



Introduction to Wikidata And Connect with Openstreetmap

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[w.wiki/t9](https://www.wikidata.org/wiki/t9)





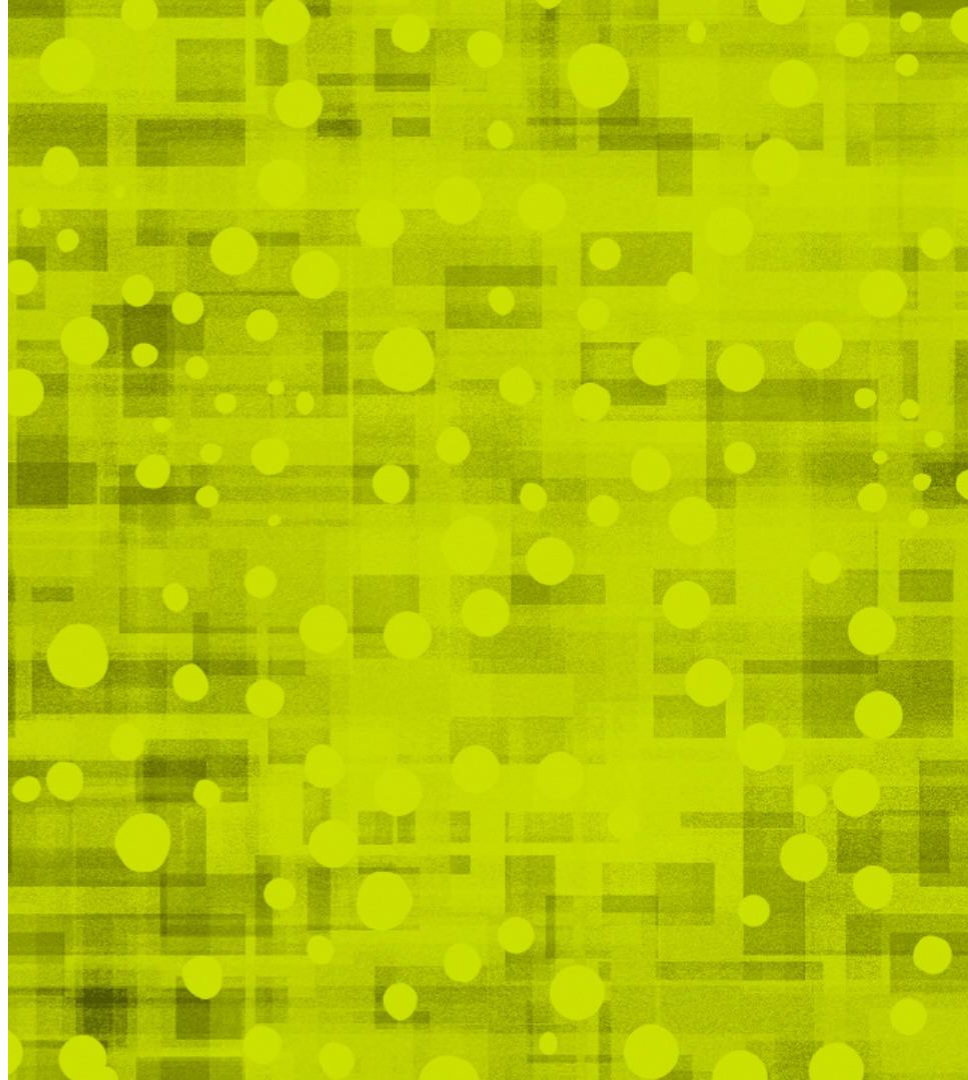
<https://commons.wikimedia.org/wiki/File:JimmyWalesJI5.jpg>

Imagine a world in which every single person on the planet is given free access to the sum of all human knowledge. That's what we're doing

– Jimmy Wales
(https://en.wikiquote.org/wiki/Jimmy_Wales#Quotes)

Unstructured Data

- Text -> Article, Poem, Script, Storyboard
- Images
- Audio,
- Video
- Smell, Taste



