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**fbchat**

***Release 2.0.0a4***

**Taehoon Kim; Moreels Pieter-Jan; Mads Marquart**

**Jun 07, 2020**



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A powerful and efficient library to interact with [Facebook's Messenger](#), using just your email and password.

This is *not* an official API, Facebook has that [over here](#) for chat bots. This library differs by using a normal Facebook account instead.

fbchat currently support:

- Sending many types of messages, with files, stickers, mentions, etc.
- Fetching all messages, threads and images in threads.
- Searching for messages and threads.
- Creating groups, setting the group emoji, changing nicknames, creating polls, etc.
- Listening for, and reacting to messages and other events in real-time.
- Type hints, and it has a modern codebase (e.g. only Python 3.5 and upwards).
- `async/await` (COMING).

Essentially, everything you need to make an amazing Facebook bot!



## VERSION WARNING

v2 is currently being developed at the `master` branch and it's highly unstable. If you want to view the old v1, go [here](#).

Additionally, you can view the project's progress [here](#).





## CAVEATS

`fbchat` works by imitating what the browser does, and thereby tricking Facebook into thinking it's accessing the website normally.

However, there's a catch! **Using this library may not comply with Facebook's Terms Of Service!**, so be responsible Facebook citizens! We are not responsible if your account gets banned!

Additionally, **the APIs the library is calling is undocumented!** In theory, this means that your code could break tomorrow, without the slightest warning! If this happens to you, please report it, so that we can fix it as soon as possible!

With that said, let's get started!



## INSTALLATION

```
$ pip install fbchat
```

If you don't have `pip`, [this guide](#) can guide you through the process.

You can also install directly from source, provided you have `pip>=19.0`:

```
$ pip install git+https://github.com/carpedm20/fbchat.git
```



## DOCUMENTATION OVERVIEW

### 4.1 Introduction

Welcome, this page will guide you through the basic concepts of using `fbchat`.

The hardest, and most error prone part is logging in, and managing your login session, so that is what we will look at first.

#### 4.1.1 Logging In

Everything in `fbchat` starts with getting an instance of `Session`. Currently there are two ways of doing that, `Session.login` and `Session.from_cookies`.

The follow example will prompt you for you password, and use it to login:

```
import getpass
import fbchat
session = fbchat.Session.login("<email/phone number>", getpass.getpass())
# If your account requires a two factor authentication code:
session = fbchat.Session.login(
    "<your email/phone number>",
    getpass.getpass(),
    lambda: getpass.getpass("2FA code"),
)
```

However, **this is not something you should do often!** Logging in/out all the time *will* get your Facebook account locked!

Instead, you should start by using `Session.login`, and then store the cookies with `Session.get_cookies`, so that they can be used instead the next time your application starts.

Usability-wise, this is also better, since you won't have to re-type your password every time you want to login.

The following, quite lengthy, yet very import example, illustrates a way to do this:

```
# TODO: Consider adding Session.from_file and Session.to_file,
# which would make this example a lot easier!

import atexit
import json
import getpass
import fbchat
```

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```

def load_cookies(filename):
    try:
        # Load cookies from file
        with open(filename) as f:
            return json.load(f)
    except FileNotFoundError:
        return # No cookies yet

def save_cookies(filename, cookies):
    with open(filename, "w") as f:
        json.dump(cookies, f)

def load_session(cookies):
    if not cookies:
        return
    try:
        return fbchat.Session.from_cookies(cookies)
    except fbchat.FacebookError:
        return # Failed loading from cookies

cookies = load_cookies("session.json")
session = load_session(cookies)
if not session:
    # Session could not be loaded, login instead!
    session = fbchat.Session.login("<email>", getpass.getpass())

# Save session cookies to file when the program exits
atexit.register(lambda: save_cookies("session.json", session.get_cookies()))

# Do stuff with session here

```

Assuming you have successfully completed the above, congratulations! Using fbchat should be mostly trouble free from now on!

## 4.1.2 Understanding Thread Ids

At the core of any thread is its unique identifier, its ID.

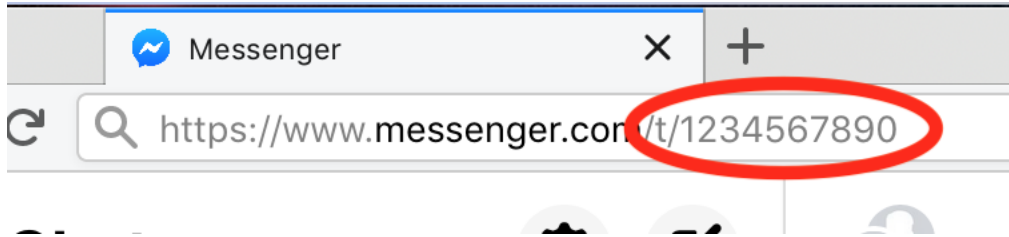
A thread basically just means “something I can chat with”, but more precisely, it can refer to a few things: - A Messenger group thread (*Group*) - The conversation between you and a single Facebook user (*User*) - The conversation between you and a Facebook Page (*Page*)

You can get your own user ID from *Session.user* with `session.user.id`.

Getting the ID of a specific group thread is fairly trivial, you only need to login to <https://www.messenger.com/>, click on the group you want to find the ID of, and then read the id from the address bar. The URL will look something like this: `https://www.messenger.com/t/1234567890`, where 1234567890 would be the ID of the group.

The same method can be applied to some user accounts, though if they have set a custom URL, then you will have to use a different method.

An image to illustrate the process is shown below:



Once you have an ID, you can use it to create a *Group* or a *User* instance, which will allow you to do all sorts of things. To do this, you need a valid, logged in session:

```
group = fbchat.Group(session=session, id="<The id you found>")
# Or for user threads
user = fbchat.User(session=session, id="<The id you found>")
```

Just like threads, every message, poll, plan, attachment, action etc. you send or do on Facebook has a unique ID.

Below is an example of using such a message ID to get a *Message* instance:

```
# Provide the thread the message was created in, and it's ID
message = fbchat.Message(thread=user, id="<The message id>")
```

### 4.1.3 Fetching Information

Managing these ids yourself quickly becomes very cumbersome! Luckily, there are other, easier ways of getting *Group/User* instances.

You would start by creating a *Client* instance, which is basically just a helper on top of *Session*, that will allow you to do various things:

```
client = fbchat.Client(session=session)
```

Now, you could search for threads using *Client.search\_for\_threads*, or fetch a list of them using *Client.fetch\_threads*:

```
# Fetch the 5 most likely search results
# Uses Facebook's search functions, you don't have to specify the whole name, first_
↳names will usually be enough
threads = list(client.search_for_threads("<name of the thread to search for>",
↳limit=5))
# Fetch the 5 most recent threads in your account
threads = list(client.fetch_threads(limit=5))
```

Note the `list` statements; this is because the methods actually return *generators*. If you don't know what that means, don't worry, it is just something you can use to make your code faster later.

The examples above will actually fetch *UserData/GroupData*, which are subclasses of *User/Group*. These model have extra properties, so you could for example print the names and ids of the fetched threads like this:

```
for thread in threads:
    print(f"{thread.id}: {thread.name}")
```

Once you have a thread, you can use that to fetch the messages therein:

