

Fitbit API Documents

I. Creating Fitbit Application

Before using Fitbit API, you must create a Fitbit application here:

<https://dev.fitbit.com/apps/new>

Log in with your Fitbit account and fill out like this picture

Register an application

Application Name *

My_APP

Description *

My first Fitbit application

Application Website *

https://www.your-website.com

Organization *

Your Company's Name

Organization Website *

https://www.your-website.com

OAuth 2.0 Application Type *

☐ Server

☐ Client

☒ Personal

Callback URL *

http://127.0.0.1:8080/

Default Access Type *

☒ Read & Write

☐ Read-Only

+ Add a subscriber

☒ I have read and agree to the [terms of service](#)

Register

Cancel

* Required

?

?

?

?

?

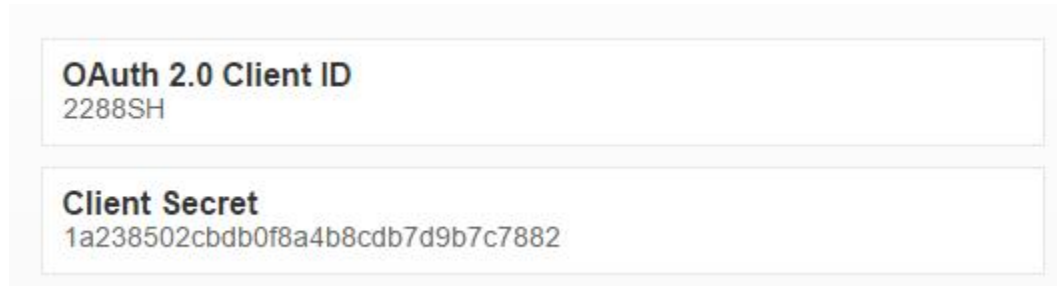
?

You can set up your app to works as a server, client or personal app.

Default callback URL, change it if you have your own Callback URL

Read & Write: Let your app get and modify your data
Read-Only: Just get your data

After creating your Fitbit application, please visit here to manage your apps:
<https://dev.fitbit.com/apps>



The screenshot shows two boxes from the Fitbit developer console. The first box is labeled "OAuth 2.0 Client ID" and contains the value "2288SH". The second box is labeled "Client Secret" and contains the value "1a238502cbdb0f8a4b8cdb7d9b7c7882".

Remember to keep your 2 important info of your app are **OAuth 2.0 Client ID** and **Client Secret**. In this case are “**2288SH**” and “**1a238502cbdb0f8a4b8cdb7d9b7c7882**”.

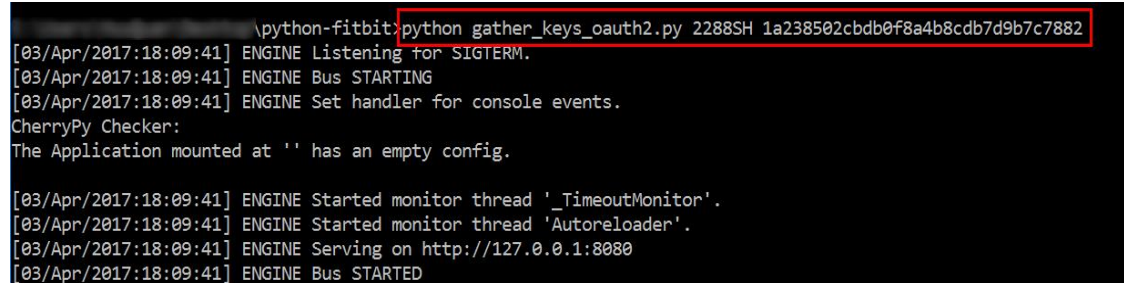
II. Get Data via Fitbit API

1. Gather Access Token and Refresh Token

Access Token and **Refresh Token** will help you to access and modify your data. But if it expired, you should get it again via “**gather_keys_oauth2.py**” file by typing the command:

```
>> python gather_keys_oauth2.py <Client ID> <Client Secret>
```

