Qudex Object Model

Version Information

Previous version: 3.0c This version: 3.0d Date: 29/01/13

Changes from 3.0c to 3.0d

Added two new attributes to the "CategoryType" model object. These attributes are CategoryScheme and CategoryType, which are described in the QuDEx reference model document (DExT_quali-QuDEx_v03_01_reference_01_01.doc).

Changes from 3.0b to 3.0c

Corrected some typos in the UML modelling notation diagram.

Changes from 3.0 to 3.0b

1) Re-modelled the ResourceComponent, Sources, MemoSources and Documents.

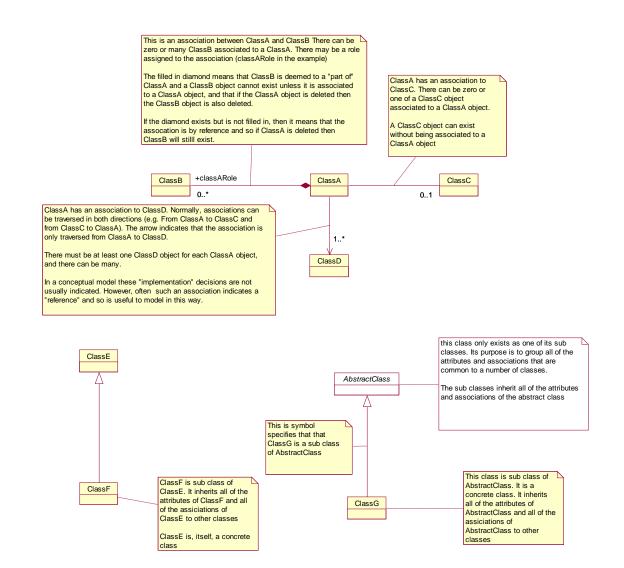
2) Changed the relationship between Document and SourceResource (this has been deleted in (1) above) to Resource Component" and added documentType attribute with DocumentType enumeration of "source" and "memoSource".

3) Changed cardinality between ResourceCollection and ResourceComponent from 1..* to 0..* (this reflects the schema)

4) Changed cardinality between Documents and Document from 1..* ot 0..* (this reflects the schema)

5) Changed name of XMLRange to Node

UML Modelling Notation



Identity and Inheritance.

Model Diagram

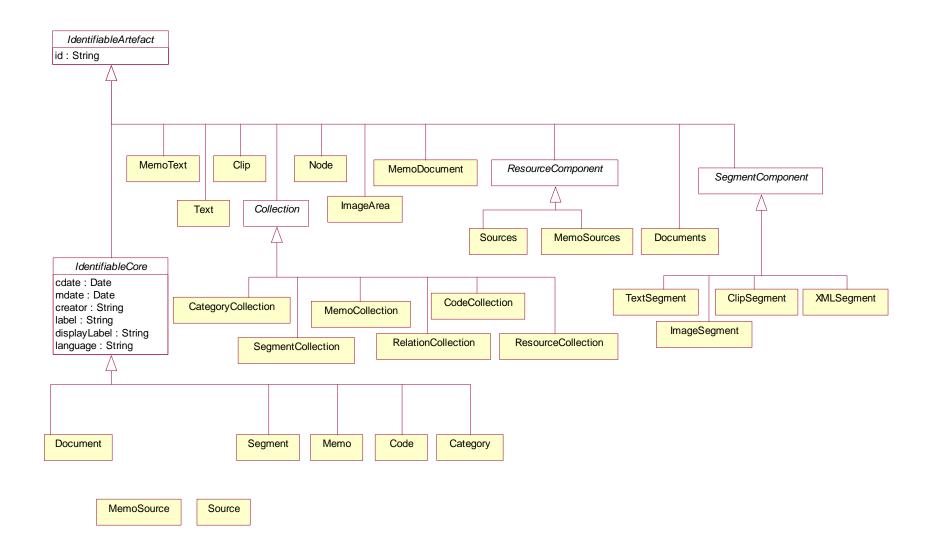


Diagram Explanation

There are many classes which have an Id attribute. This is important as this Id is used to relate two objects together in the Relation Collection – this is shown later.