```
for message in thread.fetch_messages(limit=20):
    print(message.text)
```

### 4.1.4 Interacting with Threads

Once you have a *User/Group* instance, you can do things on them as described in *ThreadABC*, since they are subclasses of that.

Some functionality, like adding users to a *Group*, or blocking a *User*, logically only works the relevant threads, so see the full API documentation for that.

With that out of the way, let's see some examples!

The simplest way of interacting with a thread is by sending a message:

```
# Send a message to the user
message = user.send_text("test message")
```

There are many types of messages you can send, see the full API documentation for more.

Notice how we held on to the sent message? The return type is a *Message* instance, so you can interact with it afterwards:

```
# React to the message with the emoji
message.react("")
```

Besides sending messages, you can also interact with threads in other ways. An example is to change the thread color:

```
# Will change the thread color to the default blue
thread.set_color("#0084ff")
```

### 4.1.5 Listening & Events

Now, we are finally at the point we have all been waiting for: Creating an automatic Facebook bot!

To get started, you create the functions you want to call on certain events:

```
def my_function(event: fbchat.MessageEvent):
    print(f"Message from {event.author.id}: {event.message.text}")
```

Then you create a *fbchat.Listener* object:

```
listener = fbchat.Listener(session=session, chat_on=False, foreground=False)
```

Which you can then use to receive events, and send them to your functions:

```
for event in listener.listen():
    if isinstance(event, fbchat.MessageEvent):
        my_function(event)
```

View the *Examples* to see some more examples illustrating the event system.



## 4.2 Examples

These are a few examples on how to use fbchat. Remember to swap out <email> and <password> for your email and password

### 4.2.1 Basic example

This will show basic usage of fbchat

```
import fbchat

# Log the user in
session = fbchat.Session.login("<email>", "<password>")

print("Own id: {}".format(session.user.id))

# Send a message to yourself
session.user.send_text("Hi me!")

# Log the user out
session.logout()
```

### 4.2.2 Interacting with Threads

This will interact with the thread in every way fbchat supports

```
import fbchat
import requests

session = fbchat.Session.login("<email>", "<password>")

client = fbchat.Client(session)

thread = session.user
# thread = fbchat.User(session=session, id="0987654321")
# thread = fbchat.Group(session=session, id="1234567890")

# Will send a message to the thread
thread.send_text("<message>")

# Will send the default `like` emoji
thread.send_sticker(fbchat.EmojiSize.LARGE.value)

# Will send the emoji ``
thread.send_emoji("", size=fbchat.EmojiSize.LARGE)

# Will send the sticker with ID `767334476626295`
thread.send_sticker("767334476626295")

# Will send a message with a mention
thread.send_text(
    text="This is a @mention",
    mentions=[fbchat.Mention(thread.id, offset=10, length=8)],
)
```

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```

# Will send the image located at `<image path>`
with open("<image path>", "rb") as f:
    files = client.upload(["image_name.png", f, "image/png"])
thread.send_text(text="This is a local image", files=files)

# Will download the image at the URL `<image url>`, and then send it
r = requests.get("<image url>")
files = client.upload(["image_name.png", r.content, "image/png"])
thread.send_files(files) # Alternative to .send_text

# Only do these actions if the thread is a group
if isinstance(thread, fbchat.Group):
    # Will remove the user with ID `<user id>` from the group
    thread.remove_participant("<user id>")
    # Will add the users with IDs `<1st user id>`, `<2nd user id>` and `<3th user id>`
    ↪ `to the group`
    thread.add_participants(["<1st user id>", "<2nd user id>", "<3rd user id>"])
    # Will change the title of the group to `<title>`
    thread.set_title("<title>")

# Will change the nickname of the user `<user id>` to `<new nickname>`
thread.set_nickname(fbchat.User(session=session, id="<user id>"), "<new nickname>")

# Will set the typing status of the thread
thread.start_typing()

# Will change the thread color to #0084ff
thread.set_color("#0084ff")

# Will change the thread emoji to ``
thread.set_emoji("")

message = fbchat.Message(thread=thread, id="<message id>")

# Will react to a message with a emoji
message.react("")

```

### 4.2.3 Fetching Information

This will show the different ways of fetching information about users and threads

```

import fbchat

session = fbchat.Session.login("<email>", "<password>")

client = fbchat.Client(session=session)

# Fetches a list of all users you're currently chatting with, as `User` objects
users = client.fetch_all_users()

print("users' IDs: {}".format([user.id for user in users]))
print("users' names: {}".format([user.name for user in users]))

```

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```

# If we have a user id, we can use `fetch_user_info` to fetch a `User` object
user = client.fetch_user_info("<user id>")["<user id>"]
# We can also query both mutiple users together, which returns list of `User` objects
users = client.fetch_user_info("<1st user id>", "<2nd user id>", "<3rd user id>")

print("user's name: {}".format(user.name))
print("users' names: {}".format([users[k].name for k in users]))

# `search_for_users` searches for the user and gives us a list of the results,
# and then we just take the first one, aka. the most likely one:
user = client.search_for_users("<name of user>")[0]

print("user ID: {}".format(user.id))
print("user's name: {}".format(user.name))
print("user's photo: {}".format(user.photo))
print("Is user client's friend: {}".format(user.is_friend))

# Fetches a list of the 20 top threads you're currently chatting with
threads = client.fetch_thread_list()
# Fetches the next 10 threads
threads += client.fetch_thread_list(offset=20, limit=10)

print("Threads: {}".format(threads))

# If we have a thread id, we can use `fetch_thread_info` to fetch a `Thread` object
thread = client.fetch_thread_info("<thread id>")["<thread id>"]
print("thread's name: {}".format(thread.name))

# Gets the last 10 messages sent to the thread
messages = thread.fetch_messages(limit=10)
# Since the message come in reversed order, reverse them
messages.reverse()

# Prints the content of all the messages
for message in messages:
    print(message.text)

# `search_for_threads` searches works like `search_for_users`, but gives us a list of
↳ threads instead
thread = client.search_for_threads("<name of thread>")[0]
print("thread's name: {}".format(thread.name))

# Here should be an example of `getUnread`

# Print image url for up to 20 last images from thread.
images = list(thread.fetch_images(limit=20))
for image in images:
    if isinstance(image, fbchat.ImageAttachment):

```

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```
url = client.fetch_image_url(image.id)
print(url)
```

#### 4.2.4 Echobot

This will reply to any message with the same message

```
import fbchat

session = fbchat.Session.login("<email>", "<password>")
listener = fbchat.Listener(session=session, chat_on=False, foreground=False)

for event in listener.listen():
    if isinstance(event, fbchat.MessageEvent):
        print(f"{event.message.text} from {event.author.id} in {event.thread.id}")
        # If you're not the author, echo
        if event.author.id != session.user.id:
            event.thread.send_text(event.message.text)
```

#### 4.2.5 Remove Bot

This will remove a user from a group if they write the message Remove me!

```
import fbchat

def on_message(event):
    # We can only kick people from group chats, so no need to try if it's a user chat
    if not isinstance(event.thread, fbchat.Group):
        return
    if event.message.text == "Remove me!":
        print(f"{event.author.id} will be removed from {event.thread.id}")
        event.thread.remove_participant(event.author.id)

session = fbchat.Session.login("<email>", "<password>")
listener = fbchat.Listener(session=session, chat_on=False, foreground=False)
for event in listener.listen():
    if isinstance(event, fbchat.MessageEvent):
        on_message(event)
```

