dhooks-lite Documentation

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CONTENTS

1 Contents **3**

2 Overview **5**

3 Functionality **7**

4 Examples **9**
- 4.1 Hello World . . . 9
- 4.2 Posting with custom avatar . . . 9
- 4.3 Complete example with embeds . . . 10

5 Installation **13**

6 Documentation **15**

7 Contribution **17**

8 API Reference **19**

Python Module Index **25**

Index **27**

Another simple class wrapper for interacting with Discord webhooks.

CHAPTER

ONE

CONTENTS

- *Overview*
- *Functionality*
- *Examples*
- *Installation*
- *Documentation*
- *Contribution*

CHAPTER

TWO

OVERVIEW

dhooks-lite is a library with a set of classes for interacting with Discord webhooks written in Python 3.

This library aims to differentiate itself from similar libraries with the following properties:

- is fully tested
- simple to use (only one way of doing things, same name of attributes and objects as in the official Discord documentation)
- has logging
- requests are automatically retried and have sensible timeouts
- works with older Python versions

CHAPTER

THREE

FUNCTIONALITY

This library provides following functionality:

- Posting messages in Discord channels via webhooks (synchronous calls only)
- Attaching Embeds to messages
- Retrieve send reports and from Discord
- Retrieve HTTP status and headers from Discord, e.g. for implementing rate limit handling

CHAPTER

FOUR

EXAMPLES

Here are some examples on how to use dhooks-lite in your Python scripts.

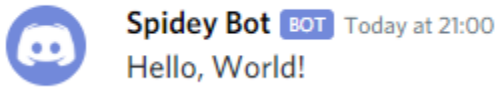
Note that you also find the source code of all examples in the `/examples` folder of this repo.

4.1 Hello World

Minimal example for posting a message.

```
from dhooks_lite import Webhook

hook = Webhook(DISCORD_WEBHOOK_URL)
hook.execute('Hello, World!')
```

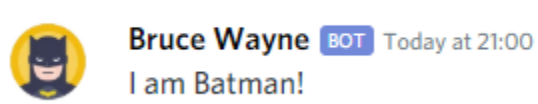


4.2 Posting with custom avatar

In this example we are setting username and avatar.

```
from dhooks_lite import Webhook

hook = Webhook(
    DISCORD_WEBHOOK_URL,
    username='Bruce Wayne',
    avatar_url='https://i.imgur.com/thK8erv.png'
)
hook.execute('I am Batman!')
```



4.3 Complete example with embeds

Finally, here is an example for posting a message with two embeds and using all available features (shortened):

```
import datetime
from dhooks_lite import Webhook, Embed, Footer, Image, Thumbnail, Author, Field

hook = Webhook(DISCORD_WEBHOOK_URL)
e1 = Embed(
    description='Only a few years ago, scientists stumbled upon an electrical current of␣
↪cosmic proportions.(...)',
    title='Universe\'s highest electric current found',
    url='https://www.newscientist.com/article/mg21028174-900-universes-highest-electric-
↪current-found/',
    timestamp=datetime.datetime.utcnow(),
    color=0x5CDBF0,
    footer=Footer(
        'Science Department',
        'https://i.imgur.com/Bgsv04h.png'
    ),
    image=Image('https://i.imgur.com/eis1Y0P.jpg'),
    thumbnail=Thumbnail('https://i.imgur.com/2A4k28x.jpg'),
    author=Author(
        'John Scientist',
        url='https://en.wikipedia.org/wiki/Albert_Einstein',
        icon_url='https://i.imgur.com/1JoHDw1.png'
    ),
    fields=[
        Field('1st Measurement', 'Failed'),
        Field('2nd Measurement', 'Succeeded')
    ]
)
e2 = Embed(description="TOP SECRET - Do not distribute!")

hook.execute(
    'Checkout this new report from the science department:',
    username='Bruce Wayne',
    avatar_url='https://i.imgur.com/thK8erv.png',
    embeds=[e1, e2],
    wait_for_response=True
)
```

