

# Introduction to Wikidata for Wikipedians

Goethe-Institut, Sofia

10.11.2018

Matti Blume: [matti.blume@wikipedia.de](mailto:matti.blume@wikipedia.de)



# Agenda

1. Wikidata
2. Items
3. Statements
4. Queries
5. Wikipedia and Wikidata
6. External use
7. Mass editing



# WIKIDATA

Wikidata is a free and open knowledge base that can be read and edited by both humans and machines.





A linked multilingual repository to save the knowledge of the world.

Designed to deal with a chaotic reality.

A world map with a dark background, where the landmasses are highlighted with a glowing, textured pattern. The colors range from purple and magenta to yellow and gold, indicating the density of Wikidata items. The most intense yellow and gold areas are concentrated in Europe, North America, and parts of Asia, while other regions like South America and Africa show more sparse, purple and magenta highlights.

More than 50 millionen data items

[https://commons.wikimedia.org/wiki/File:Wikidata\\_items\\_map\\_with\\_difference,\\_March\\_2018\\_to\\_October\\_2018.png](https://commons.wikimedia.org/wiki/File:Wikidata_items_map_with_difference,_March_2018_to_October_2018.png)

# What is an “item”

**Label** → Douglas Adams (Q42) ← **unique identifier**

British author and humorist (1952–2001) ← **Description**

Douglas Noel Adams | Douglas Noël Adams | Douglas N. Adams ← **Aliases**

▼ In more languages Configure

Language	Label	Description	Also known as
English	Douglas Adams	British author and humorist (1952–2001)	Douglas Noel Adams Douglas Noël Adams Douglas N. Adams
German	Douglas Adams	britischer Schriftsteller (1952–2001)	Douglas Noel Adams Douglas Noël Adams
Bulgarian	Дъглас Адамс	английски писател и хуморист	
Russian	Дуглас Адамс	английский писатель, драматург и сценарист, автор серии книг «Автостопом по галактике»	Адамс, Дуглас

All entered languages

**Statements** ← **Property**

instance of	human ← <b>Value</b>
	2 references

# What is an “item”

Label → Douglas Adams (Q42) ← unique identifier

British author and humorist (1952–2001) ← Description

Douglas Noel Adams | Douglas Noël Adams | Douglas N. Adams ← Aliases

▼ In more languages

Language

English

German

Bulgarian

Russian

All entered languages

Items are designated with IDs

Sofia (Q472), Douglas Adams (Q42), Universum (Q1)

Items have

Labels, Descriptions and Aliases in various languages.

Items describe statements

Berlin (Q64) hat Einwohnerzahl (P1080) mit 3.5 Millionen

Berlin (Q64) hat Partnerkommune (P190) mit Paris (Q90)

Statements

Property

instance of



human

← Value

2 references



# Title, label, lemma, qid?

Labels don't have to be unique

<https://www.wikidata.org/w/index.php?search=Sofia>

<https://www.wikidata.org/wiki/Q472>

## Search results

To search for Wikidata items by their title on a given site, use [Special:ItemByTitle](#). To search by [label](#) in a given language

 × Search

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

### **Sofia** (Q472)

capital city of Bulgaria

128 statements, 202 sitelinks - 21:37, 9 November 2018

### **Sofia** (Q18201520)

female given name

20 statements, 7 sitelinks - 21:37, 9 November 2018

### Museo Nacional Centro de Arte Reina **Sofia** (Q460889)

Spain's national museumth century art

66 statements, 40 sitelinks - 21:37, 9 November 2018

### **Sofia** University (Q841581)

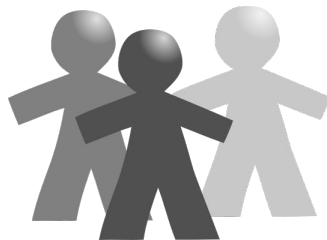
university in Sofia, Bulgaria

49 statements, 33 sitelinks - 21:37, 9 November 2018

## Structure of statements



+



= 1,286,383

Item:  
Sofia (Q472)





















Property:  
Population (P1082)

Value:  
(here) integer

Statement: Q472 has P1082 with 1.3 million

# External identifiers

## Identifiers

DMOZ ID	 Regional/Europe/Bulgaria/Localities/Sofia/	 edit
	 0 references	 + add reference
		 + add value
MusicBrainz area ID	 0641d55d-9fcb-48be-92c7-0a5273ab58bc	 edit
	 1 reference	 + add value
Freebase ID	 /m/0ftjx	 edit
	 1 reference	 + add value
GND ID	 4077502-1	 edit
	 1 reference	 + add value
FIPS 10-4 (countries and regions)	 BU42	 edit
	 1 reference	

<https://www.wikidata.org/wiki/Q472>

# Qualifiers and references

spouse



Jane Belson

edit

start time 25 November 1991  
end time 11 May 2001

▼ 1 reference

reference URL	<a href="http://www.nndb.com/people/731/00023662/">http://www.nndb.com/people/731/00023662/</a>
language of work or name	English
publisher	NNDB
retrieved	7 December 2013
title	Douglas Adams (English)






