

Expression Constraint Language - Specification and Guide



Leading healthcare
terminology, worldwide

The *Expression Constraint Language* is a formal syntax for representing SNOMED CT expression constraints. Expression constraints are computable rules used to define a bounded sets of clinical meanings represented by either precoordinated or postcoordinated expressions. Expression constraints can be used to restrict the valid values for a data element in an EHR, as the intensional definition of a concept-based reference set, as a machine processable query that identifies a set of matching expressions, or as a constraint that restricts the range of an attribute defined in the SNOMED CT concept model.

This document defines and describes the current version of the Expression Constraint Language - ECL v2.2.

Web browsable version: <http://snomed.org/ecl>

SNOMED CT Document Library: <http://snomed.org/doc>

© Copyright 2024 International Health Terminology Standards Development Organisation, all rights reserved.

This document is a publication of International Health Terminology Standards Development Organisation, trading as SNOMED International. SNOMED International owns and maintains SNOMED CT®.

Any modification of this document (including without limitation the removal or modification of this notice) is prohibited without the express written permission of SNOMED International. This document may be subject to updates. Always use the latest version of this document published by SNOMED International. This can be viewed online and downloaded by following the links on the front page or cover of this document.

SNOMED®, SNOMED CT® and IHTSDO® are registered trademarks of International Health Terminology Standards Development Organisation. SNOMED CT® licensing information is available at <http://snomed.org/licensing>. For more information about SNOMED International and SNOMED International Membership, please refer to <http://www.snomed.org> or contact us at info@snomed.org.

Search this document

Contents

1. Introduction

2. Use Cases

- 2.1 Terminology Binding
- 2.2 Intensional Reference Set Definitions
- 2.3 SNOMED CT Content Queries
- 2.4 SNOMED CT Concept Model

3. Requirements

- 3.1 General SNOMED CT Language Requirements
- 3.2 Expression Constraint and Query Requirements
- 3.3 Concept Model Requirements

4. Logical Model

- 4.1 Details

5. Syntax Specification

- 5.1 Brief Syntax (Normative)
- 5.2 Long Syntax (Informative)
- 5.3 Informative Comments
- 5.4 Order of Operation
- 5.5 Character Collation for Term Filters

6. Examples

- 6.1 Simple Expression Constraints
- 6.2 Refinements
- 6.3 Cardinality
- 6.4 Conjunction and Disjunction
- 6.5 Exclusion and Not Equals
- 6.6 Constraint Comments
- 6.7 Nested Expression Constraints
- 6.8 Description Filters
- 6.9 Concept Filters
- 6.10 Member Filters
- 6.11 History Supplements
- 6.12 Top and Bottom

7. Implementation Considerations

- 7.1 Authoring
- 7.2 Parsing
- 7.3 Validating
- 7.4 Executing
- 7.5 Storing
- 7.6 Displaying
- 7.7 Exchanging

Latest
PDF
Version
for
Downlo
ad:



doc_Expression...T_20231122.pdf



Note

This PDF document was generated from the web version on 22 Nov 2023. Any changes made to the web pages since this date will not appear in the PDF. For information about recent changes please see [Recent Updates](#).

Appendix A – Examples Of Valid Expressions

- A.1 Simple Expression Constraints - Valid Expressions
- A.2 Refinements - Valid Expressions
- A.3 Cardinality - Valid Expressions
- A.4 Conjunction and Disjunction - Valid Expressions
- A.5 Exclusion and Not Equals - Valid Expressions
- A.6 Nested Expression Constraints - Valid Expressions

Appendix B – Examples Of Invalid Expressions

- B.1 Simple Expression Constraints - Invalid Expressions
- B.2 Refinements - Invalid Expressions
- B.3 Cardinality - Invalid Expressions
- B.4 Conjunction and Disjunction - Invalid Expressions
- B.5 Exclusion and Not Equals - Invalid Expressions
- B.6 Nested Expression Constraints - Invalid Expressions

Appendix C - Dialect Aliases

Appendix D - ECL Quick Reference

Appendix E - Reference Set Fields

References

Previous Versions

Recent Updates