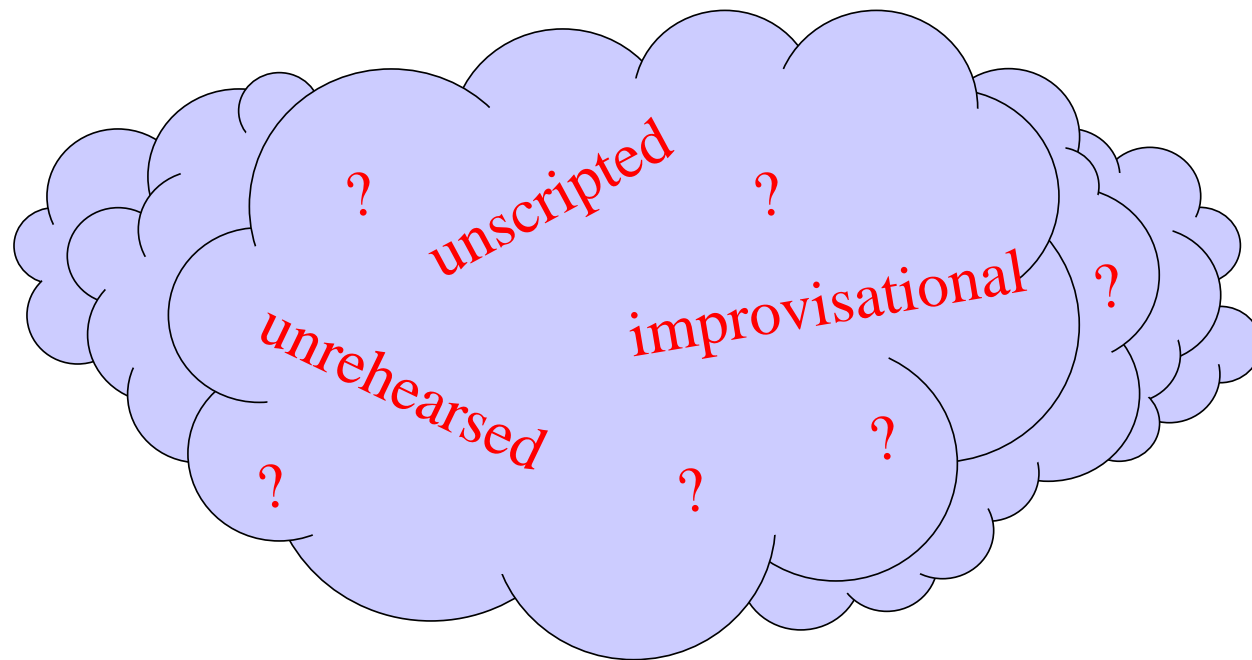
**Benefits:**

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

**Drawbacks:**

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

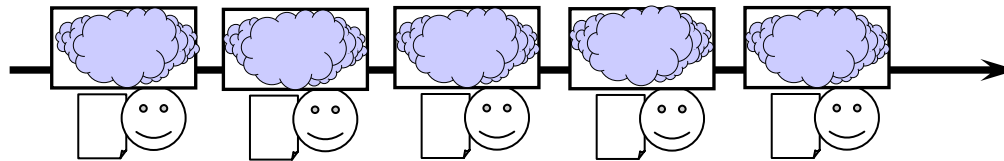
So, how can I, as test manager, understand what's happening, so I can direct the work and explain it to stakeholders?



# One Solution:

## Break the cloud into littler clouds

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### The “Session”

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

# Time Box:

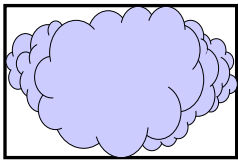
*Focused test effort of fixed duration*

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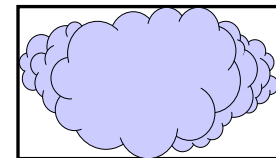
Short: 60 minutes (+-15)

