

# Testing in Session

*A method to measure  
exploratory testing*

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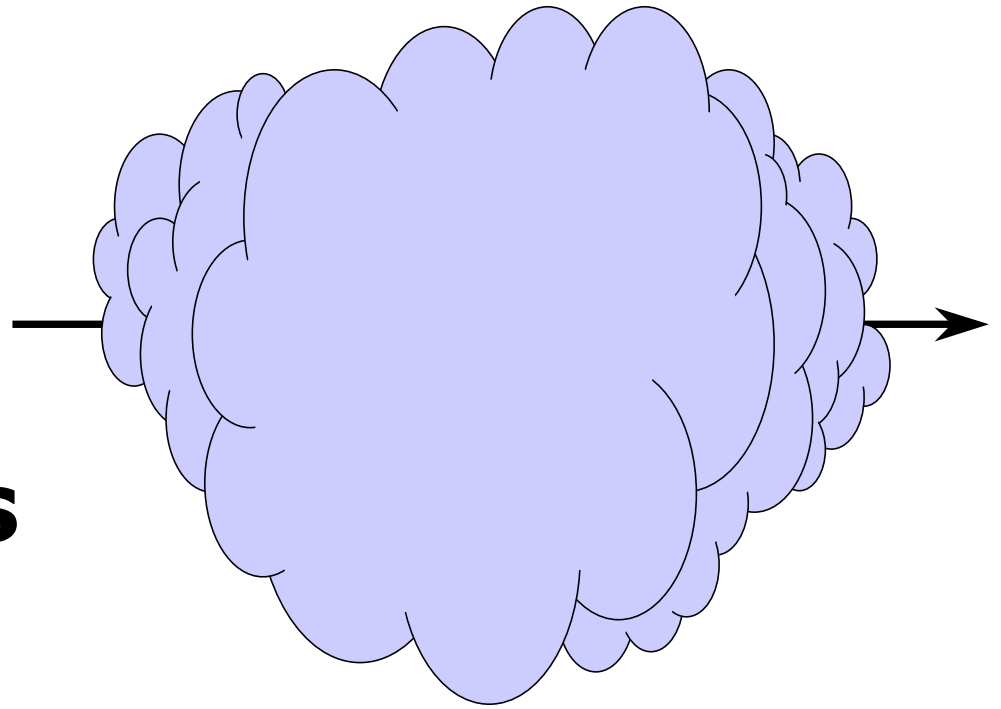
Exploratory testing (AKA “ad hoc” testing) relies on tester intuition. It is unscripted, unrehearsed, and improvisational.

**But...**

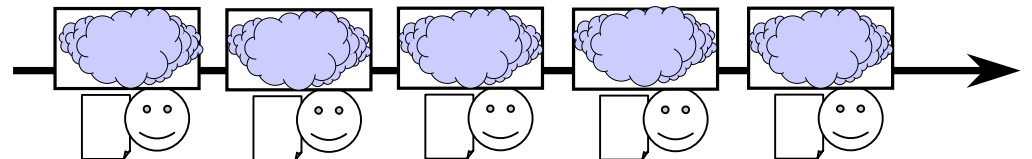
I, as test manager, need to understand what’s happening, so I can direct the work and explain it to my clients.

# ***Solution:*** **Test in Sessions**

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



**VS.**



# Charter:

*A clear mission for the session*

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- Suggests what should be tested, how it should be tested, and what problems to look for
- Not meant to be a detailed plan
- 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.”

# 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
- Brief enough to allow flexible scheduling
- Brief enough to allow course correction
- Long enough to get solid testing done
- Long enough for efficient debriefings

***Beware of overly precise timing***

# Debriefing:

*Measurement begins with observation*

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- The manager reviews ***session sheet*** to assure that they understand it and that it follows the protocol
- The tester answers any questions
- Session metrics are checked
- Charter may be adjusted
- Session may be extended
- New sessions may be chartered
- Coaching happens