#### 4.2.6 “Prevent changes”-Bot

This will prevent chat color, emoji, nicknames and chat name from being changed. It will also prevent people from being added and removed

```
# This example uses the `blinker` library to dispatch events. See echobot.py for how
# this could be done differently. The decision is entirely up to you!
import fbchat
import blinker
```

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```

# Change this to your group id
old_thread_id = "1234567890"

# Change these to match your liking
old_color = "#0084ff"
old_emoji = ""
old_title = "Old group chat name"
old_nicknames = {
    "12345678901": "User nr. 1's nickname",
    "12345678902": "User nr. 2's nickname",
    "12345678903": "User nr. 3's nickname",
    "12345678904": "User nr. 4's nickname",
}

# Create a blinker signal
events = blinker.Signal()

# Register various event handlers on the signal
@events.connect_via(fbchat.ColorSet)
def on_color_set(sender, event: fbchat.ColorSet):
    if old_thread_id != event.thread.id:
        return
    if old_color != event.color:
        print(f"{event.author.id} changed the thread color. It will be changed back")
        event.thread.set_color(old_color)

@events.connect_via(fbchat.EmojiSet)
def on_emoji_set(sender, event: fbchat.EmojiSet):
    if old_thread_id != event.thread.id:
        return
    if old_emoji != event.emoji:
        print(f"{event.author.id} changed the thread emoji. It will be changed back")
        event.thread.set_emoji(old_emoji)

@events.connect_via(fbchat.TitleSet)
def on_title_set(sender, event: fbchat.TitleSet):
    if old_thread_id != event.thread.id:
        return
    if old_title != event.title:
        print(f"{event.author.id} changed the thread title. It will be changed back")
        event.thread.set_title(old_title)

@events.connect_via(fbchat.NicknameSet)
def on_nickname_set(sender, event: fbchat.NicknameSet):
    if old_thread_id != event.thread.id:
        return
    old_nickname = old_nicknames.get(event.subject.id)
    if old_nickname != event.nickname:
        print(
            f"{event.author.id} changed {event.subject.id}'s' nickname."
            " It will be changed back"
        )
        event.thread.set_nickname(event.subject.id, old_nickname)

```

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```

@events.connect_via(fbchat.PeopleAdded)
def on_people_added(sender, event: fbchat.PeopleAdded):
    if old_thread_id != event.thread.id:
        return
    if event.author.id != session.user.id:
        print(f"{'', '.join(x.id for x in event.added)} got added. They will be removed
↳")
        for added in event.added:
            event.thread.remove_participant(added.id)

@events.connect_via(fbchat.PersonRemoved)
def on_person_removed(sender, event: fbchat.PersonRemoved):
    if old_thread_id != event.thread.id:
        return
    # No point in trying to add ourself
    if event.removed.id == session.user.id:
        return
    if event.author.id != session.user.id:
        print(f"{event.removed.id} got removed. They will be re-added")
        event.thread.add_participants([event.removed.id])

# Login, and start listening for events
session = fbchat.Session.login("<email>", "<password>")
listener = fbchat.Listener(session=session, chat_on=False, foreground=False)

for event in listener.listen():
    # Dispatch the event to the subscribed handlers
    events.send(type(event), event=event)

```

## 4.3 Frequently Asked Questions

### 4.3.1 The new version broke my application

fbchat follows [Semantic Versioning](#) quite rigorously!

That means that breaking changes can *only* occur in major versions (e.g. v1.9.6 -> v2.0.0).

If you find that something breaks, and you didn't update to a new major version, then it is a bug, and we would be grateful if you reported it!

In case you're stuck with an old codebase, you can downgrade to a previous version of fbchat, e.g. version 1.9.6:

```
$ pip install fbchat==1.9.6
```

### 4.3.2 Will you be supporting creating posts/events/pages and so on?

We won't be focusing on anything else than chat-related things. This library is called fbCHAT, after all!

## 4.4 Full API

If you are looking for information on a specific function, class, or method, this part of the documentation is for you.

### 4.4.1 Session

**class** fbchat.**Session**(\*, *user\_id*, *fb\_dtsg*, *revision*, *session=NOTHING*, *counter=0*, *client\_id=NOTHING*)

Stores and manages state required for most Facebook requests.

This is the main class, which is used to login to Facebook.

**property** **user**

The logged in user.

**classmethod** **login**(*email*, *password*, *on\_2fa\_callback=None*)

Login the user, using *email* and *password*.

**Parameters**

- **email** (*str*) – Facebook email, id or phone number
- **password** (*str*) – Facebook account password
- **on\_2fa\_callback** (*Optional[Callable[[], int]]*) – Function that will be called, in case a two factor authentication code is needed. This should return the requested code.

Tested using SMS and authentication applications. If you have both enabled, you might not receive an SMS code, and you'll have to use the authentication application.

Note: Facebook limits the amount of codes they will give you, so if you don't receive a code, be patient, and try again later!

#### Example

```
>>> import fbchat
>>> import getpass
>>> session = fbchat.Session.login(
...     input("Email: "),
...     getpass.getpass(),
...     on_2fa_callback=lambda: input("2FA Code: ")
... )
Email: abc@gmail.com
Password: ****
2FA Code: 123456
>>> session.user.id
"1234"
```

**is\_logged\_in**()

Send a request to Facebook to check the login status.

**Return type** `bool`

**Returns** Whether the user is still logged in

### Example

```
>>> assert session.is_logged_in()
```

### logout ()

Safely log out the user.

The session object must not be used after this action has been performed!

### Example

```
>>> session.logout()
```

**Return type** None

### get\_cookies ()

Retrieve session cookies, that can later be used in *from\_cookies*.

**Return type** Mapping[str, str]

**Returns** A dictionary containing session cookies

### Example

```
>>> cookies = session.get_cookies()
```

### classmethod from\_cookies (cookies)

Load a session from session cookies.

**Parameters** **cookies** (Mapping[str, str]) – A dictionary containing session cookies

### Example

```
>>> cookies = session.get_cookies()
>>> # Store cookies somewhere, and then subsequently
>>> session = fbchat.Session.from_cookies(cookies)
```

## 4.4.2 Client

**class** fbchat.**Client** (\*, session)

A client for Facebook Messenger.

This contains methods that are generally needed to interact with Facebook.



## Example

Create a new client instance.

```
>>> client = fbchat.Client(session=session)
```

### **session**

The session to use when making requests.

### **fetch\_users()**

Fetch users the client is currently chatting with.

This is very close to your friend list, with the follow differences:

It differs by including users that you're not friends with, but have chatted with before, and by including accounts that are "Messenger Only".

But does not include deactivated, deleted or memorialized users (logically, since you can't chat with those).

The order these are returned is arbitrary.

## Example

Get the name of an arbitrary user that you're currently chatting with.

```
>>> users = client.fetch_users()
>>> users[0].name
"A user"
```

**Return type** `Sequence[UserData]`

### **search\_for\_users** (*name*, *limit*)

Find and get users by their name.