**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

- **Metrics**

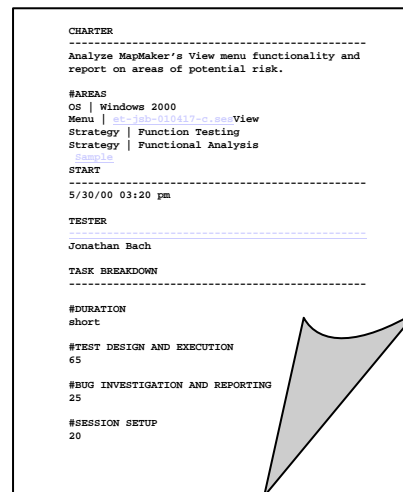
- #DURATION

- #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 | MapMakerView
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**

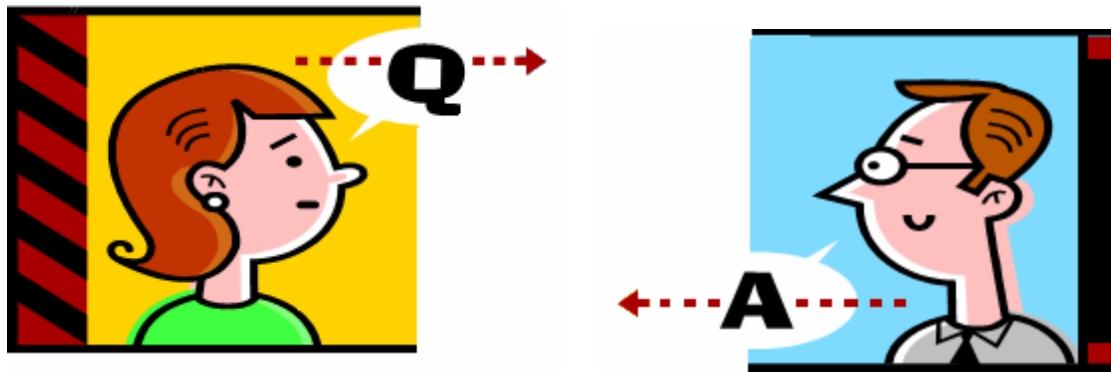
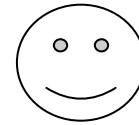
- #BUG

- **Issues**

- #ISSUE

# Debriefing:

*A conversation with the lead*



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

# Two Key Session Elements...

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**Charter:** A clear mission for the session which suggests what should be tested, how it should be tested, and what problems to find

**Breakdown Metrics:** Three basic testing activities that make exploratory testing measurable and accountable



# Charter protocol

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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*

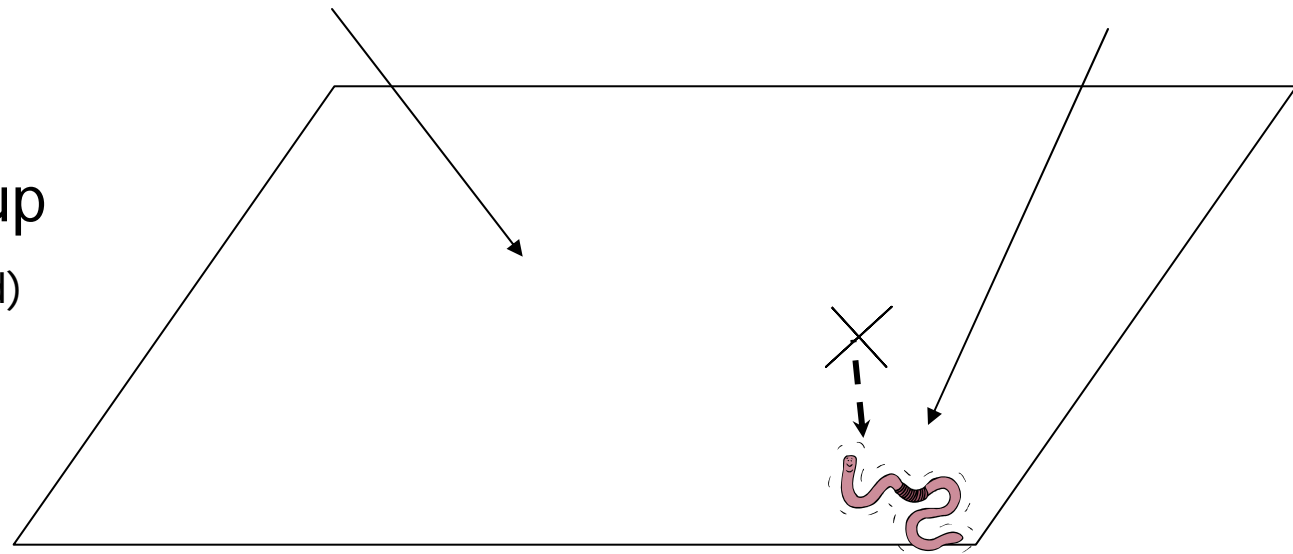
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Test Design and Execution  
(covering the ground)