+ add reference

Statements can be specified with

**Qualifiers** e.g. start date 25. November 1991

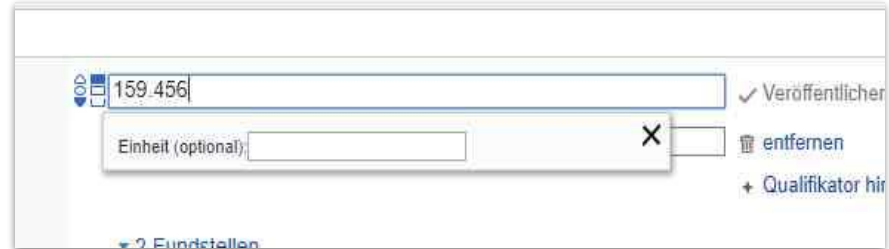
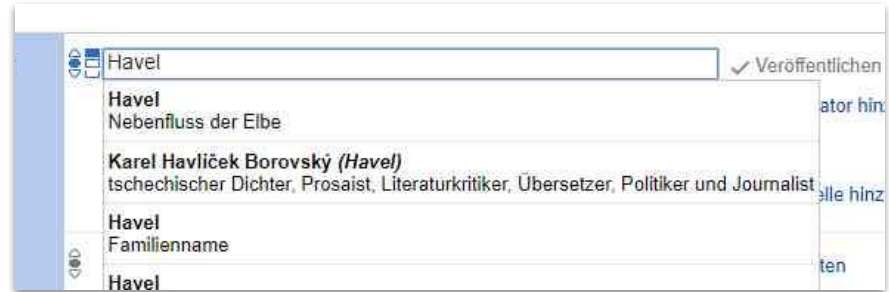
**References** e.g. reference URL in NNDB

# Ranks and special values

head of government	 Klaus Wowereit  edit
	start time 16 June 2001
	end time 11 December 2014
	▼ 0 references  + add reference
preferred value →	 Michael Müller  edit
	start time 11 December 2014
	end time <i>no value</i>
	▼ 0 references  + add reference
child	 <i>no value</i>  edit
	▼ 0 references  + add reference
	 + add value

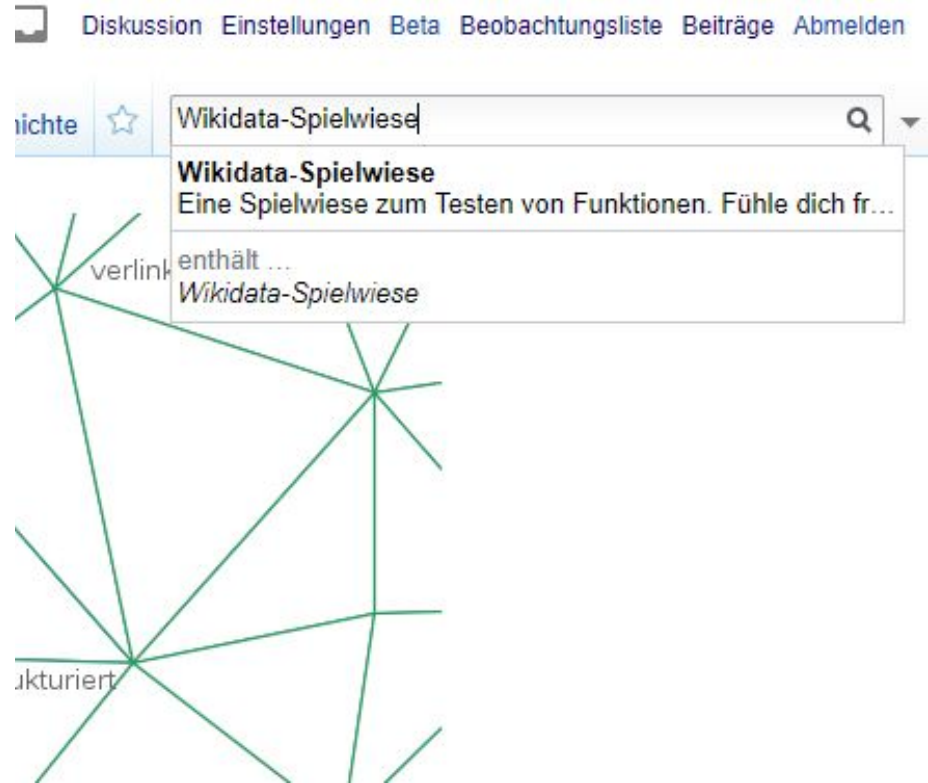
# Value types

- Wikidata item
- strings
  - monolingual/universal
- numeric
  - with(-out) unit
- date
  - greg./jul.
- geocoordinate
- media file from Commons
- external identifier
- ...



