

# Qualitative Data in DDI Views (DDI4)

Larry Hoyle

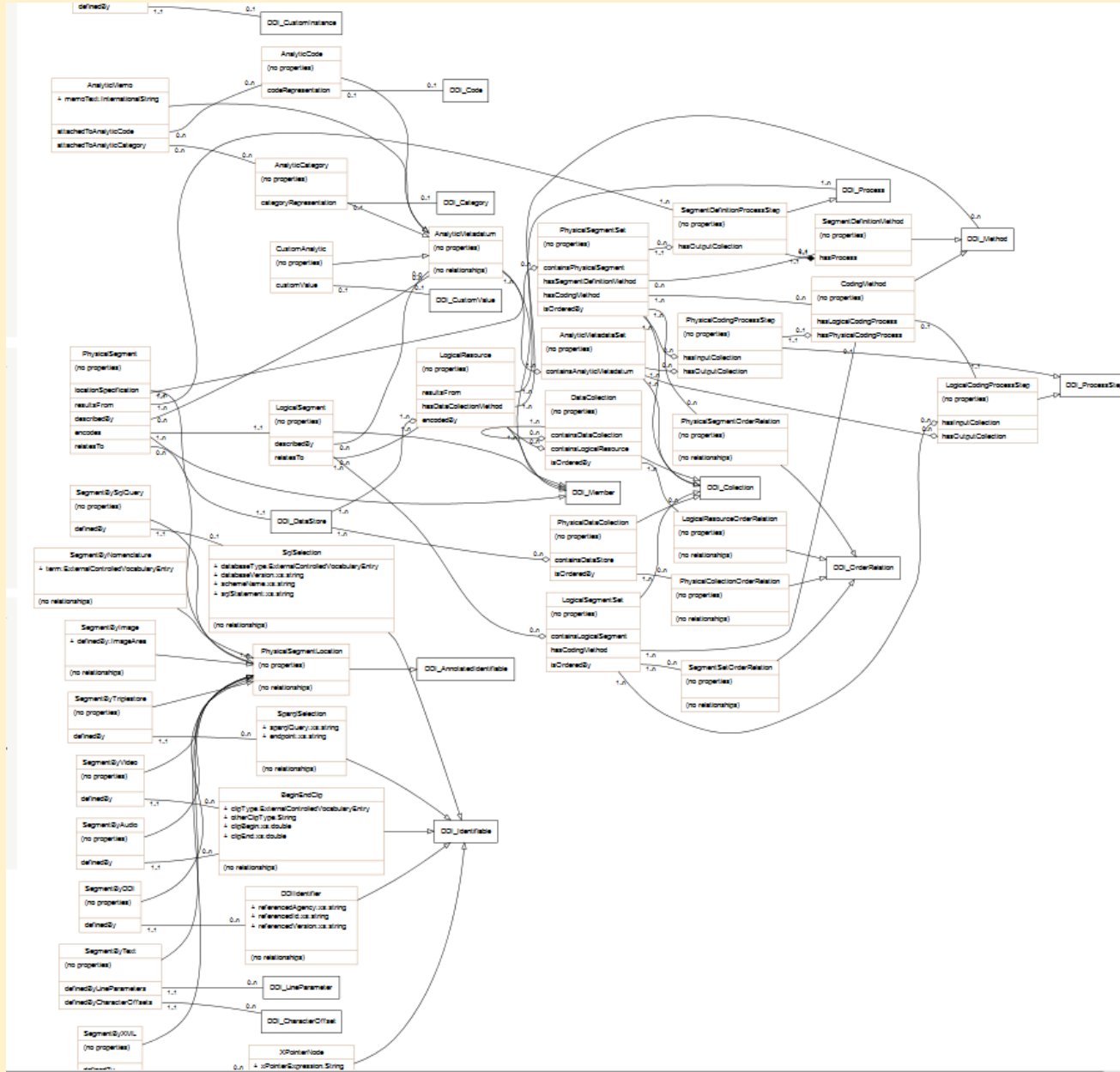
Institute for Policy & Social Research

University of Kansas

# Qualitative Data in DDI

- Earlier Standard – QUDEX (UKDA) <http://data-archive.ac.uk/create-manage/projects/qudex>
- DDI Working group formed January 2010
  - Multiple online meetings
  - in person meetings
    - Gothenburg 2011
    - Bergen 2012
    - NADDI 2013 and 2014 presentations
    - Added custom values and relations NADDI 2015
- DDI4 Qualitative Team 2015
  - Modeled earlier work into DDI4