## **Agenda: "PROOF"**

**Past**

**Results**

**Obstacles**

**Outlook**

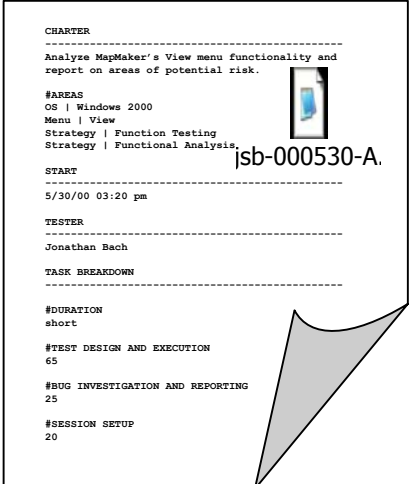
**Feelings**

# Reviewable Result:


## *A "scannable" session sheet*

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- Charter
  - #AREAS
- Start Time
- Tester Name(s)
- Breakdown
  - #DURATION
  - #TEST DESIGN AND EXECUTION
  - #BUG INVESTIGATION AND REPORTING
  - #SESSION SETUP
  - #CHARTER / OPPORTUNITY
- Data Files
- Test Notes
- Bugs
  - #BUG
- Issues
  - #ISSUE



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

#AREAS  
OS | Windows 2000  
Menu | View  
Strategy | Function Testing  
Strategy | Functional Analysis,  |sb-000530-A.

START  
-----  
5/30/00 03:20 pm

TESTER  
-----  
Jonathan Bach

TASK BREAKDOWN  
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#DURATION  
short

