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OWL-ontology visualization tool

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The main goals

**Goal:** to create an instrument for semantic structures visualization

**Purpose:** to provide an intuitive presentation of material and improve effectiveness of educational process

**Targets:**
- educational portals
- museums
Knowledge Base

**Knowledge Base** – kind of database aimed to operate with structured data concerning with some field of science and supposed to be used in a reasoning process by some device or human with a concrete goal.

**Ontology** - an hierarchical structure of items, objects, definitions, properties and relations.

Ontology representation:

**RDF** (Resource Description Framework) – ontology definition format

**OWL** (Web Ontology Language) – appeared from RDF
Visual appearance

Ontology visual appearance ways:

I. Mind-map

* A diagram builds around one central object
Visual appearance

Ontology visual appearance ways:
II. Concept-map

* Do not require central object
* Allow introduce different types of relations between individuals
Platform selection

Main requirements:
- Open-source code
- Web-appearance
- Interactivity
- Dynamic and liquidity

GraphLight

OntoViz, IsaViz (Protege)

GraphViz

UbiGraph

OntoViz, IsaViz (Protege)
Practical results

http://goo.gl/u7GkB
Practical results

Application features:
- OWL to XML generator (SemanticMediaWiki plugin)
- Directed & named edges
- Typed nodes (класс, индивид)
- Search through ontology

http://goo.gl/u7GkB
Thank you!

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