

Querying Wikidata using SPARQL

[Wikidata](#) is a collaboratively edited multilingual knowledge graph hosted by the [Wikimedia Foundation](#). It is a common source of open data that Wikimedia projects such as Wikipedia can use, and anyone else, under a public domain license.

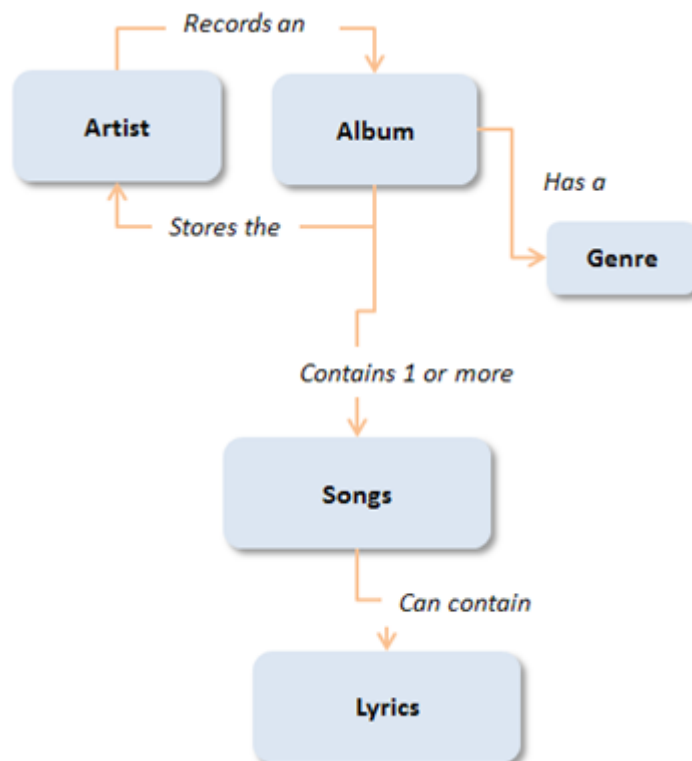
Wikidata is ...

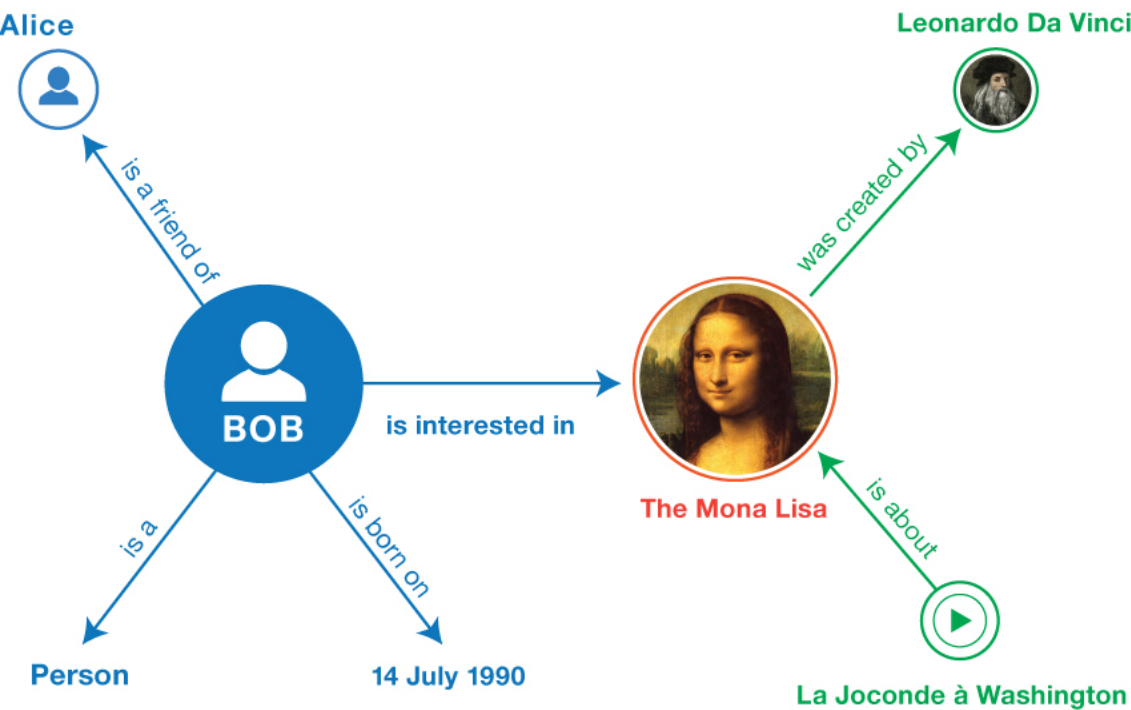
- a Wikimedia project like Wikipedia and Wikimedia Commons; represented and supported by the Wikimedia Foundation (WMF)
- a dataset that can be downloaded and freely used and distributed
- a website through which the data can be viewed and modified
- a community of volunteer editors that creates and controls all content

The used data model is the [Resource Description Framework](#).