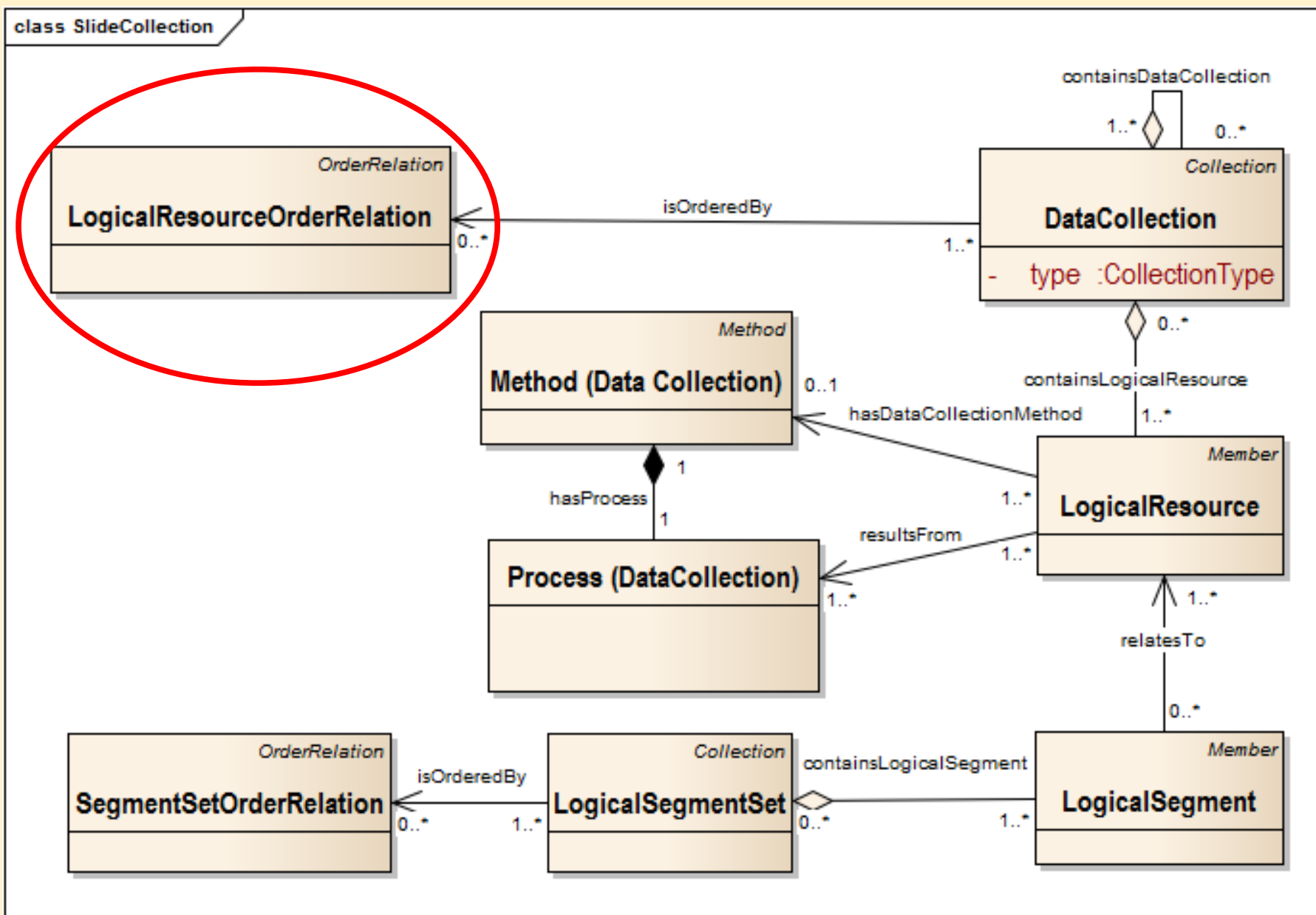
# The Qualitative Model In DDI4



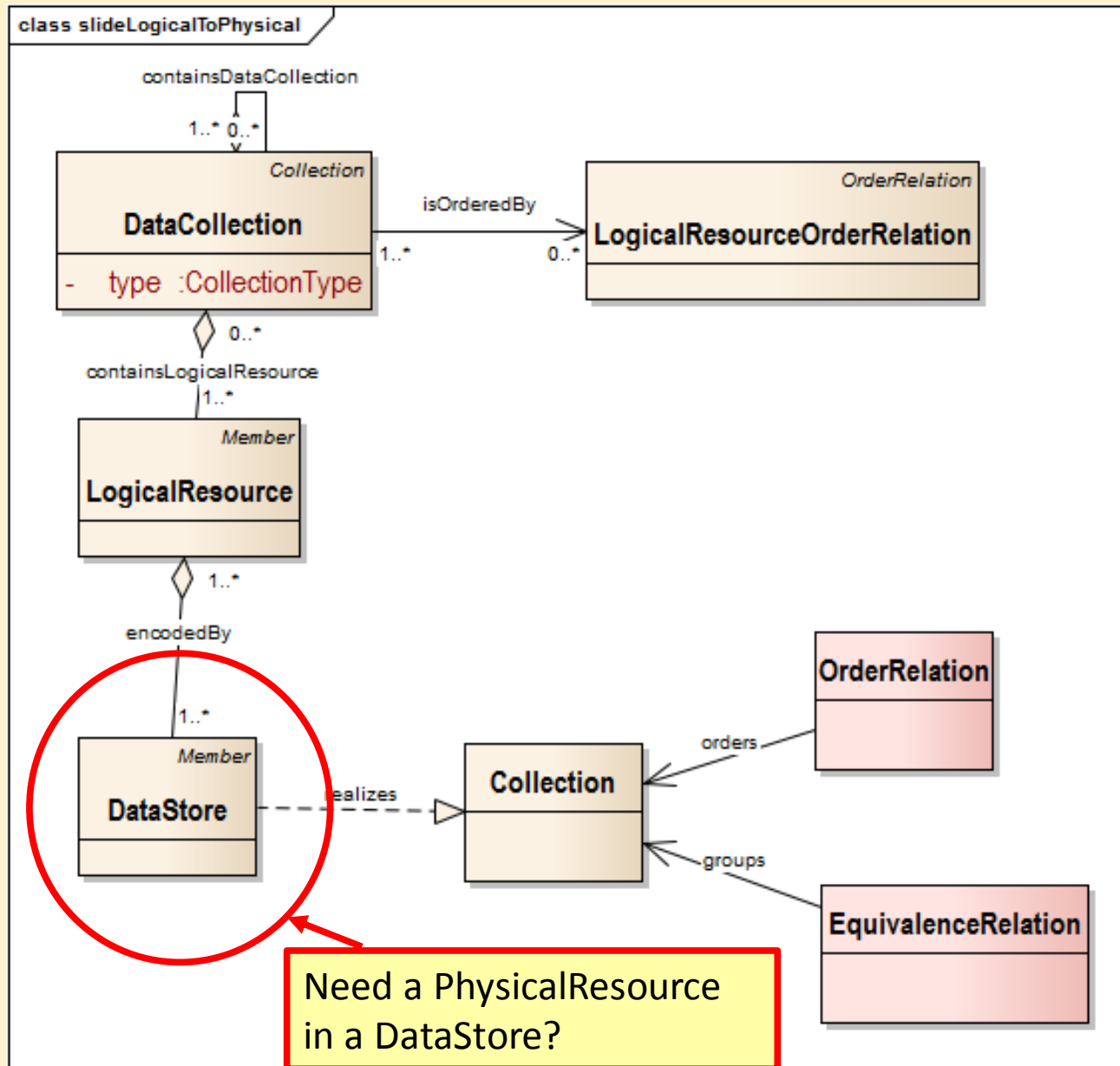
<http://lion.ddialliance.org/package/qualitative>

# Questions? ;>)

# Qualitative Collections – Logical View



# Logical to Physical Resources



Relations among resources can be described at the logical and physical level

## Chapter1

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer placerat accumsan nunc, nec laoreet nisi viverra non.

ChapOne.txt

then



## Chapter2

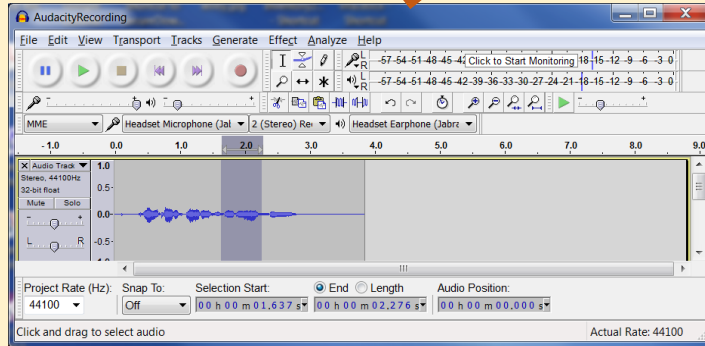
Donec lacinia aliquam lorem, nec fermentum turpis blandit non. Praesent varius sem tortor, pulvinar sagittis tortor commodo vel.

ChapTwo.txt

# Multiple Physical Resources for One LogicalResource

Sample Statement

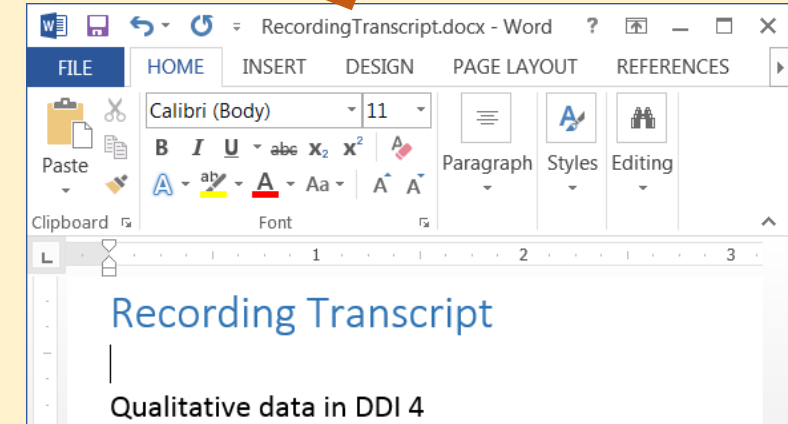
LogicalResource



Original File:  
AudacityRecording.aud



Windows .wav File:  
AudacityRecording.wav



Transcript File:  
AudacityRecording.docx

# AnnotatedIdentifiables

- Most DDI4 classes are ultimately AnnotatedIdentifiable
- having :