Structured Data

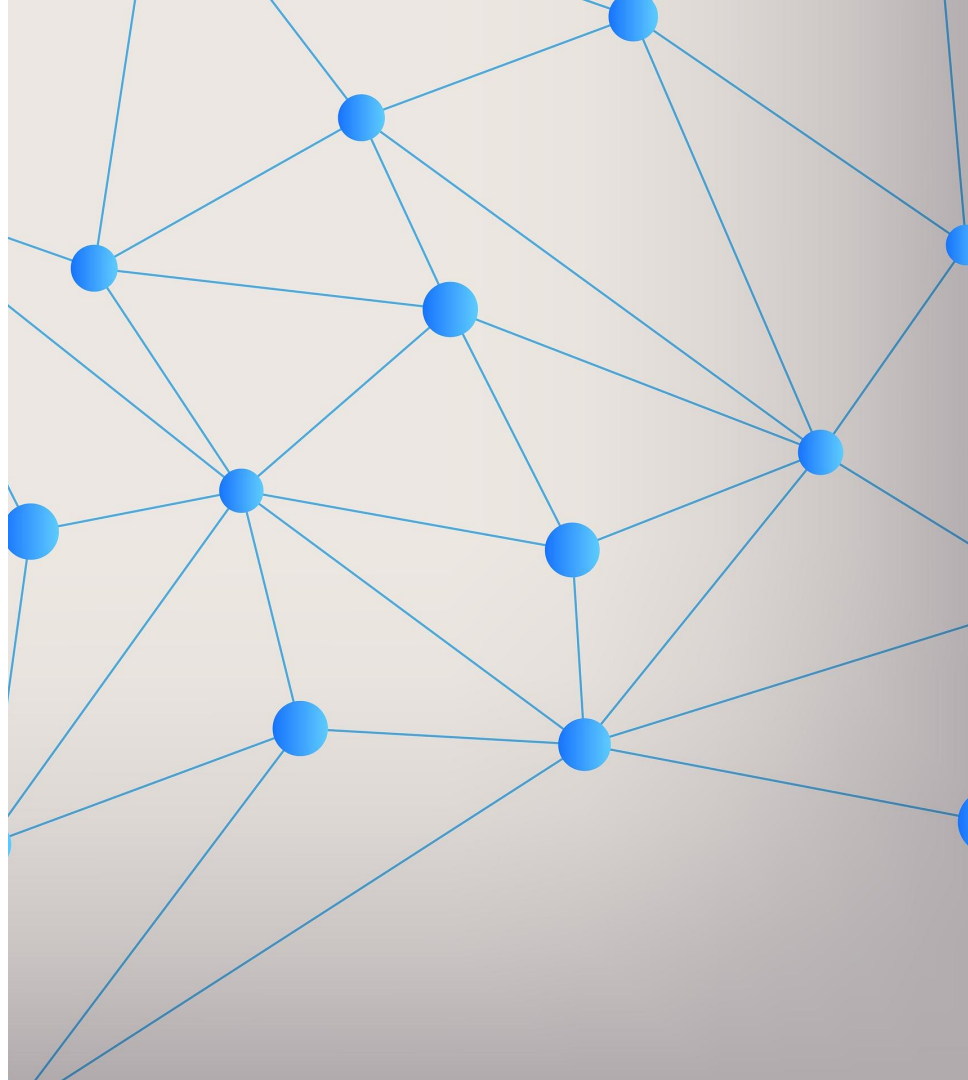
- List
- Table
- Comma Separated Values
- Database



