Ontology Application Framework

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Classes

Properties

Ontology Application Framework

The objective of this framework is to provide a common terminology for describing applications of ontologies and the benefits that ontologies deliver within these applications. In addition to classifying ontology applications, this provides the basis for benchmarks and the ability to compare different applications of ontologies.
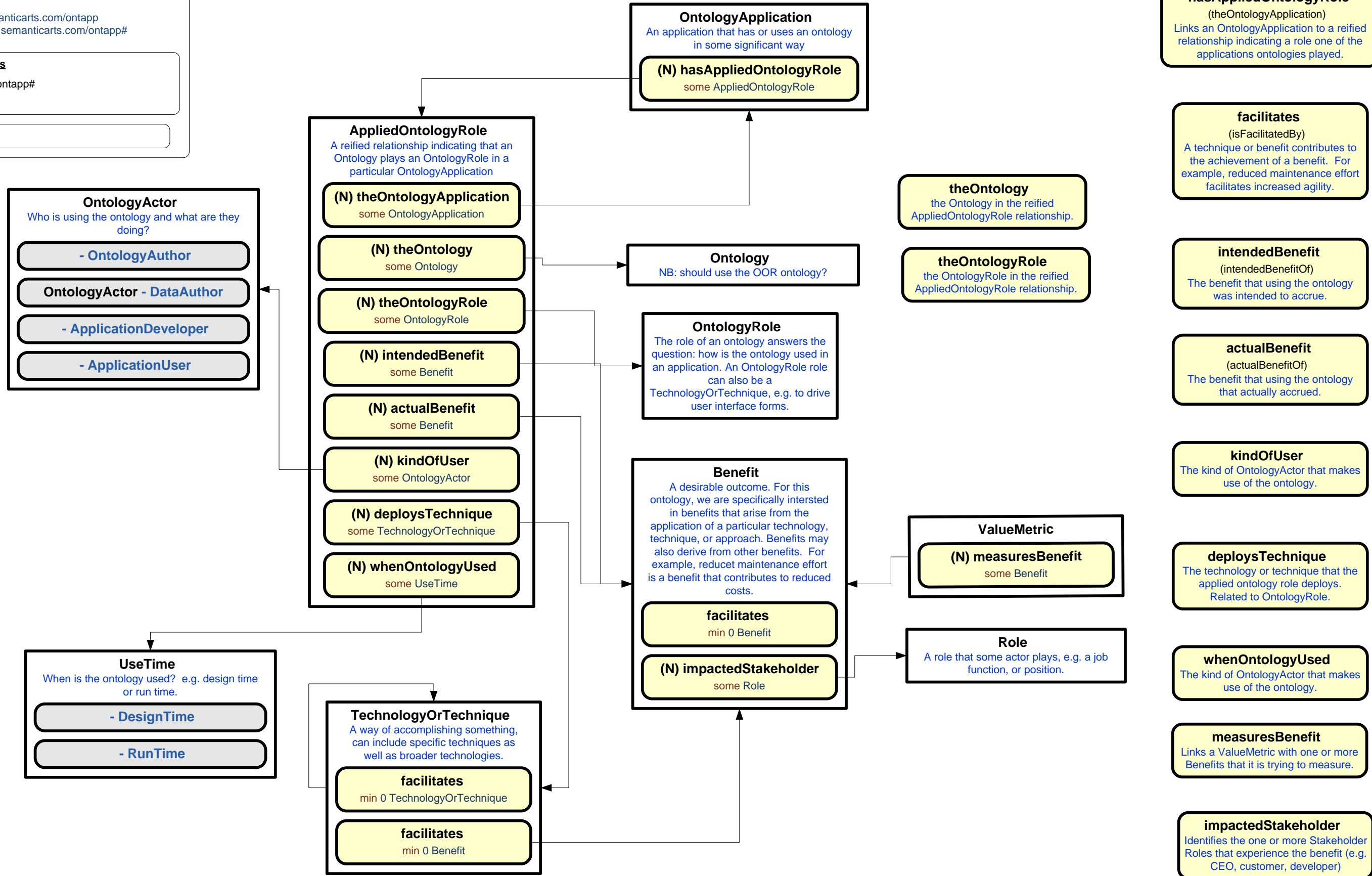
OWL Standard : 2.0

