OOPS! - OntOlogy Pitfall Scanner!

An online system for ontology evaluation

Universidad Politécnica de Madrid
Madrid, 3rd of December, 2014

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Linked Data, Open Data, Data transparency, etc.

- Data annotated by means of ontologies $\rightarrow$ Semantic Web
- Lack of evaluation in models describing data
  - Data inconsistency and incoherence $\rightarrow$ Lower quality

By 2012, 70% of public web pages will include some of semantic mark-up [Gartner, 2007]


ODI helps unlock £11m for open data innovation in Europe http://opendatainstitute.org/ [2014]

RD& for semantic technology will be $8.5B worldwide (2010)$ [Davies, 2006]
• Ontology editors
• Semantic based software
• Ontology development

• Examples:
  o *Google knowledge graph*
  o BBC ontologies
  o Open Data portals
    • Government, libraries, museums, health, biology, etc.
  o **Local applications** too: data integration, search, NLP, etc.
Current solutions – Some dimensions

- Real world representation
- Logical consistency
- Ad-hoc tests Incomplete
- Modelling issues
- Manual / Some tools Modelling experts
- Ontology language specification
- Only syntax No content
Proposed solution

- Semi-automatic tool for **ontology evaluation**
  - Available at [http://oops.linkeddata.es](http://oops.linkeddata.es)
  - Registered software: M009445/2012
- Ontology editors **independent**
- **Usability**
  - User interface (*feedback*, users’ satisfaction test)
  - Web service: Third-party software **integration**
- More automated detections (*x3 and more*)
  - Selection, classification, importance levels
- Conformance badges
Contributing to the semantic technologies field

Who
- Ontology editors
- Semantic based software
- Ontology development

How
- Distribution
- Extension development
- Use license
- Consultancy

Where
- World wide
- National

What
- Software evaluation service

&
• Used by developers from more than 48 countries (> 2000 executions)

• Contact and relation with enterprises:
  - Raytheon, SemanticArts, inova8 (no code shared)
  - HoneyWell (contact, interest in local distribution)

• Integration in third-party software:
  - OntoHub, Widoco, SmartCities Ontology Catalogue

• **Ontology Engineering Group**
  
  *(20 years of experience in ontological engineering)*

  o María Poveda Villalón
    • PhD student – Design and development

  o Miguel Ángel García Delgado
    • Software engineer – Development and support

  o Mari Carmen Suárez de Figueroa Baonza
    • Assistant Professor – Design and supervision

  o Asunción Gómez Pérez
    • Full Professor – Design and supervision
Contact

María Poveda Villalón
Ontology Engineering Group
mpoveda@fi.upm.es

Universidad Politécnica de Madrid

http://oops.linkedadata.es
oops@delicias.dia.fi.upm.es
@OOPSoeg