Bruce Wayne BOT Today at 21:00

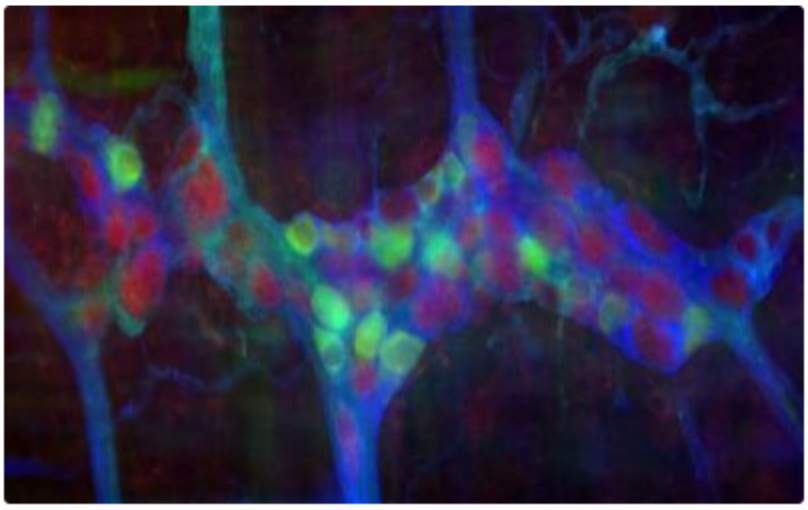
Checkout this new report from the science department:

John Scientist

Universe's highest electric current found

Only a few years ago, scientists stumbled upon an electrical current of cosmic proportions: 10^18 amps, or roughly one trillion lightning bolts. The lightning is thought to originate from an enormous black hole in the center of the galaxy, which has a core that is supposedly a "huge cosmic jet." Apparently, the black hole's huge magnetic field allows it to fire up this lightning bolt through gas and dust to a distance of over one hundred and fifty thousand light years away. And we thought that our galaxy was big, this single lightning bolt is one and a half times the size of it.

1st Measurement	2nd Measurement
Failed	Succeeded



Science Department • Today at 21:00

TOP SECRET - Do not distribute!

CHAPTER

FIVE

INSTALLATION

You can install this library directly from PyPI:

```
pip install dhooks-lite
```

CHAPTER

SIX

DOCUMENTATION

For a full documentation of all classes please see the official docs here.

CHAPTER

SEVEN

CONTRIBUTION

We welcome any contribution!

If you found a bug or have a feature request please raise an issue.

If you want to help further improve this library please feel free to issue a merge request. Please adhere to the following requirements in your change:

- Code should be compliant with PEP8
- Full overage by unit tests
- All classes should be immutable
- All classes and their public methods must have docstring documentation
- All changes must be documented in the Change Log

CHAPTER

EIGHT

API REFERENCE

Another simple class wrapper for interacting with Discord webhooks.

class dhooks_lite.**Author**(*name: str*, *url: str | None = None*, *icon_url: str | None = None*, *proxy_icon_url: str | None = None*)

Author in an Embed

asdict() → dict

returns a dict representation of this object

will not include properties that are None

classmethod from_dict(*obj_dict: dict*)

creates a new object from the given dict

property icon_url: str | None

Return author's icon URL.

property name: str

Return author name.

property proxy_icon_url: str | None

Return author's proxy icon URL.

property url: str | None

Return author URL.

class dhooks_lite.**Embed**(*description: str | None = None*, *title: str | None = None*, *url: str | None = None*, *timestamp: datetime | None = None*, *color: int | None = None*, *footer:* Footer *| None = None*, *image:* Image *| None = None*, *thumbnail:* Thumbnail *| None = None*, *author:* Author *| None = None*, *fields: List[*Field*] | None = None*)

Embedded content for a message.