Base URI : http://ontologies.semanticarts.com/ontapp
Default Namespace : http://ontologies.semanticarts.com/ontapp#

Namespaces

oaf   http://ontologies.semanticarts.com/ontapp#
Ontology Application Framework

Imports

OntologyActor
Who is using the ontology and what are they doing?
- **OntologyAuthor**
- OntologyActor - **DataAuthor**
- **ApplicationDeveloper**
- **ApplicationUser**

AppliedOntologyRole
A reified relationship indicating that an Ontology plays an OntologyRole in a particular OntologyApplication
- **(N) theOntologyApplication**
  some OntologyApplication
- **(N) theOntology**
  some Ontology
- **(N) theOntologyRole**
  some OntologyRole
- **(N) intendedBenefit**
  some Benefit
- **(N) actualBenefit**
  some Benefit
- **(N) kindOfUser**
  some OntologyActor
- **(N) deploysTechnique**
  some TechnologyOrTechnique
- **(N) whenOntologyUsed**
  some UseTime

OntologyApplication
An application that has or uses an ontology in some significant way
- **(N) hasAppliedOntologyRole**
  some AppliedOntologyRole

Ontology
NB: should use the OOR ontology?

OntologyRole
The role of an ontology answers the question: how is the ontology used in an application. An OntologyRole role can also be a TechnologyOrTechnique, e.g. to drive user interface forms.

Benefit
A desirable outcome. For this ontology, we are specifically intersted in benefits that arise from the application of a particular technology, technique, or approach. Benefits may also derive from other benefits. For example, reducet maintenance effort is a benefit that contributes to reduced costs.
- **facilitates**
  min 0 Benefit
- **(N) impactedStakeholder**
  some Role

ValueMetric
- **(N) measuresBenefit**
  some Benefit

Role
A role that some actor plays, e.g. a job function, or position.

UseTime
When is the ontology used? e.g. design time or run time.
- **DesignTime**
- **RunTime**

TechnologyOrTechnique
A way of accomplishing something, can include specific techniques as well as broader technologies.
- **facilitates**
  min 0 TechnologyOrTechnique
- **facilitates**
  min 0 Benefit

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hasAppliedOntologyRole
Links an OntologyApplication to a reified relationship indicating a role one of the applications ontologies played.

facilitates
(isFacilitatedBy)
A technique or benefit contributes to the achievement of a benefit. For example, reduced maintenance effort facilitates increased agility.

theOntology
the Ontology in the reified AppliedOntologyRole relationship.

theOntologyRole
the OntologyRole in the reified AppliedOntologyRole relationship.

intendedBenefit
(intendedBenefitOf)
The benefit that using the ontology was intended to accrue.

actualBenefit
(actualBenefitOf)
The benefit that using the ontology that actually accrued.

kindOfUser
The kind of OntologyActor that makes use of the ontology.

deploysTechnique
The technology or technique that the applied ontology role deploys. Related to OntologyRole.

whenOntologyUsed
The kind of OntologyActor that makes use of the ontology.

measuresBenefit
Links a ValueMetric with one or more Benefits that it is trying to measure.

impactedStakeholder
Identifies the one or more Stakeholder Roles that experience the benefit (e.g. CEO, customer, developer)

None of this is cut and dried.

A technology or technique can be tightly linked with the role of the ontology, and/or the architecture.

Technologies and techniques can directly lead to benefits.

Purpose is often conflated with benefit. The purpose is to have a particular benefit, but the purpose might be expressed as a particular way the ontology will be used, or it could be expressed as a benefit, or both.

An ontology may play a particular role, and do so according to spec, but there may be no benefit at the end of the day.

The ontology role is often tightly tied up with an architecture.

Still To DO:
Enumerate some key technologies/techniques/ approaches and relate them to each other.

Enumerate some ontology roles,relate them to architectures and benefits.

Enumerate some architecture patterns, relate them to ontology roles and benefits.

Create a sample ontology applications with two AppliedOntologyRoles