# Demo

<https://www.wikidata.org/wiki/Q4115189>

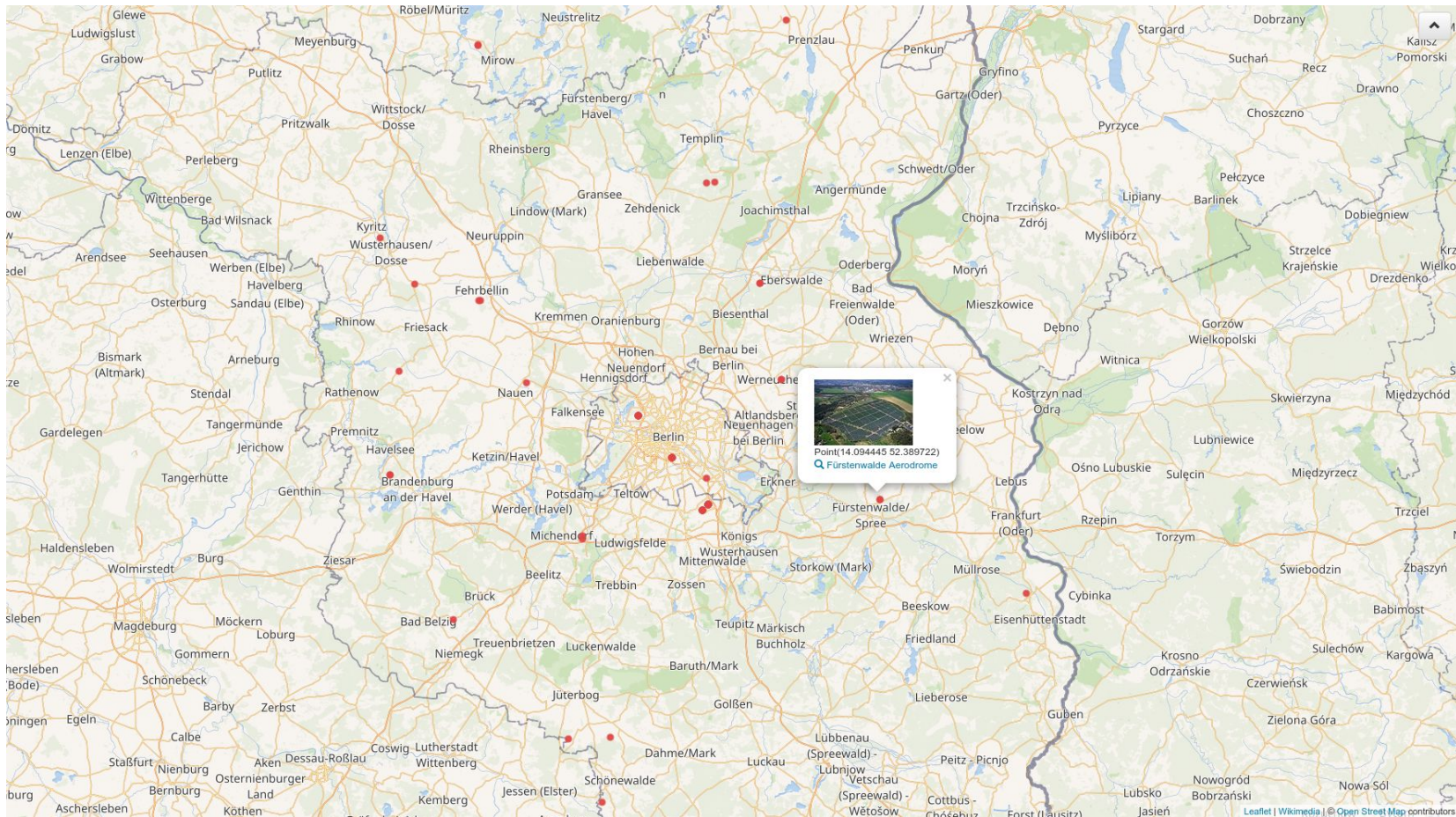




# WIKIDATA QUERY

<https://query.wikidata.org>





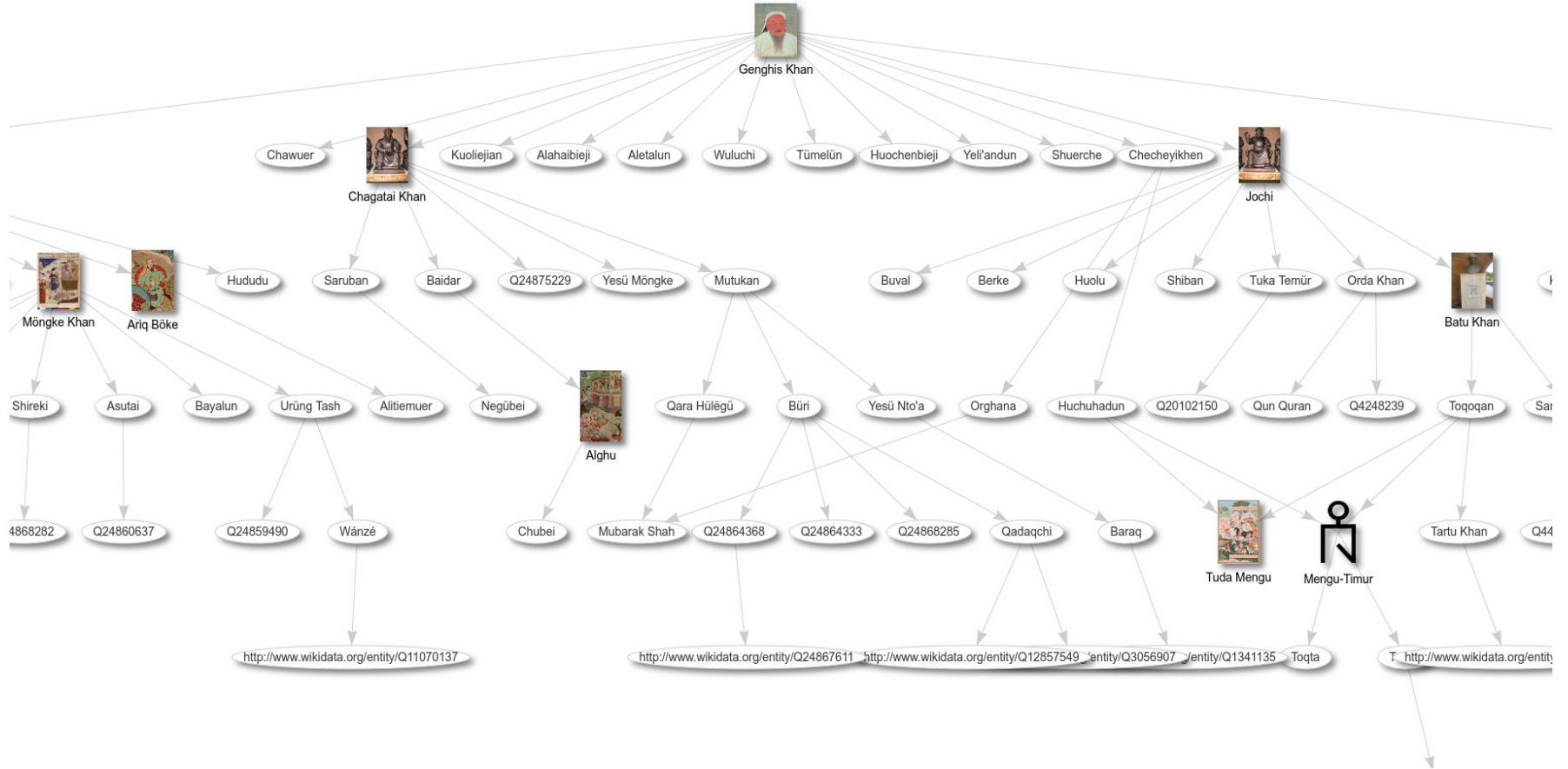
<https://query.wikidata.org>

<http://tinyurl.com/m6zcu76>









<https://query.Wikidata.org>

<http://tinyurl.com/ztd2mxj>

# Example query

- Rivers originating in the Balkans
- Sofia mayors' birthdays

# How does Wikipedia use Wikidata?

# Interwiki links

Languages 





- Cebuano
- ★ Čeština
- Chamoru
- Corsu
- Cymraeg
- ★ Dansk
- Deutsch
- ★ Deutsch
- DoInoserbski
- Eesti
- Ελληνικά
- Emiliàn e rumagnòl
- ★ Español
- ★ Esperanto
- Estremeñu
- ★ Euskara
- فارسی
- Fiji Hindi
- Føroyskt
- Français

Tools

- What links here
- Related changes
- Upload file
- Special pages
- Permanent link
- Page information
- Wikidata item
- Cite this page



# Infoboxes

A A    ▶ Avantiate ▶ Characteres special ▶ Adjuta 

```
{{Infobox entitate territorial administrativa}}
