RULE-BASED VALIDATION FOR ESWC SS PROJECT GROUPS

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SOFTWARE ARCHITECTURE FOR A RULE-BASED VALIDATION TOOL

Diagram:
- Web Interface
- Web Service
- Triple Store
- Named Graph
- Protocol: JSON-LD? RDF?
- External Vocabularies
- Rule Set
- Result Set 1
- Result Set 2
- Result Set 3
WEB INTERFACE

GiveMeFive

- group member #1: Barry Norton
- group member #2: John Domingue
- group member #3: Maribel Acosta
- group member #4: Elena Simperl
- group member #5: Aidan Hogan

Validate
THE GROUP IS NOT OK!

GiveMeFive

- group member #1: Barry Norton
- group member #2: John Dominguez
- group member #3: Maribel Acosta
- group member #4: Elena Simperl
- group member #5: Aidan Hogan

Group should have 4-5 members.
Members should be from both genders.
Members should be from different countries.
Members should not be from the same institution.

Members should not have collaborated before
ARE BOTH GENDERS REPRESENTED?

```
SELECT ?C (COUNT(?C) AS ?NR) FROM <HTTP://SUMMERSCHOOL2013.ESWC-
       FILTER(?NAME="PIETER COLPAERT" || ?NAME = "DOERTHE ARNDT") } GROUP BY ?C
```

IS ANY FOAF:BASED_NEAR VALUE REPRESENTED MORE THAN ONCE?

```
SELECT ?COUNTRY (COUNT(?NAME) AS ?NR) FROM <HTTP://SUMMERSCHOOL2013.ESWC-
       CONFERENCES.ORG/PARTICIPANTS> WHERE {?P FOAF:NAME ?NAME; FOAF:BASED_NEAR ?
       COUNTRY. FILTER(?NAME="PIETER COLPAERT" || ?NAME = "DOERTHE ARNDT")} GROUP
       BY ?COUNTRY HAVING(?NR > 1 )
```

IS ANY FOAF:WORKPLACEHOMEPAGE REPRESENTED MORE THAN ONCE?

```
SELECT ?INSTITUT (COUNT(?NAME) AS ?NR) FROM <HTTP://SUMMERSCHOOL2013.ESWC-
```
EXTENSION FOR DYNAMIC RULES

- CREATE RULES BASED ON EXISTING PROFILE DATA
- CREATE RULES BASED ON EXTERNAL ONTOLOGY PROPERTIES

- Webpage
  - Webpage_UCommerce_and_Industry
  - Webpage_UWork_and_Education
  - Webpage_UTravel
  - Webpage_USports
  - Webpage_USociety_and_Family
  - Webpage_UScience
  - Webpage_UPlaces_in_the_World
  - Webpage_UOnline_Communities
  - Webpage_UMultimedia_and_Equipment
  - Webpage_ULiterature_and_Press
  - Webpage_ULeisure
  - Webpage_ULegislation_and_Administration
  - Webpage_UInternet_and_Telecommunication
OTHER FEATURE EXTENSIONS

- User interface generated by the data
- Use other data sets to clean and extend profile information