Conceptual model for assessment

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Overview

- Background

- Research questions

- Model development

- The conceptual model for assessment

- Conclusions

Background

- Standardized testing - Assessment
- Specifications for interoperability

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Research questions

- Is it possible to develop a model that:
    1. describes as many as possible forms of assessment
    2. describes the assessment proces as complete as possible
    3. supports re-use and exchange of assessments and assessment procedures (sharing)
    4. can be used by computers to interpret and process assessments (interoperability)
- Is the method to develop a model suitable?
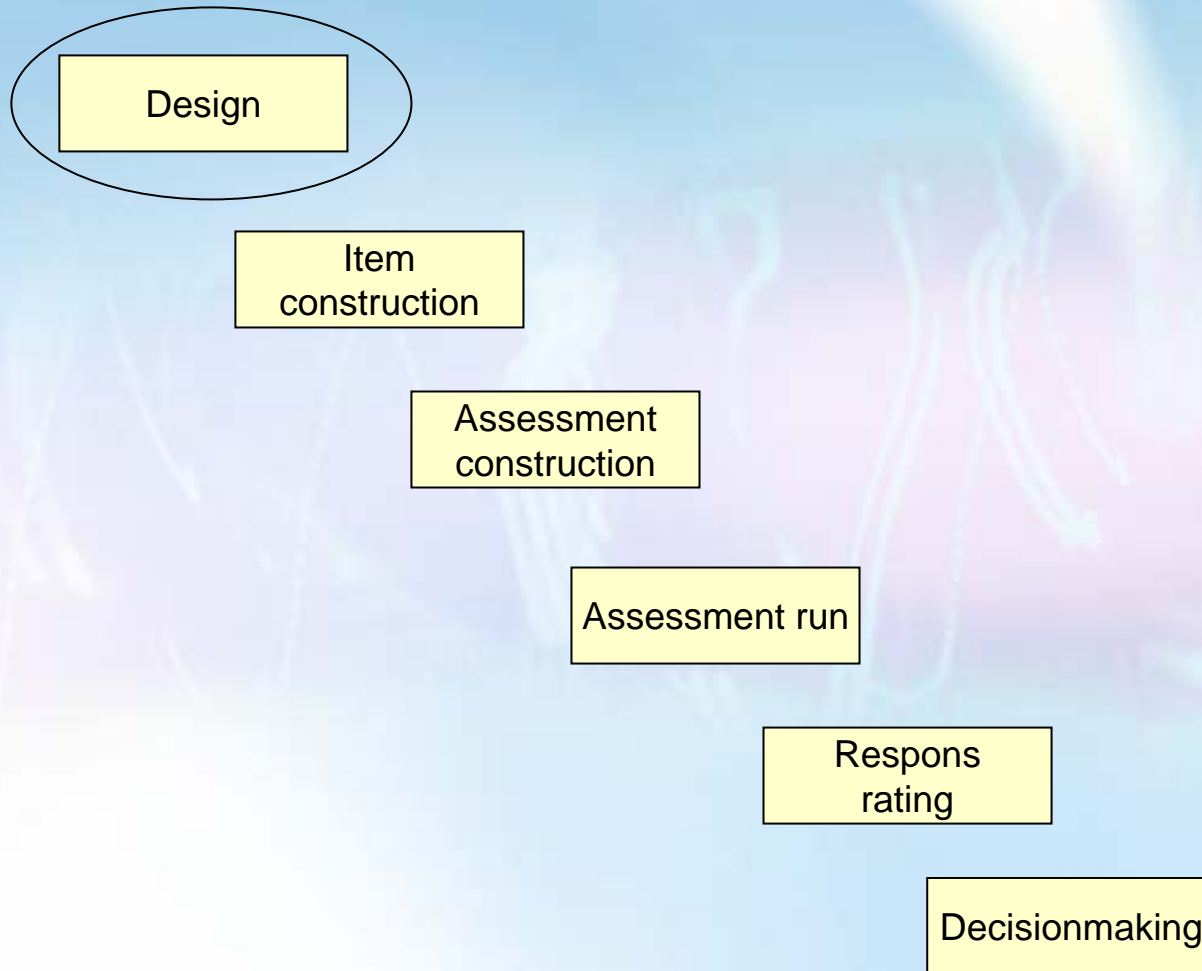
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Definition of assessment

