



GENERATING BLAISE SURVEYS FROM DDI LIFECYCLE USING COLECTICA

In This Talk



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- Overview of DDI Survey Documentation
- DDI 2
- DDI 3.0, 3.1
 - ▣ partial OWL-S process model
- DDI 3.2
 - ▣ complete OWL-S process model



In This Talk – II



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- Use Cases
- Specifying Survey Instruments in DDI-L
- Mapping DDI-L to Blaise
- Generating Blaise Source Code



Use Case #1

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- Wisconsin Longitudinal Survey in 2006
 - ▣ Jeremy Iverson – WLS
 - ▣ Dan Smith – IBM AdTech
- Create Flow Charts for documentation
 - ▣ Parse CATI Code
 - ▣ Automate Manual Flowchart Drawing
- Store information in some standard format



DDI 2

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- ❑ Documents variables in a dataset
- ❑ Question text from a survey is associated with a single variable
- ❑ No detailed description of the question or response options
- ❑ No question flow, only simple forward and backward links



DDI 2

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- DDI 2 fails
- Not descriptive enough for creating flow charts (use case #1)
 - ▣ Need flow control logic



DDI 3.0

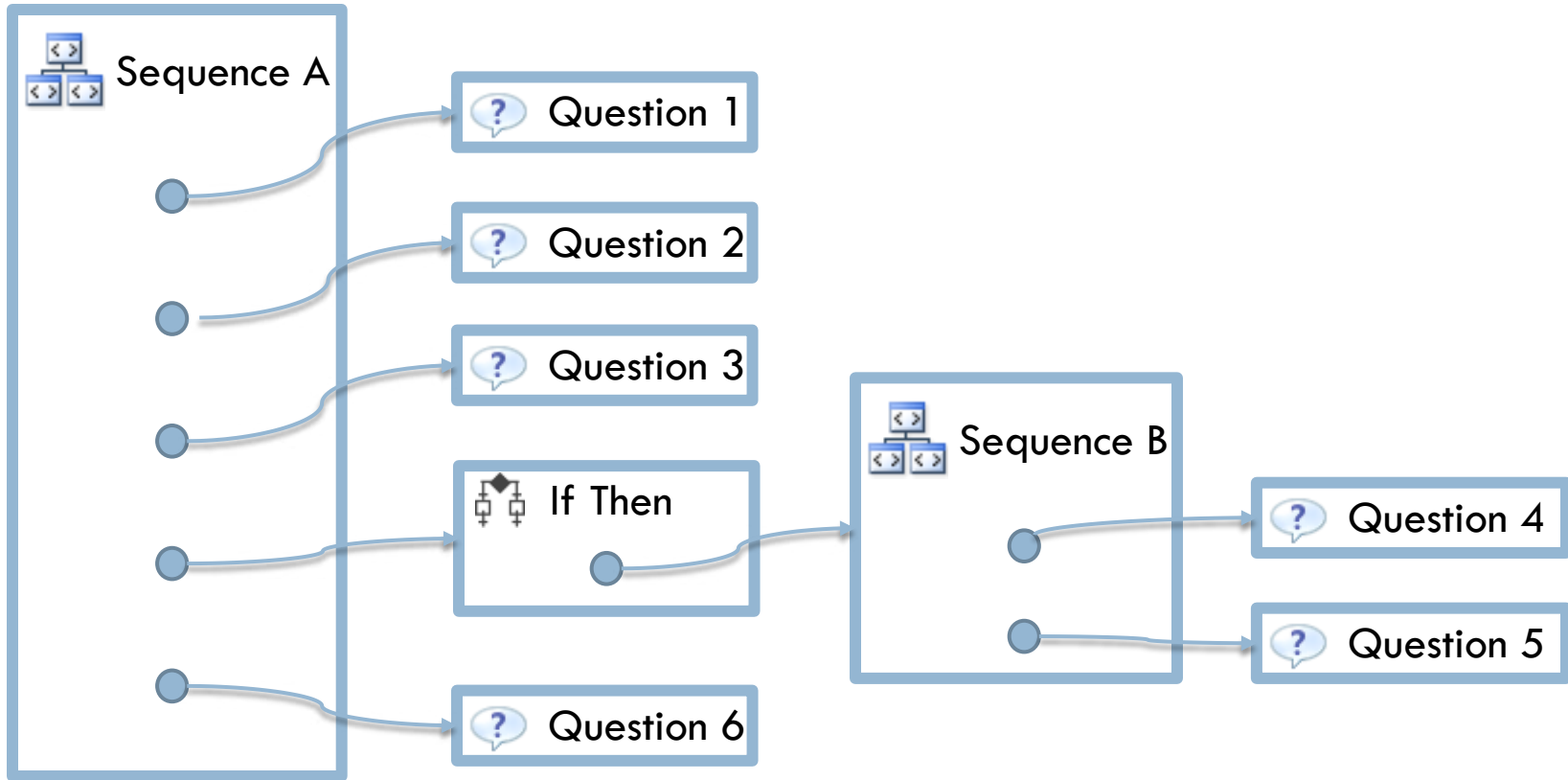
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- Join DDI Instrument Documentation Committee
- Recommend OWL-S process model to describe instrument flow
- Only import control flow portion, to meet use case #1



