Dear friends of Survey Solutions,

Version 5.10.0, released on July 5, 2016, introduces the following new features:

- Filtered answers options
- Current time question type
- Expanded scope of text substitution
- Notifications that Interviewer operations are in progress
- New tools in Interviewer for notification and review of validation errors
- Additional localization of software interface

Filtered answer options

Previously, answer options were static. Whatever answer options were defined in Designer were dutifully displayed in Interviewer. There was no mechanism for dictating which answer options were displayed under which circumstances. Now, with the filtered answer options feature, questionnaire designers have exactly this ability: to describe the conditions under which answer options will be displayed to the interviewer via the Filter field for single- and multi-select categorical questions types.

This new feature opens several opportunities for improving common questionnaire content. In food consumption modules, questionnaire designers can limit answer options to those that make sense for each food item (e.g., weight units for solids, volume units for liquids). In demographic modules, designers can now filter a child's potential fathers to the set of age- and gender-relevant household members.

```
Filter

// male
hh_b03 == 1

&&

// at least 13 years older than the current person
hh_b05a >= @current.hh_b05a + 13
```

The filtered answer options feature works in the following way. The Filter field contains a condition that is evaluated against each potential answer option. When the condition is true for a particular answer option, that answer option is displayed. When the condition is false (or yields an exception), that option is not displayed in Interviewer. In other words, the feature functions like an enabling condition for answer options, enabling only those answer options that satisfy the filter condition.

This feature also introduces two new keywords that are only available in the Filter field. For non-linked questions, the keyword @optioncode provides a way to refer to the answer options for the current question.

For linked questions, the keyword @current, used as a variable prefix, allows questionnaire developers to differentiate between the value of a variable for current roster row and that for all other rows in the current roster. For example, one may filter down the list of potential fathers to those members that are older than the current person (the child) by writing: age > @current.age.

Current time question type

A frequent fixture of questionnaires are fields for capturing the start (and end) time of the interview. Up until now, designers needed to create several questions to collect the date, hour, and minute, respectively. Now, designers can do the same by simply clicking "Current time" checkbox of a date type questions, as pictured below.

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Question type   Variable name (?)

⊘ | Date   ⌄   ⸹ | interviewStart

Variable label (?)

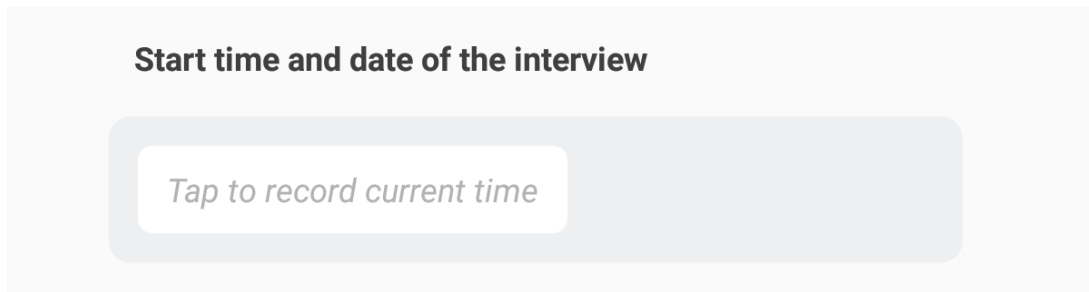[   ]

Question text

[Start time and date of the interview   ]

☑ Current time (?)

Doing so creates a question in Interviewer that is answered by pressing the "Tap to record current time" and by thereby automatically recording the current time on the tablet.

Start time and date of the interview
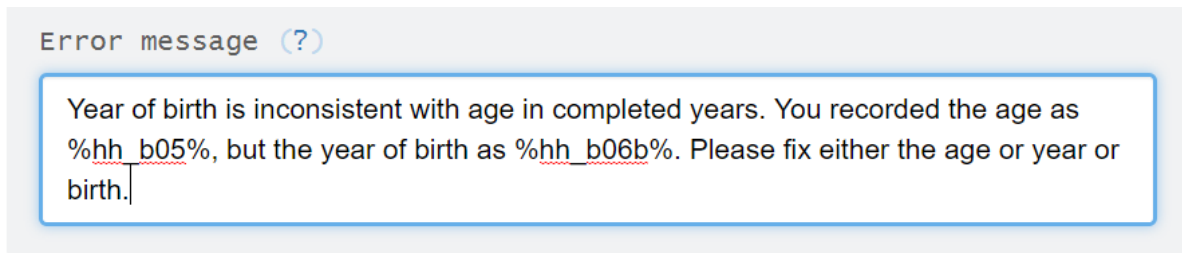
Tap to record current time

Expanded scope for text substitution

In earlier releases, text substitution—that is, displaying the value of question or variable in the questionnaire—was limited to question text and static text. With this release, text substitution is extended to the text of sections, sub-sections, and validation error messages.

