General Information

An ontology for representing decisions and decision-making

General information

The purpose of **Decision Ontology (DO)** is to provide a basis for **representing, modeling and analyzing decision and decision-making**.

You can **browse the ontology** here. Visit the wiki section for more information.

If you have any questions or comments or need help in using this ontology, send an email to: **piotrnowara(at)gmail.com**

News

April 2012 - improved annotations and new 'How to' wiki page.

October 2011 - new version of Decision Ontology is available - please check the repository and this wiki page.

Use scenarios

Representing decisions & decision-making

Decision ontology can be used for archiving information related to the decisions and their context.

Normative use (describing decision patterns)

Decision Ontology can be used for storing and analyzing decision patterns that is the knowledge associated with certain types of decision, where every aspect could be analyzed hierarchically. Such knowledge base can serve as a reference for specialist and/or as a platform for building a sophisticated system for comparing the decision patterns with actual decisions and their consequences. It can be also helpful in the process of aligning one's activities to some underlying regulations or requirements.

Examples: * knowledge base containing the necessary conditions for drug prescriptions - see example OWL file and this description * description of decisions patterns and criteria of a specific domain defined in an industry standard.

Ontology overwiew

1. Decision-making is initiated by some underlying problem that can be represented in form of a **question**.
2. **Decision-making is a process** that can result in some decision and **decision is a situation** of indicating one of the considered options. Decision Ontology provides means for precise distinguishing and distinct treatment of these two aspects.
3. **Option** is a **considered situation** of choosing some specific solution.
4. Options can have associated **criteria** that is **requirements**, **recommendation** (or other **normative** entities) that should be applied to them.

Some of the **questions** that can be answered using DO: * **What problem/question initiated the decision-making process? * What options are being considered? * What criteria are being used for respective options? * What requirements, recommendation or other possible norms are associated with proposed criteria? * What involves choosing the respective options? * What is the result of a decision-making process? * What is affected by a given norm/requirement? * What satisfies a criterion? * What does not satisfy a criterion? * What kind of exceptions are defined? * What options should be/must not considered? * What are the recommended criteria? * What are the required criteria?**

In a decision-making context a criterion is a requirement, recommendation or other normative entity applied to an option. In order to enable detailed descrption of decision-making criteria Decision Ontology imports Requirement Ontology (RO) which is designed for modeling of criteria, requirements, recommendations and other normative entities. Combining DO with RO allows not only detailed modeling of **options criteria** but also describing the **requirements and recommendation for decision-making itself** - see example.

Collaboration

This project is open for collaboration.