'''New York''' (in interlingua etiam '''Nove York;''' nomine official: '''City of New York''') es le citate le plus populose del [[Statos Unite de America]], e le secunde plus populose de America del Nord (post le [[Citate de Mexico]], le capital de [[Mexico]]). Situate in le stato de New York, apud le [[Oceano Atlantic]], ille face parte del metropole del costa oriental del Statos Unite.
```

## New York




Bandiera



Scuto de armas

Area 1 214±1 Kilometro quadrate

Zona horari Q941023

Geonames ID [5128581](#) 

Sito web: <http://www.nyc.gov/> 

Wikimedia Commons Category [New York City](#) 25

# Authority control

## Authority control

WorldCat [↗](#) · VIAF: [266415900](#) [↗](#) · LCCN: [n79007751](#) [↗](#) · ISNI: [0000 0001 2196 6726](#) [↗](#) · GND: [4042011-5](#) [↗](#)  
· SUDOC: [026581019](#) [↗](#) · BNF: [cb11880105b](#) [↗](#) (data) [↗](#) · NDL: [00628906](#) [↗](#)

```
{{Northeast Megalopolis}}
}}

{{Authority control}}

[[Category:New York City| ]]
```

## VIAF identifier

266415900

▶ 1 reference

## Description

*For more details on this topic, see [Authority control](#) and [Wikipedia:Authority control](#).*

This metadata template links Wikipedia articles to various library catalogue systems, for biographies and other topics.