OWL-S – Part 1

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DDI 3.0 and 3.1

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- DDI 3.0 a success
 - ▣ Flow model stays the same in DDI 3.1
- Describes instrument flow
- Textual description of conditions for if/then, loops, and dynamic text
- Use case #1 is implemented



Use Case #2

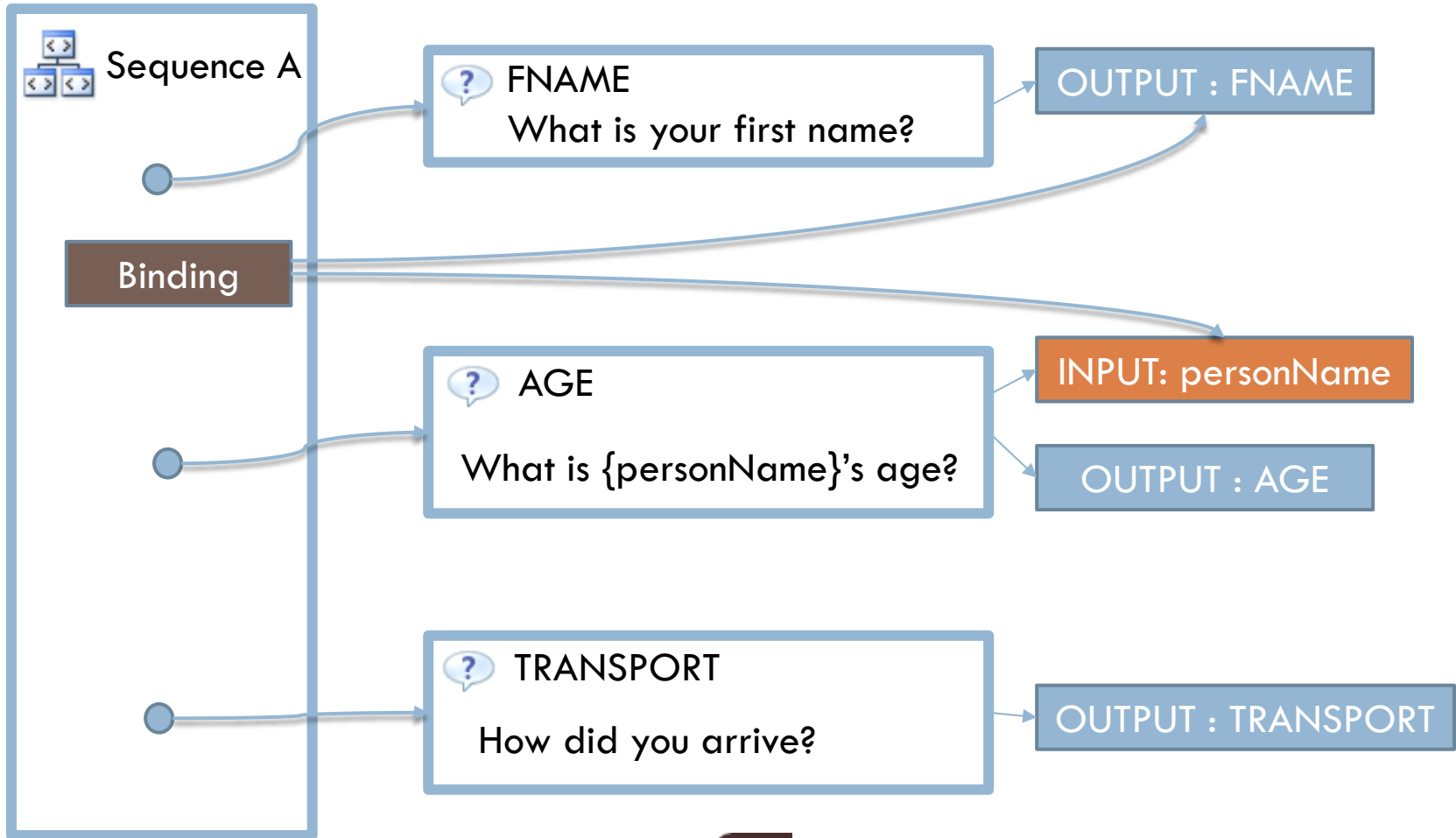
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- Create surveys using a Question Bank and Generate Blaise from DDI
 - ▣ DDI 3.0 and 3.1 are not enough
- Can not share questions and sequences across surveys due to lack of scope



