

# INSTRUCTIONS TO INSTALL AND USE

*Google Sheet Into DB(Django)*

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Yiwei Sun

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# INSTALLATION

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Before use the program, you have to install couple of software packages including virtual environment. The following installations are all in a terminal window.



## Python 2.7

From <https://www.python.org/downloads/mac-osx/> download the Max OS X 64-bit/32-bit installer.

Python Software Foundation [US] <https://www.python.org/downloads/mac-osx/>

- Download [Mac OS X 32-bit i386/PPC installer](#)
- [Python 2.7.10 - 2015-05-23](#)
  - Download [Mac OS X 64-bit/32-bit installer](#)
  - Download [Mac OS X 32-bit i386/PPC installer](#)

## Postgresql

Download it from <https://www.postgresql.org/download/macosx/>

## Pip

```
sudo easy_install pip
```

## Virtual environment

```
sudo easy_install pip
sudo -H pip install virtualenv
virtualenv --version # to check if the virtualenv is installed correctly
virtualenv <Dir> # For example, virtualenv virtual_env/venv

source <Dir>/bin/activate
# For instance, source virtual_env/venv/bin/activate
```

## Django and other packages with pip in virtual environment

Go to home dir:

```
(venv) D25QC0NMFY13:venv yiweisun$ cd ~
```

```
(venv) D25QC0NMFY13:~ yiweisun$
```

pip install django # Django 1.9 is tested.

```
pip install gspread
```

```
pip install gdata
```

- pip install psycopg2 #It needs to preinstall Postgresql

If you have the following Error:

```
Error: pg_config executable not found.

$ cd ~
$ nano .bash_profile
```

```
Add this if you use version 9.4 in the .bash_profile:  
export  
PATH=$PATH:/Applications/Postgres.app/Contents/Versions/9.4/bin
```

After save the file, run the following, note that there is a space between two dots.

```
$ . .bash_profile
```

Check if it is installed correctly:

```
$ which pg_config
```

```
/Applications/Postgres.app/Contents/Versions/9.4/bin/pg_config
```

Then pip install psycopg2:

```
$ pip install psycopg2
```

<http://cheng.logdown.com/posts/2015/01/17/install-postgresql-and-psycopg2-on-mac-osx>

- pip install --upgrade oauth2client
- pip install django-sheets

Then either download or Git clone the whole directory mysite into your destination, for example, Documents/workspace/

After that, make sure that two apps in mysite/mysite/settings.py:

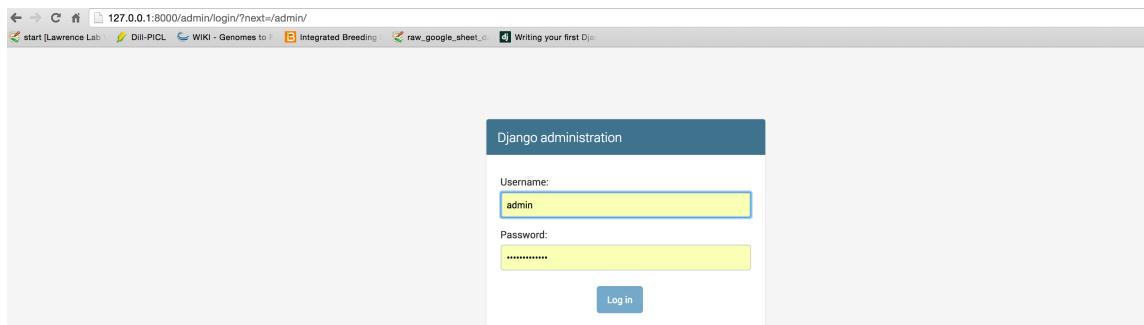
```
INSTALLED_APPS = (  
  
    ...  
  
    'googleSheetIntoDB.apps.GoogleSheetintodbConfig',  
    'sheets',  
    ...  
  
)
```

If you would like to manage the Django server with its web service, this command will help you:

Python manage.py createsuperuser

I have already create one: (user: admin password: administrator) which you can use to access the Django administration page in

<http://127.0.0.1:8000/admin/>



## Start server

After the installation, under virtual environment, go to mysite/ which contains the manage.py, with the following command:

Python manage.py runserver

Then you should see something like this which means the server is ready:

```
June 02, 2016 - 20:43:40
Django version 1.9.6, using settings 'mysite.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.
```

# USAGE

---

## Google sheet Credential

Make sure that you have a gmail account, then go to <https://console.developers.google.com> to create a project:

The screenshot shows the Google APIs library interface. On the left, there's a sidebar with 'API Manager' and 'Overview' selected. The main area displays 'Enabled APIs (7)' under 'Google APIs'. A search bar at the top right has 'GoogleSheetTest' selected. A sidebar on the right lists 'All projects' with one item checked: 'GoogleSheetTest' by 'yiweiProject Test Google Cloud' (scenic-setup-128014). Other options include 'Manage all projects' and 'Create a project...'. Below the main area, there are sections for 'Popular APIs' (Google Cloud APIs, Google Maps APIs, Google Apps APIs, Mobile APIs, Social APIs, YouTube APIs, Advertising APIs, and Other popular APIs), each with a list of specific APIs.

## New Project

Project name ?

My Project

Your project ID will be noted-casing-133021 ? [Edit](#)

[Show advanced options...](#)

[Create](#)

[Cancel](#)

Next, go to credentials/Create credentials/Service account key

The screenshot shows the Google Cloud Platform API Manager Credentials page. On the left sidebar, 'Overview' and 'Credentials' are listed under the 'API Manager' section. The 'Credentials' tab is selected. At the top of the main content area, there are tabs for 'Credentials', 'OAuth consent screen', and 'Domain verification'. Below these tabs, there are three cards: 'API key' (described as identifying the project using a simple API key), 'OAuth client ID' (described as requesting user consent for app access), and 'Service account key' (described as enabling server-to-server authentication using robot accounts). A 'Create credentials' button and a 'Delete' button are located at the top of the card area.

In the Service account, select App Engine default service account:

The screenshot shows the Google Cloud Platform API Manager Credentials page. The 'Credentials' tab is selected in the sidebar. A 'Create service account key' button is visible. Below it, a 'Service account' dropdown menu is open, showing three options: 'App Engine default service account' (selected), 'Compute Engine default service account', and 'New service account'. Under 'New service account', there are two radio button options: 'User' (selected) and 'P12'. A note below 'User' says 'Recommended'. A note below 'P12' says 'For backward compatibility with code using the P12 format'. At the bottom of the form are 'Create' and 'Cancel' buttons.

Select JSON:

<b>API</b> API Manager <ul style="list-style-type: none"> <li> Overview</li> <li> <b>Credentials</b></li> </ul>	<h3>Credentials</h3> <p> <a href="#">Create service account key</a></p> <p><b>Service account</b></p> <p>App Engine default service account</p> <p><b>Key type</b> Downloads a file that contains the private key. Store the file securely because this key cannot be recovered if lost.</p> <p><input checked="" type="radio"/> <b>JSON</b> Recommended</p> <p><input type="radio"/> <b>P12</b> For backward compatibility with code using the P12 format</p> <p><b>Create</b> <b>Cancel</b></p>
---	---

Click Create button to get a Google credential JSON file into your Download folder.

