

Design Principles

Technical Committee – 2016-04-28 [Based on the document Design Principles, written at Dagstuhl 2015]

Process:

The original document was reviewed by the Technical Committee on 2016-04-28. The recommended decision principles were supported with the minor addition of the word “conceptualization” added to the 3rd principle under Capability. The actions planned by the Technical Committee include the following:

- Forwarding of the recommended Design Principles to the Modeling Team for comment
- A second review of the Design Principles to the original set for coverage
- Request to present on the Design Principles at the meeting of the Scientific Board in May 2016 for acceptance of the Design Principles and discussion on the development of metrics related to the individual principles

Design Principles

DESIGN

The model

- is developed in an agile, modular and iterative manner
- is responsive to community needs to produce actionable metadata
- should balance complexity with functionality and understandability
- is extensible and strives towards compatibility between different versions
- is maximally interoperable with relevant community standards
- supports a plurality of implementations

DOCUMENTATION

The documentation of the model

- is clear, complete, and timely
- is concise, comprehensible, accessible, and useable by multiple communities
- provides justification for design decisions.
- provides reference and functional perspectives

CAPABILITY

The model and its documentation

- support the discovery, reuse, exchange, and sharing of (meta)data
- support the conceptualization, capture, production, management, and analysis of (meta)data
- support audit and reproducibility across the (meta)data lifecycle

Discussion of metrics

The discussion of metrics should address who would use the metric and how the information obtained from the metric would be used. For example, what are the consequences of non-compliance?

Documentation:

- Readability score
- Acronym usage
- Structure of documentation to reflect principles -- easy to mark as having or not
- Quality is empirical so there needs to be a measure of use

Design:

- proportion of classes that carry forward
- change information
- time between updates in relationship to the number of changes
- metrics on JIRA issues
- is there a way to use labels in JIRA to identify an issue with a design principle?
- is there a way to tie up usage of DDI to responsiveness principle?
- complexity - how deeply nested are classes in the model - gratuitous complexity
- compatibility with previous versions

Capability:

- Ability of the model to cover existing DDI-C, DDI-L, and GSIM content
- Responsiveness to new areas of interest and coverage of those areas