

# Wikidata

A Gentle Introduction for Complete Beginners

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**You are lucky!**

# Two key problems

1. Dated data; lacking triggers; repetitive work
2. Inflexible ways of lateral queries of knowledge (Categories and their limitations)

# ~~Two 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)

## Statement examples

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

## Once more with ~~feeling~~ 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) -->  $-10,994 \pm 1$  metre

# **Once more without squishy humanspeak**

Q2 --> P610 --> Q513

Q513 --> P2044 --> 8848 meters

Q2 --> P1589 --> Q459173

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

# Items and Properties

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.

# Questions so far?

**Let's go explore Wikidata!**

# 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!)

**query.wikidata.org demos**

# Links to sample queries

- [Notable cats](#)
- [Popular surnames among fictional characters](#)
- [Overall causes of death ranking \(presented as bubble chart\)](#)
- [Whose birthday is it today?](#)
- Count total articles in wiki XX by gender: <http://tinyurl.com/j6nedlb> (women)  
and <http://tinyurl.com/zdvgthf> (men)
- [Largest cities with female mayor](#)

# Questions?

# **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/distributed>

# WD-FIST

- Free Image Search Tool for Wikidata

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

## Mix and Match

- Match Wikidata entities to external databases' entities

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

<https://tools.wmflabs.org/mix-n-match/?mode=sites&catalog=92> (coverage of members of the Royal Society)

# Questions?

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

# Go edit Wikidata! :)

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