Bug Investigation  
and Reporting  
(digging, if necessary)

Session Setup  
(preparing to land)



# Reporting the TBS Metrics

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- Tester estimates the percentage of session time they spent in each activity: Test Execution, Bug Reporting, and Setup
- Estimations (to nearest 5 or 10 %) are good enough
- If activities are done simultaneously, report the highest precedence activity: **T**, **B**, then **S** because we only need to track **interruptions to testing**

**DEMO:**

**The Triangle program**

# Debriefing

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How did you spend your time?

What did you find?

Did you need to read a Trig textbook?

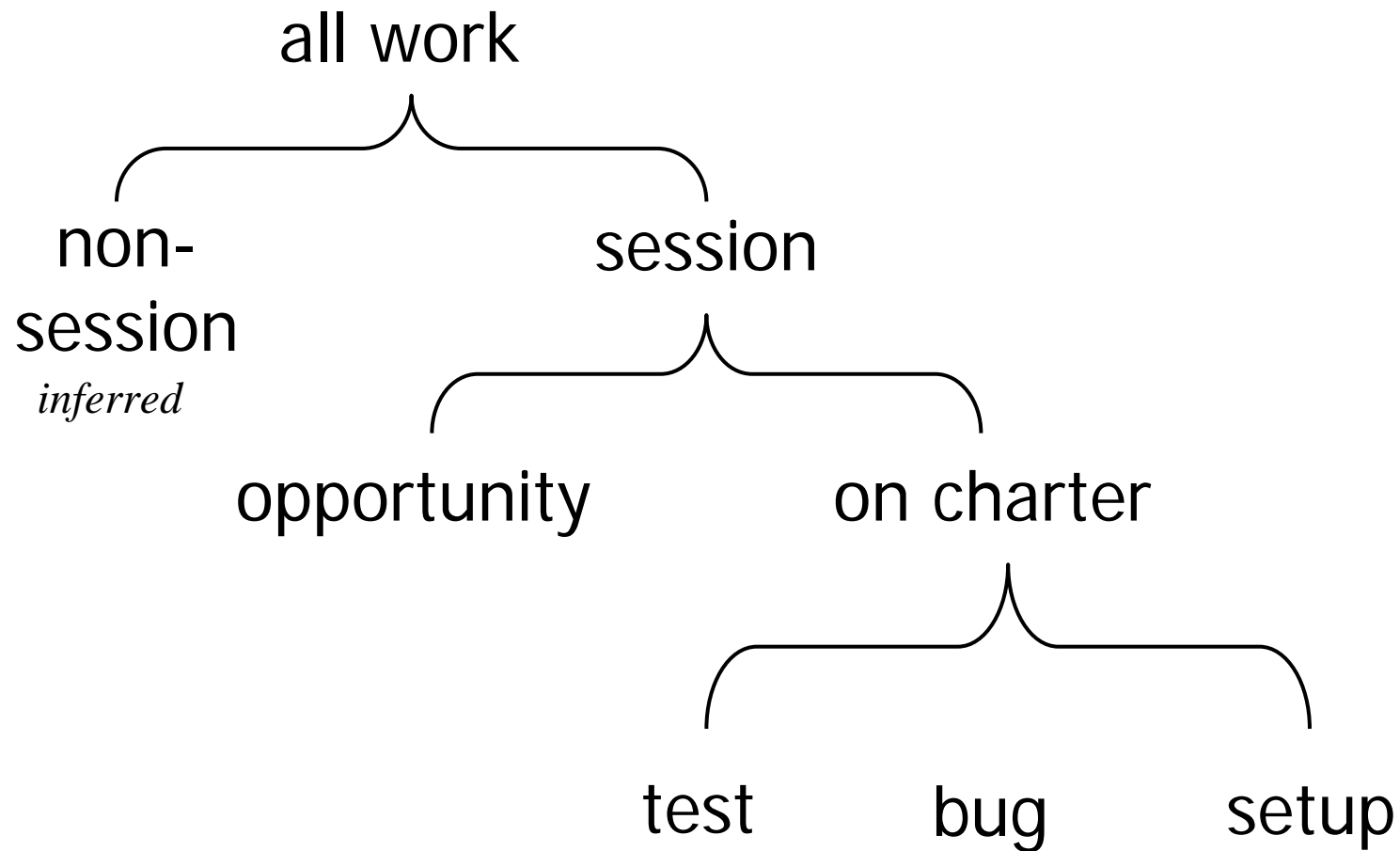
Do you think there's more to do here?

