

Wikidata Query Service

Stas Malyshev

There's over 14 million data items
in Wikidata.

How can we make sense of it all?

How can we *let our users*
make sense of it all?

The **Wikidata Query Service** lets users ask Wikidata complex questions, and find out the answers.

Wikidata Query Service uses a query language called **SPARQL** to write these complex questions.

SPARQL lets users precisely define their question so that the Wikidata Query Service understands how to answer it.

Example:

What were some of the fields of work of physicists who worked at institutions where Richard Feynman also worked?

```
prefix wikibase: <http://wikiba.se/ontology#>
PREFIX entity:   <http://www.wikidata.org/entity/>
PREFIX t:        <http://www.wikidata.org/prop/direct/>

SELECT ?colleagueLabel ?fieldLabel WHERE {
  # Q39246 is Richard Feynman
  entity:Q39246 t:P108 ?employer .
  ?colleague t:P108 ?employer .
  # Q169470 is physicist
  ?colleague t:P106 entity:Q169470 .
  ?colleague t:P101 ?field .
  SERVICE wikibase:label {
    bd:serviceParam wikibase:language "en" .
  }
  # Do not return Feynman himself
  FILTER (?colleague != entity:Q39246)
}
```

colleagueLabel

Brian Greene

Brian Greene

Earle Hesse Kennard

Earle Hesse Kennard

fieldLabel

string theory

quantum gravity

mathematical physics

fluid dynamics

WDQS Demo

**What things does the
Wikidata Query Service
let us do?**

Example:

What if someone is searching for
a list of US presidents?

This is what they get.



WIKIPEDIA
The Free Encyclopedia

- Main page
- Contents
- Featured content
- Current events
- Random article
- Donate to Wikipedia
- Wikipedia store

- Interaction
 - Help
 - About Wikipedia
 - Community portal
 - Recent changes
 - Contact page

- Tools
 - Upload file
 - Special pages
 - Printable version

Languages

Special page

list of us presidents

Search results

[Help:Searching](#)

list of us presidents

Search

Results 1 - 20 of 51,953

[Content pages](#) [Multimedia](#) [Everything](#) [Advanced](#)

There is a page named "**List of us presidents**" on Wikipedia

List of Presidents of the United States

"**Presidents of the United States**", "American **Presidents**" and "U.S. **Presidents**"

redirect here. For the C-SPAN series, see American **Presidents**: Life Portraits

93 KB (3,319 words) - 18:49, 12 June 2015

List of Vice Presidents of the United States

US Ambassador to Japan. Information about age difference between vice-**presidents**

and their **presidents**: Almost half of vice **presidents** (22 out of 46)

75 KB (3,312 words) - 20:52, 15 June 2015

List of United States Presidents by net worth

The wealth of **Presidents of the United States** has varied considerably, with one

president (John F. Kennedy) possibly being a billionaire in 2010 dollars

13 KB (459 words) - 22:06, 20 May 2015

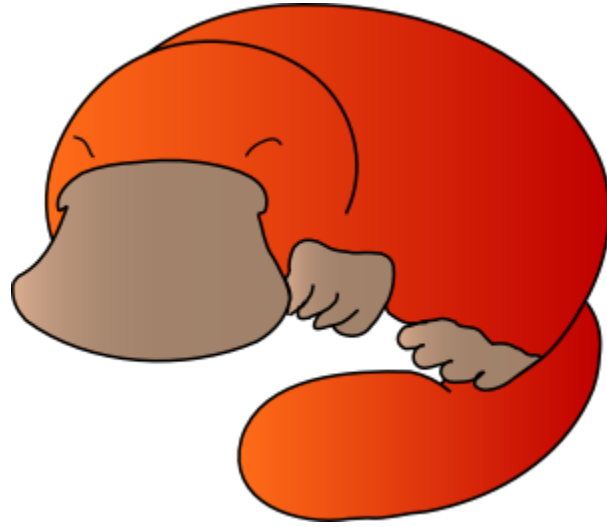
Heights of presidents and presidential candidates of the United States

A record of the heights of the **Presidents of the United States** and presidential

candidates is useful for evaluating what role, if any, height plays in

We could use Wikidata Query Service
to just show them the list!

Natural language search?
Almost.



<https://tools.wmflabs.org/ppp-sparql/>

How to get involved!

- Check out our work: <https://phabricator.wikimedia.org/tag/discovery/>
- Give feedback at: https://www.mediawiki.org/wiki/Talk:Wikidata_query_service
- Ask us questions: wikimedia-search@lists.wikimedia.org
- Speak to us on IRC: **#wikimedia-discovery** on Freenode
- Community pages: https://www.wikidata.org/wiki/Wikidata:SPARQL_query_service/queries

Thank you!





Discovery Department

Building the anonymous path of discovery to a trusted and relevant source of knowledge.



James
Douglas



Nik
Everett



Tomasz
Finc



Moiz
Syed



Dan
Garry



Stas
Malyshev



Yuri
Astrakhan



Max
Semenik



Wes
Moran



Oliver
Keyes



Erik
Bernhardson



Kevin
Smith



David
Causse