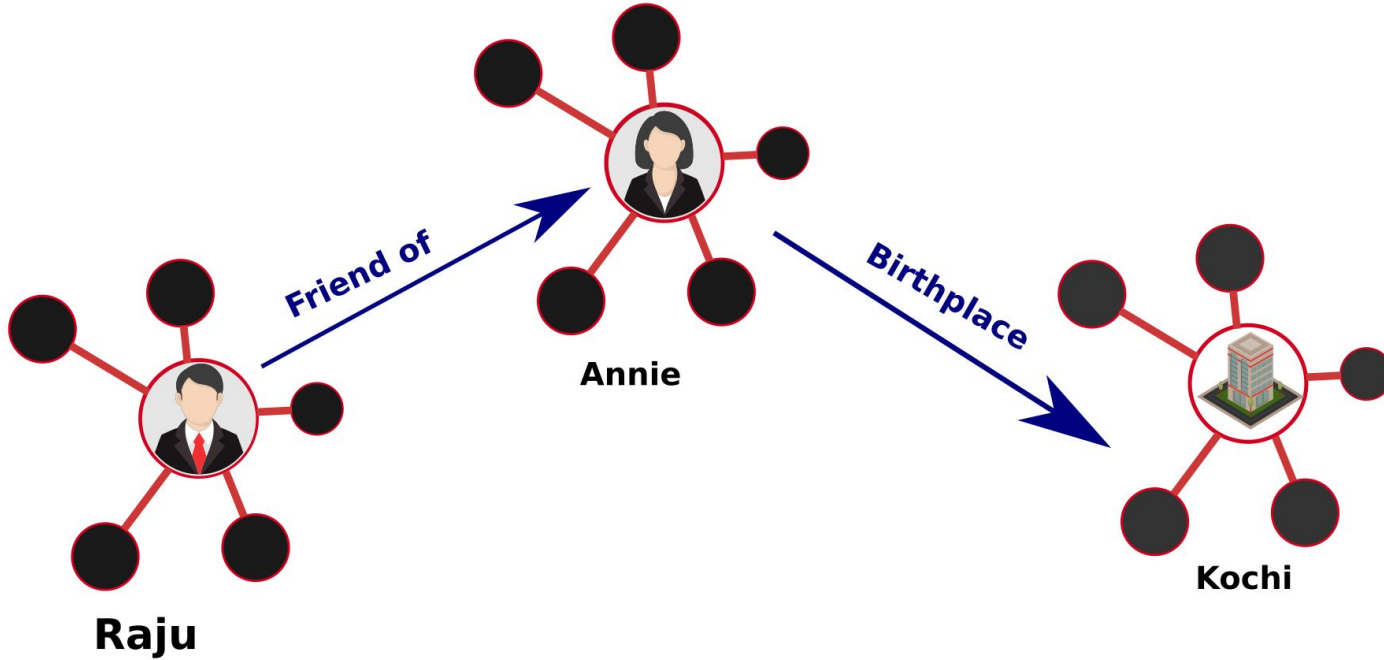
STRUCTURED DATA

Linked Data

One Data point is connected to another data through a condition



Linked Data





WIKIDATA

www.wikidata.org

What is Wikidata?

- Editable
- Structured and Linked Data Warehouse
- Available with Free License (CC0)



What is Wikidata?

- Pure Free Software, Pure free data (CC0) - Do whatever you want. No Questions asked
- Open and editable by anyone, including the ontology
- A sister project of Wikipedia, by Wikimedia
- Multilingual support from the first day
- More and more practically used in digital humanities



Structured and linked data

- Structured data: Each unit of information is described by three: **subject, predicate, and object** or as **Wikidata** says: **item, property, value**.
 - Each three can be further specified with restrictions - for other three (time period, context, source, point of view ...)
- Data statements link to each other, enabling discovery and reasoning.

A brief insight



- Universe (Q1)
- India (Q668)
- Thrissur (Q163798)
- and / instance of (P31) <- Property



Item: Earth (Q2)

Clickable Link
Connect to another
Item

Statements

<p>instance of</p> <p>Property</p>	<p>inner planet ...</p> <p>▼ 0 references</p>	<p> edit</p> <p>+ add reference</p> <p>+ add value</p>
<p>part of</p>	<p>Earth-Moon system ...</p> <p>▼ 0 references</p>	<p> edit</p> <p>+ add reference</p>

Structure of Wikidata

We have a Q (item)

Q have a property P

P have a value Another Q

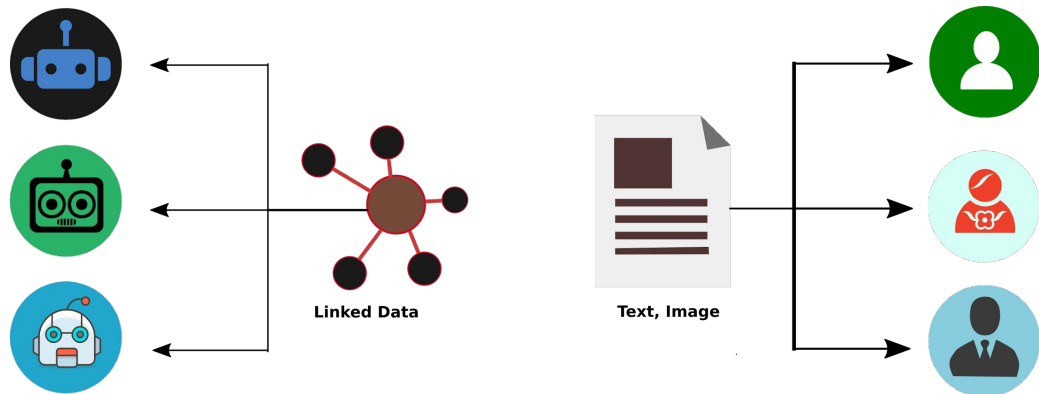
This is called a Statement

Statement = Item --> Property --> Value

Why Numbers ?

Language-neutral - not everybody speaks English!

Robot-friendly (robots love numbers ;)



So What is in Wikidata ?