The returned users are ordered by relevance.

#### **Parameters**

- **name** (`str`) – Name of the user
- **limit** (`int`) – The max. amount of users to fetch

## Example

Get the full name of the first found user.

```
>>> (user,) = client.search_for_users("user", limit=1)
>>> user.name
"A user"
```

**Return type** `Iterable[UserData]`

### **search\_for\_pages** (*name*, *limit*)

Find and get pages by their name.

The returned pages are ordered by relevance.

#### **Parameters**

- **name** (*str*) – Name of the page
- **limit** (*int*) – The max. amount of pages to fetch

### Example

Get the full name of the first found page.

```
>>> (page,) = client.search_for_pages("page", limit=1)
>>> page.name
"A page"
```

**Return type** `Iterable[PageData]`

### **search\_for\_groups** (*name, limit*)

Find and get group threads by their name.

The returned groups are ordered by relevance.

#### Parameters

- **name** (*str*) – Name of the group thread
- **limit** (*int*) – The max. amount of groups to fetch

### Example

Get the full name of the first found group.

```
>>> (group,) = client.search_for_groups("group", limit=1)
>>> group.name
"A group"
```

**Return type** `Iterable[GroupData]`

### **search\_for\_threads** (*name, limit*)

Find and get threads by their name.

The returned threads are ordered by relevance.

#### Parameters

- **name** (*str*) – Name of the thread
- **limit** (*int*) – The max. amount of threads to fetch

### Example

Search for a user, and get the full name of the first found result.

```
>>> (user,) = client.search_for_threads("user", limit=1)
>>> assert isinstance(user, fbchat.User)
>>> user.name
"A user"
```

**Return type** `Iterable[ThreadABC]`

**search\_messages** (*query*, *limit*)

Search for messages in all threads.

Intended to be used alongside `ThreadABC.search_messages`.

Warning! If someone send a message to a thread that matches the query, while we're searching, some snippets will get returned twice, and some will be lost.

This is fundamentally not fixable, it's just how the endpoint is implemented.

**Parameters**

- **query** (`str`) – Text to search for
- **limit** (`Optional[int]`) – Max. number of items to retrieve. If `None`, all will be retrieved

**Example**

Search for messages, and print the amount of snippets in each thread.

```
>>> for thread, count in client.search_messages("abc", limit=3):
...     print(f"{thread.id} matched the search {count} time(s)")
...
1234 matched the search 2 time(s)
2345 matched the search 1 time(s)
3456 matched the search 100 time(s)
```

**Return type** `Iterable[Tuple[ThreadABC, int]]`

**Returns** Iterable with tuples of threads, and the total amount of matches.

**fetch\_thread\_info** (*ids*)

Fetch threads' info from IDs, unordered.

**Warning:** Sends two requests if users or pages are present, to fetch all available info!

**Parameters** **ids** (`Iterable[str]`) – Thread ids to query

**Example**

Get data about the user with id "4".

```
>>> (user,) = client.fetch_thread_info(["4"])
>>> user.name
"Mark Zuckerberg"
```

**Return type** `Iterable[ThreadABC]`

**fetch\_threads** (*limit*, *location*=`<ThreadLocation.INBOX: 'INBOX'>`)

Fetch the client's thread list.

The returned threads are ordered by last active first.

**Parameters**

- **limit** (`Optional[int]`) – Max. number of threads to retrieve. If `None`, all threads will be retrieved.
- **location** (`ThreadLocation`) – INBOX, PENDING, ARCHIVED or OTHER

### Example

Fetch the last three threads that the user chatted with.

```
>>> for thread in client.fetch_threads(limit=3):
...     print(f"{thread.id}: {thread.name}")
...
1234: A user
2345: A group
3456: A page
```

**Return type** `Iterable[ThreadABC]`

### `fetch_unread()`

Fetch unread threads.

**Warning:** This is not finished, and the API may change at any point!

**Return type** `Sequence[ThreadABC]`

### `fetch_unseen()`

Fetch unseen / new threads.

**Warning:** This is not finished, and the API may change at any point!

**Return type** `Sequence[ThreadABC]`

### `fetch_image_url(image_id)`

Fetch URL to download the original image from an image attachment ID.

**Parameters** `image_id` (`str`) – The image you want to fetch

### Example

```
>>> client.fetch_image_url("1234")
"https://scontent-arn1-1.xx.fbcdn.net/v/t1.123-4/1_23_45_n.png?..."
```

**Return type** `str`

**Returns** An URL where you can download the original image

### `get_phone_numbers()`

Fetch the user's phone numbers.

**Return type** `Sequence[str]`

**get\_emails()**  
Fetch the user's emails.

**Return type** `Sequence[str]`

**upload(files, voice\_clip=False)**  
Upload files to Facebook.

`Distribution` files should be a list of files that requests can upload, see `requests.request`.

### Example

```
>>> with open("file.txt", "rb") as f:
...     (file,) = client.upload(["file.txt", f, "text/plain"])
...
>>> file
("1234", "text/plain")
```

**Return type** `Sequence[Tuple[str, str]]`

**Returns** Tuples with a file's ID and mimetype. This result can be passed straight on to `ThreadABC.send_files`, or used in `Group.set_image`.

**mark\_as\_delivered(message)**  
Mark a message as delivered.

**Warning:** This is not finished, and the API may change at any point!

**Parameters** **message** (`Message`) – The message to set as delivered

**mark\_as\_read(threads, at)**  
Mark threads as read.

All messages inside the specified threads will be marked as read.

#### Parameters

- **threads** (`Iterable[ThreadABC]`) – Threads to set as read
- **at** (`datetime`) – Timestamp to signal the read cursor at

**mark\_as\_unread(threads, at)**  
Mark threads as unread.

All messages inside the specified threads will be marked as unread.

#### Parameters

- **threads** (`Iterable[ThreadABC]`) – Threads to set as unread
- **at** (`datetime`) – Timestamp to signal the read cursor at

**move\_threads(location, threads)**  
Move threads to specified location.

#### Parameters

- **location** (`ThreadLocation`) – INBOX, PENDING, ARCHIVED or OTHER
- **threads** (`Iterable[ThreadABC]`) – Threads to move

**delete\_threads** (*threads*)

Bulk delete threads.

**Parameters** **threads** (`Iterable[ThreadABC]`) – Threads to delete

### Example

```
>>> group = fbchat.Group(session=session, id="1234")
>>> client.delete_threads([group])
```

**delete\_messages** (*messages*)

Bulk delete specified messages.

**Parameters** **messages** (`Iterable[Message]`) – Messages to delete

### Example

```
>>> message1 = fbchat.Message(thread=thread, id="1234")
>>> message2 = fbchat.Message(thread=thread, id="2345")
>>> client.delete_messages([message1, message2])
```

## 4.4.3 Threads

**class** `fbchat.ThreadABC`

Implemented by thread-like classes.

This is private to implement.

**abstract property** `session`

The session to use when making requests.

**Return type** `Session`

**abstract property** `id`

The unique identifier of the thread.

**Return type** `str`

**wave** (*first=True*)

Wave hello to the thread.

