

CAI Testing Tool

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The 11th International Blaise Conference
Annapolis, Maryland
September 2007





Introduction

The road to standardized testing

- Increase the over-all quality of Computer-Assisted Instruments (CAI)
- Reduce the cost of testing
- Increase access to information concerning CAI development and de-bugging



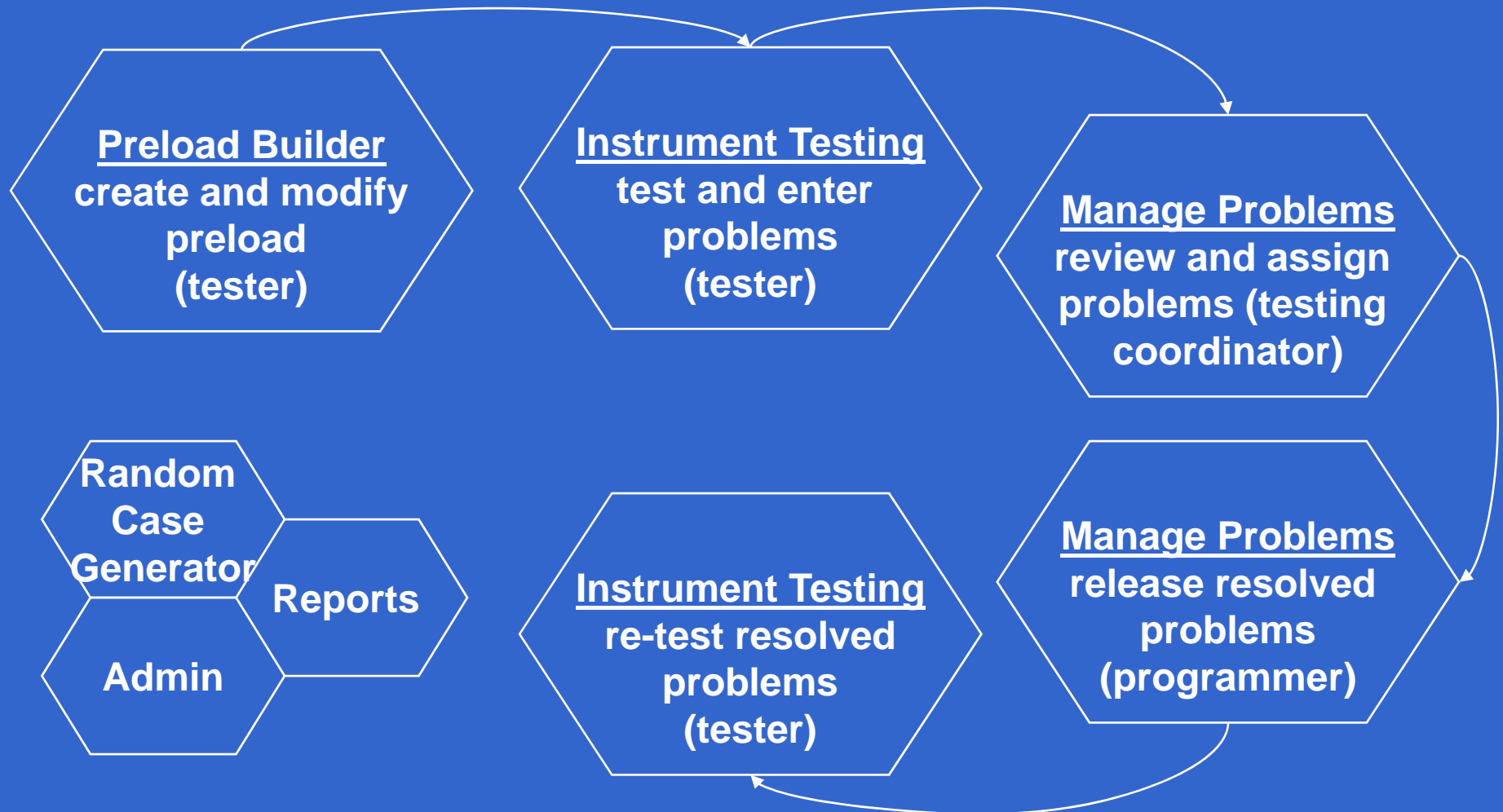
Objectives

Develop a generic testing tool that

- Can be used by all projects using Blaise CAI
- Results in time and cost savings
- Allows for critical path testing
- Allows for testing data models at various stages of development
- Is adaptable for multiple environments