The Resource Description Framework (RDF) is a framework for **semantic data** used to represent information about resources in form of a graph.

Semantic Data Model. A method of organizing data that reflects the basic meaning of data items and the relationships among them.





Wikidata Item

label

Douglas Adams (Q42)

item identifier

description

English writer and humorist
Douglas Noël Adams | Douglas Noel Adams
In more languages

aliases

Statements

property

educated at

St John's College

end time1974

academic majorEnglish literature

academic degreeBachelor of Arts

start time1971

value

rank

▼ 2 references

opened references

stated inEncyclopædia Britannica Online

reference URLhttp://www.nndb.com/people/731/000023662/

original language of workEnglish

retrieved7 December 2013

publisherNNDB

titleDouglas Adams (English)

+ add reference

collapsed reference

Brentwood School

end time1970

start time1959

0 references

+ add (statement)

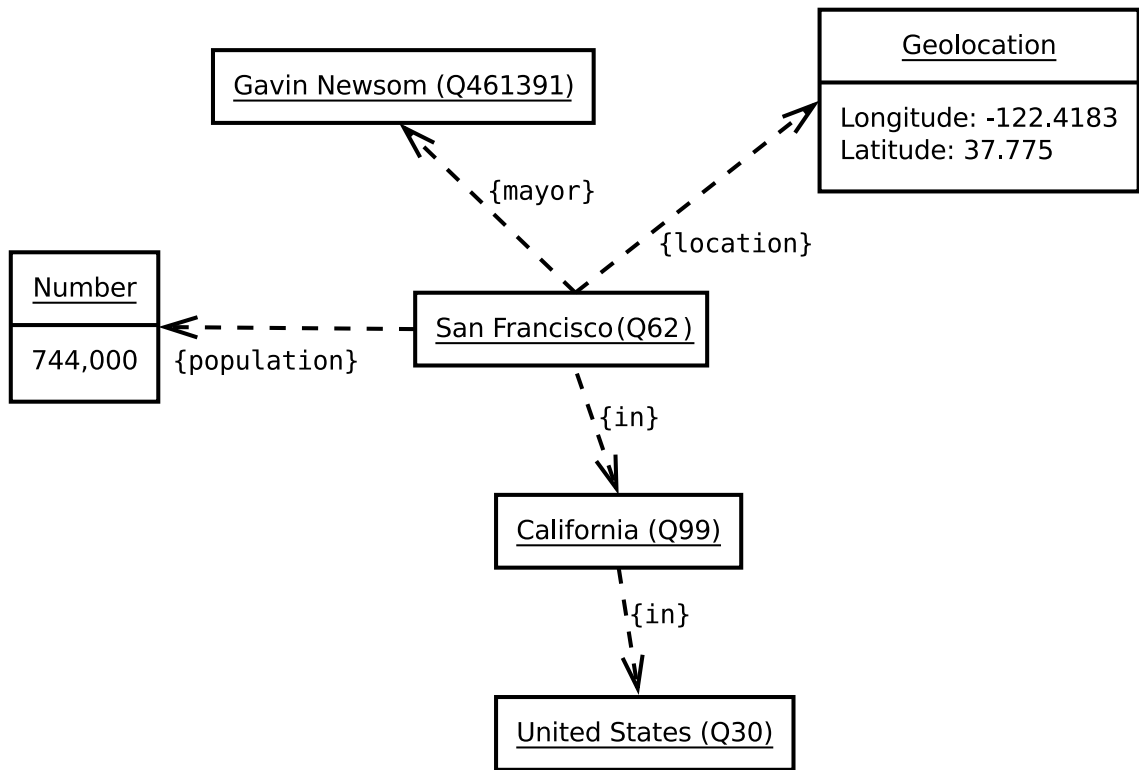
statement group

Item	Property	Value
Q42	P69	Q691283
Douglas Adams	educated at	St John's College

Items and their data are interconnected.

https://notebooks.githubusercontent.com/view/ipynb?browser=chrome&color_mode=auto&commit=ee15077699344c2a7680294efb7f69b3434c3d2b&device=u...

2/4



Inference

The process of inference involves the automated discovery of new facts based on a combination of data and rules for understanding that data. Inference is the process of inferring or discovering new facts about your data based on a set of rules. Inference with semantic triples means that automatic procedures can generate new relationships (new facts) from existing triples.

All men are mortal.

Socrates is a man.

—

Therefore, Socrates is mortal.

SPARQL

SPARQL is an RDF query language—that is, a semantic query language for databases—able to retrieve and manipulate data stored in Resource Description Framework format.

```
SERVICE wikibase:label { bd:serviceParam wikibase:language "[AUTO_LANGUAGE]". }
```

For Practice:

Players who represented indian cricket team as well as CSK.

Female cricketers who have won Arjuna Award.

Father-son who have played cricket.

List of states in india by order of population

List all descendants of mahatama gandhi

List countries in order of no. of noble prize winners

References

- [Wikidata Query Service](#)
- [Wikidata SPARQL](#)