Do you like dislike trigonometry?

# Activity Hierarchy

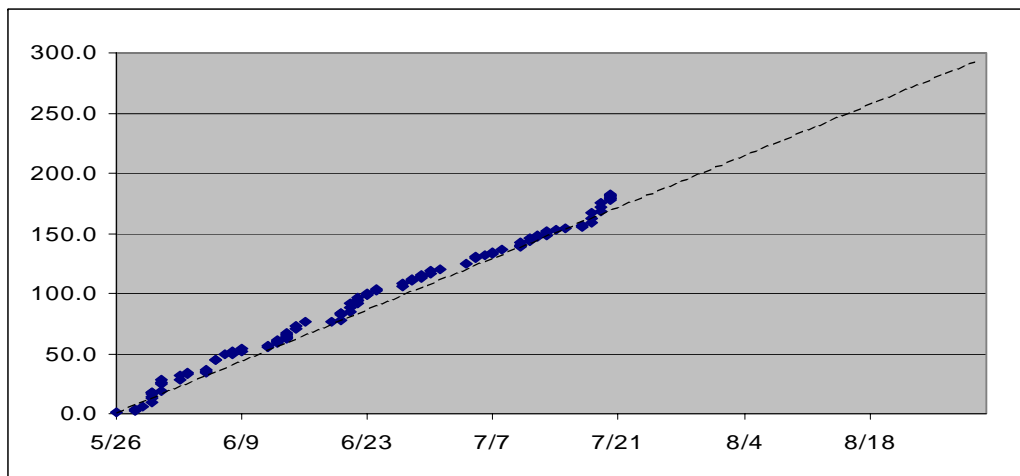
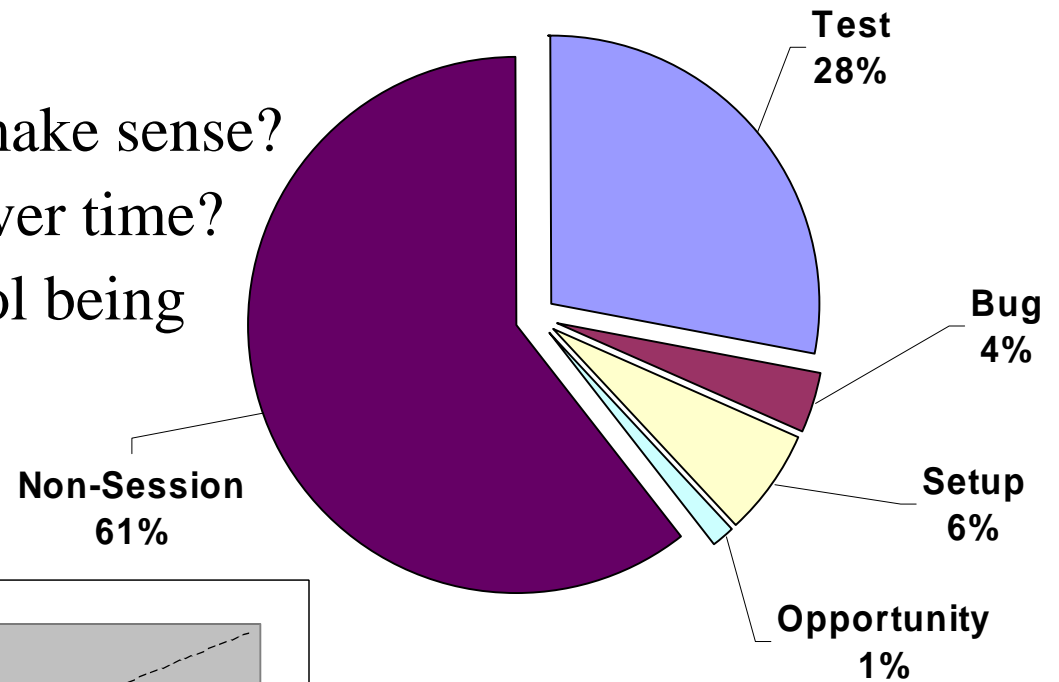
*All test work fits here, somewhere*