This template draws most of its values from [Wikidata](#), but they can be overridden by locally entered data. Adding the data to [Wikidata](#) is preferable.

An empty instance of this template stays dormant in an article, until values are added to [Wikidata](#), when it will then display them, so this template should be added to all biographies, whether or not there are authority control identifiers in [Wikidata](#) already.

# mobile Wikipedia

## New York City (Q60)

city in state of New York, United States; most populous metropolitan area in United States

image

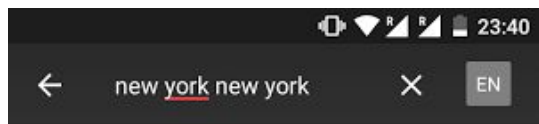
NYC Montage 2011.jpg

0 references

### File:NYC Montage 2011.jpg

From Wikimedia Commons, the free media repository

File



#### New York City

City in state of New York, United States;  
most populous metropolitan area in Uni...



#### New York-New York Hotel and Casino

Hotel and casino in Las Vegas



#### New York, New York (Moby song)



#### Manhattan New York Temple



#### New York New York (Grandmaster Flash song)



#### New York, New York (disambiguation)

Wikimedia disambiguation page

# Search results

For more information, see [Help: Searching](#) .

MediaWiki ▾

Search

**Create the page "New York New York" on this project.**

## New York New York

Disambiguation - If you are looking for other uses, see **New York** , **New York** . **New York New York** (Cagney & Lacey) is an American television series went  
5 KB (440 words) - 02:42, 5 October 2015

## Results Wikidata

**New York** metropolis , a global city , New York City, the port town, cities in New York , United States of America , named after James II of England , York ; cities in the United States of America



**New York** U.S. state in the United States of America , named after James II of England , York ; Federal State of the United States of America



**New York** Baseball Team



**New York** Football team in the United States , part of AFC East



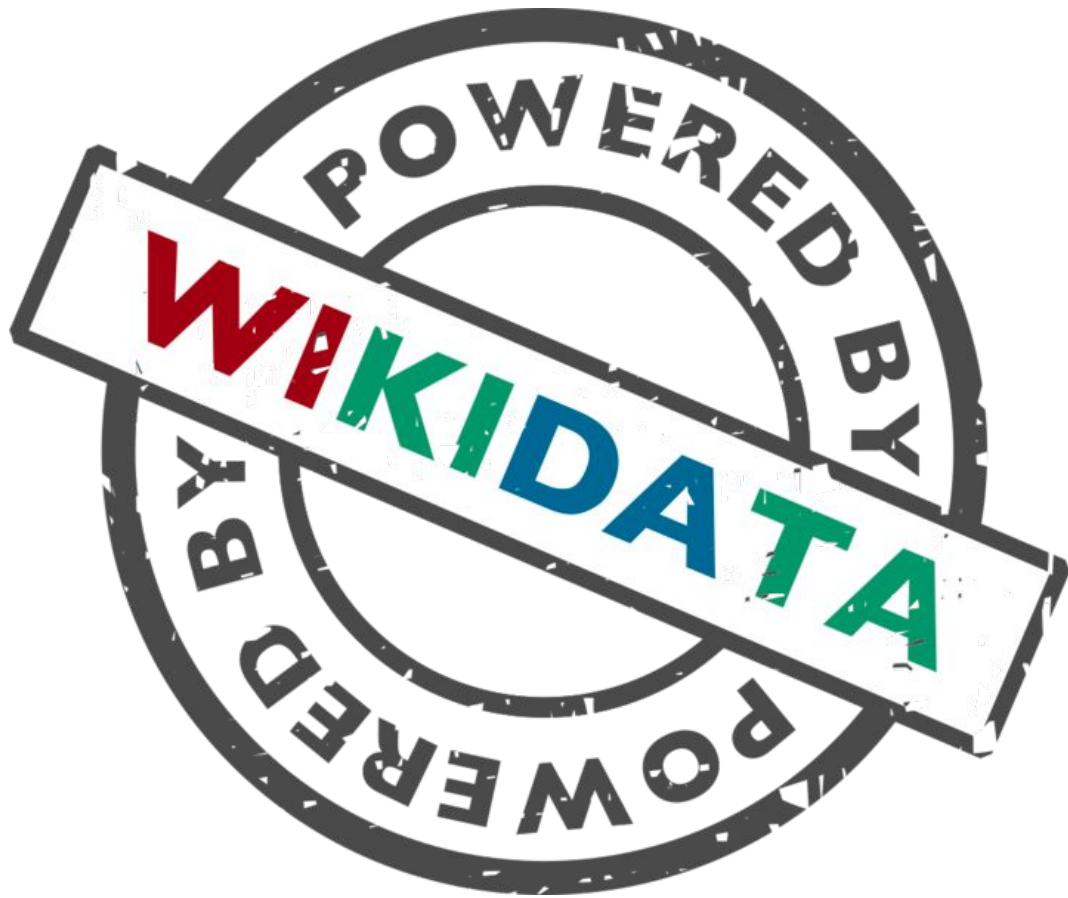
**New York** Baseball team in the United States of America , named after Yankee