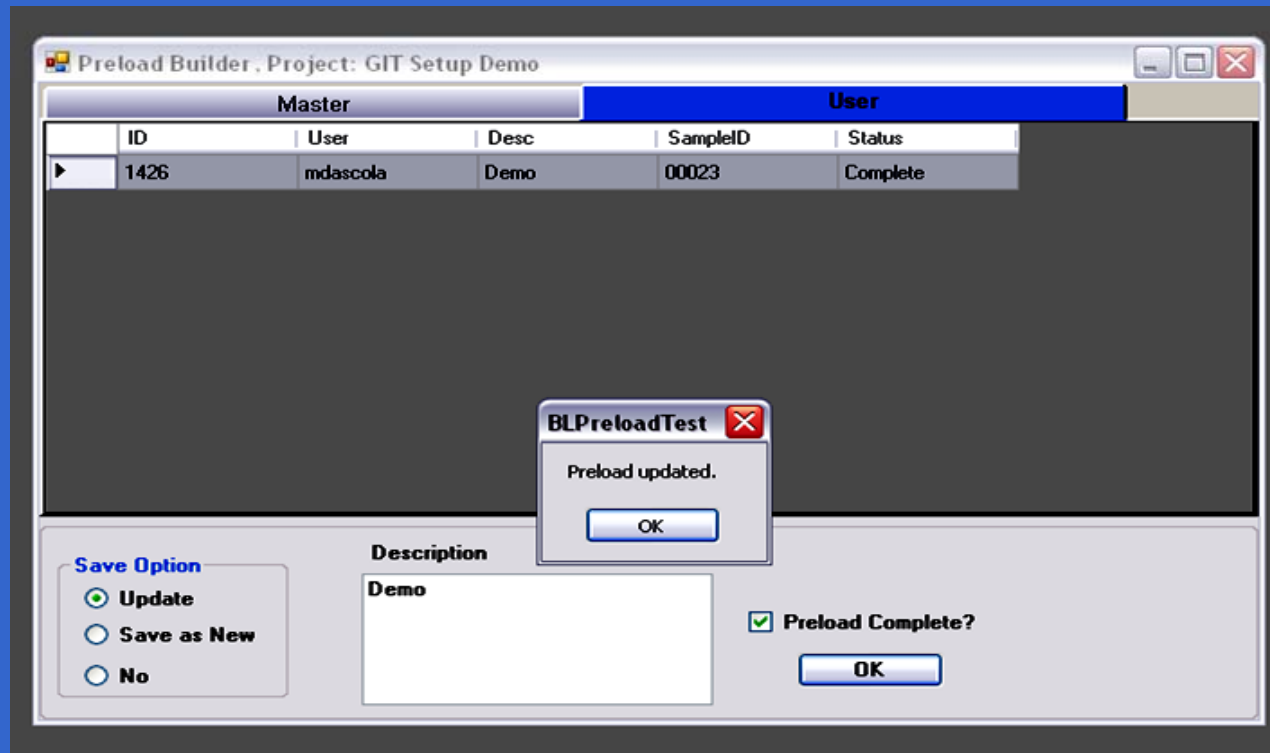
CTT Components





Preload Builder

- Data loaded to Blaise instrument that are used as jump determinants, text fills, etc





Instrument Testing

- Problems entered on a per item basis

Generalized Interviewing Techniques FIELD 2005

Forms Answer Help Testing Note Hide Watch Window

Interviewer checkpoint:

Is this a face-to-face or telephone interview?