Universe (Q1)

Thrissur (Q163798)

Pencil (Q14674)

God (Q190)

Happy Birthday to You
(Q167545)

parish church (Q317557)

ice cream (Q13233)

global warming (Q7942)

friendship (Q491)

Everything in the Universe or Beyond

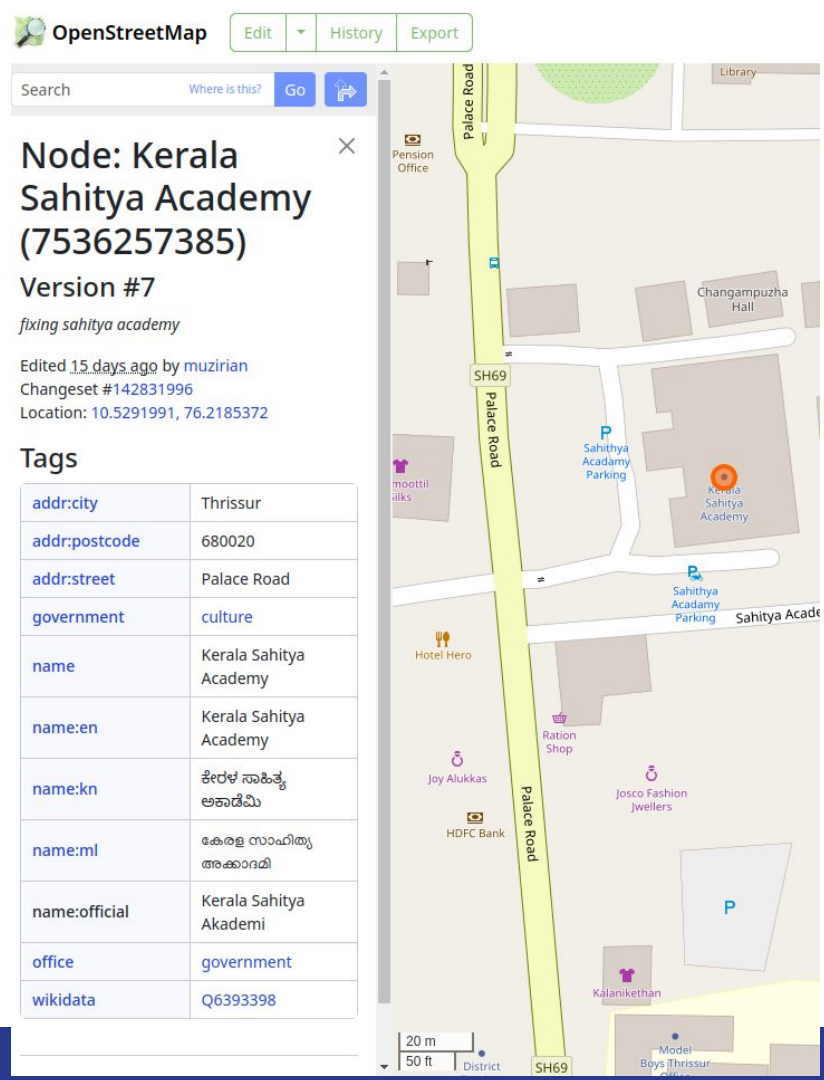
OpenStreetMap

- Collaborative built map
- Covers all over the world
- Anybody can edit
- Data in a open source license



OpenStreetMap

- Nodes - simple point
- Ways - lines and polygons
- Relations - multiple points, lines, polygons



OpenStreetMap

- Objects can have tags

Tags are key-value pairs
(both arbitrary strings)

The screenshot shows the OpenStreetMap interface. At the top, there are buttons for 'Edit', 'History', and 'Export'. Below the search bar, the details for a specific node are displayed:

Node: Kerala Sahitya Academy (7536257385)
Version #7
fixing sahyta academy
Edited 15 days ago by muzirian
Changeset #142831996
Location: 10.5291991, 76.2185372

A red box highlights the 'Tags' section, which contains the following key-value pairs:

Key	Value
addr:city	Thrissur
addr:postcode	680020
addr:street	Palace Road
government	culture
name	Kerala Sahitya Academy
name:en	Kerala Sahitya Academy
name:kn	കേരള സാഹിത്യ അക്കാദമി
name:ml	കേരള സാഹിത്യ അക്കാദമി
name:official	Kerala Sahitya Akademi
office	government
wikidata	Q6393398