This means that questionnaire content can be extensively tailored to the circumstances of the interview. Section titles can include, for example, the name of the current agricultural season. Sub-sections titles can contain, for example, the name of the household member that they target. And validation error messages can be carefully scripted to point out conflicting errors to questions and to indicate how to solve such conflicts. Questionnaire content, in other word, can become more tailored and more dynamic.
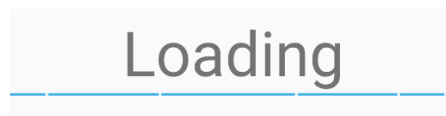
3

Text substitution continues to rely on the referencing questions and user-defined or system-defined variables the same way as before: enclosing the question or variable name with the percentage sign (%)

```
Error message (?)

Year of birth is inconsistent with age in completed years. You recorded the age as
%hh_b05%, but the year of birth as %hh_b06b%. Please fix either the age or year or
birth.
```
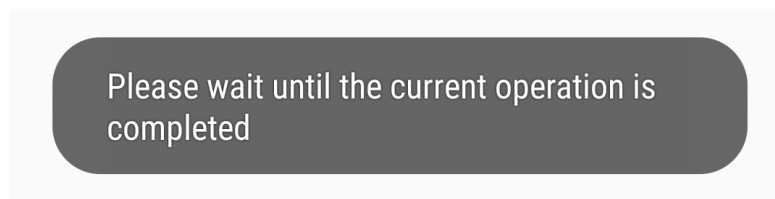
Notifications that Interviewer operations are in progress

To this point, interviewers have had a few visual clues that Interviewer is working. Some are been clear: the blue bar below questions indicates that answers are being saved. Some are ambiguous: a white screen appears while an interview is being loaded.

To give interviewers clearer cues about progress, Interviewer now has two new notifications. The first is a load screen, shown when an interview is being opened, that communicates both what is happening (i.e., an interview is being loaded) and what is the progress (e.g., 75%).
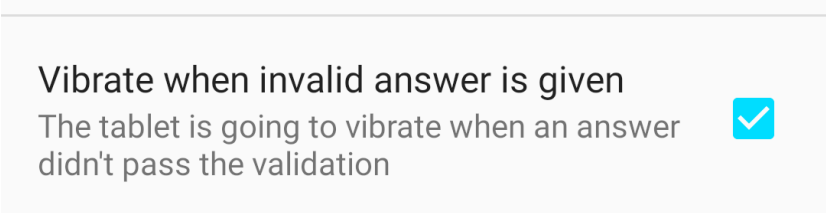
Loading

The second notification is a message that data is still being saved. This will appear when, for example, an interviewer starts to capture GPS coordinates but attempt to navigate to another section before those coordinates can be captured.

Please wait until the current operation is completed
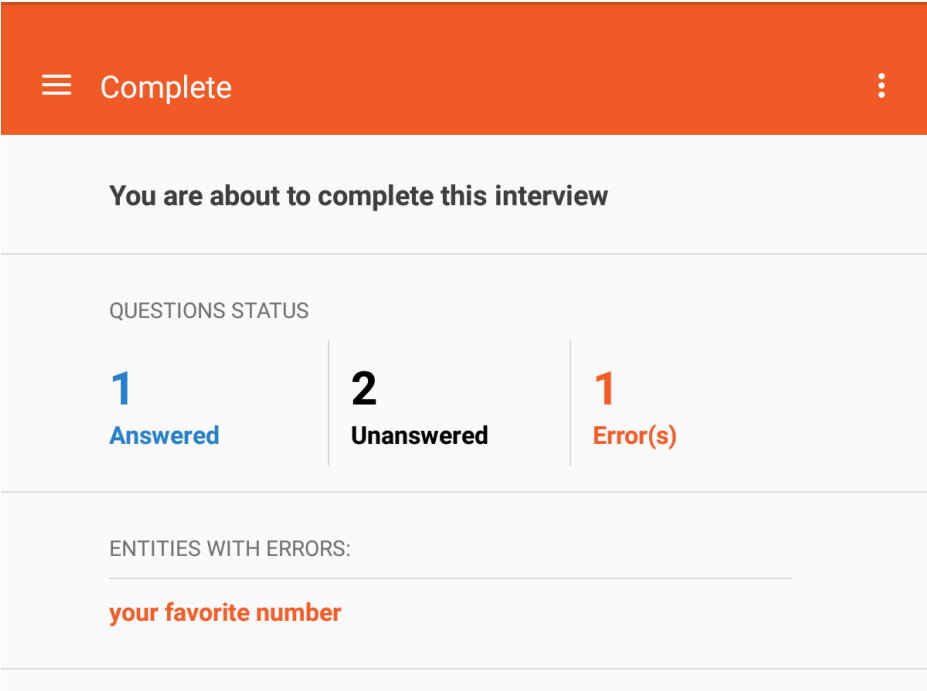
New tools in Interviewer for notification and review of validation errors

Validations are important tools for quality control. Recognizing this, the current release offers two new tools for helping interviewers heed validation errors.

To draw even more attention to errors, Interviewer vibrates when a new validation error occurs. Since this feature may not be to everyone's taste, vibration can be disabled by navigating to Interviewer's settings and removing the checkbox next to "Vibrate when invalid answer is given".

To help interviewers more readily review validation errors, Interviewer also now features a navigable list of validation errors on the Complete screen. To see the list, the interviewer looks below the "Entities with errors" heading. To navigate to a listed error, the interviewer then taps on that element of the list. The Interviewer application this moves to the point at which the selected validation error occurs in the interview.

Additional localization of software interface

As part the ongoing effort to localize the interface of Survey Solutions, this release features two new additions:

- Khmer interface for Interviewer

- Chinese interface for Headquarters and Supervisor

Changing the language of the interface follows the same rules as always. For more details, kindly consult the manual for the software product of interest.