
locationsharinglib Documentation

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CHAPTER 1

locationsharinglib

A library to retrieve coordinates from an google account that has been shared locations of other accounts.

- Documentation: <https://locationsharinglib.readthedocs.org/en/latest>

Install

```
pip install locationsharinglib
```

Usage:

```
from locationsharinglib import Service

cookies_file = 'cookies.txt'
google_email = '<your google username>@gmail.com'

service = Service(cookies_file=cookies_file, authenticating_account=google_email)

for person in service.get_all_people():
    print(person)
```

cookies.txt file

- You need to sign out, and manually sign into your Google account. Then browse to google.com/maps and extract from your “google.com” cookies and save it as *cookies.txt*
- Checkout [this chrome extension](#) to help export such file very easily
- Once *cookies.txt* created, if the Google account will be signed out it **will invalidate the cookies**

1.1 Development Workflow

The workflow supports the following steps

- lint

- test
- build
- document
- upload
- graph

These actions are supported out of the box by the corresponding scripts under `_CI/scripts` directory with sane defaults based on best practices. Sourcing `setup_aliases.ps1` for windows powershell or `setup_aliases.sh` in bash on Mac or Linux will provide with handy aliases for the shell of all those commands prepended with an underscore.

The bootstrap script creates a `.venv` directory inside the project directory hosting the virtual environment. It uses `pipenv` for that. It is called by all other scripts before they do anything. So one could simple start by calling `_lint` and that would set up everything before it tried to actually lint the project

Once the code is ready to be delivered the `_tag` script should be called accepting one of three arguments, `patch`, `minor`, `major` following the semantic versioning scheme. So for the initial delivery one would call

```
$ _tag -minor
```

which would bump the version of the project to 0.1.0 tag it in git and do a push and also ask for the change and automatically update `HISTORY.rst` with the version and the change provided.

So the full workflow after git is initialized is:

- repeat as necessary (of course it could be `test - code - lint :)`) * code * lint * test
- commit and push
- develop more through the code-lint-test cycle
- tag (with the appropriate argument)
- build
- upload (if you want to host your package in pypi)
- document (of course this could be run at any point)

1.2 Important Information

This template is based on `pipenv`. In order to be compatible with `requirements.txt` so the actual created package can be used by any part of the existing python ecosystem some hacks were needed. So when building a package out of this **do not** simple call

```
$ python setup.py sdist bdist_egg
```

as this will produce an unusable artifact with files missing. Instead use the provided build and upload scripts that create all the necessary files in the artifact.

1.3 Project Features

- TODO

CHAPTER 2

Installation

At the command line:

```
$ pip install locationsharinglib
```

Or, if you have virtualenvwrapper installed:

```
$ mkvirtualenv locationsharinglib  
$ pip install locationsharinglib
```

Or, if you are using pipenv:

```
$ pipenv install locationsharinglib
```


CHAPTER 3

Usage

To develop on locationsharinglib:

```
# The following commands require pipenv as a dependency

# To lint the project
_CI/scripts/lint.py

# To execute the testing
_CI/scripts/test.py

# To create a graph of the package and dependency tree
_CI/scripts/graph.py

# To build a package of the project under the directory "dist/"
_CI/scripts/build.py

# To see the package version
_CI/scripts/tag.py

# To bump semantic versioning [--major|--minor|--patch]
_CI/scripts/tag.py --major|--minor|--patch

# To upload the project to a pypi repo if user and password are properly provided
_CI/scripts/upload.py

# To build the documentation of the project
_CI/scripts/document.py
```

To use locationsharinglib in a project:

```
from locationsharinglib import Service
cookies_file = 'COOKIE_RETRIEVED_BY_A_BROWSER_ADDON_LIKE_COOKIES.TXT_AFTER_MANUAL_
↳LOGIN'
google_email = 'username@gmail.com'
```

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```
service = Service(cookies_file=cookies_file, authenticating_account=google_email)
for person in service.get_all_people():
    print(person)

person = service.get_person_by_nickname(nickname)
print(person)
print(person.address)

person = service.get_person_by_full_name(full_name)
print(person)
print(person.address)

latitude, longitude = service.get_coordinates_by_nickname(nickname)
print(latitude, longitude)

# for more capabilities, please see
# https://locationsharinglib.readthedocs.io/en/latest/locationsharinglib.html#module-
# locationsharinglib.locationsharinglib
```

Contributions are welcome, and they are greatly appreciated! Every little bit helps, and credit will always be given.

4.1 Submit Feedback

If you are proposing a feature:

- Explain in detail how it would work.
- Keep the scope as narrow as possible, to make it easier to implement.

4.1.1 Get Started!

Ready to contribute? Here's how to set up *locationsharinglib* for local development. Using of pipenv is highly recommended.

1. Clone your fork locally:

```
$ git clone https://github.com/costastf/locationsharinglib
```

2. Install your local copy into a virtualenv. Assuming you have pipenv installed, this is how you set up your clone for local development:

```
$ cd locationsharinglib/  
$ pipenv install --ignore-pipfile
```

3. Create a branch for local development:

```
$ git checkout -b name-of-your-bugfix-or-feature
```

Now you can make your changes locally. Do your development while using the CI capabilities and making sure the code passes lint, test, build and document stages.

4. Commit your changes and push your branch to the server:

```
$ git add .  
$ git commit -m "Your detailed description of your changes."  
$ git push origin name-of-your-bugfix-or-feature
```

5. Submit a merge request

5.1 locationsharinglib package

5.1.1 Submodules

5.1.2 locationsharinglib.locationsharinglib module

Main code for locationsharinglib.