Title

Subtitle(s)

Alternate title(s)

Creator(s)

Contributor(s)

Publisher(s)

Date(s)

Language(s)

Local identifier(s)

Copyright(s)

Type of resource(s)

Information Source(s)

Abstract

Related Resource(s)

Provenances(s)

Rights(s)

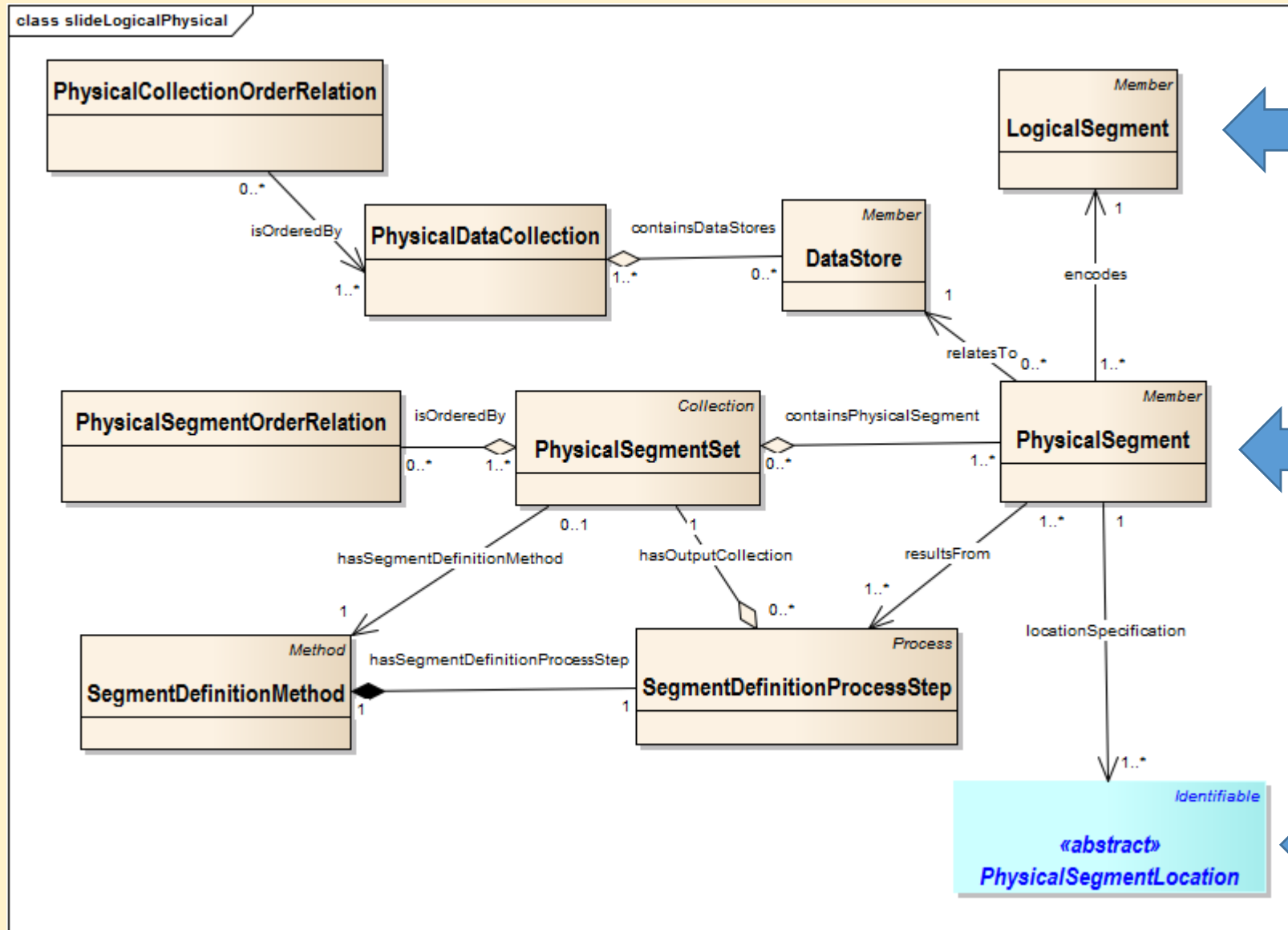
RecordCreationDate

RecordLastRevisionDate

<http://lion.ddialliance.org/ddiobjects/annotatedidentifiable>



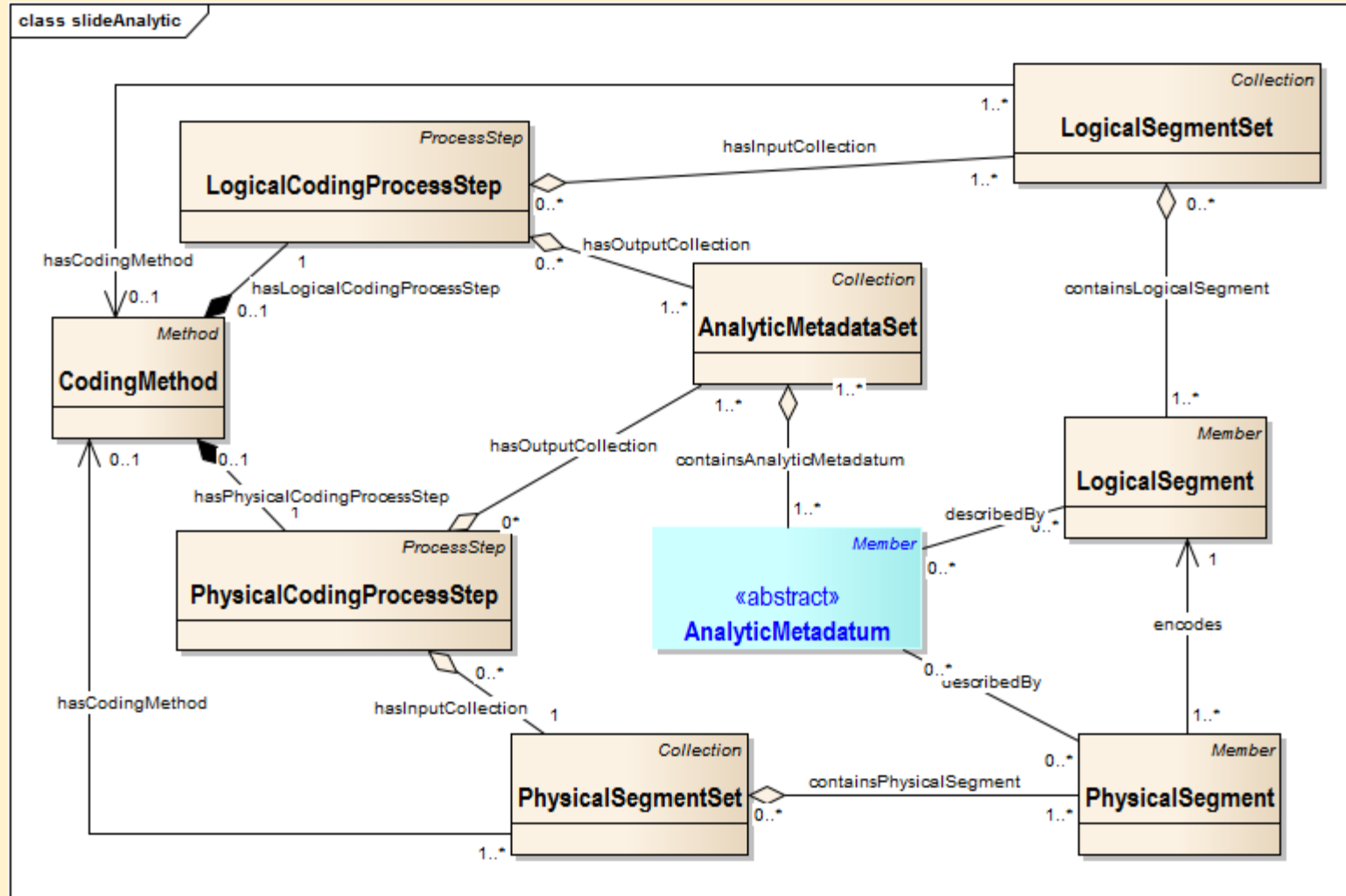
