2018-07-04 - SLPG Meeting

Date & Time
20:00 UTC Wednesday 4th July 2018

Teleconference Details
To join the meeting please go to https://snomed.zoom.us/j/471420169.
Further information can be found at SLPG meeting information

Goals
- URI standard
- Recap purpose of computable language URIs
- Recap on language instance URIs
- Proposed language features
  - Transitive relationships in ECL
  - Ability to execute maps from within ECL
- Progress SNOMED Query language
  - Discuss use of multiple language reference sets

Attendees
- Chair: Linda Bird
- Project Group: Michael Lawley, Ed Cheetham

Apologies
Anne Randorff Højen

Agenda and Meeting Notes

<table>
<thead>
<tr>
<th>Description</th>
<th>Owner</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome and apologies</td>
<td>Linda Bird</td>
<td></td>
</tr>
<tr>
<td>URLs for FHIR specification</td>
<td>Linda Bird</td>
<td></td>
</tr>
<tr>
<td>URI Specification</td>
<td>Linda Bird</td>
<td></td>
</tr>
<tr>
<td>Proposed Language Features</td>
<td>Linda Bird</td>
<td></td>
</tr>
</tbody>
</table>

URLs for canonical necessary normal form and necessary (long/short) normal form

- Recap on purpose of SNOMED CT computable language URIs
- Recap on language instance URIs (e.g. URIs for expressions and expression constraints)

Other topics for discussion. For example:
- ECL suggestions - Ability to execute maps in ECL
  - Transitive relationships and role chaining in ECL (to align with new enhanced DL axioms)
    - Example 1:
      - Direct relationship < 404684003 |Clinical finding|: << 47429007 [Associated with] = *
      - Transitive relationship < 404684003 |Clinical finding|: << 47429007 [Associated with] = *
    - Example 2:
      - Direct relationship < 71388002 ||: 363701004 |Direct substance| = 372687004 |Amoxicillin|
      - Role chained relationship (via 738774007 |is modification of|) < 71388002 ||: 363701004 |Direct substance| = 372687004 |Amoxicillin|
- The specific use-case here comes initially from Jeremy and relates to being able to work with inactive concepts via the historical association maps. For example, given an ECL expression, e, that identifies a set of concepts to be used for retrieving patient records, you probably also want to retrieve records for sameAs(e) and replacedWith(e)
  - Example 1:
    - ??? (< 72704001 |Fracture| AND ^ 9000000000000527005 [SAME AS association reference set]) . 9000000000000533901 [Association target component]
- Query language - Can we de-scope relationship filters?
<table>
<thead>
<tr>
<th>Query Language - Summary from previous meetings</th>
<th>Linda Bird</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Examples: version and language</strong></td>
<td></td>
</tr>
</tbody>
</table>

- `<64572001 [Disease] ({{ term = "heart" }}) VERSION http://snomed.info/sct/900000000000207008 /version/20180131`
- `<64572001 [Disease] ({{ synonym = "heart" }}) VERSION http://snomed.info/sct /900000000000207008/version/20180131`
- `<64572001 [Disease] ({{ FSN = "heart" }}) VERSION http://snomed.info/sct/900000000000207008/version/20180131`
- `<64572001 [Disease] ({{ FSN = "heart" }}) VERSION http://snomed.info/sct/900000000000207008/version/20180131, LANGUAGE W`
- `<64572001 [Disease] ({{ preferredTerm = "heart" }}) VERSION http://snomed.info/sct /900000000000207008/version/20180131, LANGUAGE Y`
- `<64572001 [Disease] ({{ acceptableTerm = "heart" }}) VERSION http://snomed.info/sct /900000000000207008/version/20180131, LANGUAGE Y`
- `*({{ term = "heart" }}) VERSION http://snomed.info/sct/900000000000207008/version/20180131, LANGUAGE Z) MINUS *{{ term = "heart" }} VERSION http://snomed.info/sct/900000000000207008/version/20180131, LANGUAGE W`
- `X MINUS Y WHERE X = *, Y = (*{{ term = "heart" }}) VERSION http://snomed.info/sct /900000000000207008/version/20180131, LANGUAGE W`