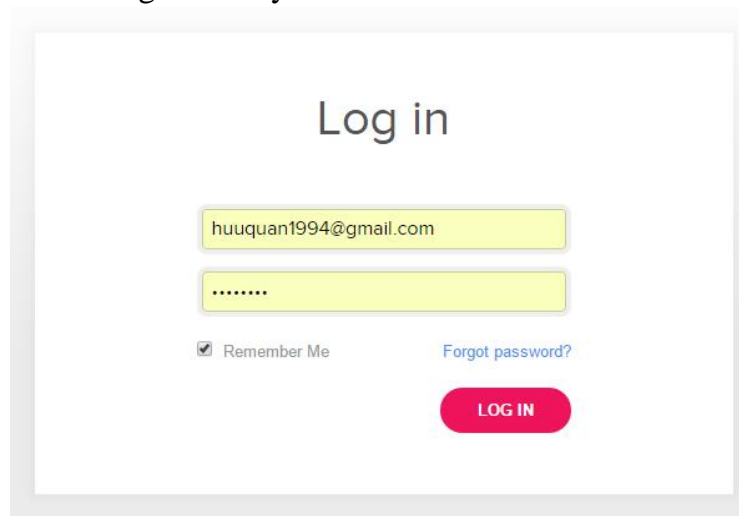
This figure shows how to gather **Access Token** and **Refresh Token**



```
\python-fitbit> python gather_keys_oauth2.py 2288SH 1a238502cbdb0f8a4b8cdb7d9b7c7882
[03/Apr/2017:18:09:41] ENGINE Listening for SIGTERM.
[03/Apr/2017:18:09:41] ENGINE Bus STARTING
[03/Apr/2017:18:09:41] ENGINE Set handler for console events.
CherryPy Checker:
The Application mounted at '' has an empty config.

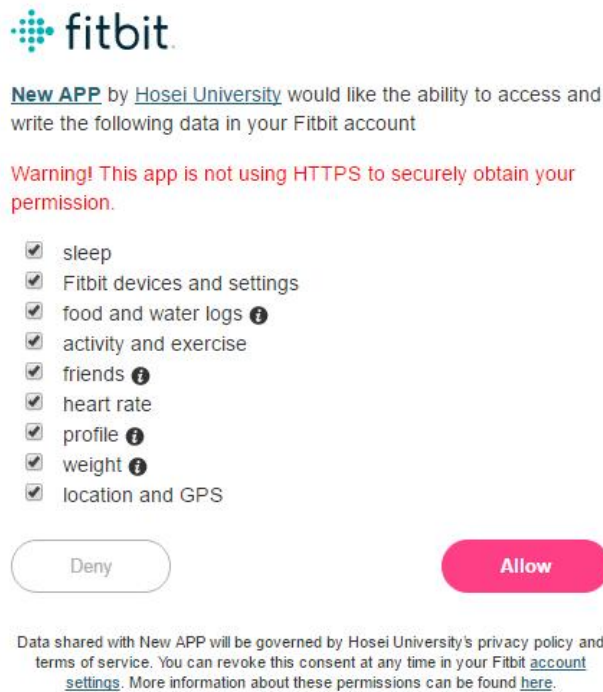
[03/Apr/2017:18:09:41] ENGINE Started monitor thread '_TimeoutMonitor'.
[03/Apr/2017:18:09:41] ENGINE Started monitor thread 'Autoreloader'.
[03/Apr/2017:18:09:41] ENGINE Serving on http://127.0.0.1:8080
[03/Apr/2017:18:09:41] ENGINE Bus STARTED
```

After that, you must log in with your Fitbit account to continue



The screenshot shows the Fitbit login page. It has a "Log in" heading, a text input field containing "huuquan1994@gmail.com", a password input field with masked characters, a "Remember Me" checkbox, a "Forgot password?" link, and a red "LOG IN" button.

Choosing your option and click **Allow** to get your **Access Token** and **Refresh Token**.