Some classes also have common attributes in addition to the identity. These inherit from the Identifiable Core, which itself inherits from Identifiable Artefact.

Data Types

Model Diagram

< <enumeration>></enumeration>	< <enumeration>></enumeration>	< <enume< td=""><td></td><td></td></enume<>		
ShapeType	ChecksumType	Location	ationType	
rect : String	haval: String	um : String	tring	
circ : String	md-5: String	url : String	String	
poly : String	sha-1 : String	purl : String		
	sha-256 : String	handle : Str	ring	
	sha-384 : String	doi : String	-	
< <enumeration>></enumeration>	sha-512 : String	other : Strin	ng	
ResourceType	tiger : String		J	
text : String	whirlpool : String			
audio : String	crc32 : String			
video: String	adler32 : String		<<	enumeration>>
image : String	other : String			RelationType
xml : String	other : othing			••
other : String			sA : String	
			sChildOf :	•
	< <enumeration>></enumeration>		sParentOf	
	ObjectType		sMemberC	•
< <enumeration>></enumeration>	tobeCompleted			om : String
ClipType	tobeCompleted			listoryFor : String
byte : String				viewOf: String
Smil : String			sOverview(0
String	DocumentType		sVersionO	
Smpte-25 : String	source : String	— i:	sFormatOf	f: String
smpte-24 : String	memoSource : String	i	sReference	edBy:String
smpte-df30 : String	memosource . Stillig		sBasedOn	
smpte-ndf30 : String			sPartOf : S	
smpte-df29.97 : String		i	sAssociate	eOf: String
smpte-ndf29.97 : String		i:	sInstanceC	Of : String
Stime : String		i:	sLinkedTo	: String
String		i	sRelatedTo	o:String
Cother : String		i	sAssigned	To : String
-volution : othing		i	sEqualTo :	String
			sNotEqual	
			nasFormat	
			nasVersion	
			nasPart : S	0
				aphicInfoln : String

references : String requires : String other : String

Diagram Explanation

These data types are used to constrain the possible values of attributes in some of the Qudex classes – see later.

Qudex Relationhsips

Model Diagram

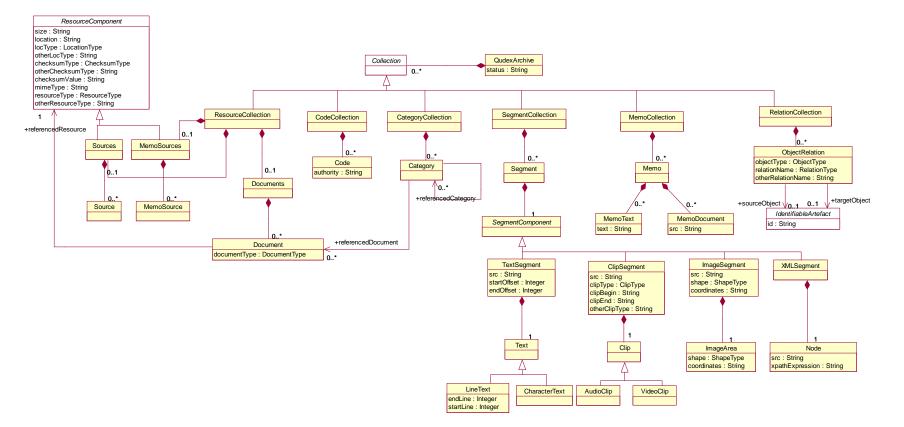


Diagram Explanation

This model is an object oriented representation of the Qudex schema. Where appropriate the names of attributes and elements are taken from the equivalent construct in the schema.

One objective of this model is to discover commonalities between the objects in Qudex and to ensure these can share common properties. Therefore, in many cases two or more classes are sub classes of a class that contains the common components.