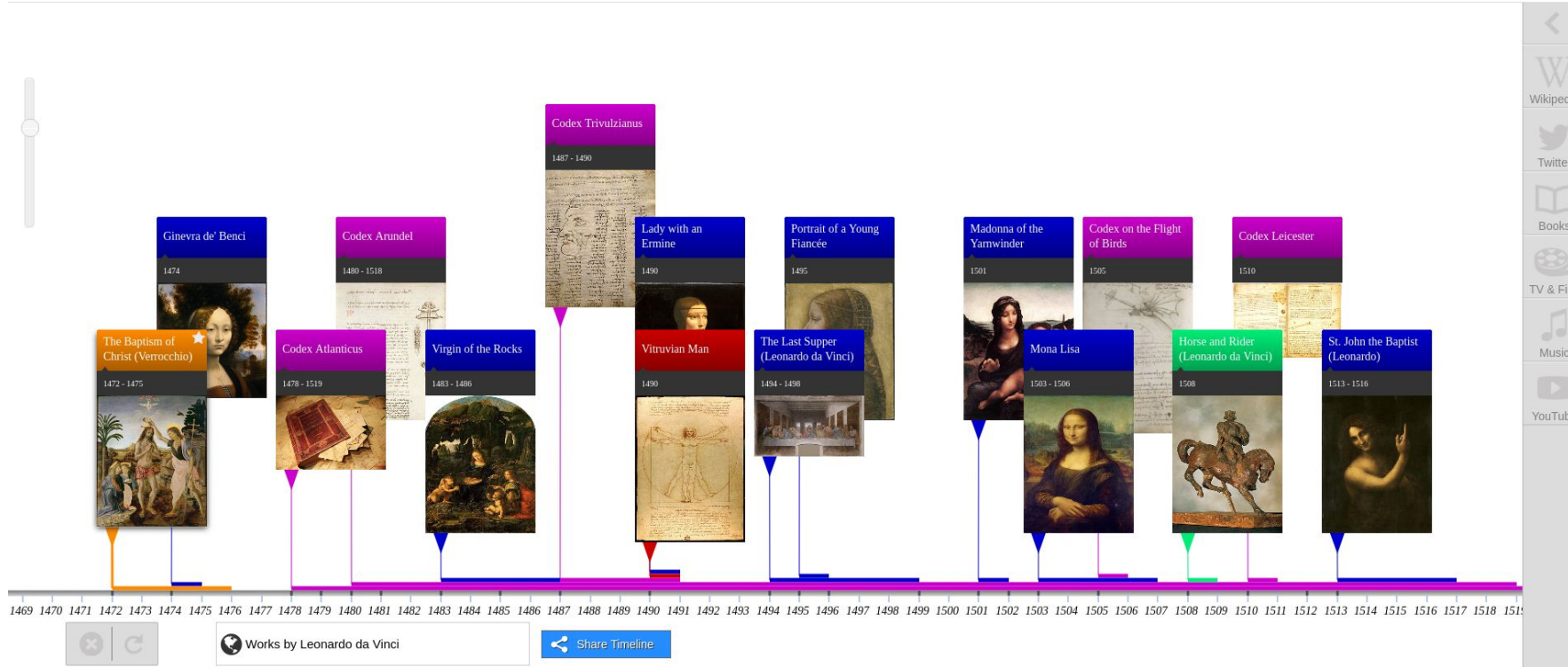
**New York** Football team in the United States , part of NFC East



# External use of Wikidata



[https://www.wikidata.org/wiki/Wikidata:Tools/External\\_tools/de](https://www.wikidata.org/wiki/Wikidata:Tools/External_tools/de)



Navigation sidebar with icons for:

- Wikipedia
- Twitter
- Books
- TV & Film
- Music
- YouTube



add a book



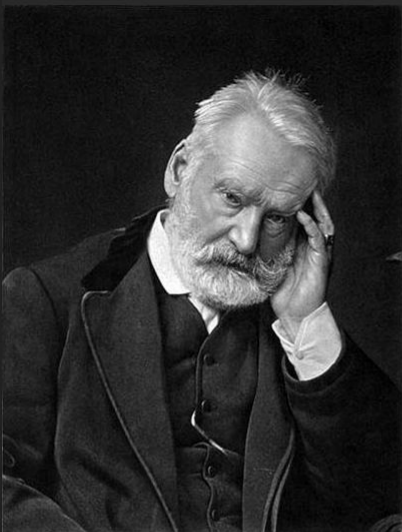
friends &amp; groups



browse books



exchanges



## Victor Hugo

French poet, novelist, and dramatist

1802 - 1885

country of citizenship: France

native language: French

educated at: University of Paris, Lycée Louis-le-Grand

occupation: poet, politician, playwright, novelist, draughtsperson, librettist, essayist, memoirist, writer

position held: member of parliament in France, member of the Senate of France

### Les Misérables

Les Misérables (pronounced /ləiˌmɪzəˈrɑːb/ or /ləiˈmɪzəˌrɑːb/; French pronunciation: [lə mizeʁabl(ə)]) is a French historical novel by Victor Hugo, first published in 1862, that is considered one of the greatest novels...

author: [Victor Hugo](#)

1862

> [more details](#)

+ add to my inventory

[o](#) in your network

### The Hunchback of Notre Dame



The Hunchback of Notre-Dame (French: Notre-Dame de Paris) is a French Romantic/Gothic novel by Victor Hugo published in 1831. The title refers to the Notre Dame Cathedral in Paris, on which the story is ...

author: [Victor Hugo](#)

1831

> [more details](#)

+ add to my inventory

[o](#) in your network

### Ninety-Three



Ninety-Three (Quatrevingt-treize) is the last novel by the French writer Victor Hugo. Published in 1874, shortly after the bloody upheaval of the Paris Commune, the novel concerns the Revolt in the Vendée and ...

author: [Victor Hugo](#)

> [more details](#)

+ add to my inventory

[o](#) in your network

### Cromwell

Cromwell is a play by Victor Hugo, written in 1827. It was influenced by Hugo's literary circle, which identified itself as Romanticist and chose as a model dramatist Shakespeare instead of the Classicists Jean Racine and ...

author: [Victor Hugo](#)

1827

> [more details](#)

+ add to my inventory

[o](#) in your network

### The Man Who Laughs

The Man Who Laughs (also published under the title By Order of the King) is a novel by Victor Hugo, originally published in April 1869 under the French title L'Homme qui rit. Although among Hugo's most obscure works...

> [more details](#)

+ add to my inventory





## Ask me anything alpha version



### Result

[Show internal results](#)

#### Spike Jonze 🇺🇸 🌐

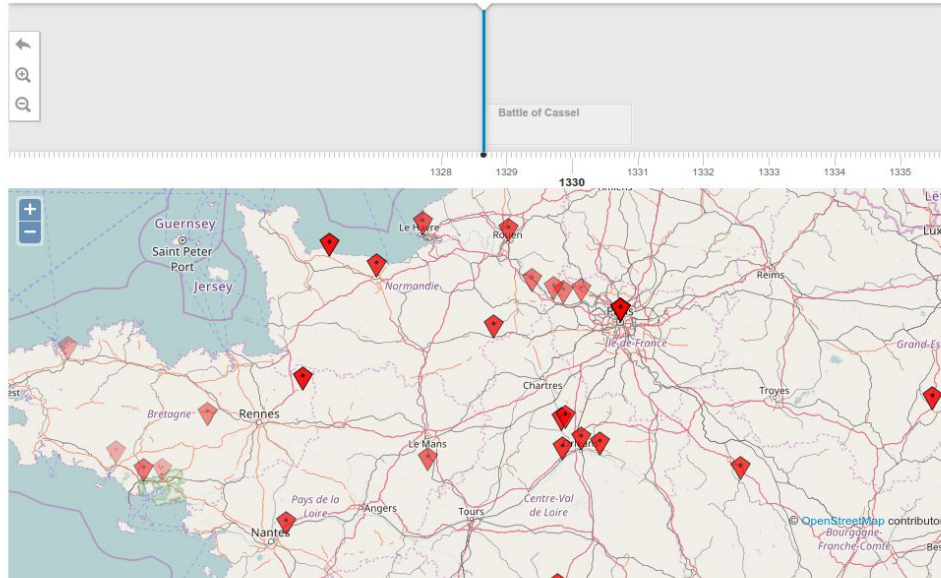
Spike Jonze (pronounced "Jones" /dʒoʊnz/; born Adam Spiegel; October 22, 1969) is an American director, producer, screenwriter and actor, whose work includes music videos, commercials, film and television. He started his feature film directing career with *Being John Malkovich* (1999) and *Adaptation* (2002), both written by Charlie Kaufman, and then started movies with screenplays of his own with *Where the Wild Things Are* (2009) and *Her* (2013). Jonze is well known for his music video collaborations with Fatboy Slim, Weezer, Beastie Boys, Björk and Kanye West. [Wikipedia](#)