OWL-S – Part 2

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DDI 3.2

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- DDI 3.2 includes full OWL-S process model
- Questions and sequences can be reused directly across studies
- Scoping is well defined
 - ▣ No longer a monolithic instrument
- Use case #2 is achievable



Creating DDI 3.2 instruments

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- Full support in Colectica Designer
- Drag and Drop Questions and Sequences from repository onto new instruments
- Automatically create Out-Parameters
- Show all possible in scope In-Parameters, add them along with parent bindings when used



Generating CATI Code

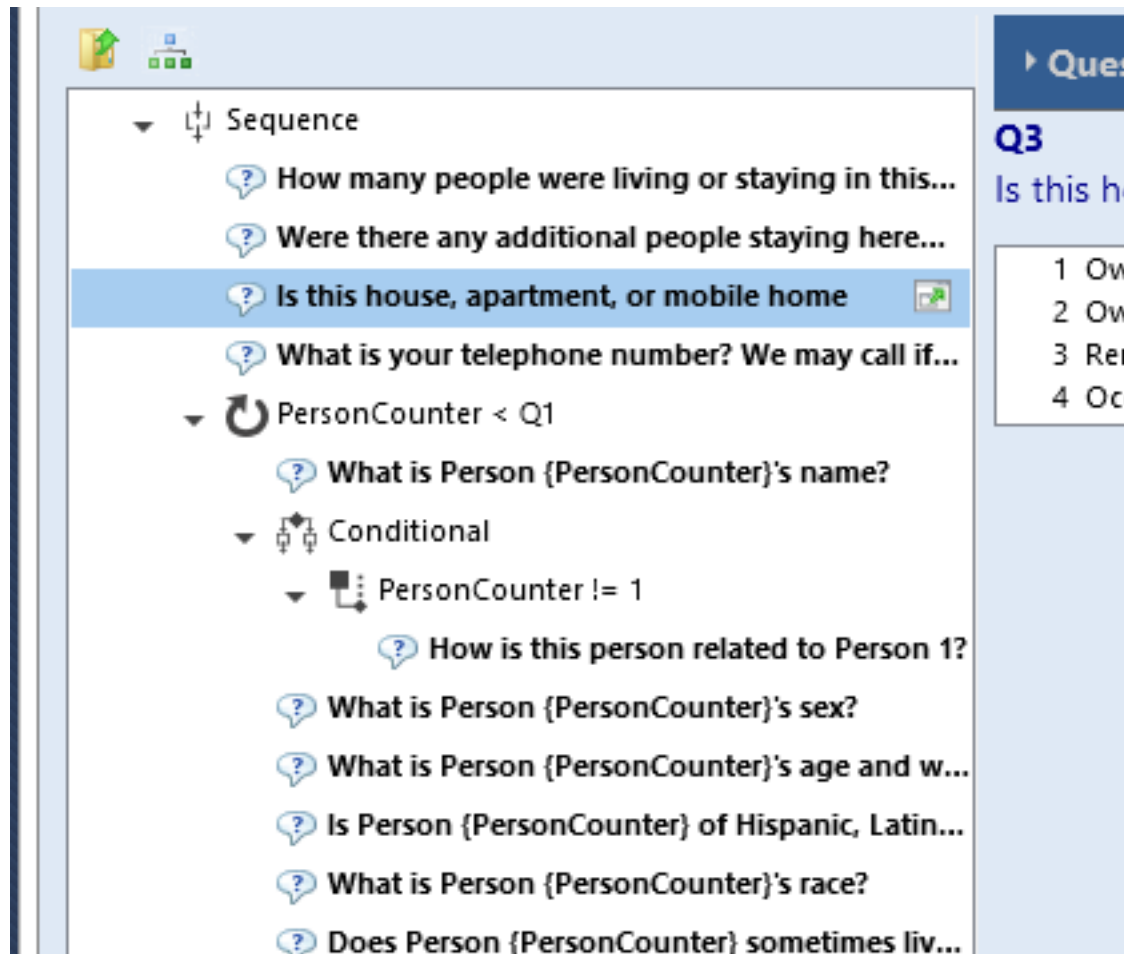
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- Colectica Generates CATI Code
 - ▣ Blaise
 - ▣ SPSS Dimensions
 - ▣ Cases
 - ▣ CS Pro
 - ▣ QueXML
 - ▣ LimeSurvey
 - ▣ REDCap