1. Face-to-face interview
 5. Telephone interview

Introduction	1	Continue FTF
Mode of IW	1	
Vol Statement	1	

Testing Notes

GIT.Mode

Problem Description

'interviewer' is not spelled correctly

Problem Type

Question Text
Label
Consistency Check
Question Text
Question Fill
Screen Format
Iwer instruction
Preload
Other

Save
Browse
Cancel



Manage Problems

- Review and management of problems

CAI Testing Tool (Version: 2.2.0.0) - [Problem Management for Study: GIT]

File Preload Builder Instrument Testing Manage Problems Reports Random Case Generator Admin Help

Filter

Problem ID	Project Id	Cai Field Name	Cai Block Name	Cai Meta Date	Problem Type	Priority Level	Problem Status	Assigned Person	Date Entered	Date Fixed	Who Fixed
mdascola-3864-N	GIT Setup Demo	GIT.Mode	GIT	10/11/2006 10:0...	Question Text	Medium	New		09/19/2007 1:07...		
mdascola-3863-N	GIT Setup Demo	GIT.Mode	GIT	10/11/2006 10:0...	Question Text	Medium	New		09/19/2007 12:5...		
mdascola-3862-N	GIT Setup Demo	GIT.Intro	GIT	10/11/2006 10:0...	Question Text	Medium	Fixed	Youhong Liu	09/19/2007 11:3...		Jeff Smith
qianyang-3480-N	GIT Setup Demo	GIT.SS_Conf	GIT	10/11/2006 10:0...	Code List	Medium	New		08/07/2007 4:44...		



Manage Problems

- Assign, edit, reprioritize problems

CAI Field Name	CAI Block Name	CAI Date				
<input type="text" value="GIT.Mode"/>	<input type="text" value="GIT"/>	<input type="text" value="10/11/2006 10:04:00 AM"/>				
CAI Question Text						
<input type="text" value="@B@XR@X Interviewer checkpoint: @/~/Is this a face-to-face or telephone interview?@B"/>						
Problem ID	<input type="text" value="mdascola-3864-N"/>	Sample ID	<input type="text" value="00023"/>	Date Fixed	<input type="text"/>	
Problem Type	<input type="text" value="Question Text"/>	Date Created	<input type="text" value="09/19/2007 1:07:56 PM"/>	Who Fixed	<input type="text"/>	
Level of Priority	<input type="text" value="Medium"/>	Created By	<input type="text" value="mdascola"/>	Date Tested	<input type="text"/>	<input type="button" value="Open Screen Shot"/>
Problem Status	<input type="text" value="New"/>	Problem Origin	<input type="text" value="Tester"/>	Who Tested	<input type="text"/>	<input type="button" value="Open Audit Trail"/>
Assigned Person	<input type="text" value="Youhong Liu"/>	Project	<input type="text" value="GIT Setup Demo"/>			
Problem Description	<input type="text" value="Interviewer is"/>					
	<ul style="list-style-type: none">Jeff SmithYouhong LiuMarsha SkomanJody LamkinSujatha VenkatapuramJim HagermanDave DybickiJason Langfahl					
<input type="button" value="Insert"/> <input type="button" value="Save"/> <input type="button" value="Cancel"/> <input type="button" value="Close"/>						



Instrument Testing

- Re-testing problems

Generalized Interviewing Techniques FIELD 2005
Forms Answer Help Testing Note Hide Watch Window

Interviewer checkpoint:
Is this a face-to-face or telephone interview?

1. **Face-to-face interview**
 5. **Telephone interview**

Introduction Co
Mode of IW FT
Vol Statement

Existing Problem for: GIT.Mode

ID	User	Type	Date Entered	Status
1262	shondak	Code List	02/22/2007 5:16...	New
3863	mdascola	Question Text	09/19/2007 12:5...	New
3864	mdascola	Question Text	09/19/2007 1:07...	Ready to test

BlaiseTestEntry [X]
Status updated.
OK

Description
'interviewer' is not spelled correctly

Update Problem Status
 Fixed Not Fixed



Reports

- Detailed Reports: current status of testing

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Ready to Test
Study: GIT

Project ID	Field Name	Block Name	ProblemID	ProblemType	Priority	Status	Assigned	Meta Date	Created	Tested/by
Random test for y	GIT.HHL.HHL[1].Sex	GIT	genisep-4-N	Jump Destination	Fatal	Ready to test	1	10/12/2006 10:04:00AM	10/18/2006 8:23:15AM	