# Logical to Physical Segments



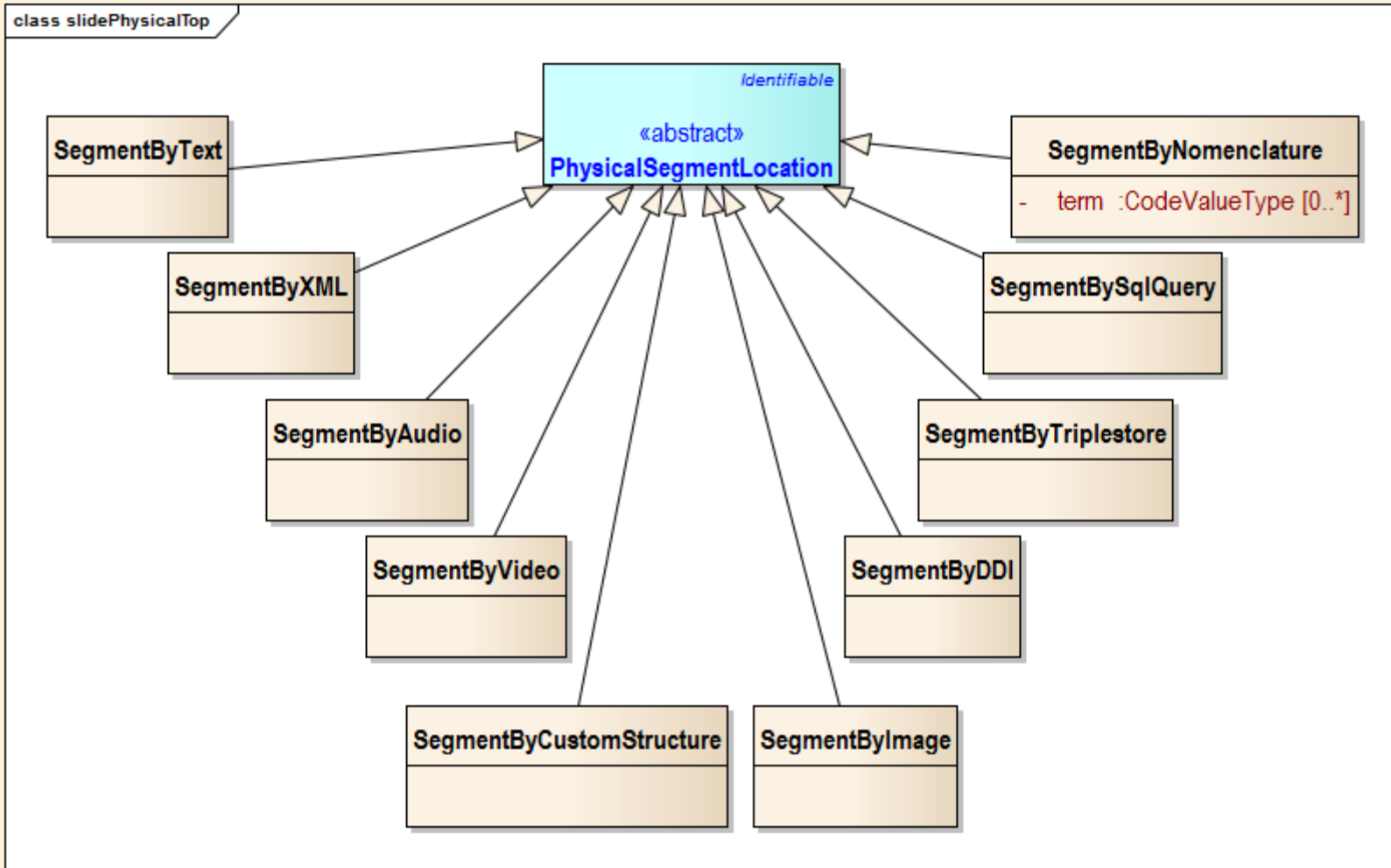
Segments,  
defined on the  
physical level  
can correspond  
to the same  
LogicalSegment

Example: a  
segment of a  
transcript and  
corresponding  
audio

# Analytics on Segments



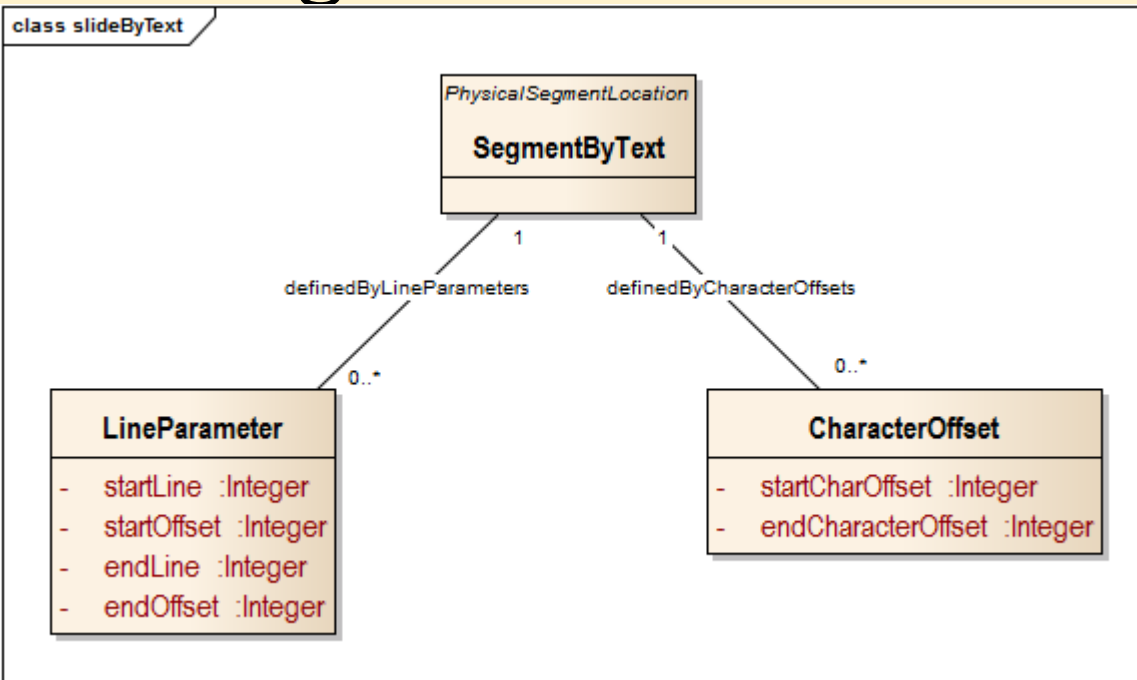
# Segments



Many types of physical objects, each with different ways of describing the location of segments

