2016-12-07 - SLPG Meeting

Date & Time
20:00 UTC Wednesday 7 December 2016

Goals
- To discuss feedback from B2i on Expression Constraint Language
- To progress the SNOMED CT Template Syntax

GoToMeeting Details
Click here to see GoToMeeting joining information

Attendees
- Chair: Linda Bird
- Project Group: Alejandro Lopez Osornio, Michael Lawley, Orsolya Bali, Daniel Karlsson, Ed Cheetham, Rob Hausam, Andrew Perry

Agendas and Meeting Notes

<table>
<thead>
<tr>
<th>Description</th>
<th>Owner</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome, apologies and agenda review</td>
<td>Linda Bird</td>
<td>Record attendees and apologies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Review agenda for today's meeting</td>
</tr>
</tbody>
</table>
| Feedback from B2i on ECL                        | Orsolya Bali| Members of Descendants
  - Decision - To add ability to do "^ (expressionConstraint)", using brackets around the expressionConstraint unless it is a single refset concept
  - "^(<446609009|Simple type reference set|) /* Invalid */
    For example, to select members of all GP refsets:
    | General Practice / Family Practice reference set|
    | GP/FP health issue reference set |
    | Adverse drug reactions reference set for GP/FP health issue |
    ...|
    | GP/FP reason for encounter reference set |
    | Family history reference set for GP/FP reason for encounter |
    ...|
Constraints over Medication Strength

- Decision - No action for now. To be revisited when the Default Extension Drugs Model is in place.

B2i proposes that a new symbol is introduced to indicate a refinement of a relationship - for example:

- `< |Pharmaceutical / biologic product|: {
  |has active ingredient| = << |calcium carbonate|,
  |has basis of strength| = |calcium only|) : [{|strength magnitude| >= #500), |strength unit| = |mg|}]

Alternative solutions

Using the existing ":*" refinement symbol

- `< |Pharmaceutical / biologic product|: {
  |has active ingredient| = << |calcium carbonate|,
  |has basis of strength| = |calcium only| : |{[|strength magnitude| >= #500), |strength unit| = |mg|}]

Applying the strength as a refinement of the substance

- `< |Pharmaceutical / biologic product|: {
  |has active ingredient| = << |calcium carbonate|,
  |has basis of strength| = |calcium only|, |strength magnitude| >= #500, |strength unit| = |mg|}

Flattening the relationships into a 'close-to-user' form

- `< |Pharmaceutical / biologic product|: {
  |has active ingredient| = << |calcium carbonate|,
  |has basis of strength| = |calcium only|, |strength magnitude| >= #500, |strength unit| = |mg|}

DL examples

- measurementGroup.( hasActiveIngredient.CalciumCarbonate
  hasBOSS.CalciumOnly strength.( #500.value  unit.Mg ) )
- roleGroup.( hasActiveIngredient.CalciumCarbonate hasBOSS.CalciumOnly strength.( #500.value unit.Mg ) )

See Template Syntax Specification

- Suggestion to add a new chapter on 'Slot placement and template processing'

Please provide any other comments you have.

Remove slots and replace slots

- Remove slot: [[ 1..1 ]], [[ 1..1 @slotName ]]
- Replace slot: [[ +id (<< 138875005 |SNOMED CT concept|) ], [[ +id ]], [[ +id
  (<<138875005 |SNOMED CT concept|) @slotName $valueReference ]]
- Example: CT of X
  71388002 [Procedure] : [{[1..1 @roleGroup1]}
  { 260686004 [Method] = 312251004 [Computed tomography imaging action],
    405813007 [Procedure site - Direct] = [+id (<<442083009 |Anatomical or acquired body structure|) @site]}]
Replace slots - Type of replacement

- Replace with single concept: 
  \[ +id \]
- Replace with any expression: 
  \[ +scg \]
- Replace with an expression constraint: 
  \[ +ecl \]
- Replace with a character string: 
  \[ +str \]

**Example 1:** MRCM domainTemplateForPrecoordination (Finding with explicit context)

- \[ +id(\llll 243796009 | Situation with explicit context (situation) | : \llll 0..0 \llll 408730004 | Procedure context | = *, \llll 0..0 \llll 363589002 | Associated procedure | = *) \]

**Example 2:** MRCM domainTemplateForPostcoordination (Finding with explicit context)

Cardinality

- Cardinality of relationship group
  \[ [1..*] \{ .. \} \]
  Default operator between repeats: "+" / "AND"
  \[ Example: CT of X 71388002 | Procedure | : [1..1] \]
  \[ 260686004 | Method | = 312251004 | Computed tomography imaging action |, 405813007 | Procedure site - Direct | = \[ +id (\llll 442083009 | Anatomical or acquired body structure |) @site \] \]

- Cardinality of attribute value pair
  \[ [1..1] 123345 | Attribute | = 234456 | Value | \]
  Default operator between repeats: "+" / "AND"
  \[ Example: CT of X 71388002 | Procedure | : [1..1] \]
  \[ 260686004 | Method | = 312251004 | Computed tomography imaging action |, 405813007 | Procedure site - Direct | = \[ +id (\llll 442083009 | Anatomical or acquired body structure |) @site \] \]

- Cardinality of focus concepts
  \[ [[ +() ]] 1..* \]
  How would we achieve an operator of "OR" in an Expression Constraint? - e.g. \[ [+ecl 1..*] \] A OR B OR C
  \[ Example: \[ +id(\llll 404684003 | Clinical finding |) 1..* \] \]

**Other types of cardinalities?**

**Other Topics raised by Ed**

- The fact that a template processor would need to 'clean-up' any left over characters, such as":". I suggest that we try to document the steps that a template processor should follow to turn a template into an expression, constraint etc.

---

**Confirm next meeting date/time**

<table>
<thead>
<tr>
<th>Linda Bird</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next meeting to be held at 20:00 UTC on Wednesday 1st February 2017</td>
</tr>
<tr>
<td>File</td>
</tr>
<tr>
<td>------</td>
</tr>
</tbody>
</table>

No files shared here yet.