



Computer assisted interview Testing Tool (CTT)

- a review of new features and how the tool has improved the testing process

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Overview

- Dascola et al (2007) 'CAI Testing Tool'.
- Recent updates - demonstrate the new features.
- The current testing process - benefits of using the CTT



What is CTT?

- CTT is..
 - a comprehensive tool designed to be used by all involved in the testing process (programmer, tester, coordinator and clients) from beginning to end.
- Developed to..
 - to manage and facilitate efficient testing of Blaise questionnaires.



I1

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Key components

- **Automated testing tool**
 - Tool captures comments and information about the testing process in a 'bug log' - bug item prioritization.
- **Problem management screen**
 - A functional dashboard – all information about any issue is stored and can be accessed from this screen.
- **Report generator**
 - Reports can be run by all involved and as required.



Key components

- **Pre-load builder**
 - Used to enter or load any data required to test the instrument.
- **Random case generator**
 - Tests questionnaire routing using test cases created using random data – ensures all questions have been tested.
- **Administration**
 - Upper level functions – for example, setting-up projects, assign testers to projects, attach specific priorities to different problem types, import master preloads and assign access rights.



Recent developments

- Updated “Ribbon” user interface



Recent developments

- Updated functionality to the “Manage Problems” screen
- Demonstration



    
 Preload Builder Instrument Testing Random Case Generator Select Study Exit
 Manage Problems

1 of 150

Project ID	Problem ID	Unique Name	CAI Field Name	Date Entered	Priority Level	Problem Status	Problem Type	Sample ID
YH's Local BlaiselS	9854	yliu	IWComplete	02/18/2010	High	Fixed	Consistency Check	yliu0001
BlaiselSTest 1 (BDB) s	9856	pbatra	SectionA.A2	02/19/2010	Medium	New	Specification change	pbatra0001
BlaiselSTest 1 (BDB) s	9857	pbatra	SectionA.A2a	02/19/2010	Medium	New	Specification change	pbatra0001
BlaiselSTest 1 (BDB) s	9858	pbatra	SectionA.A2a	02/19/2010	Medium	New	Specification change	pbatra0001
Starrs_AAS server	9859	yliu	PA.PA5m_FeelDie	02/19/2010	High	New	Consistency Check	yliu0001
Starrs_AAS server	9860	josterg	IED.IED1b_HrtSom	02/19/2010	High	New	Consistency Check	Josterg0001
BlaiselSTest 1 (BDB) s	9861	yliu	IWComplete	02/19/2010	High	Not Fixed	Consistency Check	yliu0001
Starrs_AAS server	9862	genisep	AD.AD1d_FdgtSqr	02/23/2010	Medium	New	Label	genisep0001
Starrs_AAS server	9863	yliu	AD.AD3_ProbGetAI	02/23/2010	High	New	Consistency Check	yliu0001
Starrs_AAS server	9864	genisep	PA.PA5b_Sweating	02/23/2010	Medium	New	Question Text	genisep0001
Starrs_AAS server	9865	pbatra	AD.AD1b_ProbGet	02/23/2010	Medium	New	Specification change	pbatra0001
Starrs_AAS server	9866	pbatra	AD.AD1b_ProbGet	02/23/2010	Medium	New	Question Text	pbatra0001

Problem ID: 9749 Sample ID: yliu0001 Created By: yliu Date Created: 12/21/2009

CAI Field Name: SectionA.A15a CAI Block Name: SectionA CAI Date: 12/18/2009

CAI Question Text:

Project ID: YH's Local BlaiselS [Open Audit Trail](#) [Open Screen Shot](#)

Problem Type: Jump Destination Assigned Person: Who Fixed: Who Tested:

Problem Status: Not Fixed Level of Priority: High Date Fixed: 03/04/2010 Date Tested:

Problem Description:

test problem description 33
 10/12/2010 10:25:00 AM
 10/13/2010 1:10:16 PM

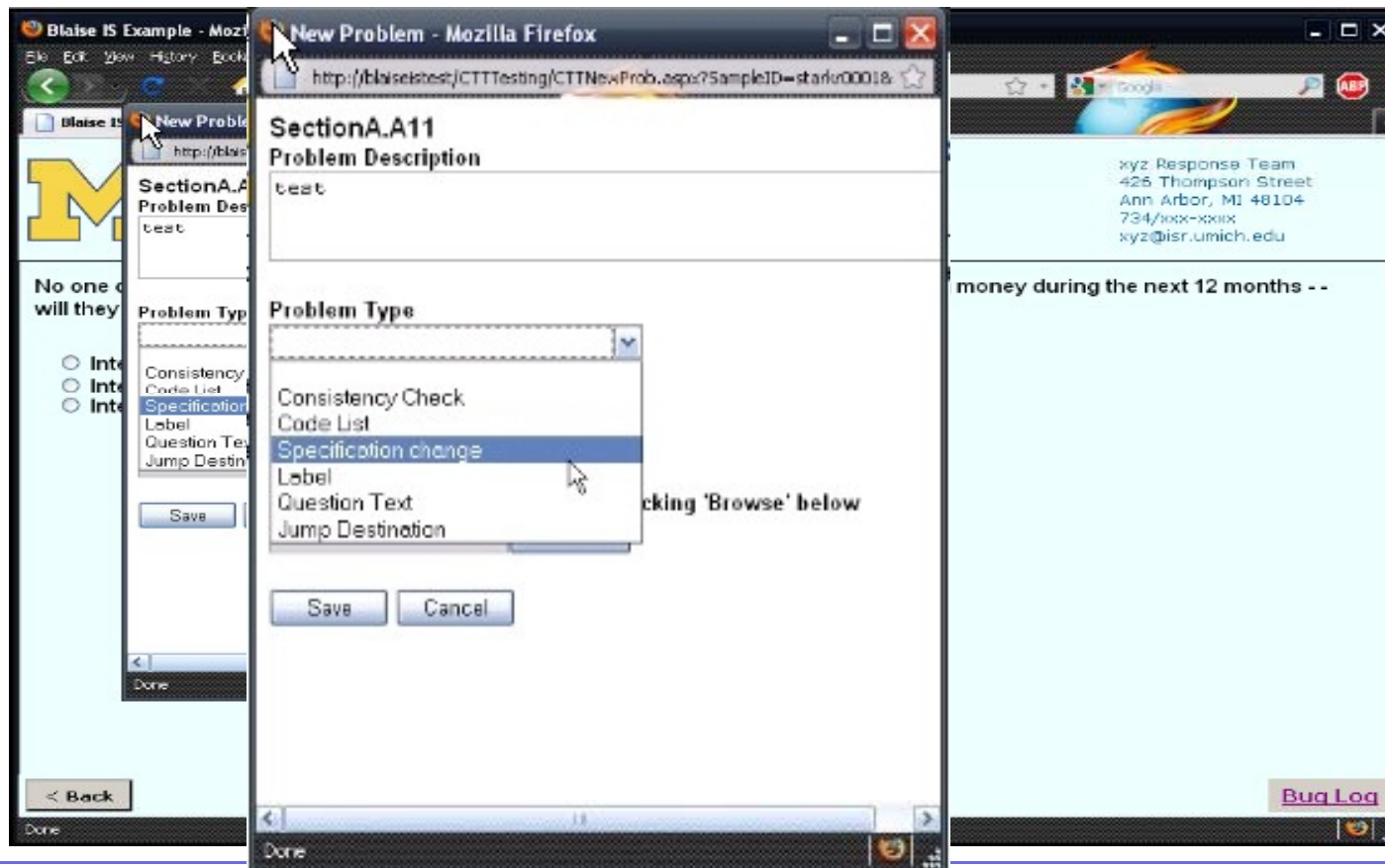
Recent developments

- Integration of BlaiseIS web-based testing
- Same functionality as “normal” Blaise CTT
 - Allows testing in different browser types