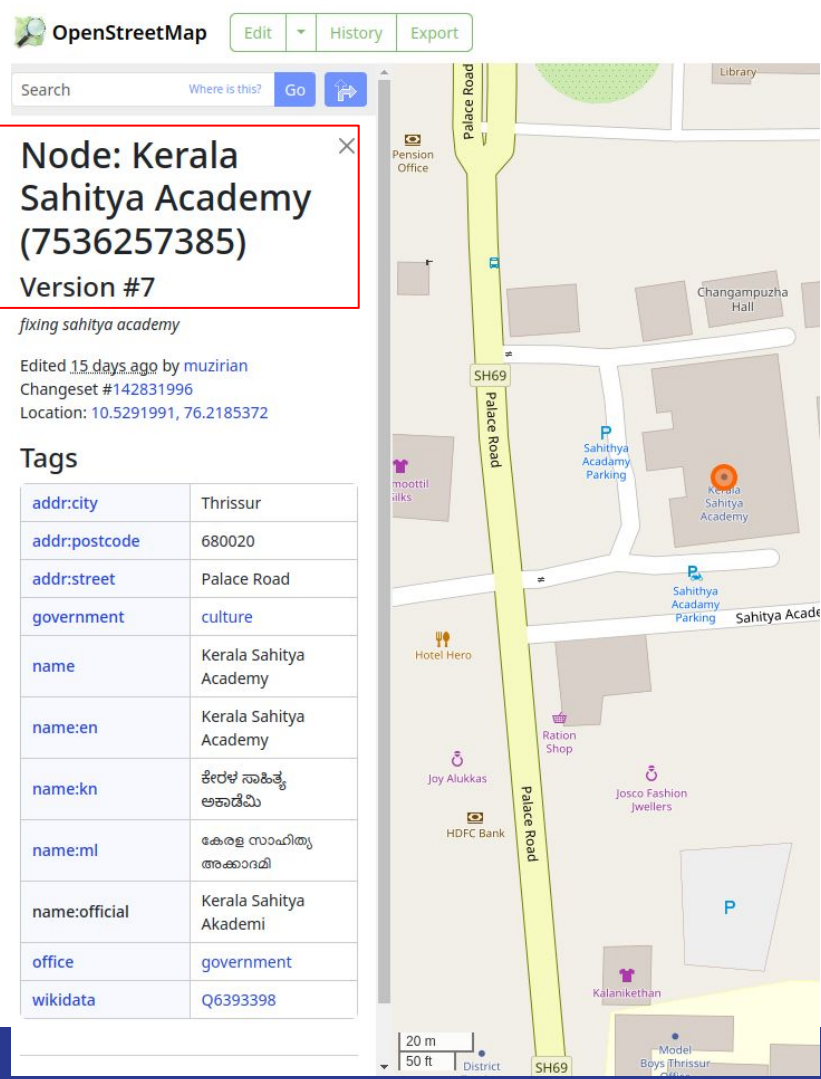
The background shows a map of the area around the Kerala Sahitya Academy, with labels for 'Palace Road', 'SH69', 'Kerala Sahitya Academy', 'Sahitya Academy Parking', 'Hotel Hero', 'Joy Alukkas', 'HDFC Bank', 'Ration Shop', 'Josco Fashion Jewellers', 'Kalanikethan', and 'Boys Thrissur'.

OpenStreetMap

Objects are uniquely
identified by the type and ID

type: relation

ID: 7536257385



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Node: Kerala Sahitya Academy (7536257385)
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Tags

addr:city	Thrissur
addr:postcode	680020
addr:street	Palace Road
government	culture
name	Kerala Sahitya Academy
name:en	Kerala Sahitya Academy
name:kn	കേരള സാഹിത്യ അക്കാദമി
name:ml	കേരള സാഹിത്യ അക്കാദമി
name:official	Kerala Sahitya Akademi
office	government
wikidata	Q6393398

The map shows the Kerala Sahitya Academy building, marked with an orange dot, located on Palace Road in Thrissur. Other nearby landmarks include the Pension Office, Changampuzha Hall, Sahitya Academy Parking, Hotel Hero, Joy Alukkas, Ration Shop, Josco Fashion Jewellers, Kalanikethan, and Boys Thrissur. The map includes a scale bar (20 m, 50 ft) and a district boundary.