Initialize an Embed object

Parameters

- **description** – message text for this embed
- **title** – title of embed
- **url** – url of embed
- **timestamp** – timestamp of embed content
- **color** – color code of the embed
- **footer** – footer information

- **image** – image within embed
- **thumbnail** – thumbnail for this embed
- **author** – author information
- **fields** – fields information

Exceptions:
TypeException: when passing variables of wrong type ValueException: when embed size exceeds hard limit

asdict() → dict
returns a dict representation of this object

will not include properties that are None

property author: *Author* | None
Return embed's author or None.

property color: int | None
Return embed's color or None.

property description: str | None
Return embed's description.

property fields: List[*Field*] | None
Return embed's fields or None.

property footer: *Footer* | None
Return embed's footer or None.

classmethod from_dict(*obj_dict: dict*)
creates a new object from the given dict

property image: *Image* | None
Return embed's image or None.

property thumbnail: *Thumbnail* | None
Return embed's thumbnail or None.

property timestamp: datetime | None
Return embed's timestamp or None.

property title: str | None
Return embed's title or None.

property type: str | None
Return embed's type or None.

property url: str | None
Return embed's URL or None.

class dhooks_lite.**Field**(*name: str*, *value: str*, *inline: bool = True*)
Field in an Embed

asdict() → dict
returns a dict representation of this object

will not include properties that are None

classmethod from_dict(*obj_dict: dict*)

creates a new object from the given dict

property inline: bool | None

Return field inline.

property name: str

Return field name.

property value: str

Return field value.

class dhooks_lite.**Footer**(*text: str*, *icon_url: str | None = None*, *proxy_icon_url: str | None = None*)

Footer in an Embed

asdict() → dict

returns a dict representation of this object

will not include properties that are None

classmethod from_dict(*obj_dict: dict*)

creates a new object from the given dict

property icon_url: str | None

Return footer's icon URL.

property proxy_icon_url: str | None

Return footer's proxy icon URL.

property text: str

Return Footer text.

class dhooks_lite.**Image**(*url: str*, *proxy_url: str | None = None*, *height: int | None = None*, *width: int | None = None*)

Image in an Embed

asdict() → dict

returns a dict representation of this object

will not include properties that are None

classmethod from_dict(*obj_dict: dict*)

creates a new object from the given dict

property height: int | None

Return image height.

property proxy_url: str | None

Return image's proxy URL.

property url: str

Return image URL.

property width: int | None

Return image width.

class dhooks_lite.**Thumbnail**(*url: str*, *proxy_url: str | None = None*, *height: int | None = None*, *width: int | None = None*)

Thumbnail in an Embed.

asdict() → dict

returns a dict representation of this object

will not include properties that are None

classmethod from_dict(*obj_dict: dict*)

creates a new object from the given dict

property height: int | None

Return image height.

property proxy_url: str | None

Return image's proxy URL.

property url: str

Return image URL.

property width: int | None

Return image width.

class dhooks_lite.**UserAgent**(*name: str*, *url: str*, *version: str*)

Defines the content of the user agent string send to Discord

Parameters

- **name** – Name of the application
- **url** – Homepage URL of the application
- **version** – Version of the application

property name: str

Return user agent's name.

property url: str

Return user agent's URL.

property version: str

Return user agent's version.

class dhooks_lite.**Webhook**(*url: str*, *username: str | None = None*, *avatar_url: str | None = None*, *user_agent: UserAgent | None = None*)

A Discord Webhook

Initialize a Webhook object

Parameters

- **url** – Discord webhook url
- **username** – Override default user name of the webhook
- **avatar_url** – Override default avatar icon of the webhook with image URL
- **user_agent** – User agent to be send with every request to Discord.

property avatar_url: str | None

Return the avatar's URL for this webhook.

execute(*content: str | None = None*, *embeds: List[Embed] | None = None*, *tts: bool | None = None*, *username: str | None = None*, *avatar_url: str | None = None*, *wait_for_response: bool | None = False*, *max_retries: int = 3*) → *WebhookResponse*

Posts a message to this webhook

Parameters

- **content** – Text of this message
- **embeds** – List of Embed objects to be attached to this message
- **tts** – Whether or not the message will use text-to-speech
- **username** – Overrides default user name of the webhook
- **avatar_url** – Override default avatar icon of the webhook with image URL
- **wait_for_response** – Whether or not to wait for a send report from Discord
- **max_retries** – maximum number of retries on errors. 0 turns it off.

