

Some Uses of Roles in Blaise 5

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Texts in Blaise 4.8

A field can be presented in many different ways, and in Blaise 4.8 any field might have different standard ways in which it might be presented. That is:

- ▶ a field always had a field name,
- ▶ it might have a tag,
- ▶ it might have question text in one or more languages,
- ▶ it might have a label or description;
- ▶ datamodels could have titles,
- ▶ categories usually have labels,

and the list continues.

Text Roles in Blaise 5

In Blaise 5, there are six predefined text roles, and the user can extend this list to include as many as needed for the instrument being designed. Here are some text roles defined for one survey (and we might still extend the list):

ROLES =

HelpInt, HelpResp,

Watermark, Units, Template, ToolTip, EditMask, Width, QText,

PreInst, SAQ, QNum, InstInt, InstResp,

NaText, SaVisible, InitYear, InitMonth, InitDay

The three examples of Roles

In the following we discuss three distinct examples of the use of Roles:

1. a simple extension of texts to present different information to users of disconnected interviews (interviewer-administered questionnaires) and users of web browsers (self-administered questionnaires);
2. extending the friendliness of numerical text boxes;
3. using role texts to give an easily accessible way of collecting different types of information for comment review.

Interviews and Self Administered Questionnaires

Interviews and Self-administered Questionnaires

We have a study that wants to start interviewing with an interviewer (an interview), and then possibly continue data collection with the respondent connecting to the survey by means of a web browser or a mobile device (an SAQ – self-administered questionnaire).

The text for the questionnaire will, for many questions, be the same for the interview and for the SAQ, but there will be differences for some questions.

After analyzing a wide set of different questions, we decided that there were certain key functional areas to questions in general.

Question functional Role texts

- ▶ Interviewer instructions prior to the respondent question (PreInst) not appropriate for an SAQ.
- ▶ A question asked of the respondent in an interview or an SAQ (the default is text for an interview).
- ▶ A question only asked in the case of an SAQ, if the default text did not make sense for a web question (SAQ).
- ▶ Interviewer instructions to the respondent on how to complete the answer (InstInt).
- ▶ SAQ instructions to the respondent on how to complete the answer (InstResp).
- ▶ One other role (QNum) gives the question number displayed in case of problems – the tag is used to hold the SAS variable label, if applicable.

Blaise 5.4 code for a question

CoolRoof

"Please look at Show Card A4. Does the roof of this building have any of the following characteristics that allow it to reflect more sunlight or absorb less heat than a standard roof?"

PreInst "SHOW CARD A4"

InstInt "Enter all that apply"

SAQ "Does the roof of this building have any of the following characteristics that allow it to reflect more sunlight or absorb less heat than a standard roof?"

InstResp "Please select all that apply"

QNum "A11"

/ "Cool roof materials"

: SET OF

(CoatingPaint "White or highly reflective coating or paint",
TilesShingles "White or highly reflective tiles or shingles",
Aluminum "Aluminum coating",
Ballasted "Ballasted roof system",
Vegetative "Vegetated roof",
Other "Other",
None "None of these")

Screen for the interview question

SHOW CARD A4

Please look at Show Card A4. Does the roof of this building have any of the following characteristics that reflect more sunlight or absorb less heat than a standard roof?

Enter all that apply

- White or highly reflective coating or paint
- White or highly reflective tiles or shingles
- Aluminum coating
- Ballasted roof system
- Vegetated roof
- Other
- None of these

Next

Screen for the SAQ question

Does the roof of this building have any of the following characteristics that allow it to reflect more sunli

Please select all that apply

- White or highly reflective coating or paint
- White or highly reflective tiles or shingles
- Aluminum coating
- Ballasted roof system
- Vegetated roof
- Other
- None of these

Next

The Vertical Field Pane question template for interview/SAQ

Template

Name: Vertical Description: Vertical Field Pane with a Remark control Image: Select... References: --

