Ontology-Driven Conceptual Modelling

in the Services of Interoperability

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Oct 2 2019
Comparing traditional conceptual modeling with ontology-driven conceptual modeling: An empirical study

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HIGHLIGHTS

- Empirical study on adopting a traditional conceptual modeling technique and an ontology-driven conceptual modeling technique.
- Measure the difference in model quality and the effort required to create such a model.
- Understand and identify in which modeling situations an ODCM technique can prove beneficial compared to a TCM technique.
Master’s thesis

Comparing Data Annotations using Deep and Shallow Semantics

Bc. Lukáš Bicek
Figure 2.1: Provided model in OWL

Model was part of the BYOD workshop and conference in Rome, courtesy of

Robert Pergl, CTU in Prague

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Figure 2.2: First iteration of the model
Figure 2.4: Sixth iteration of the model
Figure 2.5: Invalid Alloy simulation of the model prior fixing all the issues

Figure 2.6: Valid simulation of the model in figure 2.7
Figure 2.7: Final version of the model, after all the issues and faults were fixed.
GO FAIR Reference Ontology models

Manage topics

| 34 commits | 2 branches | 0 releases | 1 contributor | Apache-2.0 |

Branch: master

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<th>Latest commit 5d6e281 18 days ago</th>
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<td>README.md</td>
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FAIR Vocabulary

Authors:
https://orcid.org/0000-0002-1267-0234
https://orcid.org/0000-0003-4727-9435

Download serialization:
Format JSON-LD, Format RDF/XML, Format N-Triples, Format TTL

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https://orcid.org/0000-0002-1267-0234, https://orcid.org/0000-0003-4727-9435. FAIR Vocabulary.

Provenance of this page

Abstract

This is the formal vocabulary (ontology) describing the FAIR principles.
3.1. Classes

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<th>FAIR Principle or Sub-Principle</th>
<th>FAIR principles</th>
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**FAIR Principle**

**IRI**: [https://w3id.org/fair/principles/terms/FAIR-Principle](https://w3id.org/fair/principles/terms/FAIR-Principle)

A FAIR principle describes an essential aspect of FAIR.

**Is defined by**

[https://w3id.org/fair/principles/latest/FAIR-Principle](https://w3id.org/fair/principles/latest/FAIR-Principle)

**is equivalent to**

{ **Accessible**, **Findable**, **Interoperable**, **Reusable** }

**has super-classes**

**FAIR Principle or Sub-Principle**

**has members**

**Accessible**, **Findable**, **Interoperable**, **Reusable**

**FAIR Principle or Sub-Principle**


OpenPonk is a metamodelling platform and a modeling workbench implemented in the dynamic environment Pharo aimed at supporting activities surrounding software and business engineering such as modeling, execution, simulation, source code generation, etc.
Pharo is a pure object-oriented programming language and a powerful environment, focused on simplicity and immediate feedback (think IDE and OS rolled into one).
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Diagram of an ontological model with classes and associations, including attributes and multiplicities.
Data Stewardship Wizard

Create Smart Data Management Plans for FAIR Open Science

Get started
Thank you for listening!

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