In the JSON file, find the client\_email:

```
GoogleSheetTest-35d2a050db49.json
\n01k8FP4VCxJMjTf1KLE5UyZV5cyU7gcX0G9FdgPogTEP+oTEalTZNgRU0dk91znF
\nbl3LwTxAgMBAEcgEAfYU4nxAn9saY/mezv3Vt9lpP4AxodSS/89+/VkyLMyEW\ncCVobobU/V0afTwZpr1vdMR
+xx1NzFKvoXnuw0y1BmTp70/TVGLUeHxEiwoc9Eb/noitaFzs7idsS7etd/
XjvVtiBksmc0uJud6wW34d2dF7i8sKqamSgwDmbZ49h1bR\nw/
HMtN9ch05QRWu675Y1Hukr0Et5EApxzmn3jdTNLaLhb7D/C0pmeo5h0QIgwuV\nn90wLPa0/
8vr0pElqB8nvtt3tS8EKSG3KtGHzuPbfJXdbU5d4ucxBVLLbkleNHfYm0
\nczn9EtJxP9R3q90MhywBv73wHCRUSUkhf3Mf1szMQ0KBgQDhvwsSVI10Lk1X9wwq
\lHhpQtVKs0lY47aWivK5DNcob+NpghBxAZm239danx/EmtJ3nj/
0Q1PyWbB5847\ntpti7qftFLn0sCgawWV50fGnQR6jvosW01FeJs1MfCy0i+xr7w9q76VGjuGAeSyAA\n
+6a5c04yUkvnN2Z/3DdHAPgp3QKBgQDDZ+3SY7K8DGZP8jssoaaUU1RCvirT18Bwv\nd8EZVjl9EeZsAEepQ
+hJxSy1rKAiFyBtryqftIp/ihvI7aonaYazRROE9HDKSa\ nwWzYq9whs18tmUTJoj/
7ltZuT1PyjpnGKw9diTtIj1WbGbvgLbuZ+JkpD/LBq1Yt
\noMbedf1YJQKBgDF2wuQSjIPM8XWM1ENVRNMLqeCr0vV/L8uyZLYWmop5hpdrAfQ0
\nTfbLsaSuaiKPaCLPdI0351r0/o00VcoMTQERxdTq0L2plZ3+dwOLj0Pr78BSUifh\n3yx09omezzgu/
UKdL5htD05Ox+dDXsfYXDfV5d5w2eDX6swpYxNTyyhaoGAff87\nnmBd1HLAYgKA
+iPZl3aLtGw0k4p0aeJMTNtdsNQopoSM+u5LRtdkpnvfjgKfVpv26wK\ nzGFS1czW4uMEcfGj6u/
U1Gu7PJHWQoztxpJ30haB1r2wdT+0KKYJxS7moFcio1N\nnwVBF16nwlvvmkykuuJb/
oclo40izKaql1qzfHWZokCgYBxmy+R09t51NWmD9XMvCv7\nnRb/6IEPPdZsDEONza/UtWcnrCMN1/
KZ76AtcxU0hjzG6bjLfoqiTLsIi8tRQSpm8\nn18nmHOB
+nNHcqAK9mpbPGwoC90L5LknjURCuu5Bw2lsEfRmYq0Bj/fxGSHR5Uc\ nsnzm6oc+QxeyLahhvyG3Hw==\n-----
END PRIVATE KEY-----\n",
  "client_email": "scenic-setup-128014@appspot.gserviceaccount.com",
  "client_id": "113031637766624883978",
  "auth_uri": "https://accounts.google.com/o/oauth2/auth",
  "token_uri": "https://accounts.google.com/o/oauth2/token",
  "auth_provider_x509_cert_url": "https://www.googleapis.com/oauth2/v1/certs",
  "client_x509_cert_url": "https://www.googleapis.com/robot/v1/metadata/x509/scenic-
setup-128014%40appspot.gserviceaccount.com"
}
```

Copy that client\_email address, go to every Google sheet to click the Share button on the top right corner:

Under People, paste the client\_email address into the text area:

People

Enter names or email addresses...

Can edit ▾

Shared with Gene Fields, Darwin C and 3 others

Done

Advanced

Then click “Done” button.

Repeat the “Share” operation with every Google sheet to let it share with the client\_email address.

**Input JSON path and trial\_year:**

- Copy the JSON file path that you downloaded, such as '/Users/yiweisun/Downloads/GoogleSheetTest-d112a30fe1a8.json';
- In a browser address window, type in <http://127.0.0.1:8000/googleSheetIntoDB/>  
Paste the JSON file path into json\_path area, type in the trial year, such as 2016, then click "YES" button:

The Json file path and trial\_year in the db are:

Json_path	Trial_year
/Users/yiweisun/Downloads/GoogleSheetTest-d112a30fe1a8.json	2016

Would you like to input json path and year?

json\_path: /Users/yiweisun/Downl trial\_year: 2016 Yes No, thanks

If the json path and trial year are already in the database, the system will show up red alerts and clear the text areas:

The Json file path and trial\_year in the db are:

Json_path	Trial_year
/Users/yiweisun/Downloads/GoogleSheetTest-d112a30fe1a8.json	2016

Would you like to input json path and year?

json\_path: trial\_year: Yes No, thanks

The json path and year are already in the table.

Click "No, thanks" button, it will go to data\_index.html:

Sheet_title	Imported_status	Import_date	Refresh_data	Delete_data
iah1_metadata_2016	Imported	May 26, 2016	<input type="checkbox"/>	<input type="checkbox"/>
Copy of iah1_metadata_2016	Imported	May 26, 2016	<input type="checkbox"/>	<input type="checkbox"/>
gahl_metadata_2016	Imported	May 26, 2016	<input type="checkbox"/>	<input type="checkbox"/>

The google sheet list that is already put into the database table:

- iah1\_metadata\_2016
- Copy of iah1\_metadata\_2016
- gahl\_metadata\_2016

Then you can select either “Import Data”, “Refresh Data” or “Delete Data” button to click for your choice of action.

**Reference:**

(Rajaraman, 2016)