# Hundred Years' War

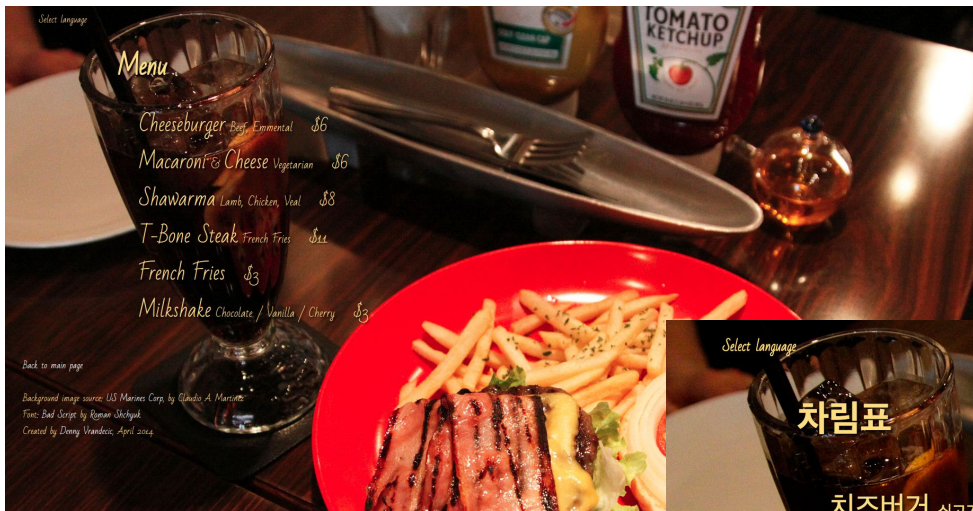
series of conflicts from 1337 to 1453 between France and England  
[Hundred Years' War](#) on Wikidata

  
AUGUST 23,  
1328  
Battle of Cassel |  
Q2237467



99 events. Markers on map are shaded according to time, with earlier events more transparent.

Item	Time	Location
<a href="#">Battle of Cassel</a>	1328-08-23	???
<a href="#">Hundred Years' War</a>	1336-11-30 — 1359-11-30	???



# Turing Award (Q185667)

## List of recipients

Show  entries

Search:

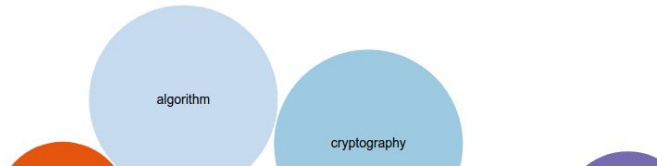
Year	Recipient
2016	<a href="#">Tim Berners-Lee</a>
2015	<a href="#">Martin Edward Hellman</a>
2015	<a href="#">Whitfield Diffie</a>
2014	<a href="#">Michael Stonebraker</a>
2013	<a href="#">Leslie Lamport</a>
2012	<a href="#">Shafira Goldwasser</a>
2012	<a href="#">Silvio Micali</a>
2011	<a href="#">Judea Pearl</a>
2010	<a href="#">Leslie Valiant</a>
2009	<a href="#">Charles P. Thacker</a>

[Edit on query.Wikidata.org](#)

Showing 1 to 10 of 66 entries

Previous  2 3 4 5 6 7 Next

## Topics of works by recipients



<https://tools.wmflabs.org/scholia/award/Q185667>



## Museo del Prado

Spanish national art museum

### Works in Museo del Prado



Christ Washing the Disciples' Feet painting by Jacopo Tintoretto (Prado)



The Triumph of Bacchus painting by Diego Velázquez

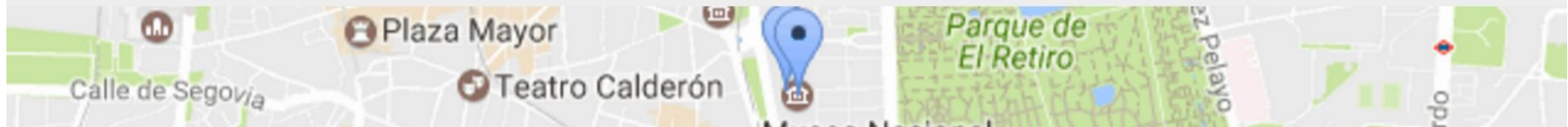


La maja painting by Francisco de Goya.



Las Meninas painting by Diego Velázquez

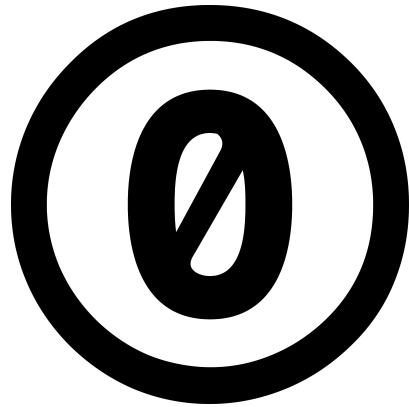
Show more



# Mass editing

- QuickStatements
- OpenRefine
- Bots

# Licensing



# Questions?

These slides:

[goo.gl/iL6iEy](https://goo.gl/iL6iEy)