ChapOne.txt

# Segments of Text



## LineParameter

startLine=15  
startOffset=1  
endLine=15  
endOffset=40

## CharacterOffset

startCharOffset=535  
endCharacterOffset=578

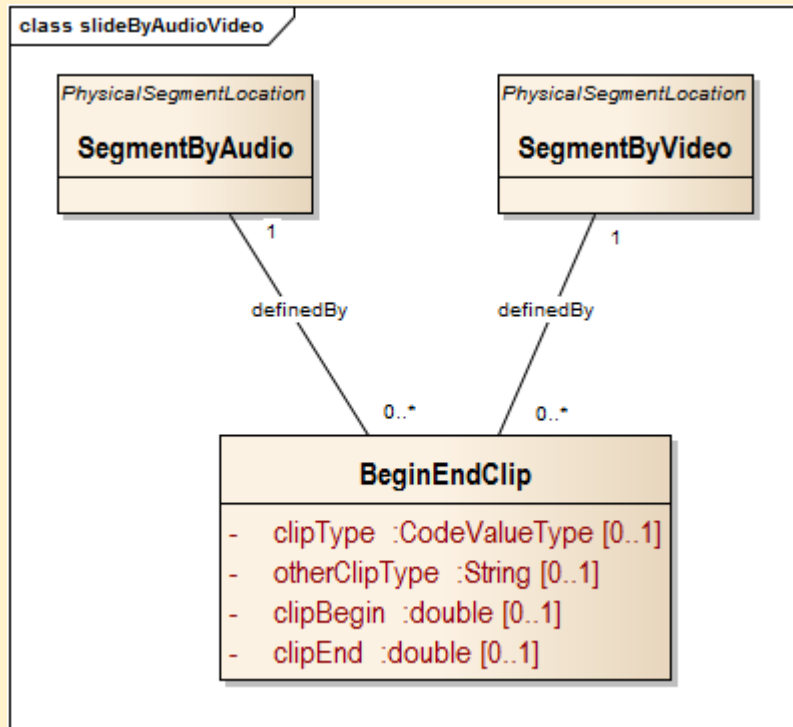
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer placerat accumsan nunc, nec laoreet nisi viverra non. Donec lacinia aliquam lorem, nec fermentum turpis blandit non. Praesent varius sem tortor, pulvinar sagittis tortor commodo vel. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Nullam eleifend quis augue a dapibus. Praesent gravida justo quis dolor elementum viverra. Quisque a hendrerit mauris. Nunc ac nulla ex. Vestibulum ex dui, finibus eu lorem ut, tempor ornare dolor.

**Sed imperdiet mauris quis mi cursus iaculis.**

Suspendisse maximus sem in dui tempus, quis suscipit arcu posuere. Etiam porta in nulla at vulputate. Aenean neque purus, volutpat a lobortis eu, tincidunt vel risus.

**Nulla id rhoncus metus, at rhoncus arcu.** Phasellus malesuada mi ipsum, non sagittis est consectetur non. Maecenas dictum rutrum leo non vestibulum. Aenean id sagittis tellus. Sed et rhoncus mi.

# Segments of Audio or Video



Whole resource



Segment



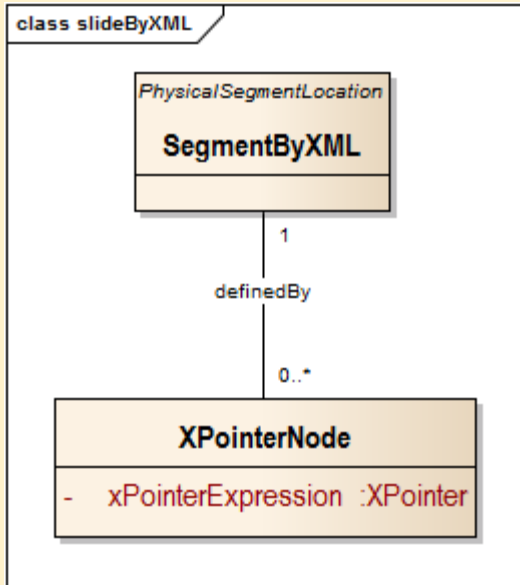
Selection Start: ☒ End ☐ Length

00 h 00 m 02.101 s 00 h 00 m 02.740 s

**BeginEndClip**

Cliptype="AudioMs"  
clipBegin=2101  
clipEnd=2740

# Segments of XML

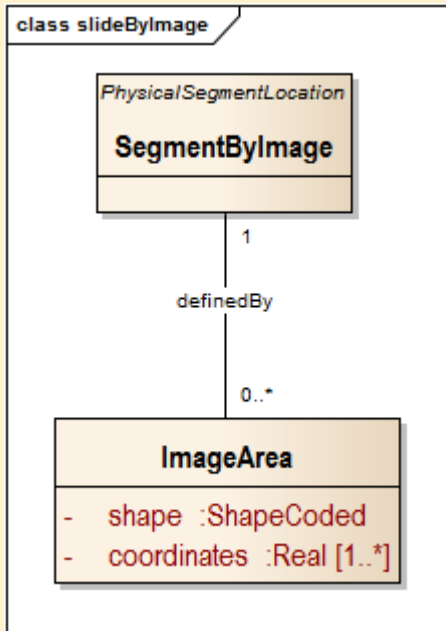


```
<?xml version="1.0" encoding="UTF-8"?>
<codeBook xmlns="ddi:codebook:2_5"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  <docDscr>
    <citation>
      <titlStmnt>
        <titl>A Sample Codebook</titl>
        <subTitl>About this Codebook</subTitl>
      </titlStmnt>
    </citation>
  </docDscr>
```

## XPointerNode

xPointerExpression=/codeBook/docDscr[1]/citation[1]/titlStmnt[1]/titl[1]

# Segment of an Image

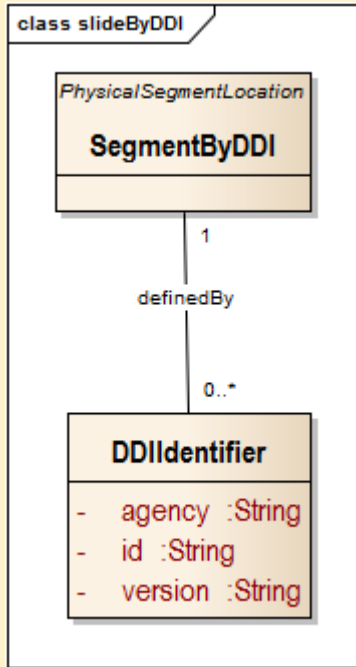


**ImageArea**

Shape = Polygon

Coordinates= 437,173,445,188,433,187

# Segment of DDI



<dataDscr>

<var name="MyVar" ID="myVar1">

<qstn ID="MyQ1"

ddiLifecycleUrn="URN:DDI:US.IPSR:17b8959b-9aa3-4dc0-a2b8-b640347d3506:1.0">

How tall are you?