Field Pane Template

- Cell 0,0
- mainGrid
 - Cell 0,0
 - Cell 1,0
 - PreInstText
 - Cell 2,0
 - Cell 0,1
 - Cell 1,1
 - Cell 2,1
 - Cell 0,2
 - Cell 1,2
 - fieldText
 - Cell 2,2
 - rightMarginGrid
 - Cell 0,0
 - Cell 0,3
 - Cell 1,3
 - webText
 - Cell 2,3
 - Cell 0,4
 - Cell 1,4
 - InstInt
 - Cell 2,4
 - Cell 0,5
 - Cell 1,5
 - instResp
 - Cell 2,5
 - Cell 0,6
 - Cell 1,6
 - Cell 2,6
 - Cell 0,7
 - Cell 1,7
 - errorGrid
 - Cell 0,0

Field PreInst Text

Field Question Text

Field SAQ Text

Field InstInt Text

Field InstResp Text

Error Message Text

This is correct. Continue.

Properties Events

Field Text

FieldReference

FontName PreInst

Height Auto

HorizontalAlignme Left

HorizontalTextAligi Left

LabelFor

LabelledBy

Margin 2,1,2,10

Name PreText

RoleName PreInst

RowIndex 0

RowSpan 1

ScreenReaderRoleName PreInst

ScreenReaderText

ScreenReaderTextk

ScreenReaderTextS TextOAlays

ScreenReaderRoleName

The FieldPane/MainGrid/PreText control

We can see that for the PreText control both the RoleName and the ScreenReaderRoleName properties are equal to the PreInst role. Whether we see the pretext control is its Visibility as defined by an expression:

```
IF LEN(Field.GetRoleText('PreInst')) = 0 OR State.IsCawi THEN
  'Collapsed'
ELSE
  'Visible'
ENDIF
```

That is, IF there is no role text for PreInst OR the the questionnaire is being viewed in a browser (IsCawi) THEN the control is collapsed, ELSE the role text is visible. All the other field texts have similar expressions to control visibility. Note that the font format for PreInst has a different colour text by default, partly so that interviewer instructions are clearer.

Instructions to interviewer or respondent

The two controls InstInt (interviewer instructions) and InstResp (SAQ) respondent instructions) we can see that they are the reverse of each other (that is, both cannot be visible at the same time).

```
IF LEN(Field.GetRoleText('InstResp')) = 0 OR (NOT State.IsCawi) THEN  
    'Collapsed'  
ELSE  
    'Visible'  
ENDIF
```

Both instructions have a different font format from standard question text – the font format is (like PreInst) defined in the resource database:

Defining a Tole text font

- Embedded Fonts (1)
- ▲ Font Definitions (70)
 - Default Font (1)
 - Controls (42)
 - ▲ Text Roles (15)
 - Category
 - CategoryGroup
 - Description
 - EditMask
 - InstInt**
 - InstResp
 - Message
 - PreInst
 - Question
 - SAQ
 - SpecialAnswer
 - Tag
 - Title
 - ToolTip
 - Watermark

Font Definition

Name:	InstInt	References: --
Family:	Current	<input type="checkbox"/> Current
Size:	Current	<input type="checkbox"/> Current
Bold:	False	<input type="checkbox"/> Current
Italic:	True	<input type="checkbox"/> Current
Underline:	Current	<input type="checkbox"/> Current
Color:	 Current	<input type="checkbox"/> Current
Preview:	<i>The quick brown fox jumps over the lazy dog</i>	

Enhancing Data- collection Controls

Watermark, Units, and Explicit DK

What is the gross or total square footage of all the space in this building shafts, and indoor parking levels?