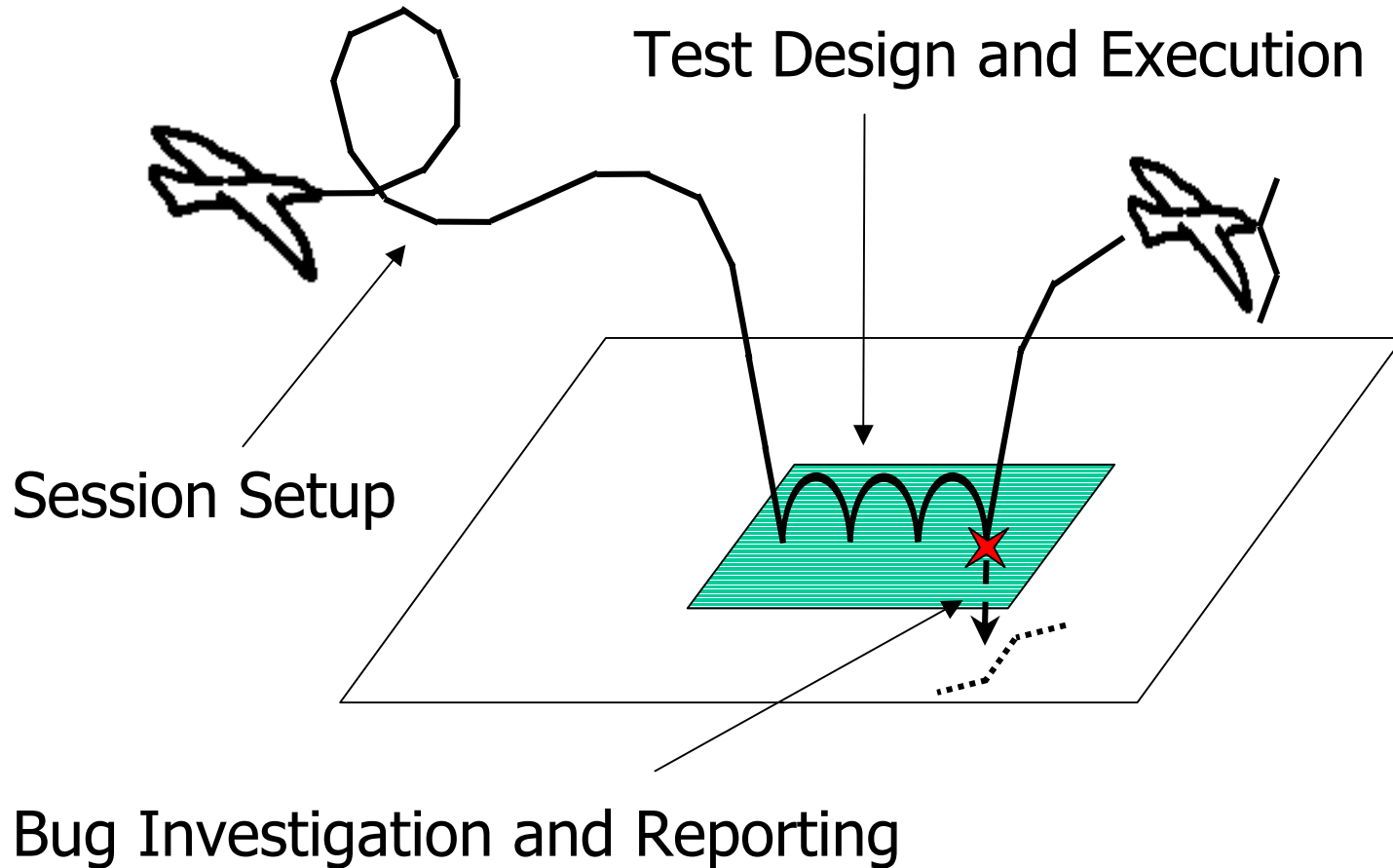
#TEST DESIGN AND EXECUTION  
65

#BUG INVESTIGATION AND REPORTING  
25

#SESSION SETUP  
20

# The Breakdown Metrics

*Testing is like looking for worms*



# Reporting the TBS Breakdown

*A guess is okay, but follow the protocol*

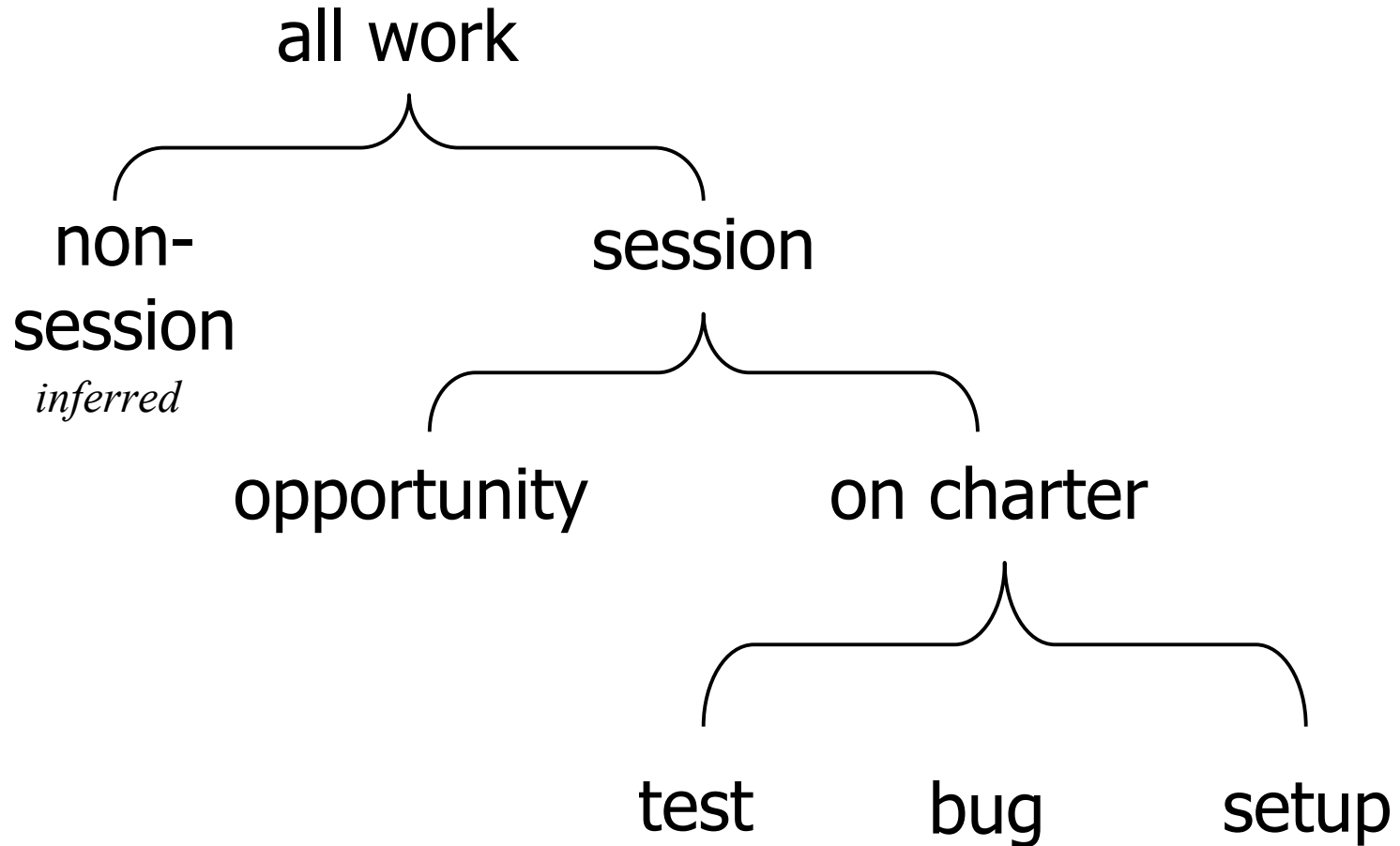
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- Test, Bug, and Setup are orthogonal categories.
- Estimate the percentage of charter work that fell into each category.
- Nearest 5% or 10% is good enough.
- If activities are done simultaneously, report the highest precedence activity.
- Precedence goes in order: T, B, then S.
- All we really want is to track interruptions to testing.
- Don't include Opportunity Testing in the estimate.

