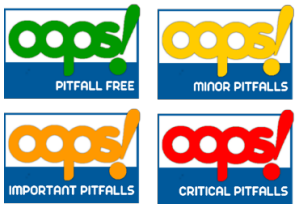
OOPS! OntOlogy Pitfall Scanner!

An online system for ontology evaluation



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Technological Offers type

Technological solutions

Research and innovation areas

- Digital Technologies, Artificial Intelligence, Cybersecurity, 5G, Robotics
- Social Innovation, Open Science, Governance, and Education Science

ODS

Available from: 2020

Where?

Ontology Engineering Group

Keywords: | ontology | Semantic web

Brief description of the technology solution and the added value it provides

OOPS! is an online ontology evaluation system independent of any ontology development environment. It is also provided as a Web Service so that it could be integrated within parties software. Currently it have been used from more than 48 countries (>2000 times), embedded within 3 third-party software developments and used in several enterprises, by means of local distributions, as well as during training and courses. It extends the list of errors detected by most recent and available ontology evaluation systems providing examples and descriptions of such bad practices.

Description of the technological base

OOPS! represents a step forward within ontology evaluation tools since it extends the list of bad practices detected by most recent and available ontology evaluation systems. It is fully independent of any ontology development environment as it is available online. However, it also provides a web service allowing its integration with third-party software too.

Finally, its graphical user interface ease the interaction with the system in a user-friendly way.

"OOPS! extends the list of bad practices detected by most recent and available ontology evaluation systems"

" Used from more than 48 countries and (>2000 times)"

Market demands

Semantic Web & Linked Data

- The Linked Data effort has become a catalyst for the realization of the vision of the semantic Web where large amount of data, annotated by means of ontologies, is shared on the Web. Therefore, ontologies must be accurate and of high quality from a knowledge representation perspective in order to avoid inconsistencies or undesired inferences.
- Reusing existing knowledge saves time and increases interoperability. In this sense, the candidates ontologies to be reused should be evaluated before reusing them.

Knowledge representation

- When developing systems based on semantic technologies and ontologies, such ontologies and knowledge models should be evaluated as any other software component.

"Ontologies are one of the pillars of the semantic web and a widespread form to capture background knowledge for semantically enriched technologies. Evaluating ontologies is therefore an essential task in this context"

Competitive advantages

- Detects semi-automatically more bad practices than existing tools (x3)
- Available online at http://oops.linkeddata.es
    - Web user interface
    - Web service
- Provides an online catalogue of pitfalls including description and examples
- Independent of ontology editors
- User friendly
- Allows selecting subset of pitfalls to be analysed according to different evaluation dimensions

Development stage

- Concept
- Research
- Lab prototype
- **Industrial prototype**
- Production

Contact

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