Wikidata Tag

Objects in OSM can link to a Wikidata item by adding a tag.

wikidata: Q6393398

OpenStreetMap

Search Where is this? Go

Node: Kerala Sahitya Academy (7536257385)

Version #7

fixing sahitya academy

Edited 15 days ago by muzirian
Changeset #142831996
Location: 10.5291991, 76.2185372

Tags

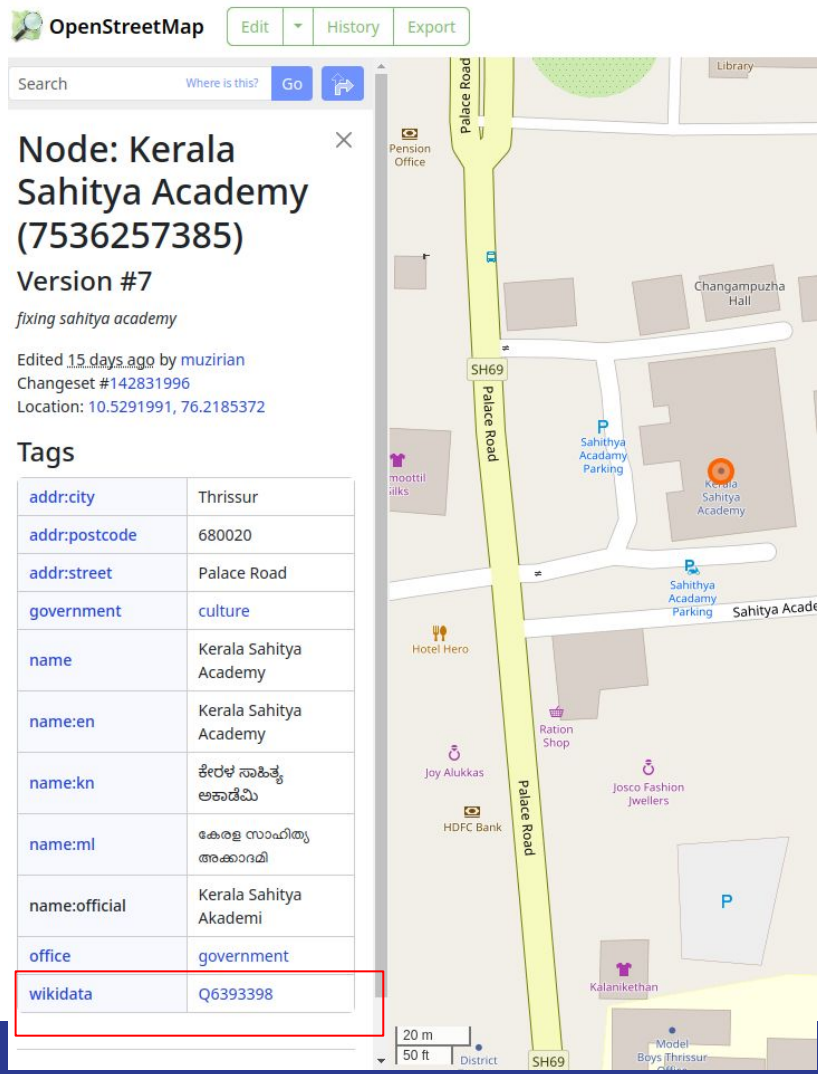
addr:city	Thrissur
addr:postcode	680020
addr:street	Palace Road
government	culture
name	Kerala Sahitya Academy
name:en	Kerala Sahitya Academy
name:kn	കേരള സാഹിത്യ അക്കാദമി
name:ml	കേരള സാഹിത്യ അക്കാദമി
name:official	Kerala Sahitya Akademi
office	government
wikidata	Q6393398

20 m 50 ft District SH69

Why connect ?

Wikidata links in OSM mean OSM can potentially access:

- Labels in more languages
- Wikipedia articles in multiple languages
- Wikimedia Commons Identifiers for other data catalogues
- Connection to other databases in the world



▼ In more languages

Language	Label	Description	Also known as
English	Kerala Sahitya Akademi by Skldbot	autonomous body to promote the Malayalam language and literature by Fffrr	
Canadian English	Kerala Sahitya Akademi by Nikosguard	No description defined	
British English	Kerala Sahitya Akademi by Nikosguard	No description defined	
Hindi	No label defined	No description defined	
Malayalam	കേരള സാഹിത്യ അക്കാദമി by Skldbot	മലയാളഭാഷയെയും അതിന്റെ സാഹിത്യപൈതൃകത്തെയും സംരക്ഷിക്കാനും പ്രോത്സാഹിപ്പിക്കാനും സ്ഥാപിച്ച ഒരു സ്വയംഭരണ സ്ഥാപനമാണ് by Ranjithsiji	Kerala Sahithya Academy by Skldbot
Bangla	কেরল সাহিত্য অকাদেমি	No description defined	
German	No label defined	indische Non-Profit-Organisation	
Greek	Κεράλα Σαχίτγια Ακαντεμί	No description defined	
Spanish	Academia Sahitya de Kerala	No description defined	Kerala Sahitya Akademi
Indonesian	Kerala Sahitya Akademi	No description defined	
Japanese	ケラール・サーヒトヤアカデミー	No description defined	
Odia	କେରଳ ସାହିତ୍ୟ ଏକାଡେମୀ	No description defined	
Urdu	کیرالہ سہیتیہ اکادمی	No description defined	
Chinese	马拉雅拉姆语文学协会	No description defined	
Simplified Chinese	马拉雅拉姆语文学协会	No description defined	
Traditional Chinese	馬拉雅拉姆語文學協會	No description defined	