square feet

I don't know

Next

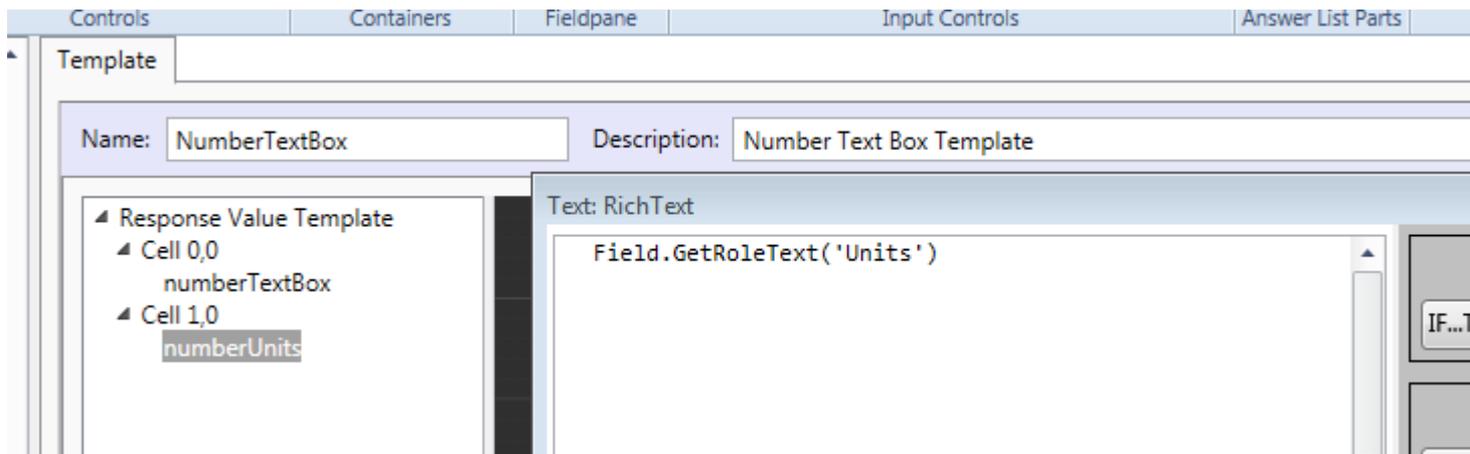
There are three points to note: there is a watermark (a standard Blaise 5 feature); there is a description of the units for the number following the entry box; and there is an explicit DK with the entry box (this study usually hides DK/RF when a question is first asked).

Here is the question code (note that fields in this instrument have DK and RF by default, which is why this field has NORF to switch off the refusal option):

```
SqFt (A6) "What is the gross or total square footage of all the space in this building  
both finished and unfinished, including basements, hallways, lobbies,  
stairways, elevator shafts, and indoor parking levels?"  
Watermark "Enter a number"  
Units "square feet"  
SaVisible "Yes"  
/ "Square feet"  
: 1..999999999, NORF
```

A label (numberUnits) has been added to the template for a NumberTextBox in the resource database, and the label text is taken from the Units text role – if the Units role does not exist for a question, the label is empty:

numberUnits



A label (numberUnits) has been added to the template for a NumberTextBox in the resource database, and the label text is taken from the Units text role – if the Units role does not exist for a question, the label is empty.

The screenshot displays a configuration window for a template named 'RadioButtonOptionalHidden'. The window has a 'Name' field containing 'RadioButtonOptionalHidden' and a 'Description' field containing 'Optionally hidden special answer radio buttons and text'. On the left, a tree view shows the template's structure: 'Special Answer Template' (expanded) contains 'Cell 0,0' (expanded), which contains 'mainGrid' (expanded), 'Cell 0,0' (expanded), and 'Cell 1,0'. 'mainGrid' contains 'controlGrid' (expanded), which contains 'specialAnswerRadioB'. 'Cell 0,0' contains 'specialAnswerText'. The main area shows the 'ApplyAtRuntime: Boolean' property with a complex logical expression: `((SpecialAnswer.Field.AnswerStatus = SpecialAnswer OR (NOT ((State.RuntimeSettings.HideSpecialAnswerFirstTime AND (NOT SpecialAnswer.Field.IsVisited)) OR (State.RuntimeSettings.HideSpecialAnswerWhenResponse AND SpecialAnswer.Field.AnswerStatus = Response)))) AND (NOT IsDropDown)) OR Field.GetRoleText('SaVisible') = 'Yes'`. On the right, a preview pane shows a partial view of a form with a button labeled 'IF...THEN.' and a text field with an asterisk.