</qstn>

</var>

<var name="MyVar2" qstn="MyQ1">

</var>

</dataDscr>

## DDIIdentifier

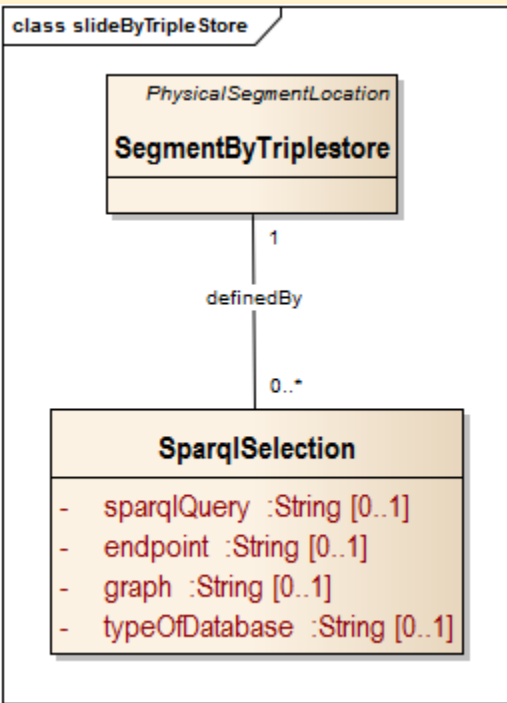
agency = US.IPSR

id = 17b8959b-9aa3-4dc0-a2b8-b640347d3506

version = 1.0



# Segment of TripleStore



**Subject**

**predicate**

**object**

<http://example.org/book/book1> <http://purl.org/dc/elements/1.1/title> "SPARQL Tutorial" .

## SparqlSelection

sparqlQuery = "SELECT ?title

WHERE

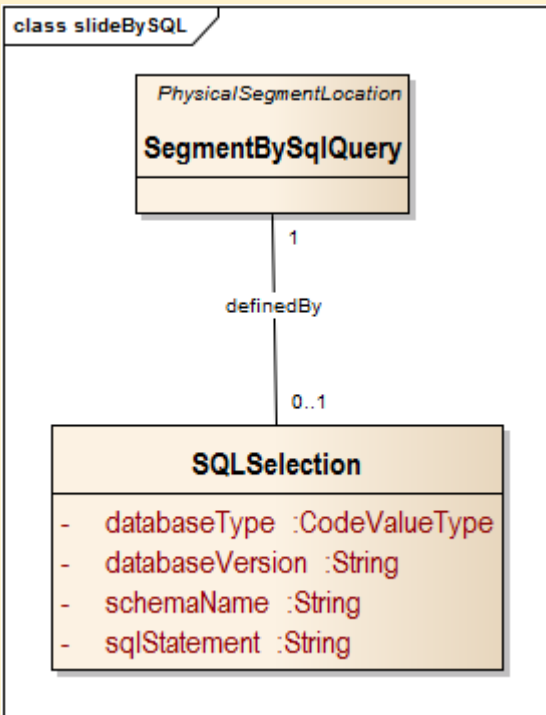
{

<http://example.org/book/book1> <http://purl.org/dc/elements/1.1/title> ?title .

} "

Endpoint = http://example.org/sparql/

# Segment of Relational Database (SQL Query)

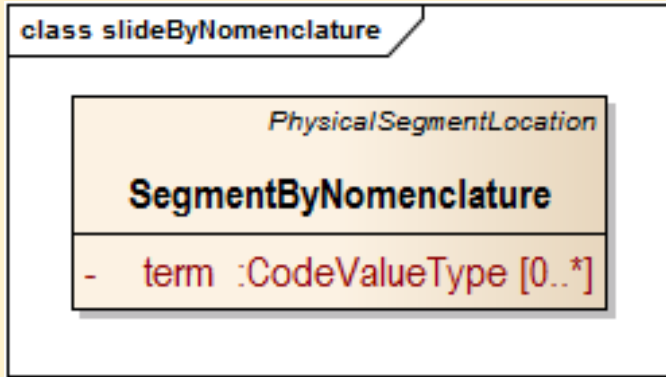


FirstName ▾	MiddleName ▾	LastName ▾	Age ▾
Larson	E	Whipsnade	110
Olive		Hoyle	30
Will		Call	14
Olive		Pitts	27

## SqlSelection

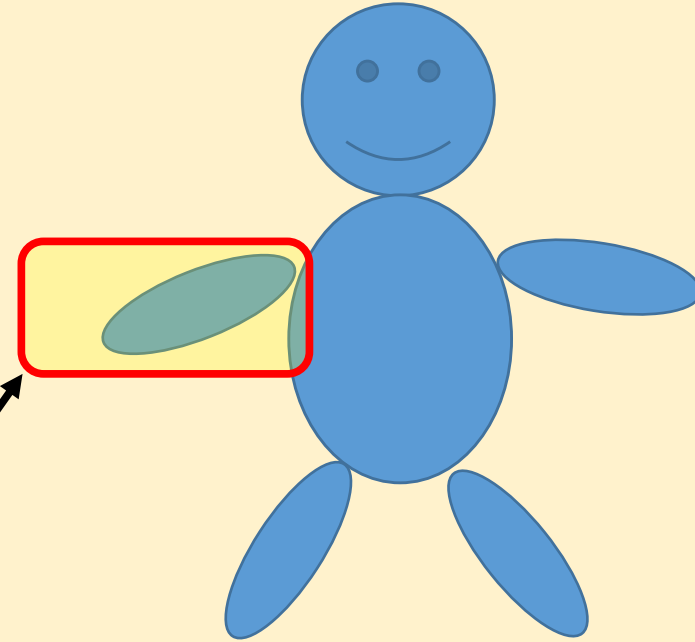
DatabaseType = MSAccess  
databaseVersion = 2013  
sqlStatement= "SELECT Persons.FirstName,  
Persons.MiddleName, Persons.LastName,  
Persons.Age  
FROM Persons  
WHERE (((Persons.FirstName)="Olive") AND  
((Persons.Age)<30));"