Here is your **Access Token** and **Refresh Token**

```
FULL_RESULTS = {'u'token_type': 'u'Bearer', 'u'user_id': 'u'5FF7QP', 'u'refresh_token': 'u'15ef8d2e65054c06df7994c8de7f3d0c3430d4d11b392fcf272d8ce1ac14c57b', 'u'access_token': 'u'eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiI1RkY3UVAiLCJhdWQiOiIyMjg4U0giLCJpc3MiOiJGaXRiaXQiLCJ0eXAiOiJhY2Nlc3NfdG9rZW4iLCJzY29wZXMiOiJ3aHgd251dCB3cHJvIHdzbG9rZ3dlbSB3c29jIHdzZXQgd2FjdCB3bG9jIiwiaXhwIjojNDkxMjMSNDE1LCJpYXQiojE0OTEyMTA2MTV9.202H1LH3EQdIOPyVcbfqsY-fnSiZbuJvSddfAi9sQys', 'u'scope': ['u'location', 'u'settings', 'u'heartrate', 'u'nutrition', 'u'profile', 'u'sleep', 'u'weight', 'u'social', 'u'activity'], 'u'expires_in': 28800, 'u'expires_at': 1491239416.097}
ACCESS_TOKEN = eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiI1RkY3UVAiLCJhdWQiOiIyMjg4U0giLCJpc3MiOiJGaXRiaXQiLCJ0eXAiOiJhY2Nlc3NfdG9rZW4iLCJzY29wZXMiOiJ3aHgd251dCB3cHJvIHdzbG9rZ3dlbSB3c29jIHdzZXQgd2FjdCB3bG9jIiwiaXhwIjojNDkxMjMSNDE1LCJpYXQiojE0OTEyMTA2MTV9.202H1LH3EQdIOPyVcbfqsY-fnSiZbuJvSddfAi9sQys
REFRESH_TOKEN = 15ef8d2e65054c06df7994c8de7f3d0c3430d4d11b392fcf272d8ce1ac14c57b
```

Now, you can fully access your Fitbit data with these token.

2. Play with your data

Note that you can read full implemented function in this website: <http://python-fitbit.readthedocs.io/en/latest/>

Here are just some Python code examples to get data via this API

- Get your heart rate in every 1 minute

```
import datetime
import fitbit
today = datetime.datetime.now().strftime("%Y-%m-%d")
USER_ID = "2288SH"
CLIENT_SECRET = "1a238502cbdb0f8a4b8cdb7d9b7c7882"
ACCESS_TOKEN =
"eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiI1RkY3UVAiLCJhdWQiOiIyMjg4U0giLCJpc3MiOiJGaXRiaXQiLCJ0eXAiOiJhY2Nlc3NfdG9rZW4iLCJzY29wZXMiOiJ3aHgd251dCB3cHJvIHdzbG9rZ3dlbSB3c29jIHdzZXQgd2FjdCB3bG9jIiwiaXhwIjojNDkxMjMSNDE1LCJpYXQiojE0OTEyMTA2MTV9.202H1LH3EQdIOPyVcbfqsY-fnSiZbuJvSddfAi9sQys"
```

```

0giLCJpc3MiOiJGaXRiaXQiLCJ0eXAiOiJhY2Nlc3NfdG9rZW4iLCJzY
29wZXMiOiJ3aHIgd251dCB3cHJvIHdzbGUgd3dlaSB3c29jIHdzZXQgd
2FjdCB3bG9jLiwiZXhwIjoxNDkxMjM5NDE1LCJpYXQiOiJ0OTeyMT
A2MTV9.202H1LH3EQdIOPyVcbfqSY-fnSiZbuJvSddfAi9sQys"
REFRESH_TOKEN =
"15ef8d2e65054c06df7994c8de7f3d0c3430d4d11b392fcf272d8ce1ac14c5
7b"
auth2_client = fitbit.Fitbit(USER_ID, CLIENT_SECRET, oauth2=True,
                             access_token=ACCESS_TOKEN,
                             refresh_token=REFRESH_TOKEN)
# fitbit_stats is a JSON instance, please print for more detail
fitbit_stats = auth2_client.intraday_time_series('activities/heart', today,
detail_level='1min')