Missing choice to enter on screen

Ready
to
Test

Not
Fixed

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Not Fixed
Study: GIT

Project ID	Field Name	Block Name	ProblemID	ProblemType	Priority	Status	Assigned	Meta Date	Created	Tested/by
GIT Setup Demo	GIT.Intro	GIT	sarrahb-1265-N	Question Text	Low	Not Fixed	1	10/12/2006 10:04:00AM	02/23/2007 10:56:22AM	mdascola

Missing a sentence
Update by: mdascola 09/19/2007 11:48:05 AM



Reports

- Summary Reports: performance metrics

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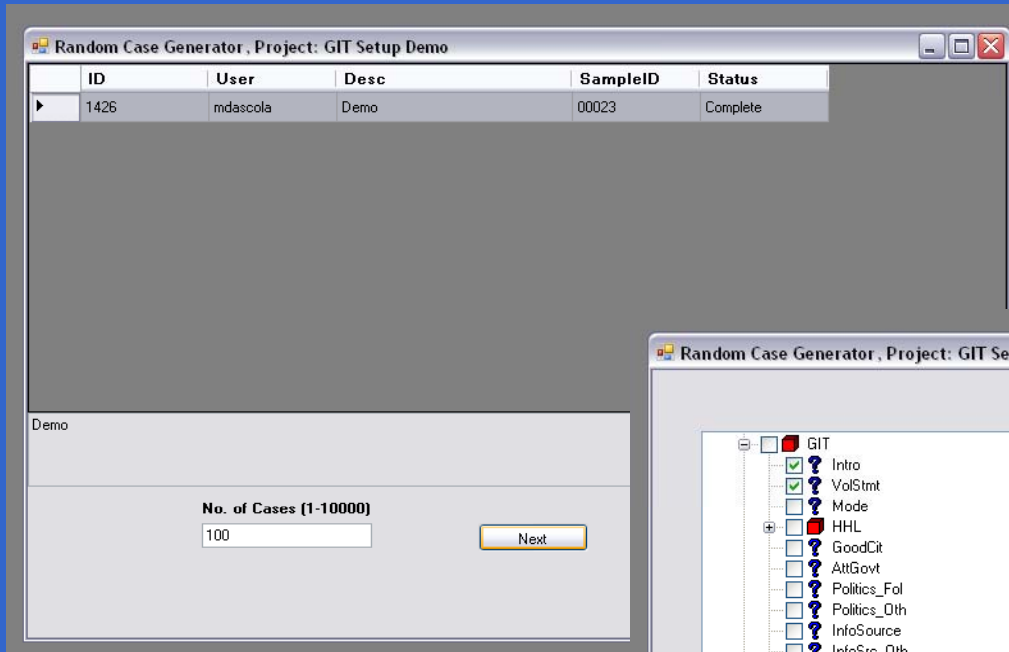
Problems Found by Section
Study: GIT

Project		Instrument Date			Total
			10/11/2006	02/21/2007	
GinaDemo		2	2	0	4
	GIT	0	2	0	2
	GITBLOCK	0	0	1	1
	Test	2	0	0	2
	Total	4	4	1	9
GIT Setup Demo		4	0	0	4
	GIT	0	28	0	28
	Total	4	28	0	32
Random test for youhong	GIT	0	3	0	3
	Test	1	0	0	1
	Total	1	3	0	4
Total		9	35	1	45