**Notes**

- Allow nested where, version, language
- Scope of variables is inner query

<table>
<thead>
<tr>
<th>Examples: where</th>
<th></th>
</tr>
</thead>
</table>

- `X MINUS >! X WHERE X = (<< 1234 : 5678 = << 6547)`
- `X MINUS >! X WHERE X = (<< 1234 : 5678 = << 6547) VERSION http://snomed.info/sct /900000000000207008/version/20180131`
- `X MINUS >! Y WHERE X = (<< 1234 : 5678 = << 6547), Y = (<< 1456) VERSION http://snomed.info/sct /900000000000207008/version/20180131`
- `X MINUS >! X WHERE X = (<< 1234 : 5678 = << 6547) VERSION http://snomed.info/sct /900000000000207008/version/20180131, LANGUAGE 900000000000058004 [GB English]`
- `X MINUS >! X WHERE X = (<< 1234 : 5678 = << 6547) VERSION http://snomed.info/sct /900000000000207008/version/20180131, LANGUAGE 999001881000000108 [GB clinical extension LRS], 900000000000058004 [GB English]`
- `X minus >! X WHERE X = (<< M WHERE M = (<< 1234)) VERSION http://snomed.info/sct /900000000000207008/version/20180131, LANGUAGE 999001881000000108[GB clinical extension LRS], 900000000000058004 [GB English]`

**Notes**

- Allow nested variable definitions, but recommend that people don't due to readability
- Scope of variables is the inner query
- No recursion e.g. `X WHERE X = 1234 MINUS X`
  - `ie can't use a variable in its own definition`
  - `ie X is only known on the left of the corresponding WHERE, and not on the right of the WHERE`
Keywords for Term-based searching:

- **D.term**
  - D.term = "*heart*"
  - D.term = wild:"*heart*"
  - D.term = regex:"*heart*"
  - D.term = match:"hear att"
  - D.term = (sv) wild: "*heart*"

- **D.languageCode**
  - D.languageCode = "en"
  - D.languageCode = "es"

- **D.caseSignificance**
  - D.caseSignificance = "insensitive"
  - D.caseSignificance = "sensitive"
  - D.caseSignificance = "InitialCharInsensitive"

- **D.typeId**
  - D.typeId = 900000000000003001 |fully specified name|
  - D.typeId = 900000000000013009 |synonym|
  - D.typeId = 900000000000550004 |definition|

- **D.type**
  - D.type = "FSN"
  - D.type = "fullySpecifiedName"
  - D.type = "synonym"
  - D.type = "textDefinition"

- **D.acceptabilityId**
  - D.acceptabilityId = 900000000000549004 |acceptable|
  - D.acceptabilityId = 900000000000548007 |preferred|

- **D.acceptability**
  - D.acceptability = "acceptable"
  - D.acceptability = "preferred"

Additional Syntactic Sugar

- **FSN**
  - FSN = "*heart"
  - D.type = "FSN"
  - D.type = "fullySpecifiedName"

- **synonym**
  - synonym = "*heart"
  - D.type = "synonym"
  - D.type = "fullySpecifiedName"

- **synonymOrFSN**
  - synonymOrFSN = "*heart"
  - synonymOrFSN = "*heart" OR FSN = "*heart"

- **textDefinition**
  - textDefinition = "*heart"
  - textDefinition = "*heart" LANGUAGE X

- **Unacceptable Terms**
  - (D.term = "*heart") MINUS (D.term = "*heart", D.acceptability = "LANGUAGE X")
Language preferences using multiple language reference sets

- LRSs that use the same Language tend to use 'Addition' - i.e. child LRS only includes additional acceptable terms, but can override the preferred term
  - E.g. Regional LRS that adds local dialect to a National LRS
  - E.g. Specialty-specific LRS
  - E.g. Irish LRS that adds local preferences to the en-GB LRS
- LRSs that define a translation to a different language tend to use 'Replacement' - i.e. child LRS replaces set of acceptable and preferred terms for any associated concept
  - E.g. Danish LRS that does a partial translation of the International Release
    - 999999 [Danish language reference set] ELSE [GB English reference set]

<table>
<thead>
<tr>
<th>Other topics</th>
<th>Linda Bird</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Confirm next meeting date /time</th>
<th>Linda Bird</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The next SLPG meeting will be held in 2 weeks at 20:00 UTC on <strong>Wednesday 18th July</strong>.</td>
</tr>
</tbody>
</table>

---

No files shared here yet.