Generate Blaise Code

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The screenshot displays a Blaise code generation interface. On the left, a tree view shows a 'Sequence' structure with the following questions:

- How many people were living or staying in this...
- Were there any additional people staying here...
- Is this house, apartment, or mobile home** (highlighted)
- What is your telephone number? We may call if...

Below the sequence is a loop structure labeled 'PersonCounter < Q1' with a refresh icon. Inside the loop, there is a 'Conditional' block with the condition 'PersonCounter != 1'. The questions within the conditional block are:

- How is this person related to Person 1?
- What is Person {PersonCounter}'s name?
- What is Person {PersonCounter}'s sex?
- What is Person {PersonCounter}'s age and w...
- Is Person {PersonCounter} of Hispanic, Latin...
- What is Person {PersonCounter}'s race?
- Does Person {PersonCounter} sometimes liv...

On the right side of the interface, a 'Questions' panel is partially visible, showing 'Q3' and the question 'Is this ho'. Below it, a list of response options is shown:

- 1 Ow
- 2 Ow
- 3 Re
- 4 Occ



Generate Blaise Code

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```
{ This code was generated by a tool on Wednesday, December 04, 2013 at 3:10:19 AM. }
{ Colectica® 4.1.3341 Release }
{ }
{ Changes to this file may cause incorrect behavior and will be lost if the code is regenerated. }

DATAMODEL _2010Instrument "2010 United States Census Questionnaire"

INCLUDE "BBlock1.inc.bla"

TYPE
    AdditionalPeopleCodes =
    (
        C1 (1) "Children, such as newborn babies or foster children",
        C2 (2) "Relatives, such as adult children, cousins, or in-laws",
        C3 (3) "Nonrelatives, such as roommates or live-in baby sitters",
        C4 (4) "People staying here temporarily ...",
        C5 (5) "No additional people"
    )
    ThouseOwnershipCodes =
    (
        C1 (1) "Owned by you or someone in this household with a mortgage or loan? Include home equity loans.",
        C2 (2) "Owned by you or someone in this household free and clear (without a mortgage or loan)?",
        C3 (3) "Rented?",
        C4 (4) "Occupied without payment of rent?"
    )

FIELDS
    { Name: Q1 }
    Q1 "How many people were living or staying in this house, apartment, or mobile home on April 1, 2010?" : Integer

    { Name: Q2 }
    Q2 "Were there any additional people staying here April 1, 2010 that you did not include in Question 1?" : Additional

    { Name: Q3 }
    Q3 "Is this house, apartment, or mobile home" : ThouseOwnershipCodes

    { Name: Q4 }
    Q4 "What is your telephone number? We may call if we don't understand an answer." : String[10]
```


Main Take Away

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- Use DDI 3.2
- Generate your CATI code
 - ▣ Eliminate errors, save time, and enable harmonization
- Get in touch with us for Collaboration Opportunities





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Thank you

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