← Problems Found

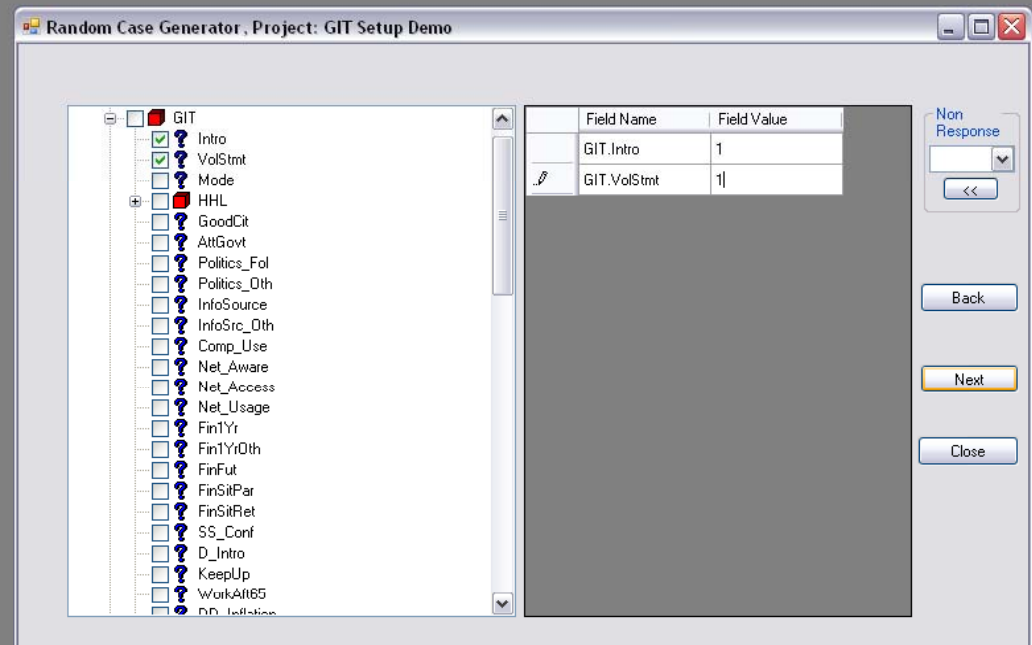


Random Case Generator



1. Select preload;
← specify #cases to be generated

2. Specify fields with constant values →





Random Case Generator

Microsoft Excel - Frequency.csv

File Edit View Insert Format Tools Data Window Help

Reply with Changes... End Review...

	A	B	C	D	E	F	G	H	I	J
1	FieldName	Frequency								
2	GIT.Intro	100								
3	GIT.VolStmnt	100								
4	GIT.Mode	100								
5	GIT.HHL.HHL[1].Name	100								
6	GIT.HHL.HHL[1].RelToMainR	0								
7	GIT.HHL.HHL[1].Sex	100								
8	GIT.HHL.HHL[1].Age	100								
9	GIT.HHL.HHL[1].BirthYr	100								
10	GIT.HHL.HHL[1].English	100								
11	GIT.HHL.HHL[2].Name	100								
12	GIT.HHL.HHL[2].RelToMainR	100								
13	GIT.HHL.HHL[2].Sex	100								
14	GIT.HHL.HHL[2].Age	100								
15	GIT.HHL.HHL[2].BirthYr	100								
16	GIT.HHL.HHL[2].English	100								
17	GIT.HHL.HHL[3].Name	100								
18	GIT.HHL.HHL[3].RelToMainR	100								
19	GIT.HHL.HHL[3].Sex	100								
20	GIT.HHL.HHL[3].Age	100								
21	GIT.HHL.HHL[3].BirthYr	100								
22	GIT.HHL.HHL[3].English	100								
23	GIT.HHL.HHL[4].Name	100								
24	GIT.HHL.HHL[4].RelToMainR	100								
25	GIT.HHL.HHL[4].Sex	100								
26	GIT.HHL.HHL[4].Age	100								
27	GIT.HHL.HHL[4].BirthYr	100								
28	GIT.HHL.HHL[4].English	100								
29	GIT.HHL.HHL[5].Name	100								
30	GIT.HHL.HHL[5].RelToMainR	100								
31	GIT.HHL.HHL[5].Sex	100								
32	GIT.HHL.HHL[5].Age	100								
33	GIT.HHL.HHL[5].BirthYr	100								
34	GIT.HHL.HHL[5].English	100								
35	GIT.HHL.HHL[6].Name	100								
36	GIT.HHL.HHL[6].RelToMainR	100								
37	GIT.HHL.HHL[6].Sex	100								
38	GIT.HHL.HHL[6].Age	100								
39	GIT.HHL.HHL[6].BirthYr	100								



Admin

Administration tasks

- Add projects; project setup
- Assign testers to projects
- Attach priority to problem types
- Assign access rights
- Import master preload



Conclusions

- Testing process streamlined & standardized
- Time savings leading to cost reductions
- Flexible and easy-to-use tool for projects and programmers
- Reduction in misinformation and miscommunication



CAI Testing Tool

- Thank You
- Questions