# Segment by Nomenclature

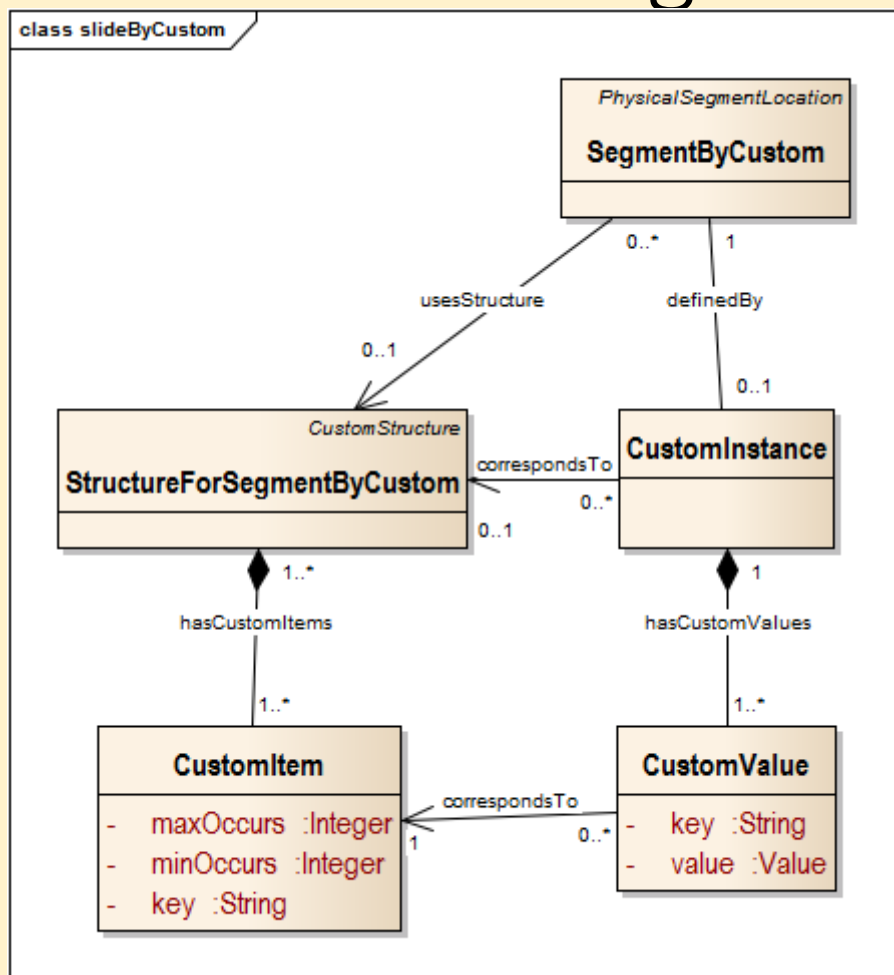


**SegmentByNomenclature**

Term= "right arm"



# Custom Segment



Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer placerat accumsan nunc, nec laoreet nisi viverra non. Donec lacinia aliquam lorem, nec fermentum turpis blandit non. Praesent varius sem tortor, pulvinar sagittis tortor commodo vel. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Nullam eleifend quis augue a dapibus. Praesent gravida justo quis dolor elementum viverra. Quisque a hendrerit mauris. Nunc ac nulla ex. Vestibulum ex dui, finibus eu lorem ut, tempor ornare dolor. **Sed imperdiet mauris quis mi cursus iaculis.**

Suspendisse maximus sem in dui tempus, quis suscipit arcu posuere. Etiam porta in nulla at vulputate. Aenean neque purus, volutpat a lobortis eu, tincidunt vel risus.

## CustomValue(s)

Key = "paragraph"  
Value = content(1)

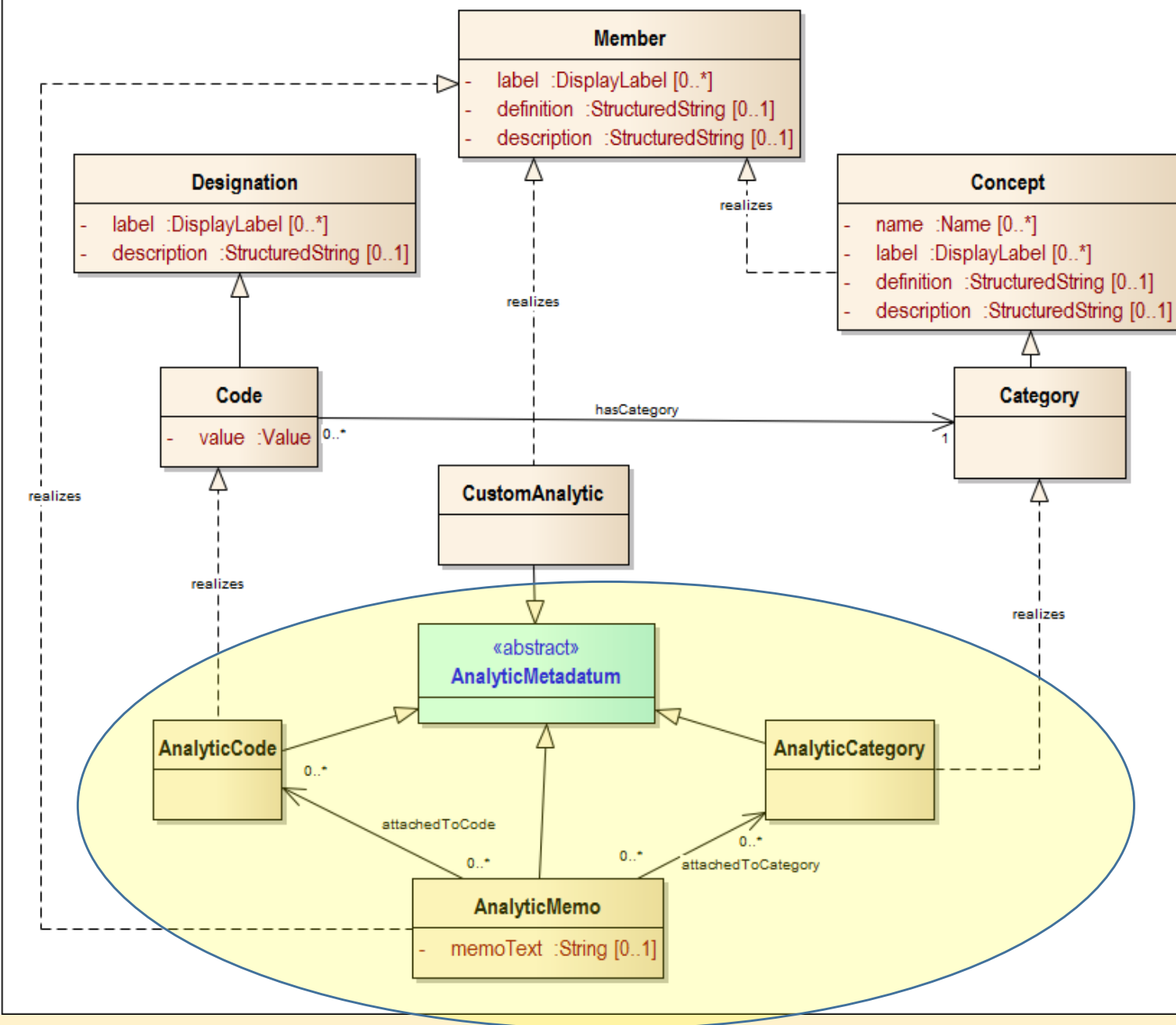
Key = "sentence"  
Value = content(5)

