
pywikidata Documentation

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Contents:

The pywikidata manual

Pywikidata is a library which provides an interface to Wikidata's API.

1.1 Download it

By now, the only way to download pywikidata is cloning the github repo.

```
git clone https://github.com/jcreus/pywikidata.git
```

You might want to add it to the Python path so you can import it from all over the filesystem.

1.2 Simple configuration

The file `config.py` includes some example settings, which have to be modified.

api This variable has to point to the URL of wikidata repo's API. For example, <http://localhost/repo/api.php>

username and password If present, they will be used to log in.

lang If present, queries will add a `uselang` parameter with the language code specified.

Items

Items are a core part of pywikidata. They provide an abstraction to Wikidata items in the form of a class, `Item()`. Instead of dealing with JSON directly, it allows to change properties of the class.

Being a simple object (kind of a C struct), they can be easily Pickled to store them into files. Other parts of pywikidata will allow to work with them, and most functions use them.

2.1 Initializing an item

To create a new item, the `Item` constructor can be used. It allows four parameters.

Obviously, however, one can create an empty `Item` and then set stuff via its properties.

Items have another property, `id`, which shouldn't generally be set manually. In case it's not defined when the item is saved, a new item will be created, and the item object will have the new id available at `Item.id`. When items are fetched by id, for example, the property is already defined.

2.2 Fetching items

Pywikidata provides various ways to get an item. These are outlined below; you can see the full reference here at the last section of this manual.

```
wikidata.api.getItemById(id)
```

```
wikidata.api.getItemsById(ids)
```

It returns either an item or a collection of items.

```
import wikidata

item = wikidata.api.getItemById(1)
items = wikidata.api.getItemsById([4, 8, 15, 16, 23, 42])
```

You can also select by interwikis.

```
wikidata.api.getItemByInterwiki(site, title)
```

```
wikidata.api.getItemsByInterwiki(sites, titles)
```

```
wikidata.api.getItemsByInterwiki(sitesandtitles)
```

It blah blah blah

```
import wikidata

item = wikidata.api.getItemByInterwiki("cawiki", "Catalunya")
items = wikidata.api.getItemsById(["cawiki", "enwiki"], ["Catalunya", "Barcelona"])
items = wikidata.api.getItemsById([["cawiki", "Catalunya"], ["enwiki", "Barcelona"]]) # Equivalent to a
```

2.3 Modifying items

Now items can be modified. For example:

```
import wikidata

item = wikidata.api.getItemByInterwiki("cawiki", "Catalunya")
item.sitelinks["enwiki"] = "Catalonia"
```

2.4 Saving items

Items can be saved via `wikidata.api.save`.

```
wikidata.api.save(item, summary="")
```

```
wikidata.api.save(items, summary="")
```

```
import wikidata

item = wikidata.api.getItemByInterwiki("cawiki", "Catalunya")
item.sitelinks["enwiki"] = "Catalonia"
wikidata.api.save(item, "Edit summary")
```

```
import wikidata

item = wikidata.Item()
wikidata.api.save(item, "Edit summary")
# Now item.id contains the assigned id. Redirects in sitelinks will be also here resolved.
```

Advanced: custom API and Config instances

`wikidata.api` and `wikidata.config` are, really, instances of `api.API` and `configReader.Config`. `wikidata.py` creates variables `config` (Config using `config.py` as a file) and `api` (Api using `config` as configuration). However, one can create another API object and give it other configuration, operating separately.

Documentation for each module

4.1 `api.py`

4.2 `item.py`

Note: It can also be found at `wikidata.Item`, as a shortcut.

4.3 `request.py`

Indices and tables

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