**Parameters** **first** (`bool`) – Whether to wave first or wave back

### Example

Wave back to the thread.

```
>>> thread.wave(False)
```

**Return type** `str`

**send\_text** (*text, mentions=None, files=None, reply\_to\_id=None*)

Send a message to the thread.

**Parameters**

- **text** (*str*) – Text to send
- **mentions** (*Optional[Iterable[Mention]]*) – Optional mentions
- **files** (*Optional[Iterable[Tuple[str, str]]]*) – Optional tuples, each containing an uploaded file’s ID and mimetype. See *ThreadABC.send\_files* for an example.
- **reply\_to\_id** (*Optional[str]*) – Optional message to reply to

### Example

```
>>> mention = fbchat.Mention(thread_id="1234", offset=5, length=2)
>>> thread.send_text("A message", mentions=[mention])
```

**Return type** *str*

**Returns** The sent message

**send\_emoji** (*emoji, size*)

Send an emoji to the thread.

**Parameters**

- **emoji** (*str*) – The emoji to send
- **size** (*EmojiSize*) – The size of the emoji

### Example

```
>>> thread.send_emoji("", size=fbchat.EmojiSize.LARGE)
```

**Return type** *str*

**Returns** The sent message

**send\_sticker** (*sticker\_id*)

Send a sticker to the thread.

**Parameters** **sticker\_id** (*str*) – ID of the sticker to send

### Example

Send a sticker with the id “1889713947839631”

```
>>> thread.send_sticker("1889713947839631")
```

**Return type** *str*

**Returns** The sent message

**send\_location** (*latitude, longitude*)

Send a given location to a thread as the user’s current location.

**Parameters**

- **latitude** (*float*) – The location latitude
- **longitude** (*float*) – The location longitude

### Example

Send a location in London, United Kingdom.

```
>>> thread.send_location(51.5287718, -0.2416815)
```

### **send\_pinned\_location** (*latitude, longitude*)

Send a given location to a thread as a pinned location.

#### Parameters

- **latitude** (*float*) – The location latitude
- **longitude** (*float*) – The location longitude

### Example

Send a pinned location in Beijing, China.

```
>>> thread.send_pinned_location(39.9390731, 116.117273)
```

### **send\_files** (*files*)

Send files from file IDs to a thread.

*Distribution* `files` should be a list of tuples, with a file's ID and mimetype.

### Example

Upload and send a video to a thread.

```
>>> with open("video.mp4", "rb") as f:  
...     files = client.upload(["video.mp4", f, "video/mp4"])  
>>>  
>>> thread.send_files(files)
```

### **search\_messages** (*query, limit*)

Find and get message IDs by query.

Warning! If someone send a message to the thread that matches the query, while we're searching, some snippets will get returned twice.

This is fundamentally not fixable, it's just how the endpoint is implemented.

The returned message snippets are ordered by last sent first.

#### Parameters

- **query** (*str*) – Text to search for
- **limit** (*int*) – Max. number of message snippets to retrieve



### Example

Fetch the latest message in the thread that matches the query.

```
>>> (message,) = thread.search_messages("abc", limit=1)
>>> message.text
"Some text and abc"
```

**Return type** `Iterable[MessageSnippet]`

#### **fetch\_messages** (*limit*)

Fetch messages in a thread.

The returned messages are ordered by last sent first.

**Parameters** **limit** (`Optional[int]`) – Max. number of threads to retrieve. If None, all threads will be retrieved.

### Example

```
>>> for message in thread.fetch_messages(limit=5)
...     print(message.text)
...
A message
Another message
None
A fourth message
```

**Return type** `Iterable[Message]`

#### **fetch\_images** (*limit*)

Fetch images/videos posted in the thread.

The returned images are ordered by last sent first.

**Parameters** **limit** (`Optional[int]`) – Max. number of images to retrieve. If None, all images will be retrieved.

### Example

```
>>> for image in thread.fetch_messages(limit=3)
...     print(image.id)
...
1234
2345
```

**Return type** `Iterable[Attachment]`

#### **set\_nickname** (*user\_id*, *nickname*)

Change the nickname of a user in the thread.

##### **Parameters**

- **user\_id** (`str`) – User that will have their nickname changed

- **nickname** (*str*) – New nickname

### Example

```
>>> thread.set_nickname("1234", "A nickname")
```

### **set\_color** (*color*)

Change thread color.

The new color must be one of the following:

```
"#0084ff", "#44bec7", "#ffc300", "#fa3c4c", "#d696bb", "#6699cc",  
"#13cf13", "#ff7e29", "#e68585", "#7646ff", "#20cef5", "#67b868",  
"#d4a88c", "#ff5ca1", "#a695c7", "#ff7ca8", "#1adb5b", "#f01d6a",  
"#ff9c19" or "#0edcde".
```

This list is subject to change in the future!

The default when creating a new thread is "#0084ff".

**Parameters** **color** (*str*) – New thread color

### Example

Set the thread color to “Coral Pink”.

```
>>> thread.set_color("#e68585")
```

### **set\_emoji** (*emoji*)

Change thread emoji.

**Parameters** **emoji** (*Optional[str]*) – New thread emoji. If None, will be set to the default “LIKE” icon

### Example

Set the thread emoji to “”.

```
>>> thread.set_emoji("")
```

### **forward\_attachment** (*attachment\_id*)

Forward an attachment.

**Parameters** **attachment\_id** (*str*) – Attachment ID to forward

### Example

```
>>> thread.forward_attachment("1234")
```

### **start\_typing** ()

Set the current user to start typing in the thread.

### Example

```
>>> thread.start_typing()
```

#### **stop\_typing()**

Set the current user to stop typing in the thread.

### Example

```
>>> thread.stop_typing()
```

#### **create\_plan** (*name*, *at*, *location\_name=None*, *location\_id=None*)

Create a new plan.

# TODO: Arguments

##### Parameters

- **name** (*str*) – Name of the new plan
- **at** (*datetime*) – When the plan is for

### Example

```
>>> thread.create_plan(...)
```

#### **create\_poll** (*question*, *options*)

Create poll in a thread.

##### Parameters

- **question** (*str*) – The question
- **options** (*Mapping[str, bool]*) – Options and whether you want to select the option

### Example

```
>>> thread.create_poll("Test poll", {"Option 1": True, "Option 2": False})
```

#### **mute** (*duration=None*)

Mute the thread.

**Parameters** **duration** (*Optional[timedelta]*) – Time to mute, use None to mute forever

### Example

```
>>> import datetime
>>> thread.mute(datetime.timedelta(days=2))
```

**unmute()**  
Unmute the thread.

### Example

```
>>> thread.unmute()
```

**mute\_reactions()**  
Mute thread reactions.

**unmute\_reactions()**  
Unmute thread reactions.

**mute\_mentions()**  
Mute thread mentions.

**unmute\_mentions()**  
Unmute thread mentions.

**mark\_as\_spam()**  
Mark the thread as spam, and delete it.

**delete()**  
Delete the thread.  
  
If you want to delete multiple threads, please use `Client.delete_threads`.

### Example

```
>>> message.delete()
```

**class** fbchat.**Thread**(\* , session, id)  
Represents a Facebook thread, where the actual type is unknown.

Implements parts of *ThreadABC*, call the method to figure out if your use case is supported. Otherwise, you'll have to use an *User/Group/Page* object.