All the systematic methods that can be used to gather information and evidence about student properties, based on a process, a product or the progress of a student, for the purposes of certification, placement or diagnoses in formative and summative contexts.
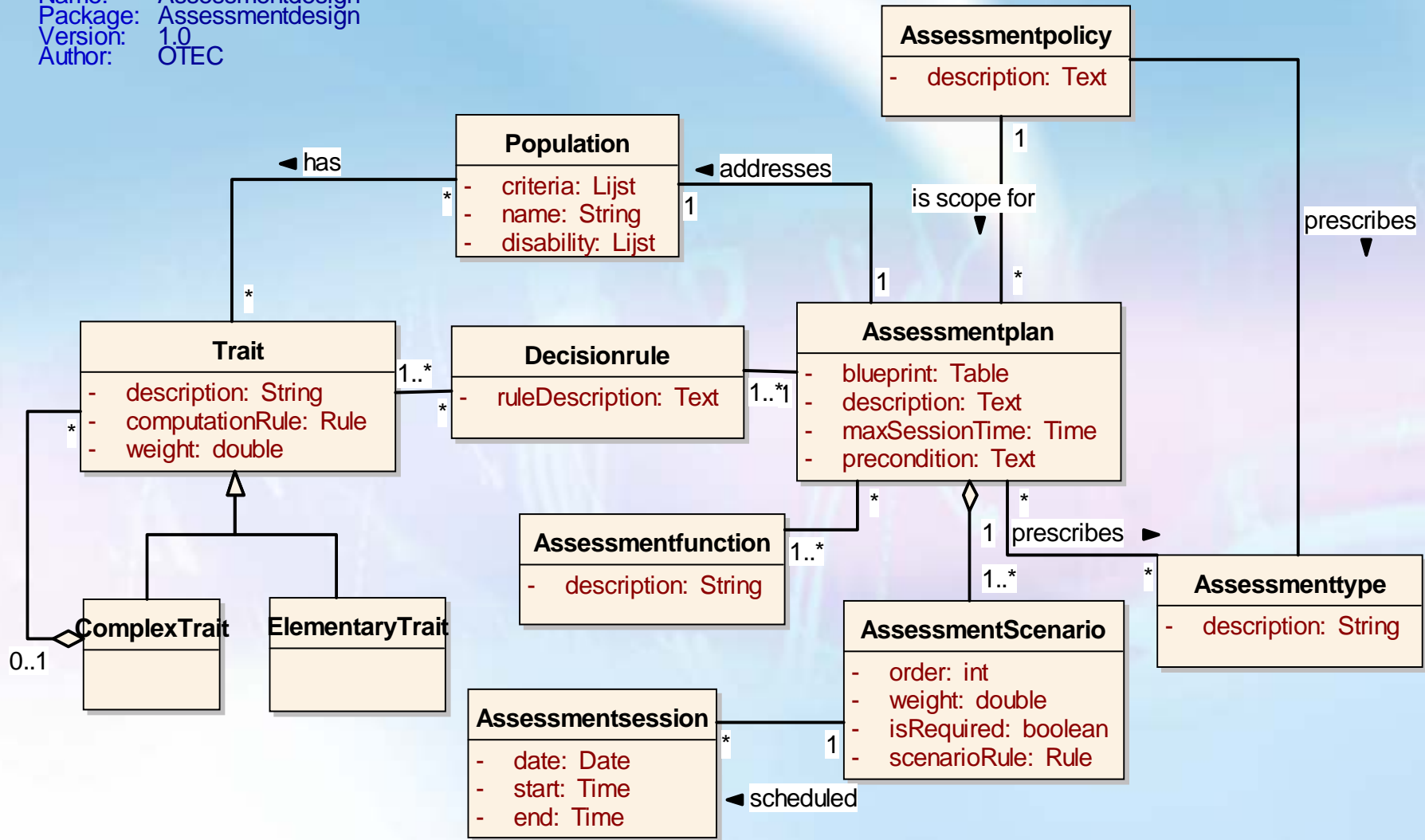
Method

- UML class diagrams: formalisation
- Different expertise:
  - Assessment (Open university of the Netherlands, Fontys university, Citogroup)
  - Modelling
  - UML
- Evaluation
- Validation
  - Literature
  - Cases
  - Experts

Phases in the process of assessment

Design

Item construction

Assessment construction

Assessment run

Respons rating

Decisionmaking

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Name: Assessmentdesign
Package: Assessmentdesign
Version: 1.0
Author: OTEC

Assessmentpolicy
- description: Text

Population
- criteria: Lijst
- name: String
- disability: Lijst

◄ has

◄ addresses

is scope for

prescribes

Trait
- description: String
- computationRule: Rule
- weight: double

Decisionrule
- ruleDescription: Text

Assessmentplan
- blueprint: Table
- description: Text
- maxSessionTime: Time
- precondition: Text

1..*   1..*1

Assessmentfunction
- description: String

1..*

prescribes ►

Assessmenttype
- description: String

ComplexTrait

ElementaryTrait

0..1

AssessmentScenario
- order: int
- weight: double
- isRequired: boolean
- scenarioRule: Rule

Assessmentsession
- date: Date
- start: Time
- end: Time

◄ scheduled

Conclusions

The model is developed

+ describes as many as possible forms of assessment

+ describes the assessment proces as complete as possible

? supports re-use and exchange of assessments and assessment procedures (sharing)

? can be used by computers to interpret and process assessments.

The method was useful, but complicated

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At this moment

1. Version 1.0 is developed.
2. Review at the start of 2005 was positive
3. Model published march 2005
   http://dspace.ou.nl;
   http://www.ou.nl/open/ltdp-asses/
4. To do:
   a. a demonstrator should be build
   b. tooling

Thank you for your attention

- For comments, questions, or a copy of the paper, please contact me:

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