More Identifiers

Items on Wikidata

includes

identifiers for other data catalogues

Identifiers

VIAF ID

by [Borgioni](#)



130210588

▼ 0 references

ISNI

by [QuickStatementsBot](#)



0000 0001 2157 1249

▼ 0 references

Library of Congress authority ID

by [Thisismattmiller](#)



n82115370

▼ 0 references

WorldCat Identities ID (superseded)

by [Vladimir Alexiev](#)



lccn-n82115370



► 1 reference

Freebase ID

by [Lockal](#)



/m/01h15c

► 0 references



**Adding Wikidata links
to OpenStreetMap
individually is time
consuming
Better to automate it**



osm.wikidata.link

Web interface for linking places in OSM to Wikidata

thrissur

search

Searching for *thrissur* found 2 places. Select one to start matching.

Thrissur, Thrissur District, Kerala, 680001, India

node category: place type: city [view on OpenStreetMap](#) ↗

[matcher only works with relations and ways, not with nodes]

Try searching for [Thrissur District, Kerala, 680001, India](#) instead

Thrissur, Thrissur District, Kerala, India

relation area: 664.6 km² category: boundary type: administrative [view on OpenStreetMap](#) ↗

[browse subdivisions](#)



map.osm.wikidata.link

Second version of the tool.

Still in Beta

Map key

- Map filters

OSM/Wikidata link status

- ☒ Wikidata items tagged in OSM
- ☒ Wikidata items not tagged in OSM

item types

- select all

clear selection

☒

higher secondary school (Q64062731) [only](#)

☒

lower primary school (Q64063317) [only](#)

☒

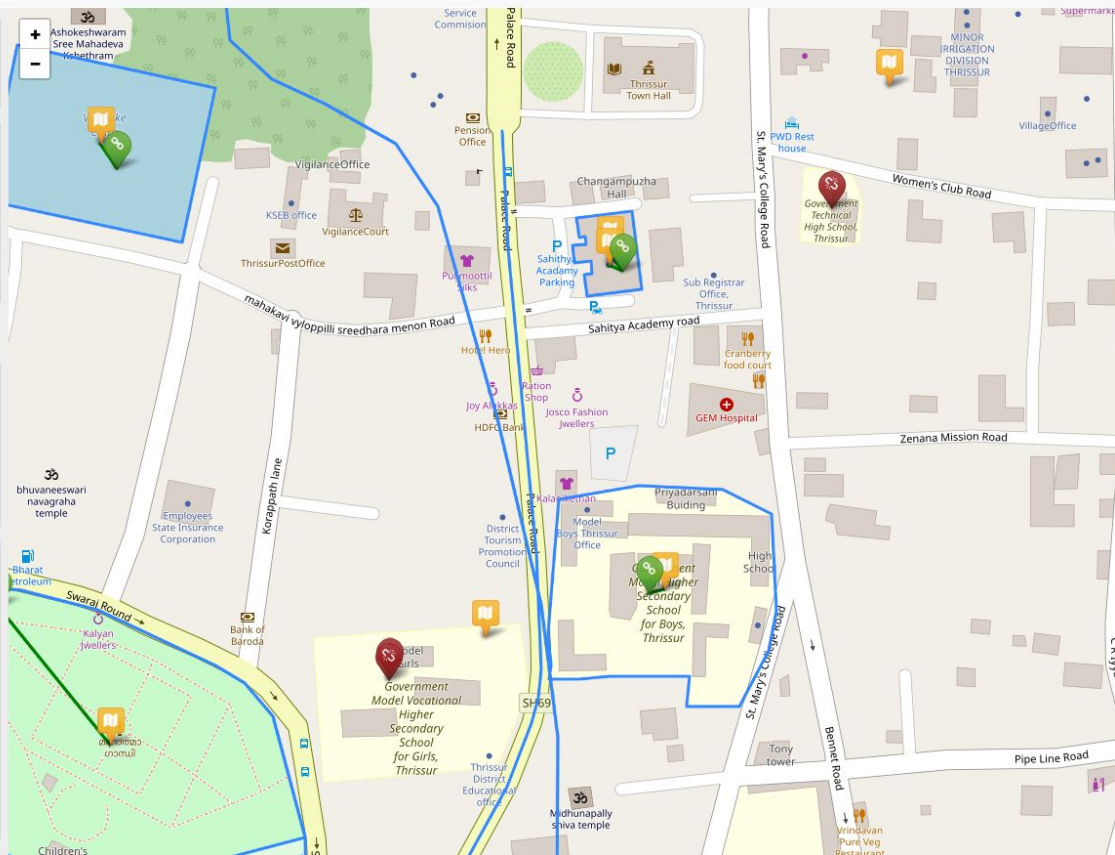
high school (Q9826) [only](#)

