

GitHub

This repository

Search

Explore

Features

Enterprise

Blog

Sign up

Sign in

burnash / gspread

Watch

70

Star

1,121

Fork

210

Google Spreadsheets Python API. Easy to use. Supports OAuth2

270 commits

7 branches

6 releases

25 contributors

branch: master

gspread / +

changed code, added a note

burnash

 authored 2 days ago

latest commit 96392b8759

docs	changed code, added a note	2 days ago
gspread	Update client.py	a month ago
tests	Added the `numeric_value` attribute to `Cell`	7 months ago
.gitignore	Add support for tox testrunner	3 years ago
HISTORY.rst	bumped version; updated history	2 months ago
LICENSE.txt	Update LICENSE.txt	a year ago
MANIFEST.in	fix typo	4 years ago
Makefile	Fixed typo in Makefile	2 years ago
README.md	Corrected the wording #234	8 days ago
gspread.png	changed visual alignment	2 years ago
setup.py	added shortcut command, courtesy of @kennethreitz	a year ago
tox.ini	Add support for tox testrunner	3 years ago

README.md

# Google Spreadsheets Python API

Downloads

Manage your spreadsheets with *gspread* in Python.

Features:

- Open a spreadsheet by its **title** or **url**.
- Extract range, entire row or column values.
- Independent of Google Data Python client library.
- Python 3 support.

Code

Issues111

Pull requests14

Wiki

Pulse

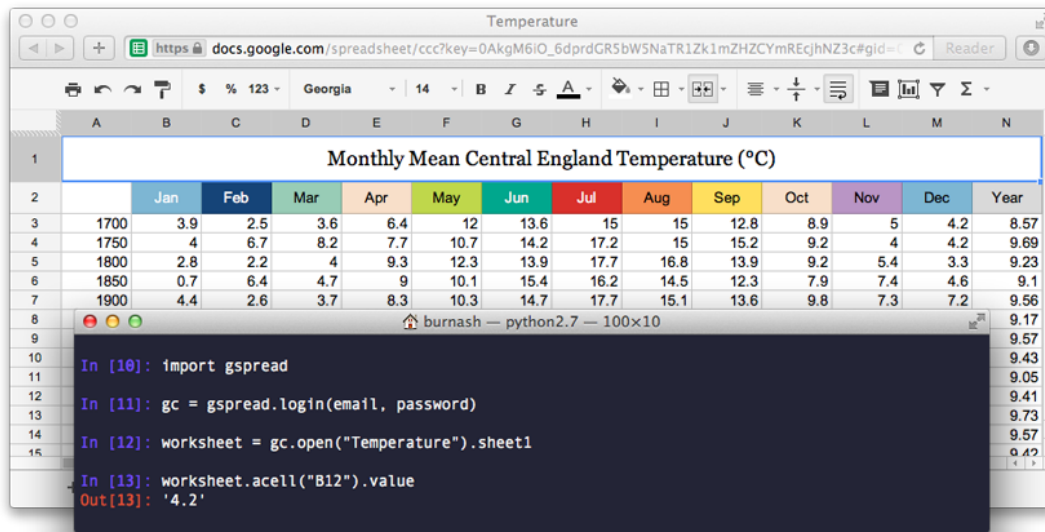
Graphs

HTTPS clone URL

https://github.com

You can clone with HTTPS or Subversion.

Download ZIP



# gspread

## Basic Usage

```
import gspread

# Login with your Google account
gc = gspread.login('thedude@abid.es', 'password')

# WARNING: The code above uses ClientLogin and was disabled
# on April 20, 2015.

# Please use OAuth2 authorization to access Google Sheets.

# Open a worksheet from spreadsheet with one shot
wks = gc.open("Where is the money Lebowski?").sheet1

wks.update_acell('B2', "it's down there somewhere, let me take another look.")

# Fetch a cell range
cell_list = wks.range('A1:B7')
```

## Authorization Using OAuth2

```
import gspread

# Login with your Google account
gc = gspread.authorize(OAuth2Credentials)

# Open a worksheet from spreadsheet with one shot
wks = gc.open("Where is the money Lebowski?").sheet1
```

OAuth2Credentials must be an object with a valid `access_token` attribute, such as one created with

the `oauth2client` library from Google. See ["Using OAuth2 for Authorization"](#) for more information.

