Wikidata

A Gentle Introduction for Complete Beginners

Asaf Bartov <asaf@wikimedia.org>

Video of (almost) this talk:
https://www.youtube.com/watch?v=eVrAx3AmUvA

Wiki training in Dar es Salaam, 2019

Hello! I'm Asaf.

Longtime Wikipedia volunteer
Amateur digital librarian
Linked data enthusiast
Lapsed classicist
Digital Humanities hacker

You are lucky!

You're (only just) still in time to be considered a Wikidata hipster!

Four key problems

1. Dated data; lacking triggers; repetitive work
2. Inflexible ways of lateral queries of knowledge (Categories and their limitations)
3. Describing data with data.
4. Correlating data from disparate sources is hard work

~~Four key problems~~
One solution

An editable central storage for **structured and linked data,** on a wiki, under a free license.

(AKA **Wikidata**)

In short:

Wikidata is <3

Structured data, you say?

Statement = Item --> Property --> Value

Item is any topic (Wikipedia article, thing, person, place, concept, etc.)
Property is a specific single **kind** of data relevant to this item (e.g. height for mountains, capitals for countries, gender for humans)
Value is either a reference to another Item (the capital of Germany is Berlin) or a literal value (e.g. 8848 meters)

Items and Properties

Item Form A

Property

Name _____

Address _____

City _____**Value**_____ State _____ Zip _____

Home Phone _____ Cell Phone _____

Work Phone _____ Other phone _____

An **item** is described by a series of **statements**, each asserting a single datum or fact about it.

A **property** is a specific kind of information, like a field in a form, and is used to describe what the data means.

Examples

An **item** about a **country** would have statements about the following **properties:** population, land area, official languages, borders-with, anthem, capital city, demonyms, Gross Domestic Product, etc. etc.

Examples

An item about a **person** would have statements about: name, date of birth/death, place of birth/death, citizenship, occupation, languages spoken, religion, father, mother, children, notable works, place of education, etc. etc.

Statement examples (Item --> Property --> Value)

Earth --> highest-point --> Mount Everest

Mount Everest --> elevation above sea level --> 8848 meters

Earth --> deepest point --> Challenger Deep

Challenger Deep --> elevation above sea level --> -10,994±1 metre

Another way of looking at it

Earth -->

   highest-point: Mount Everest

   deepest point: Challenger Deep

Challenger Deep -->

   elevation above sea level: -10,994±1 metre

Mount Everest -->

   elevation above sea level: 8848 meters

Once more with numeric IDs

Earth (**Q2**) --> highest-point (P610) --> Mount Everest (Q513)

Mount Everest (Q513) --> elevation above sea level (P2044) --> 8848 meters

Earth (Q2) --> deepest point (P1589) --> Challenger Deep (Q459173)

Challenger Deep (Q459173) --> elevation above sea level (P2044) --> -10,994±1 metre

Once more without squishy humanspeak

Q2 --> P610 --> Q513

Q513 --> P2044 --> 8848 meters

Q2 --> P1589 --> Q459173

Q459173 --> P2044 --> -10,994±1 meters

Interlude: Why numbers?

Labels are ambiguous and sometimes redundant: What is London?

City in England, in Canada, family name,
personal name, movie company, hotel?

Language-neutral - not everybody speaks English!

Robot-friendly (robots love numbers ;)

Questions so far?

Let's go explore Wikidata!

https://wikidata.org

Questions?

(also: remember [[Wikidata:Project chat]])

Let's teach Wikidata Something new!

https://www.wikidata.org/wiki/Special:NewItem

Do I really have to just guess property names?

Nope. Here's a handy property browser:
http://tools.wmflabs.org/hay/propbrowse/
https://www.wikidata.org/wiki/Wikidata:List_of_properties

Contributing to Wikidata on your commute!

The Wikidata Game

Semi-automates micro-decisions and make incremental improvement of Wikidata super-fun.

https://tools.wmflabs.org/wikidata-game

https://tools.wmflabs.org/wikidata-game/distributed

Embedding Data from Wikidata

{{#property}} and {{#statements}} are magic! :)
[[en:User:Ijon/Wikidata]]

Article Placeholder

https://eo.wikipedia.org/w/index.php?search=Helen+DeWitt&title=Speciala%C4%B5o:Ser%C4%89i&go=Ek

Questions?

Remember:

Wikidata is <3

Extra Credit

For when you just can't get enough of Wikidata

Wikidata has an API!

https://www.wikidata.org/w/api.php

And people do awesome things with it:

Some examples, in brief

- Histropedia
- WikiGenomes
- Monumental
- Scholia
- Crotos
  - Callisto
- Ask Platypus
- Inventaire
- Stadt, Land, Fluss

Querying Wikidata

https://query.wikidata.org/

Querying Wikidata

* query Wikidata using [[SPARQL]]

* Wikidata will tell you **everything it knows**, but **no more**

* The more data and the more links in Wikidata, the more useful it becomes (so contribute!)

* Wikidata Query and SPARQL tutorial

query.wikidata.org demos

Links to sample queries

- Notable cats
- Popular surnames among fictional characters
- Overall causes of death ranking (presented as bubble chart)
- Painters whose fathers were also painters
- Count total articles in Wikipedia language XX by gender:
  http://tinyurl.com/yaklnjsm
- Largest cities with female mayor
- Paintings known to Wikidata, by location, on a map
- African women with articles in English but not in French
  - Same, but only good/featured articles in English (i.e. "badges")

Remember: "**good artists borrow, great artists steal.**" --attributed to Picasso

WD-FIST

- Free Image Search Tool for Wikidata

https://tools.wmflabs.org/fist/wdfist/index.html

The Wikidata Reasonator

- Pretty-format data from Wikidata
- https://tools.wmflabs.org/reasonator

Mix and Match

- Match Wikidata entities to external databases' entities

https://tools.wmflabs.org/mix-n-match/

E.g. Art: https://tools.wmflabs.org/mix-n-match/#/group/art https://tools.wmflabs.org/mix-n-match/?mode=sitestats&catalog=92 (coverage of members of the Royal Society)

WikiProjects on Wikidata

- Do systematic work on Wikidata around a theme!
- For example: https://www.wikidata.org/wiki/Wikidata:WikiProject_India

Go edit Wikidata! :)

Now that you have the power,
use it for good and not for evil.

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