

Knowledge Graphs

Exercise 6: KG

6.1. Knowledge graph comparison (Instance)

Have a look at Wikidata, DBpedia, YAGO and NELL and search for the following concepts:

- Mannheim (Place)
- Super Bowl XXVIII (Event)
- Peter Kurz (Person)

Compare the given information.

6.2. Knowledge graph comparison (Instance)

For Wikidata, DBpedia, and YAGO find out the following:

- How many Basketball players are in the KG
- How many of those Basketball players do have the property “height”

Use the corresponding SPARQL endpoints:

Wikidata: <https://query.wikidata.org>

DBpedia: <https://dbpedia.org/sparql>

YAGO: <https://yago-knowledge.org/sparql>

6.3. Knowledge graph comparison (Schema)

For Wikidata, DBpedia, and YAGO find out the following:

- List some examples of Event subclasses
- How many subclasses of Event exist

Use again the SPARQL endpoints

6.4. Wikidata results visualization

Have a look at the following page with different possibilities to visualize a SPARQL result:

https://www.wikidata.org/wiki/Wikidata:SPARQL_query_service/Wikidata_Query_Help/Result_View_S

Visualize the following queries:

1. List all images of type sea with an ImageGrid
2. Show all majors of Mannheim in a timeline
3. A map showing all big cities in Germany.
4. Line chart of the population of Mannheim.