Note: This list may change in minor versions!

**session**  
The session to use when making requests.

**id**  
The unique identifier of the thread.

**class** fbchat.**Page**(\* , session, id)  
Represents a Facebook page. Implements *ThreadABC*.

### Example

```
>>> page = fbchat.Page(session=session, id="1234")
```

**session**

The session to use when making requests.

**id**

The unique identifier of the page.

**class** fbchat.**User**(\*, session, id)

Represents a Facebook user. Implements *ThreadABC*.

### Example

```
>>> user = fbchat.User(session=session, id="1234")
```

**session**

The session to use when making requests.

**id**

The user's unique identifier.

**confirm\_friend\_request**()

Confirm a friend request, adding the user to your friend list.

### Example

```
>>> user.confirm_friend_request()
```

**remove\_friend**()

Remove the user from the client's friend list.

### Example

```
>>> user.remove_friend()
```

**block**()

Block messages from the user.

### Example

```
>>> user.block()
```

**unblock**()

Unblock a previously blocked user.

### Example

```
>>> user.unblock()
```

**class** fbchat.**Group**(\* , session, id)  
Represents a Facebook group. Implements *ThreadABC*.

### Example

```
>>> group = fbchat.Group(session=session, id="1234")
```

#### **session**

The session to use when making requests.

#### **id**

The group's unique identifier.

#### **add\_participants**(user\_ids)

Add users to the group.

**Parameters** **user\_ids** (*Iterable[str]*) – One or more user IDs to add

### Example

```
>>> group.add_participants(["1234", "2345"])
```

#### **remove\_participant**(user\_id)

Remove user from the group.

**Parameters** **user\_id** (*str*) – User ID to remove

### Example

```
>>> group.remove_participant("1234")
```

#### **add\_admins**(user\_ids)

Set specified users as group admins.

**Parameters** **user\_ids** (*Iterable[str]*) – One or more user IDs to set admin

### Example

```
>>> group.add_admins(["1234", "2345"])
```

#### **remove\_admins**(user\_ids)

Remove admin status from specified users.

**Parameters** **user\_ids** (*Iterable[str]*) – One or more user IDs to remove admin

### Example

```
>>> group.remove_admins(["1234", "2345"])
```

#### **set\_title** (*title*)

Change title of the group.

**Parameters** **title** (*str*) – New title

### Example

```
>>> group.set_title("Abc")
```

#### **set\_image** (*image\_id*)

Change the group image from an image id.

**Parameters** **image\_id** (*str*) – ID of uploaded image

### Example

Upload an image, and use it as the group image.

```
>>> with open("image.png", "rb") as f:
...     (file,) = client.upload(["image.png", f, "image/png"])
...
>>> group.set_image(file[0])
```

#### **set\_approval\_mode** (*require\_admin\_approval*)

Change the group's approval mode.

**Parameters** **require\_admin\_approval** (*bool*) – True or False

### Example

```
>>> group.set_approval_mode(False)
```

#### **accept\_users** (*user\_ids*)

Accept users to the group from the group's approval.

**Parameters** **user\_ids** (*Iterable[str]*) – One or more user IDs to accept

### Example

```
>>> group.accept_users(["1234", "2345"])
```

#### **deny\_users** (*user\_ids*)

Deny users from joining the group.

**Parameters** **user\_ids** (*Iterable[str]*) – One or more user IDs to deny

### Example

```
>>> group.deny_users(["1234", "2345"])
```

## 4.4.4 Thread Data

```
class fbchat.PageData(*, session, id, photo, name, last_active=None, message_count=None,
                       plan=None, url=None, city=None, likes=None, sub_title=None, cate-
                       gory=None)
```

Represents data about a Facebook page.

Inherits *Page*, and implements *ThreadABC*.

**photo**

The page's picture

**name**

The name of the page

**last\_active**

When the thread was last active / when the last message was sent

**message\_count**

Number of messages in the thread

**plan**

Set *Plan*

**url**

The page's custom URL

**city**

The name of the page's location city

**likes**

Amount of likes the page has

**sub\_title**

Some extra information about the page

**category**

The page's category

```
class fbchat.UserData(*, session, id, photo, name, is_friend, first_name, last_name=None,
                       last_active=None, message_count=None, plan=None, url=None, gen-
                       der=None, affinity=None, nickname=None, own_nickname=None,
                       color=None, emoji=None)
```

Represents data about a Facebook user.

Inherits *User*, and implements *ThreadABC*.

**photo**

The user's picture

**name**

The name of the user

**is\_friend**

Whether the user and the client are friends



**first\_name**  
The users first name

**last\_name**  
The users last name

**last\_active**  
When the thread was last active / when the last message was sent

**message\_count**  
Number of messages in the thread

**plan**  
Set *Plan*

**url**  
The profile URL. *None* for Messenger-only users

**gender**  
The user's gender

**affinity**  
From 0 to 1. How close the client is to the user

**nickname**  
The user's nickname

**own\_nickname**  
The clients nickname, as seen by the user

**color**  
The message color

**emoji**  
The default emoji

```
class fbchat.GroupData(*, session, id, photo=None, name=None, last_active=None, message_count=None, plan=None, participants=NOTHING, nicknames=NOTHING, color=None, emoji=None, admins=NOTHING, approval_mode=None, approval_requests=NOTHING, join_link=None)
```

Represents data about a Facebook group.

Inherits *Group*, and implements *ThreadABC*.

**photo**  
The group's picture

**name**  
The name of the group

**last\_active**  
When the group was last active / when the last message was sent

**message\_count**  
Number of messages in the group

**plan**  
Set *Plan*

**participants**  
The group thread's participant user ids

**nicknames**  
A dictionary, containing user nicknames mapped to their IDs

**color**  
The groups's message color

**emoji**  
The groups's default emoji

## 4.4.5 Messages

**class** fbchat.**Message** (\*, *thread*, *id*)  
Represents a Facebook message.

### Example

```
>>> thread = fbchat.User(session=session, id="1234")
>>> message = fbchat.Message(thread=thread, id="mid.$XYZ")
```

**thread**  
The thread that this message belongs to.

**id**  
The message ID.

**property session**  
The session to use when making requests.

**delete()**  
Delete the message (removes it only for the user).  
If you want to delete multiple messages, please use *Client.delete\_messages*.

### Example

```
>>> message.delete()
```

**unsend()**  
Unsend the message (removes it for everyone).  
The message must to be sent by you, and less than 10 minutes ago.

### Example

```
>>> message.unsend()
```

**react** (*reaction*)  
React to the message, or removes reaction.  
Currently, you can use “”, “”, “”, “”, “”, “”, “” or “”. It should be possible to add support for more, but we haven't figured that out yet.

**Parameters** **reaction** (*Optional[str]*) – Reaction emoji to use, or if None, removes reaction.

### Example

```
>>> message.react("")
```

#### **fetch()**

Fetch fresh *MessageData* object.

### Example

```
>>> message = message.fetch()
>>> message.text
"The message text"
```

**Return type** *MessageData*

#### **static format\_mentions** (*text*, \**args*, \*\**kwargs*)

Like `str.format`, but takes tuples with a thread id and text instead.