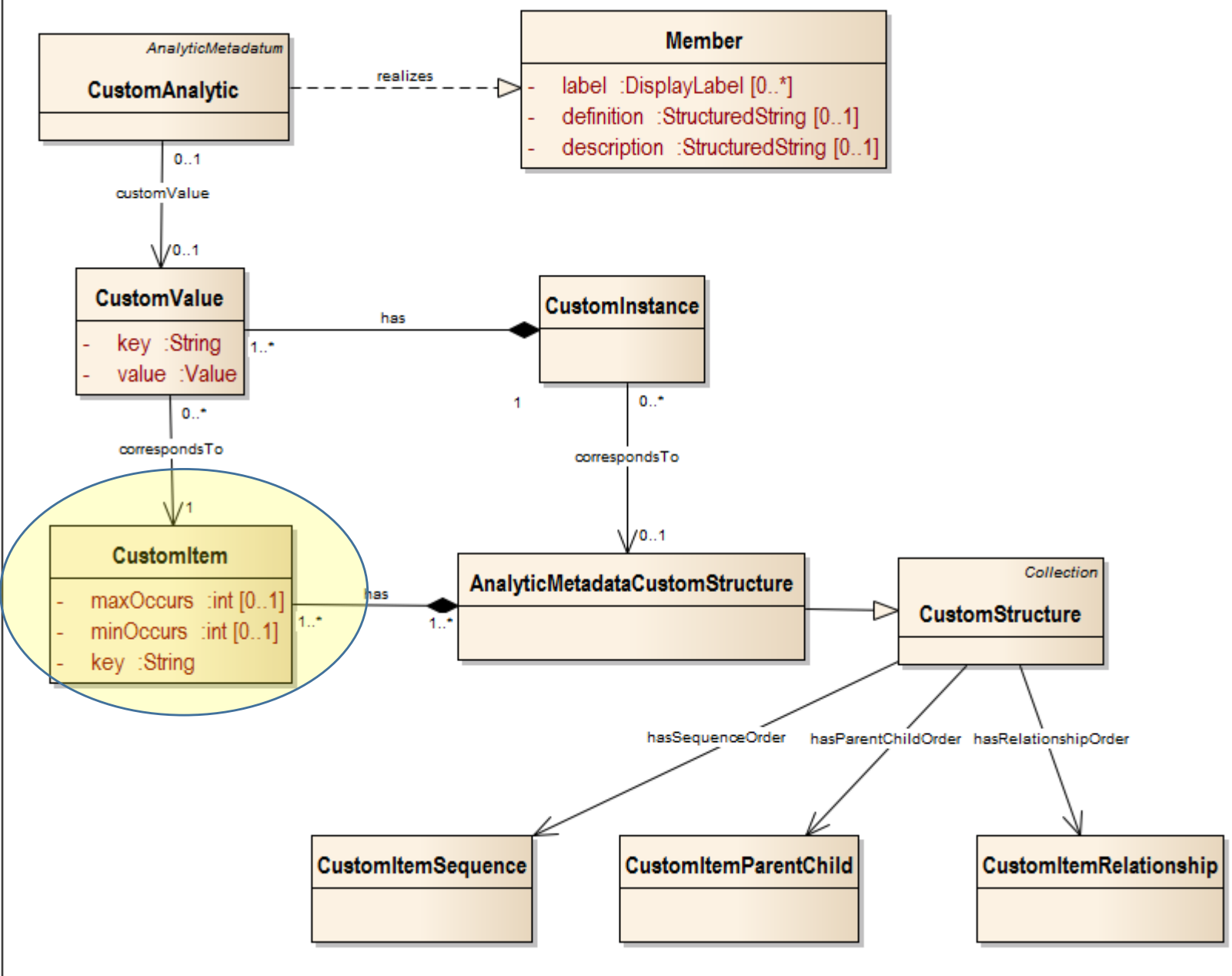
"Paragraph 1, Sentence 5"

# Analytics

Codes, Categories, and Memos as used by qualitative data analysis software.

Also a CustomAnalytic facility for other possibilities



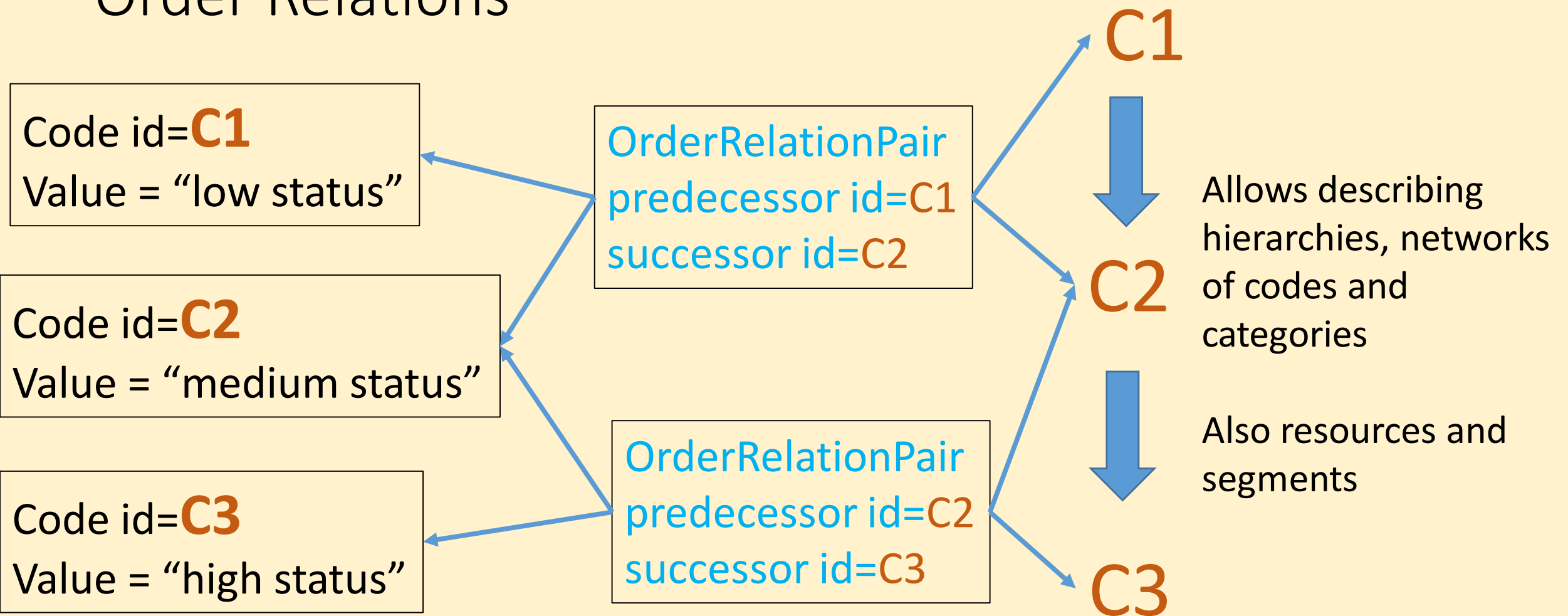


# Custom Analytics

A vocabulary of Keys, their cardinalities and relationships is described in a DDI CustomStructure. This structure can be shared by a community.

It is then used in CustomValues

# Order Relations



# Equivalence Relations

C1 = C2 = C3

Code id=C1  
Value = "low status"

Code id=C2  
Value = "medium status"

Code id=C3  
Value = "high status"

Equivalence  
Type = "similar to"  
id=C1  
id=C2  
Id=C3

Allows describing  
groupings,  
hierarchy levels  
of codes and  
categories

Also resources and  
segments



# Moving Forward, Qualitative Data Team

Pages / ... / Current Teams 

## Qualitative Data Team

Created by Wendy Thomas, last modified by Larry Hoyle on Nov 04, 2015

Qualitative Data Team Meeting Minutes

### What does this team do?






Focusing on the special needs of qualitative data reviews the contents of DDI work related to quantitative data and specifies extensions or new classes to support the capture, definition, storage, and analysis of qualitative data.

### Meeting Schedule and Connection Information

to be announced

### Members

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File	Modified ^
›  DDI4QualitativeDraftAnalytic.pdf	Sep 09, 2015 by Larry Hoyle
›  DDI4QualitativeDraftMain.pdf	Sep 09, 2015 by Larry Hoyle
›  DDI4QualitativeDraftPhysical.pdf	Sep 16, 2015 by Larry Hoyle
›  DDI4QualitativeDraft.eap	Sep 16, 2015 by Larry Hoyle
›  DDI4 and Qualitative Data.pptx	Oct 20, 2015 by Larry Hoyle

<https://ddi-alliance.atlassian.net/wiki/display/DDI4/Qualitative+Data+Team>

# Contact

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