☒

nonprofit organization (Q163740) [only](#)

☒

lake (Q23397) [only](#)



Osm Tag







Wikidata has a property
for OpenStreetMap tag or
key

The Wikidata item for
sculpture has the OSM tag
'artwork_type=sculpture'

		+ add value
OpenStreetMap tag or key	<div>Tag:artwork_type=sculpture</div> <div>▼ 0 references</div> <div>Tag:artwork:type=sculpture</div> <div>▼ 0 references</div>	<div>edit</div> <div>+ add reference</div> <div>+ add reference</div> <div>+ add value</div>
equivalent class	<div>https://schema.org/Sculpture</div> <div>▼ 0 references</div>	<div>edit</div> <div>+ add reference</div> <div>+ add value</div>
properties for this type	<div>Vanderkrogt.net Statues ID</div> <div>▼ 0 references</div>	<div>edit</div> <div>+ add reference</div> <div>+ add value</div>

Osm Tags in Wikidata

Wikidata has more properties related to OSM.

	OpenStreetMap tag or key
	▼ 0 references
	OpenStreetMap zoom level
	▼ 0 references
	URL
	▼ 0 references
	OpenHistoricalMap relation ID
	▼ 0 references
	OpenStreetMap way ID
	▼ 0 references
	OpenStreetMap numeric user ID
	▼ 0 references

Wikidata Projects

Wikiproject India

<https://w.wiki/tQ>

Wikiproject Kerala

<https://w.wiki/CvD>

COVID-19 Taskforce

<https://w.wiki/bwA>



OpenStreetMap Projects

OpenStreetMap India

<https://wiki.openstreetmap.org/wiki/India>

OpenStreetMap Kerala

<https://wiki.openstreetmap.org/wiki/Kerala>



Video Training about Wikidata

Video by Asaf Bartov

<https://www.youtube.com/watch?v=eVrAx3AmUvA>

<http://bit.ly/wikidatavideo>

Wikidata, Knowledge Graphs, and Beyond

Denny Vrandečić, founder of Wikidata.

<https://www.youtube.com/watch?v=Oips1aW738Q>

Video in Malayalam

Video by Mujeeb Rahman

<https://www.youtube.com/watch?v=JoVCzvDjd78>

<http://bit.ly/wikidataml>



**Now that you have the power.
This is just a beginning.**



Questions ?

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Wikimedians of Kerala User Group



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- Photo of Jimmy Wales by [Joi Ito](https://commons.wikimedia.org/wiki/File:JimmyWalesJI5.jpg) - <https://commons.wikimedia.org/wiki/File:JimmyWalesJI5.jpg>
- Linking Opendata Cloud Diagram - https://commons.wikimedia.org/wiki/File:Lod-cloud_2019-03-29.png
- Crotos art browser - <http://zone47.com/crotos/?l=en>
- Histropedia - <http://histropedia.com/timeline/>
- Wikidata timeline - <https://wikidata-timeline.toolforge.org/>
- Malayalam Wikidata Logo by [Jinoytommanjaly](https://commons.wikimedia.org/wiki/File:Wikidata-ml.svg) - <https://commons.wikimedia.org/wiki/File:Wikidata-ml.svg>
- Robot Icons - [https://commons.wikimedia.org/wiki/File:Cib-probot_\(CoreUI_Icons_v1.0.0\).svg](https://commons.wikimedia.org/wiki/File:Cib-probot_(CoreUI_Icons_v1.0.0).svg) ,
https://commons.wikimedia.org/wiki/File:Noun_Robot_212089_4380c9.svg,
<https://commons.wikimedia.org/wiki/File:092-robot-face-1.svg>
- Human Icons - https://commons.wikimedia.org/wiki/File:Wikimania2019_person_icon.svg,
- Text icon - <https://commons.wikimedia.org/wiki/File:Icon-txt.svg>