BlaiseIS CTT functions

- Reporting a problem within a BlaiseIS instrument



BlaiseIS CTT functions

- Updating the status of a problem (Fixed/not fixed)

The screenshot displays the 'Exist Problem for: SectionA.A4' page in Mozilla Firefox. The browser address bar shows the URL: <http://blaiseitest/CTTTesting/CTTExistProb.aspx?SampleID=starlr0001&CTTProjectID=SRO.SRO.BlaiseISTe>. The main content area features a table with the following data:

	ID	User	Type	Date Entered	Status	Screen Shot
Select	9790	josterg	Jump Destination	1/14/2010 12:05:36 PM	Ready to test	No
Select	9818	pbatra	Code List	2/17/2010 10:27:19 PM	New	No
Select	9819	pbatra	Code List	2/17/2010 10:29:31 PM	New	No

Below the table, there is a 'Problem Description' section with a text input field containing 'this is ~~1000~~ test'. Below the description are two buttons: 'New Problem' and 'Duplicate Problem'. Further down is the 'Update Problem Status' section, which includes two radio buttons: 'Fixed' and 'Not Fixed', and an 'Update' button. At the bottom of the page, there are navigation buttons: '< Back', 'Next >', and 'Bug Log'.



Tester

- Direct access to the CTT
 - One main bug log
 - Tool 'stamps' comment with field name/path, testers name, attaches additional data – e.g. screen shot)
- Existing problem button
 - Eliminate duplication of effort



Slide 12

16

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Tester

- Screen shots
 - Especially useful when recording comments on screen layouts or strange display issues
- Central creation of testing cases
 - The manager can create a 'master scenario' for testing an instrument
 - Tester can save their own scenarios to re-test, so data does not have to be re-entered
 - A shared pool of master cases can be prefilled



Tester

- Remote testing
 - Provides opportunity to use off site testers (clients, field interviewers)
- Sharing test cases
 - Reduces time required to 'recreate' problems
- Targeted re-testing
 - Ready to test report – no time wasted testing problems which have not been fixed.



Slide 14

I10

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Programmer

- Consolidated list of problems
 - Lists all problems on one screen and in a standard format with all relevant information
 - Elimination of missing or incorrect variable names
- Reporting
 - Built-in standardized testing reports save programmers time
 - Can focus on highest priority items
 - Can easily print copy for offline use



Slide 15

17

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Programmer

- Identifying problems
 - The ability to sort and manipulate the list of problems helps identify similarities between problems and lead to further common problems being found.



Testing coordinator

- Control over the testing process
 - Previous job – managing conflicting Excel bug logs
 - Current job – acting as a filter for the programmers by prioritizing tester comments
- Setting up scenarios
 - Ability to save scenarios for all testers eliminates the need to specify testing scenarios
 - Coordinators or testers can save scenarios to be used by others.



Slide 17

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Testing coordinator

- Managing problems
 - Just one list per project
 - List can be prioritized, sorted and allocated to programmers to fix from one place.
- Information about the testing process
 - Built-in reports allow the manager to access information on progress at any point



Slide 18

I11

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Objectives

- CTT was designed to...
 - Improve the quality of CAI instruments through standardized testing procedures.
 - Reduce testing costs.
 - Increase access to information about the CAI development process through preset and ad-hoc reports.



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Summary

- **Fulfilled all the objectives**
 - ✓ Testing process more efficient – saving time, money and has improved the quality of CAI questionnaires.
 - ✓ Using the CTT ensures all projects are following a standardized approach to testing.
 - ✓ CTT stores and allows access to information about the entire testing process, providing a source of data about the questionnaire development stage and ability to run reports easily at any time.
 - ✓ Repository for future projects – for example, a future wave or similar project.



Summary

- Smoother and more harmonious testing process - all those involved working in the same environment providing accurate and appropriate information which can be shared easily.
- Found the CTT to be a useful tool that reduces the burden of testing on all those involved.
- Although the quality of a questionnaire can only be as good as the time spent testing, the tool allows the tester to concentrate their efforts on releasing an instrument with minimal errors.



Questions