Return a tuple, with the formatted string and relevant mentions.

```
>>> Message.format_mentions("Hey {!r}! My name is {}", ("1234", "Peter"), (
↳ "4321", "Michael"))
("Hey 'Peter'! My name is Michael", [Mention(thread_id=1234, offset=4,
↳ length=7), Mention(thread_id=4321, offset=24, length=7)])
```

```
>>> Message.format_mentions("Hey {p}! My name is {}", ("1234", "Michael"), p=(
↳ "4321", "Peter"))
('Hey Peter! My name is Michael', [Mention(thread_id=4321, offset=4,
↳ length=5), Mention(thread_id=1234, offset=22, length=7)])
```

#### **class** fbchat.**Mention** (\*, *thread\_id*, *offset*, *length*)

Represents a @mention.

```
>>> fbchat.Mention(thread_id="1234", offset=5, length=2)
Mention(thread_id="1234", offset=5, length=2)
```

#### **thread\_id**

The thread ID the mention is pointing at

#### **offset**

The character where the mention starts

#### **length**

The length of the mention

#### **class** fbchat.**EmojiSize** (*Enum*)

Used to specify the size of a sent emoji.

**LARGE** = '369239383222810'

**MEDIUM** = '369239343222814'

**SMALL** = '369239263222822'

```
class fbchat.MessageData(*, thread, id, author, created_at, text=None, mentions=NOTHING,
                           emoji_size=None, is_read=None, read_by=NOTHING, re-
                           actions=NOTHING, sticker=None, attachments=NOTHING,
                           quick_replies=NOTHING, unsent=False, reply_to_id=None,
                           replied_to=None, forwarded=False)
```

Represents data in a Facebook message.

Inherits *Message*.

**author**

ID of the sender

**created\_at**

When the message was sent

**text**

The actual message

**mentions**

A list of *Mention* objects

**emoji\_size**

Size of a sent emoji

**is\_read**

Whether the message is read

**read\_by**

People IDs who read the message, only works with *ThreadABC.fetch\_messages*

**reactions**

A dictionary with user's IDs as keys, and their reaction as values

**sticker**

A *Sticker*

**attachments**

A list of attachments

**quick\_replies**

A list of *QuickReply*

**unsent**

Whether the message is unsent (deleted for everyone)

**reply\_to\_id**

Message ID you want to reply to

**replied\_to**

Replied message

**forwarded**

Whether the message was forwarded

## 4.4.6 Exceptions

**exception** `fbchat.FacebookError` (*message*)

Base class for all custom exceptions raised by fbchat.

All exceptions in the module inherit this.

**message**

A message describing the error

**exception** `fbchat.HTTPError` (*message, status\_code=None*)

Base class for errors with the HTTP(s) connection to Facebook.

**status\_code**

The returned HTTP status code, if relevant

**exception** `fbchat.ParseError` (*message, data*)

Raised when we fail parsing a response from Facebook.

This may contain sensitive data, so should not be logged to file.

**data**

The data that triggered the error.

The format of this cannot be relied on, it's only for debugging purposes.

**exception** `fbchat.NotLoggedIn` (*message*)

Raised by Facebook if the client has been logged out.

**exception** `fbchat.ExternalError` (*message, description, code=None*)

Base class for errors that Facebook return.

**description**

The error message that Facebook returned (Possibly in the user's own language)

**code**

The error code that Facebook returned

**exception** `fbchat.GraphQLError` (*message, description, code=None, debug\_info=None*)

Raised by Facebook if there was an error in the GraphQL query.

**debug\_info**

Query debug information

**exception** `fbchat.InvalidParameters` (*message, description, code=None*)

Raised by Facebook if:

- Some function supplied invalid parameters.
- Some content is not found.
- Some content is no longer available.

**exception** `fbchat.PleaseRefresh` (*message, description, code=1357004*)

Raised by Facebook if the client has been inactive for too long.

This error usually happens after 1-2 days of inactivity.

### 4.4.7 Attachments

**class** fbchat.**Attachment** (\*, *id=None*)

Represents a Facebook attachment.

**id**

The attachment ID

**class** fbchat.**ShareAttachment** (\*, *id=None, author=None, url=None, original\_url=None, title=None, description=None, source=None, image=None, original\_image\_url=None, attachments=NOTHING*)

Represents a shared item (e.g. URL) attachment.

**author**

ID of the author of the shared post

**url**

Target URL

**original\_url**

Original URL if Facebook redirects the URL

**title**

Title of the attachment

**description**

Description of the attachment

**source**

Name of the source

**image**

The attached image

**original\_image\_url**

URL of the original image if Facebook uses `safe_image`

**attachments**

List of additional attachments

**class** fbchat.**Sticker** (\*, *id=None, pack=None, is\_animated=False, medium\_sprite\_image=None, large\_sprite\_image=None, frames\_per\_row=None, frames\_per\_col=None, frame\_count=None, frame\_rate=None, image=None, label=None*)

Represents a Facebook sticker that has been sent to a thread as an attachment.

**pack**

The sticker-pack's ID

**is\_animated**

Whether the sticker is animated

**medium\_sprite\_image**

URL to a medium spritemap

**large\_sprite\_image**

URL to a large spritemap

**frames\_per\_row**

The amount of frames present in the spritemap pr. row

**frames\_per\_col**

The amount of frames present in the spritemap pr. column

**frame\_count**

The total amount of frames in the spritemap

**frame\_rate**

The frame rate the spritemap is intended to be played in

**image**

The sticker's image

**label**

The sticker's label/name

```
class fbchat.LocationAttachment (*, id=None, latitude=None, longitude=None, image=None, url=None, address=None)
```

Represents a user location.

Latitude and longitude OR address is provided by Facebook.

**latitude**

Latitude of the location

**longitude**

Longitude of the location

**image**

Image showing the map of the location

**url**

URL to Bing maps with the location

```
class fbchat.LiveLocationAttachment (*, id=None, latitude=None, longitude=None, image=None, url=None, address=None, name=None, expires_at=None, is_expired=None)
```

Represents a live user location.

**name**

Name of the location

**expires\_at**

When live location expires

**is\_expired**

True if live location is expired

```
class fbchat.FileAttachment (*, id=None, url=None, size=None, name=None, is_malicious=None)
```

Represents a file that has been sent as a Facebook attachment.

**url**

URL where you can download the file

**size**

Size of the file in bytes

**name**

Name of the file

**is\_malicious**

Whether Facebook determines that this file may be harmful

```
class fbchat.AudioAttachment (*, id=None, filename=None, url=None, duration=None, audio_type=None)
```

Represents an audio file that has been sent as a Facebook attachment.

**filename**

Name of the file

**url**

URL of the audio file

**duration**

Duration of the audio clip

**audio\_type**

Audio type

**class** fbchat.**ImageAttachment** (\*, *id=None, original\_extension=None, width=None, height=None, is\_animated=None, previews=NOTHING*)

Represents an image that has been sent as a Facebook attachment.

To retrieve the full image URL, use: *Client.fetch\_image\_url*, and pass it the id of the image attachment.