## Two Factor Authorization

In case your Google Account protected with [Two Factor Authorization](#), you have to create [an application-specific password](#) and use your email to login as usual.

Otherwise you will get an `AuthenticationError: Unable to authenticate. 403 code` when trying to login.

## Authorization Problems

If you're not using Two Factor Authorization and you get `gspread.exceptions.AuthenticationError: Unable to authenticate. 403 code` while trying to logon with `gspread`, do this:

1. In your webbrowser login to gmail/google with the account you're using in `gspread`.
2. Visit the URLs <https://www.google.com/settings/security/lesssecureapps> and <https://accounts.google.com/DisplayUnlockCaptcha> and follow the instructions on those pages.

## More Examples

### Opening a Spreadsheet

```
# You can open a spreadsheet by its title as it appears in Google Docs
sh = gc.open("My poor gym results") # <-- Look ma, no keys!

# If you want to be specific, use a key (which can be extracted from
# the spreadsheet's url)
sht1 = gc.open_by_key('0BmgG6nO_6dprdS1MN3d3MkdPa142WFRrdnRRUWl1UFE')

# Or, if you feel really lazy to extract that key, paste the entire url
sht2 = gc.open_by_url('https://docs.google.com/spreadsheet/ccc?key=0Bm...FE&hl')
```

### Selecting a Worksheet

```
# Select worksheet by index. Worksheet indexes start from zero
worksheet = sh.get_worksheet(0)

# By title
worksheet = sh.worksheet("January")

# Most common case: Sheet1
worksheet = sh.sheet1

# Get a list of all worksheets
worksheet_list = sh.worksheets()
```

### Creating a Worksheet

```
worksheet = sh.add_worksheet(title="A worksheet", rows="100", cols="20")
```

### Deleting a Worksheet

```
sh.del_worksheet(worksheet)
```

## Getting a Cell Value

```
# With label
val = worksheet.acell('B1').value

# With coords
val = worksheet.cell(1, 2).value
```

## Getting All Values From a Row or a Column

```
# Get all values from the first row
values_list = worksheet.row_values(1)

# Get all values from the first column
values_list = worksheet.col_values(1)
```

## Getting All Values From a Worksheet as a List of Lists

```
list_of_lists = worksheet.get_all_values()
```

## Finding a Cell

```
# Find a cell with exact string value
cell = worksheet.find("Dough")

print("Found something at R%sC%s" % (cell.row, cell.col))

# Find a cell matching a regular expression
amount_re = re.compile(r'(Big|Enormous) dough')
cell = worksheet.find(amount_re)
```

## Finding All Matched Cells

```
# Find all cells with string value
cell_list = worksheet.findall("Rug store")

# Find all cells with regexp
criteria_re = re.compile(r'(Small|Room-tiering) rug')
cell_list = worksheet.findall(criteria_re)
```

## Cell Object

Each cell has a value and coordinates properties.

```
value = cell.value
row_number = cell.row
column_number = cell.col
```

## Updating Cells

```
worksheet.update_acell('B1', 'Bingo!')

# Or
worksheet.update_cell(1, 2, 'Bingo!')

# Select a range
cell_list = worksheet.range('A1:C7')

for cell in cell_list:
    cell.value = 'O_o'

# Update in batch
worksheet.update_cells(cell_list)
```

## Requirements

Python 2.6+ or Python 3+

## Installation

### From GitHub

```
git clone https://github.com/burnash/gspread.git
cd gspread
python setup.py install
```

### From PyPI

```
pip install gspread
```

If you're on easy\_install, it's:

```
easy_install gspread
```

## Documentation

[API Reference](#)

## Testing

1. Go to Google Drive and create an empty spreadsheet you will use for testing.
2. Create a configuration file from config dummy:

```
cp tests/tests.config.example tests/tests.config
```

3. Open `tests.config` with your favorite editor and fill up config parameters with your testing

spreadsheet's info.

4. Install [Nose](#).

5. Run tests:

```
nosetests
```

## Suggestions & Code Contribution

- [Javier Candeira](#)
- [Peter "Mash" Morgan](#)
- [ptlu](#)
- [aginator](#)

[All contributors](#)

## Feedback

Please report bugs and suggest features via [GitHub Issues](#).