```
class locationsharinglib.locationsharinglib.Cookie (domain: str, flag: bool, path: str,  
secure: bool, expiry: int, name:  
str, value: str = "", rest: List[T] =  
<factory>)
```

Bases: object

Models a cookie.

to_dict ()

Returns the cookie as a dictionary.

Returns The dictionary with the required values of the cookie

Return type cookie (dict)

value = ''

```
class locationsharinglib.locationsharinglib.Person (data)
```

Bases: object

A person sharing its location as coordinates.

accuracy

The accuracy of the gps.

address

The address as reported by google for the current location.

battery_level

The battery level of the user's device.

charging

Whether or not the user's device is charging.

country_code

The location's country code.

datetime

A datetime representation of the location retrieval.

full_name

The full name of the user as set in google.

id

The internal google id of the account.

latitude

The latitude of the person's current location.

longitude

The longitude of the person's current location.

nickname

The nickname as set in google.

picture_url

The url of the person's avatar.

timestamp

The timestamp of the location retrieval.

```
class locationsharinglib.locationsharinglib.Service(cookies_file=None, authenticat-  
ing_account='unknown@gmail.com')
```

Bases: object

An object modeling the service to retrieve locations.

get_all_people()

Retrieves all people sharing their location.

get_authenticated_person()

Retrieves the person associated with this account.

get_coordinates_by_full_name(name)

Retrieves a person's coordinates by full name.

get_coordinates_by_nickname(nickname)

Retrieves a person's coordinates by nickname.

get_latitude_by_full_name(name)

Retrieves a person's latitude by name.

get_latitude_by_nickname(nickname)

Retrieves a person's latitude by nickname.

get_longitude_by_full_name(name)

Retrieves a person's longitude by name.

get_longitude_by_nickname(nickname)

Retrieves a person's longitude by nickname.

get_person_by_full_name(name)

Retrieves a person by full name.

get_person_by_nickname (*nickname*)

Retrieves a person by nickname.

get_shared_people ()

Retrieves all people that share their location with this account.

get_timedate_by_full_name (*name*)

Retrieves a person's time in unix format by name.

get_timedate_by_nickname (*nickname*)

Retrieves a person's time in unix format by nickname.

5.1.3 locationsharinglib.locationsharinglibexceptions module

Custom exception code for locationsharinglib.

exception locationsharinglib.locationsharinglibexceptions.**InvalidCookieFile**

Bases: Exception

The cookies file provided could not be parsed for cookies.

exception locationsharinglib.locationsharinglibexceptions.**InvalidCookies**

Bases: Exception

The cookies provided do not provide a valid session.

exception locationsharinglib.locationsharinglibexceptions.**InvalidData**

Bases: Exception

The data received do not fit the expected format.

5.1.4 Module contents

locationsharinglib package.

Import all parts from locationsharinglib here

6.1 Development Lead

- Costas Tyfoxylos <costas.tyf@gmail.com>

6.2 Contributors

None yet. Why not be the first?

CHAPTER 7

History

CHAPTER 8

0.0.1 (24-12-2017)

- First code creation

CHAPTER 9

4.0.0 (05-03-2019)

- Removed authentication mechanism and made the service expect an authenticated pickled requests session

CHAPTER 10

4.0.1 (06-03-2019)

- Removed wrongly placed files in the root of the virtual environment

CHAPTER 11

4.0.2 (07-07-2019)

- Fixes issue when the battery level is not reported by specific brands of mobiles

CHAPTER 12

4.1.0 (01-09-2019)

- Implemented support for text based cookies compatible with curl and wget that can be retrieved from addons from the browser.

CHAPTER 13

4.1.1 (22-04-2020)

- Updated endpoint to rpc from preview and updated dependencies.

CHAPTER 14

4.1.3 (01-01-2021)

- Changed to authuser setting “2” and loosened up pinning of dependencies.

CHAPTER 15

4.1.4 (01-01-2021)

- Releasing with changes.

CHAPTER 16

4.1.5 (01-01-2021)

- Aligning New Year's morning blunder release with git tag

CHAPTER 17

4.1.6 (24-02-2021)

- More verbose debug messages (courtesy of Dmitry Katsubo <dmitry.katsubo@gmail.com>) and bumped dependencies.

CHAPTER 18

4.1.7 (07-07-2021)

- Bumped dependencies.

CHAPTER 19

4.1.8 (07-07-2021)

- Pinned Pipfile version to 3.7

CHAPTER 20

4.1.9 (01-03-2023)

- Implement default values for cookies.

CHAPTER 21

4.2.0 (01-03-2023)

- [Expose more details.](#)

CHAPTER 22

5.0.0 (04-04-2023)

- Implement better session validation heuristic, checking from cookies. Remove obsolete pickle cookie loading.

CHAPTER 23

5.0.1 (05-04-2023)

- Implement better foreign cookie handling.

CHAPTER 24

5.0.2 (07-06-2023)

- Bump dependencies for proxy header leak in requests.

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