Exceptions:

ValueError: on invalid input ConnectionError: on network issues Timeout: if timeouts are exceeded TooManyRedirects: if configured redirect limit is exceeded

Returns

response from webhook as WebhookResponse object

property url: str

Return URL for this webhook.

property user_agent: *UserAgent*

Return the user agent for this webhook.

property username: str | None

Return username for this webhook.

class dhooks_lite.**WebhookResponse**(*headers: dict*, *status_code: int*, *content: dict | None = None*)

response from a Discord Webhook

property content: dict | None

content of the response, e.g. send report

will be empty if not waited for response from Discord

property headers: dict

response headers

property status_code: int

HTTP status code of the response

property status_ok: bool

whether the response was ok based on its HTTP status

PYTHON MODULE INDEX

d

dhooks_lite, 19

INDEX

A

asdict() (*dhooks_lite.Author method*), 19
asdict() (*dhooks_lite.Embed method*), 20
asdict() (*dhooks_lite.Field method*), 20
asdict() (*dhooks_lite.Footer method*), 21
asdict() (*dhooks_lite.Image method*), 21
asdict() (*dhooks_lite.Thumbnail method*), 21
Author (*class in dhooks_lite*), 19
author (*dhooks_lite.Embed property*), 20
avatar_url (*dhooks_lite.Webhook property*), 22

C

color (*dhooks_lite.Embed property*), 20
content (*dhooks_lite.WebhookResponse property*), 23

D

description (*dhooks_lite.Embed property*), 20
dhooks_lite
    module, 19

E

Embed (*class in dhooks_lite*), 19
execute() (*dhooks_lite.Webhook method*), 22

F

Field (*class in dhooks_lite*), 20
fields (*dhooks_lite.Embed property*), 20
Footer (*class in dhooks_lite*), 21
footer (*dhooks_lite.Embed property*), 20
from_dict() (*dhooks_lite.Author class method*), 19
from_dict() (*dhooks_lite.Embed class method*), 20
from_dict() (*dhooks_lite.Field class method*), 20
from_dict() (*dhooks_lite.Footer class method*), 21
from_dict() (*dhooks_lite.Image class method*), 21
from_dict() (*dhooks_lite.Thumbnail class method*), 22

H

headers (*dhooks_lite.WebhookResponse property*), 23
height (*dhooks_lite.Image property*), 21
height (*dhooks_lite.Thumbnail property*), 22

I

icon_url (*dhooks_lite.Author property*), 19
icon_url (*dhooks_lite.Footer property*), 21
Image (*class in dhooks_lite*), 21
image (*dhooks_lite.Embed property*), 20
inline (*dhooks_lite.Field property*), 21

M

module
    dhooks_lite, 19

N

name (*dhooks_lite.Author property*), 19
name (*dhooks_lite.Field property*), 21
name (*dhooks_lite.UserAgent property*), 22

P

proxy_icon_url (*dhooks_lite.Author property*), 19
proxy_icon_url (*dhooks_lite.Footer property*), 21
proxy_url (*dhooks_lite.Image property*), 21
proxy_url (*dhooks_lite.Thumbnail property*), 22

S

status_code (*dhooks_lite.WebhookResponse property*), 23
status_ok (*dhooks_lite.WebhookResponse property*), 23

T

text (*dhooks_lite.Footer property*), 21
Thumbnail (*class in dhooks_lite*), 21
thumbnail (*dhooks_lite.Embed property*), 20
timestamp (*dhooks_lite.Embed property*), 20
title (*dhooks_lite.Embed property*), 20
type (*dhooks_lite.Embed property*), 20

U

url (*dhooks_lite.Author property*), 19
url (*dhooks_lite.Embed property*), 20
url (*dhooks_lite.Image property*), 21
url (*dhooks_lite.Thumbnail property*), 22
url (*dhooks_lite.UserAgent property*), 22

url (*dhooks_lite.Webhook property*), 23
user_agent (*dhooks_lite.Webhook property*), 23
UserAgent (*class in dhooks_lite*), 22
username (*dhooks_lite.Webhook property*), 23

V

value (*dhooks_lite.Field property*), 21
version (*dhooks_lite.UserAgent property*), 22

W

Webhook (*class in dhooks_lite*), 22
WebhookResponse (*class in dhooks_lite*), 23
width (*dhooks_lite.Image property*), 21
width (*dhooks_lite.Thumbnail property*), 22