# Activity Hierarchy

*All test work fits here, somewhere*

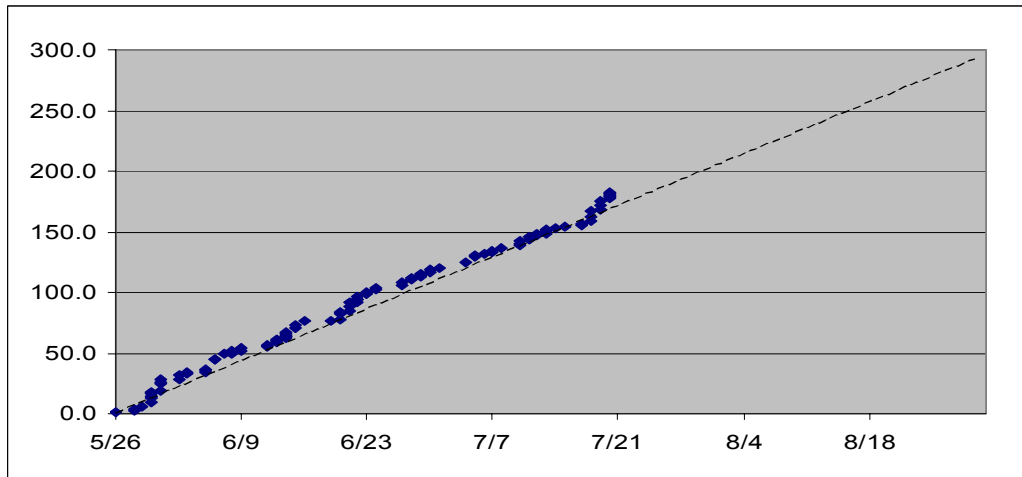
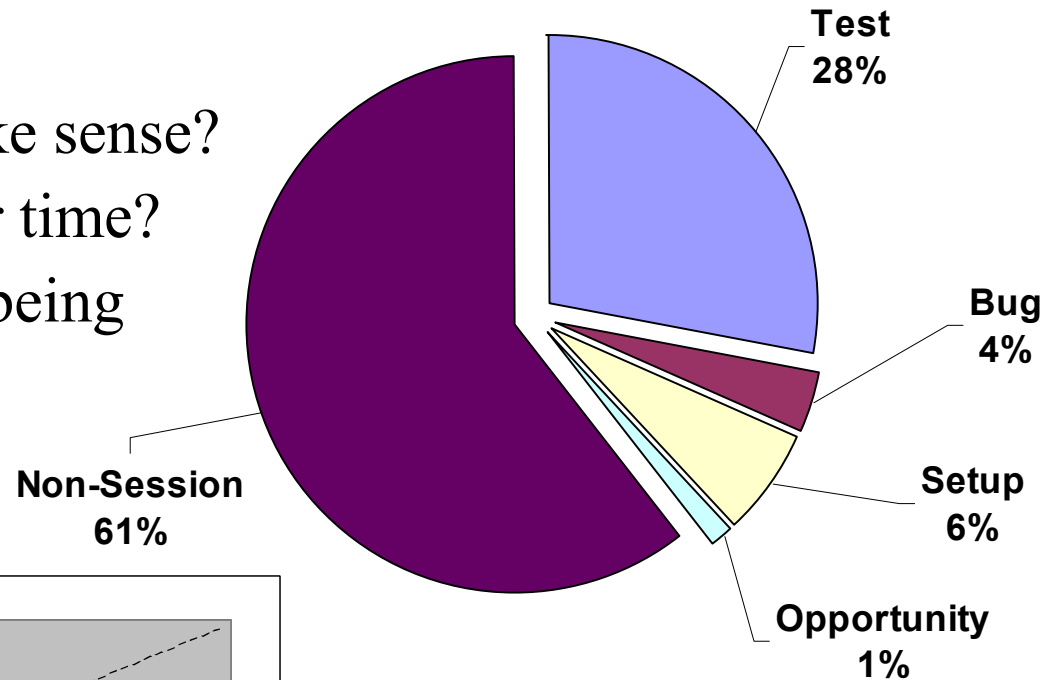
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# Work Breakdown:

