OKE 2017
Open Knowledge Extraction Challenge

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OKE @ ESWC 2017
Portoroz, Slovenia

Horizon 2020, GA No 688227

May 30th, 2017
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Knowledge Extraction Challenge

4 Tasks
- Focused NE Identification and Linking
- Broader NE Identification and Linking
- Focused Musical NE Recognition and Linking
- Knowledge Extraction

3rd iteration

Carried out using HOBBIT benchmarking platform

Format: NLP Interchange Format (NIF), RDF/OWL-based
Task 1: Focused NE Identification and Linking

- **Goal:** Identification of NEs and Disambiguation to DBpedia
- **3 DBpedia Ontology classes (Person, Place, Organisation)**

Florence May Harding studied at a school in Sydney, and with Douglas Robert Dundas, but in effect had no formal training in either botany or art.

- dbr:Florence_May_Harding
- dbr:Sydney
- oke:Douglas_Robert_Dundas
Task 1: Focused NE Identification and Linking

- **Scenario A:**
  - curated training and evaluation data
  - contains emerging entities

- **KPIs**
  - Precision
  - Recall
  - F1-measure

- **Scenario B:**
  - synthetically generated data
  - implemented as stress test

- **KPI**
  - $\beta = \text{F1-score points per second}$
Goal: Identification of NEs and Disambiguation to DBpedia

12 DBpedia Ontology classes and subclasses
Activity, Agent, Award, Disease, EthnicGroup, Event, Language, MeanOfTransportation, PersonFunction, Place, Species Animal, Work

Scenarios and measures as in Task 1
Task 3: Focused Musical NE Recognition and Linking

- Goal of Task 3 A: Identification and Typing of Musical NEs
- 3 Music Ontology classes (MusicArtist, MusicalWork and SignalGroup)
- Goal of Task 3 B: Disambiguation to MusicBrainz
- KPIs
  - Precision
  - Recall
  - F1-measure
Goal: Knowledge Extraction and Formalization in RDF triples
- 21 owl:ObjectProperty (almaMater, author, award, ...)

KPI: comparison of the received graph with DBpedias Knowledge Graph
Participants

- ADEL (Plu et al.)
- HmaraNER (Asif et al.)
  (canceled participation)
- Baseline
  - FOX (Speck et al.)
  - FRED, FREME and Spotlight
    Task 1 – 2 A, 3 A + B
Second half of 2017: **Open** challenge
- Easier participation
- Online leader board
- (Planned) winner announcement in February 2018

Nearer future:
- Poster session
  - Results at the closing session

Now: ADEL participant presentation
Thank You!
Questions?