



Modular Ontology Evaluation Report

Ontology IRI:
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1 Evaluation Matrics

1.1 Naming Convention

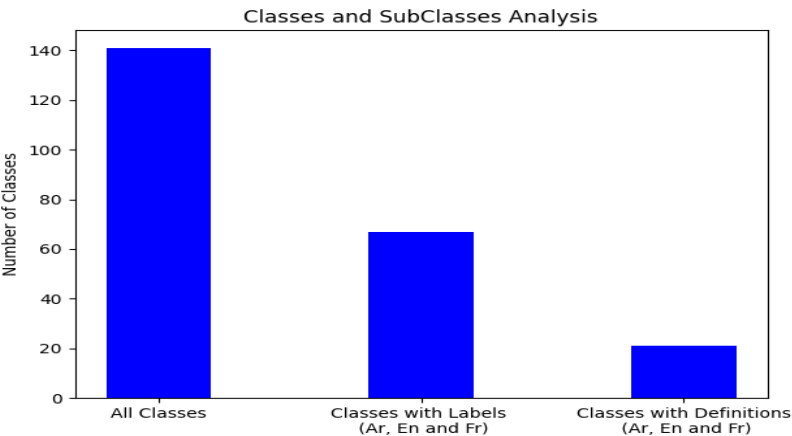


Figure 1: Caption

1.2 Syntax Evaluation

Module	Lawfulness	Richness	Syntactic Quality

Table 1: Modules Syntax Evaluation Results

1.3 Categorization & Distribution Evaluation

Module	Class Distribution	Attribute Distribution	Relationship Distribution	Module Distribution

Table 2: Modules Categorization & Distribution Evaluation Results

1.4 Structure Evaluation

Module	Size of Module	Appropriateness	Relative Size	Depth of Module	Average Depth of inheritance Tree

Module	Atomic Size	Module Density	Breadth of Module	Overall Complexity of Module

Table 3: Modules Structure Evaluation Results

1.5 Richness Evaluation

Module	Attribute Richness	Inheritance Richness	Relationship Richness

Table 4: Modules Richness Evaluation Results

1.6 Logical Criteria Evaluation

Module	Correctness of Module	Completeness of Module

Table 5: Modules Logical Criteria Evaluation Results

1.7 Relatedness Evaluation

Module	Inter-Module Distance	Intra-Module Distance	Relative Intra-Module Distance

Module	Encapsulation	Redundancy	Independency

Table 6: Modules Relatedness Evaluation Results

1.8 Quality Evaluation

Module	Precision	Recall	Module Cohesion	Module Coupling	Module Overall Quality

Table 7: Modules Quality Evaluation Results

2 Use cases tested

Use case N° 1:

Input

Individuals	Features

Output

Individuals	New features
Herd02	<p>..</p> <ul style="list-style-type: none"> • IndicateToPastureState \implies ModeratelyRich • IndicateToAnimalState \implies ModeratelySatisfied • hasEffectOnPasture \implies NormalUse
Pasture02	
G1	
G2	
G3	
G4	