**original\_extension**

The extension of the original image (e.g. png)

**width**

Width of original image

**height**

Height of original image

**is\_animated**

Whether the image is animated

**previews**

A set, containing variously sized / various types of previews of the image

**class** fbchat.**VideoAttachment** (\*, *id=None, size=None, width=None, height=None, duration=None, preview\_url=None, previews=NOTHING*)

Represents a video that has been sent as a Facebook attachment.

**size**

Size of the original video in bytes

**width**

Width of original video

**height**

Height of original video

**duration**

Length of video

**preview\_url**

URL to very compressed preview video

**previews**

A set, containing variously sized previews of the video

**class** fbchat.**ImageAttachment** (\*, *id=None, original\_extension=None, width=None, height=None, is\_animated=None, previews=NOTHING*)

Represents an image that has been sent as a Facebook attachment.

To retrieve the full image URL, use: *Client.fetch\_image\_url*, and pass it the id of the image attachment.



**original\_extension**

The extension of the original image (e.g. png)

**width**

Width of original image

**height**

Height of original image

**is\_animated**

Whether the image is animated

**previews**

A set, containing variously sized / various types of previews of the image

## 4.4.8 Events

**class** fbchat.**Listener**(\* , session, chat\_on, foreground, mqtt=NOTHING, sync\_token=None, sequence\_id=None, tmp\_events=NOTHING)

Listen to incoming Facebook events.

Initialize a connection to the Facebook MQTT service.

**Parameters**

- **session** (Session) – The session to use when making requests.
- **chat\_on** (bool) – Whether ...
- **foreground** (bool) – Whether ...

### Example

```
>>> listener = fbchat.Listener(session, chat_on=True, foreground=True)
```

**listen()**

Run the listening loop continually.

This is a blocking call, that will yield events as they arrive.

This will automatically reconnect on errors, except if the errors are one of *PleaseRefresh* or *NotLoggedIn*.

### Example

Print events continually.

```
>>> for event in listener.listen():
...     print(event)
```

**Return type** Iterable[Event]

**disconnect()**

Disconnect the MQTT listener.

Can be called while listening, which will stop the listening loop.

The *Listener* object should not be used after this is called!

### Example

Stop the listener when receiving a message with the text “/stop”

```
>>> for event in listener.listen():
...     if isinstance(event, fbchat.MessageEvent):
...         if event.message.text == "/stop":
...             listener.disconnect() # Almost the same "break"
```

**Return type** None

**set\_foreground** (*value*)

Set the foreground value while listening.

**Return type** None

**set\_chat\_on** (*value*)

Set the chat\_on value while listening.

**Return type** None

## 4.4.9 Miscellaneous

**class** fbchat.**ThreadLocation** (*Enum*)

Used to specify where a thread is located (inbox, pending, archived, other).

**INBOX** = 'INBOX'

**PENDING** = 'PENDING'

**ARCHIVED** = 'ARCHIVED'

**OTHER** = 'OTHER'

**class** fbchat.**ActiveStatus** (\*, *active*, *last\_active=None*, *in\_game=None*)

**active**

Whether the user is active now

**last\_active**

When the user was last active

**in\_game**

Whether the user is playing Messenger game now

**class** fbchat.**QuickReply** (\*, *payload=None*, *external\_payload=None*, *data=None*,  
*is\_response=False*)

Represents a quick reply.

**payload**

Payload of the quick reply

**external\_payload**

External payload for responses

**data**

Additional data

**is\_response**

Whether it's a response for a quick reply

```
class fbchat.QuickReplyText (*, payload=None, external_payload=None, data=None,
                             is_response=False, title=None, image_url=None)
```

Represents a text quick reply.

**title**

Title of the quick reply

**image\_url**

URL of the quick reply image

```
class fbchat.QuickReplyLocation (*, payload=None, external_payload=None, data=None,
                                  is_response=False)
```

Represents a location quick reply (Doesn't work on mobile).

```
class fbchat.QuickReplyPhoneNumber (*, payload=None, external_payload=None, data=None,
                                       is_response=False, image_url=None)
```

Represents a phone number quick reply (Doesn't work on mobile).

**image\_url**

URL of the quick reply image

```
class fbchat.QuickReplyEmail (*, payload=None, external_payload=None, data=None,
                                is_response=False, image_url=None)
```

Represents an email quick reply (Doesn't work on mobile).

**image\_url**

URL of the quick reply image

```
class fbchat.Poll (*, session, id, question, options, options_count)
```

Represents a poll.

**session**

ID of the poll

**id**

ID of the poll

**question**

The poll's question

**options**

The poll's top few options. The full list can be fetched with *fetch\_options*

**options\_count**

Options count

**fetch\_options()**

Fetch all *PollOption* objects on the poll.

The result is ordered with options with the most votes first.

### Example

```
>>> options = poll.fetch_options()
>>> options[0].text
"An option"
```

**Return type** `Sequence[PollOption]`

**set\_votes** (*option\_ids*, *new\_options=None*)

Update the user's poll vote.

### Parameters

- **option\_ids** (`Iterable[str]`) – Option ids to vote for / keep voting for
- **new\_options** (`Optional[Iterable[str]]`) – New options to add

### Example

```
>>> options = poll.fetch_options()
>>> # Add option
>>> poll.set_votes([o.id for o in options], new_options=["New option"])
>>> # Remove vote from option
>>> poll.set_votes([o.id for o in options if o.text != "Option 1"])
```

```
class fbchat.PollOption(* , id, text, vote, voters, votes_count)
```

Represents a poll option.

**id**

ID of the poll option

**text**

Text of the poll option

**vote**

Whether vote when creating or client voted

**voters**

ID of the users who voted for this poll option

**votes\_count**

Votes count

```
class fbchat.Plan(* , session, id)
```

Base model for plans.

### Example

```
>>> plan = fbchat.Plan(session=session, id="1234")
```

**session**

The session to use when making requests.

**id**

The plan's unique identifier.

**fetch()**

Fetch fresh *PlanData* object.

### Example

```
>>> plan = plan.fetch()
>>> plan.title
"A plan"
```

**Return type** PlanData

**edit** (*name*, *at*, *location\_name=None*, *location\_id=None*)

Edit the plan.

# TODO: Arguments

**delete** ()

Delete the plan.

### Example

```
>>> plan.delete()
```

**participate** ()

Set yourself as GOING/participating to the plan.

### Example

```
>>> plan.participate()
```

**decline** ()

Set yourself as having DECLINED the plan.

### Example

```
>>> plan.decline()
```

**class** fbchat.**PlanData** (\*, *session*, *id*, *time*, *title*, *location=None*, *location\_id=None*, *author\_id=None*, *guests=None*)

Represents data about a plan.

**time**

Plan time, only precise down to the minute

**title**

Plan title

**location**

Plan location name

**location\_id**

Plan location ID

**author\_id**

ID of the plan creator

**guests**

*User* ids mapped to their *GuestStatus*

**property going**

List of the *User* IDs who will take part in the plan.

**Return type** `Sequence[str]`

**property declined**

List of the *User* IDs who won't take part in the plan.

**Return type** `Sequence[str]`

**property invited**

List of the *User* IDs who are invited to the plan.

**Return type** `Sequence[str]`

**class** `fbchat.GuestStatus` (*Enum*)

An enumeration.

**INVITED** = 1

**GOING** = 2

**DECLINED** = 3

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