## *Diagnosing the productivity*

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



# Coverage:

## *Specifying coverage areas*

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- These are text labels listed in the Charter section of the session sheet. (e.g. "insert picture")
- Coverage areas can include anything
  - *areas of the product*
  - *test configuration*
  - *test strategies*
  - *system configuration parameters*
- Use the debriefings to check the validity of the specified coverage areas.

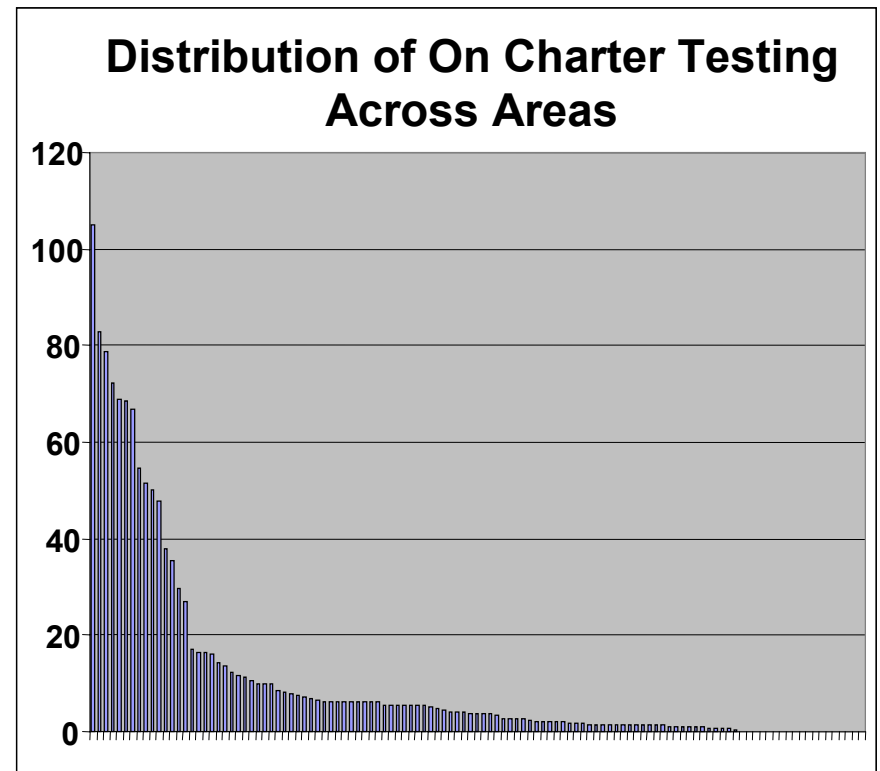
# Coverage:

*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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- <http://www.qasig.org/articles>
- Scan tool -- TBA
- 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>