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# Assessing Productivity

- Do these proportions make sense?
- How do they change over time?
- Is the reporting protocol being followed?



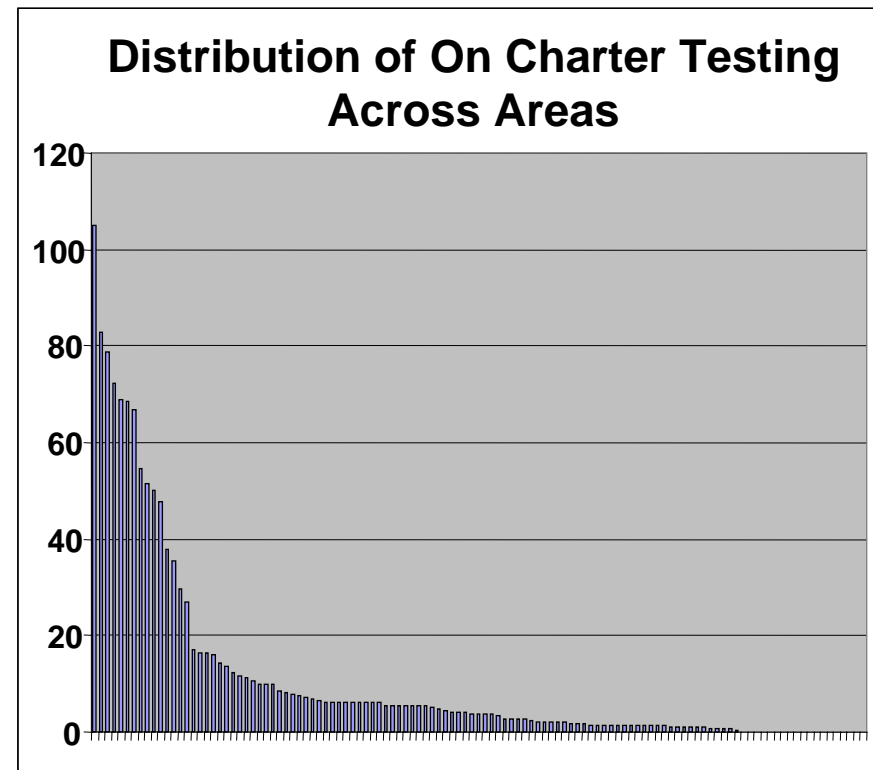
# Assessing Coverage:

*Are we testing the right stuff?*

- Is this a risk-based test strategy?

**or**

- Is it a lop-sided set of coverage areas?
- Is it distorted reporting?





# 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), [www.satisfice.com](http://www.satisfice.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 SBTM and Exploratory Testing – <http://www.satisfice.com/articles.shtml>
- James Bach, Satisfice, Inc. – <http://www.satisfice.com>