The appearance of the DK is controlled by the SaVisible text role, which is applied at run time to the RadioButtonOptionalHidden template (remember NORF).

Annotating interviews in Blaise 5

Two questions, one focussed

Please enter the date this occurred, using the date-picker calendar.

11/29/2017 

Please enter the time this occurred.

1:00 PM

Press F9 when on the focused question to get the information source

Please enter the date this occurred, using the date-picker calendar.

11/29/2017

Please enter the time this occurred.

1:00 PM

Information_Source

Observation Respondent OtherFamily

Information

We press F9 (the default for remarks is Ctrl-M, but we added F9) but ,before we enter some information, we are asked to provide the source of the information.

Capturing the importance of a remark

Which of the following is true for you?

Select one option only.

- One
- Two
- Three
- Four
- Five
- Six
- Seven
- Eight
- Nine

Comment_Importance

- Low
- Medium
- High

Comment

Capturing just the information

Open-ended question

Information

Role texts and Field Properties

An important introduction in Blaise 5 is the notion of field properties, and the beginning of this questionnaire code includes two significant sections – ROLES and FIELDPROPERTIES:

```
...
ROLES = HELP, ShowFieldProperty
...
FIELDPROPERTIES
  Comment_Importance: (Low, Medium, High)
  Comment: STRING[1023]
  Information_Source: (Observation, Respondent, OtherFamily)
  Information: STRING[1023]
...
```

In the FIELDPROPERTIES section there are definitions of the four types of remark we have encountered above and, to define which combination of remarks we show, we use the ShowFieldProperty role. For example, the time question:

```
TimeField ENG "Please enter the time this occurred."
  ESP "Introduce la fecha esto seleccionando la hora."
  ShowFieldProperty "Information_Source;Information;"
  / "Example time field"
  : TIMETYPE, DK
```

Displaying the required remark-types: Role text ShowFieldProperty

The screenshot shows a configuration window for a 'StringTextBox' control. The window has a title bar with tabs for 'Controls', 'Containers', 'Fieldpane', 'Input Controls', and 'Placeholders'. Below the title bar, there are fields for 'Name: StringTextBox', 'Description: String Textbox property template', and 'Image: Xyz abc'. A tree view on the left shows a 'FieldProperty Template' with a 'Cell 0,0' containing an 'FpGrid' with 'Cell 0,0' (propertyName) and 'Cell 0,1' (stringTextBox). The main area is titled 'Visibility: Visibility' and contains the following code:

```
IF POSITION(LOWERCASE(FieldProperty.Name) + ';',  
LOWERCASE(Field.GetRoleText('ShowFieldProperty'))) > 0  
THEN  
  'Visible'  
ELSE  
  'Collapsed'  
ENDIF
```

At the bottom of the main area is a table with columns 'Type', 'Line', 'Col', and 'Message'. To the right of the code editor are several sections: 'Constructs' with an 'IF...THEN...ELSE...ENDIF' dropdown, 'Functions' with an empty dropdown, 'Variables' with 'FieldProperty', 'AnswerStatus', and 'Empty' dropdowns, and 'Value' with a 'Collapsed' dropdown. 'OK' and 'Cancel' buttons are at the bottom right.

Manipulating field properties in Blaise code

If a field property is not listed it is not shown.

It is of note that there is more to field properties than mere remarks. For example, we can filter on the information source:

```
IF (TimeField.Information_Source = Observation) THEN
  aString := TimeField.Information
ENDIF
```

And so forth.

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