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# Wikidata Documentation

*Release 0.2.0*

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This package provides easy APIs to use [Wikidata](#) for Python.

```
>>> entity = client.get('Q494290')
>>> entity
<wikidata.entity.Entity Q494290 'Shin Jung-hyeon'>
>>> entity.description
m'South Korean rock guitarist and singer-songwriter'
```



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## wikidata — Wikidata client library

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### wikidata.client — Client session

```
class wikidata.client.Client (base_url: str='https://www.wikidata.org/wiki/', opener: typing.Union=None, entity_type_guess: bool=True, repr_string: typing.Union=None) → None
```

Wikidata client session.

#### Parameters

- **base\_url** (*str*) – The base url of the Wikidata. WIKIDATA\_BASE\_URL is used by default.
- **opener** (*urllib.request.OpenerDirector*) – The opener for *urllib.request*. If omitted or None the default opener is used.
- **entity\_type\_guess** (*bool*) – Whether to guess *type* of *Entity* from its id for less HTTP requests. True by default.

New in version 0.2.0: The *entity\_type\_guess* option.

#### **entity\_type\_guess = True**

(*bool*) Whether to guess *type* of *Entity* from its id for less HTTP requests.

New in version 0.2.0.

**get** (*entity\_id*: <function NewType.<locals>.new\_type at 0x7f39a22e41e0>) → wikidata.entity.Entity  
Get a Wikidata entity by its EntityId.

**guess\_entity\_type** (*entity\_id*: <function NewType.<locals>.new\_type at 0x7f39a22e41e0>) → typing.Union  
Guess *EntityType* from the given EntityId. It could return None when it fails to guess.

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**Note:** It always fails to guess when *entity\_type\_guess* is configured to False.

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**Returns** The guessed EntityId, or None if it fails to guess.

**Return type** Optional[*EntityType*]

New in version 0.2.0.

## wikidata.entity — Wikidata entities

**class** `wikidata.entity.Entity` (*id*: `<function NewType.<locals>.new_type at 0x7f39a22e41e0>`,  
*client*: `'Client'`)  $\rightarrow$  `None`

Wikidata entity. Can be an item or a property. Its attributes can be lazily loaded.

To get an entity use `Client.get()` method instead of the constructor of `Entity`.

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**Note:** Although it implements `Mapping[EntityId, object]`, it actually is multidict. See also `getlist()` method.

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Changed in version 0.2.0: Implemented `Mapping[EntityId, object]` protocol for easy access of statement values.

Changed in version 0.2.0: Implemented `Hashable` protocol and `==/=` operators for equality test.

**getlist** (*key*: `'Entity'`)  $\rightarrow$  `typing.Sequence`

Return all values associated to the given *key* property in sequence.

**Parameters** *key* (`Entity`) – The property entity.

**Returns** A sequence of all values associated to the given *key* property. It can be empty if nothing is associated to the property.

**Return type** `Sequence[object]`

**lists** ()  $\rightarrow$  `typing.ItemsView`

Similar to `items()` except the returning pairs have each list of values instead of each single value.

**Returns** The pairs of (*key*, *values*) where *values* is a sequence.

**Return type** `ItemsView[Entity, Sequence[object]]`

**type**

(`EntityType`) The type of entity, *item* or *property*.

New in version 0.2.0.

`wikidata.entity.EntityId` (*x*)

The identifier of each `Entity`.

**class** `wikidata.entity.EntityType`

The enumerated type which consists of two possible values:

- `item`
- `property`

New in version 0.2.0.

**item** = `<EntityType.item: 'item'>`

(`EntityType`) Items are `Entity` objects that are typically represented by Wikipage (at least in some Wikipedia languages). They can be viewed as “the thing that a Wikipage is about,” which could be an individual thing (the person [Albert Einstein](#)), a general class of things (the class of all [Physicists](#)), and any other concept that is the subject of some Wikipedia page (including things like [History of Berlin](#)).

**See also:**

**Items — Wikibase Data Model** The data model of Wikibase describes the structure of the data that is handled in Wikibase.



**property** = <EntityType.property: ‘property’>

(*EntityType*) Properties are *Entity* objects that describe a relationship between items (or other *Entity* objects) and values of the property. Typical properties are *population* (using numbers as values), *binomial name* (using strings as values), but also *has father* and *author of* (both using items as values).

**See also:**

**Properties — Wikibase Data Model** The data model of Wikibase describes the structure of the data that is handled in Wikibase.

## wikidata.multilingual — Multilingual texts

wikidata.multilingual.**normalize\_locale\_code** (*locale*: *typing.Union*) → str

Determine the normalized locale code string.

```
>>> normalize_locale_code('ko-kr')
'ko_KR'
>>> normalize_locale_code('zh-TW')
'zh_Hant_TW'
>>> normalize_locale_code(Locale.parse('en_US'))
'en_US'
```



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## Changelog

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### Version 0.2.0

Released on February 19, 2017.

- Made `Entity` multidict. Now it satisfies `Mapping[Entity, object]` protocol.
- Added `Entity.type` property and `EntityType` enum class to represent it.
- Added `entity_type_guess` option and `guess_entity_type()` method to `Client` class.
- Implemented `Hashable` protocol and `==/=` operators to `Entity` for equality test.

### Version 0.1.0

Initial version. Released on February 15, 2017.



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