```

- Get your walking steps in every 1 minute

```

import datetime
import fitbit
today = datetime.datetime.now().strftime("%Y-%m-%d")
USER_ID = "2288SH"
CLIENT_SECRET = "1a238502cbdb0f8a4b8cdb7d9b7c7882"
ACCESS_TOKEN =
"eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiI1RkY3UVAiLCJhdWQiOiIyMjg4U
0giLCJpc3MiOiJGaXRiaXQiLCJ0eXAiOiJhY2Nlc3NfdG9rZW4iLCJzY
29wZXMiOiJ3aHIgd251dCB3cHJvIHdzbGUgd3dlaSB3c29jIHdzZXQgd
2FjdCB3bG9jLiwiZXhwIjoxNDkxMjM5NDE1LCJpYXQiOiJ0OTeyMT
A2MTV9.202H1LH3EQdIOPyVcbfqSY-fnSiZbuJvSddfAi9sQys"
REFRESH_TOKEN =
"15ef8d2e65054c06df7994c8de7f3d0c3430d4d11b392fcf272d8ce1ac14c5
7b"
auth2_client = fitbit.Fitbit(USER_ID, CLIENT_SECRET, oauth2=True,
                             access_token=ACCESS_TOKEN,
                             refresh_token=REFRESH_TOKEN)
# fitbit_stats is a JSON instance, please print for more detail
fitbit_stats = auth2_client.intraday_time_series('activities/steps', today,
detail_level='1min')

```

- Get your calories in every 1 minute

```

import datetime
import fitbit
today = datetime.datetime.now().strftime("%Y-%m-%d")
USER_ID = "2288SH"

```

```

CLIENT_SECRET = "1a238502cbdb0f8a4b8cdb7d9b7c7882"
ACCESS_TOKEN =
"eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiI1RkY3UVVAiLCJhdWQiOiIyMjg4U
0giLCJpc3MiOiJGaXRiaXQiLCJ0eXAiOiJhY2Nlc3NfdG9rZW4iLCJzY
29wZXMiOiJ3aHIgd251dCB3cHJvIHdzbGUgd3dlaSB3c29jIHdzZXQgd
2FjdCB3bG9jIiwiaXhwIjoxNDkxMjM5NDE1LCJpYXQiOiE0OTEyMT
A2MTV9.202H1LH3EQdIOPyVcbfqsY-fnSiZbuJvSddfAi9sQys"
REFRESH_TOKEN =
"15ef8d2e65054c06df7994c8de7f3d0c3430d4d11b392fcf272d8ce1ac14c5
7b"
auth2_client = fitbit.Fitbit(USER_ID, CLIENT_SECRET, oauth2=True,
                             access_token=ACCESS_TOKEN,
                             refresh_token=REFRESH_TOKEN)
# fitbit_stats is a JSON instance, please print for more detail
fitbit_stats = auth2_client.intraday_time_series('activities/calories', today,
detail_level='1min')

```

- Get your sleep data

```

import datetime
import fitbit
today = datetime.datetime.now().strftime("%Y-%m-%d")
today = datetime.datetime.strptime(today, '%Y-%m-%d')

USER_ID = "2288SH"
CLIENT_SECRET = "1a238502cbdb0f8a4b8cdb7d9b7c7882"
ACCESS_TOKEN =
"eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiI1RkY3UVVAiLCJhdWQiOiIyMjg4U
0giLCJpc3MiOiJGaXRiaXQiLCJ0eXAiOiJhY2Nlc3NfdG9rZW4iLCJzY
29wZXMiOiJ3aHIgd251dCB3cHJvIHdzbGUgd3dlaSB3c29jIHdzZXQgd
2FjdCB3bG9jIiwiaXhwIjoxNDkxMjM5NDE1LCJpYXQiOiE0OTEyMT
A2MTV9.202H1LH3EQdIOPyVcbfqsY-fnSiZbuJvSddfAi9sQys"
REFRESH_TOKEN =
"15ef8d2e65054c06df7994c8de7f3d0c3430d4d11b392fcf272d8ce1ac14c5
7b"
auth2_client = fitbit.Fitbit(USER_ID, CLIENT_SECRET, oauth2=True,
                             access_token=ACCESS_TOKEN,
                             refresh_token=REFRESH_TOKEN)
# fitbit_stats is a JSON instance, please print for more detail
fitbit_stats = auth2_client.get_sleep(today)

```