Ya2ro: A tool for creating Research Objects from minimum metadata

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Demo

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Research Objects provide the means to represent all the inputs, outputs and context of a scientific investigation

Slide derived from “RO-Crate: A framework for packaging research products into FAIR Research Objects” By Carole Goble and Stian Soiland-Reyes.
Many aggregated resources are already described elsewhere: Datasets, Publications, Software, People (DOIs, ORCIDs, Code repository URLs)
- Available under different APIs (JSON, SPARQL)
- Time-consuming to collect and integrate
Ya2RO: Creating ROs from YAML files

Ya2RO collects and aggregates existing resource metadata

Minimum description of RO resources (YAML)

```
type: "paper"
summary: "Materials used for a SEPLN paper submission"
input the textual description of the contracting program

title: "Materials for Multi-label Text Classification"

datasets:
- https://doi.org/10.5281/zenodo.6554684

software:
- https://github.com/oeg-upm/cpv-classifier

authors:
- Julian
  - orcid: https://orcid.org/0000-0003-1011-5023
  - role: "Postdoctoral researcher"
- Daniel
  - orcid: https://orcid.org/0000-0003-0454-7145
  - role: "Distinguished Researcher"
```

Input

External metadata

Generated outputs

website materials

ro-crate-preview.html

ro-crate.json

.htaccess

Human-readable view

Machine-readable view

Content negotiation
Materials for Multi-lal Procurement in Spanish

Summary

Materials used for a SEPLN paper submission to appear that uses as an input the textual description of the contract in Spanish, and improves the state of the art by access the contents of this Research object as a JSON.

curl -sH 'accept:application/vnd.json+json' -L http://example.com/json

Datasets

- CPV Classifier training and test datasets
  - Description: Datasets used to test different approaches to Common Procurement Vocabulary (CPV) codes classification, using data extracted from the Spanish Treasury.

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Example: https://w3id.org/dgarijo/ro/sepln2022
Ya2RO saves time when creating Research Objects by:

- Using a simple YAML file to list URLs of aggregated resources
- Enriching resources from external metadata in the RO
- Creating an HTML representation for the RO

https://github.com/oeg-upm/ya2ro

https://pypi.org/project/ya2ro/