

---

# **BrawlStats Documentation**

***Release v4.0.4***

**SharpBit**

**Jul 22, 2020**



---

## Contents

---

|          |                                     |           |
|----------|-------------------------------------|-----------|
| <b>1</b> | <b>Features</b>                     | <b>3</b>  |
| <b>2</b> | <b>Installation</b>                 | <b>5</b>  |
| 2.1      | API Reference . . . . .             | 5         |
| 2.1.1    | Data Models . . . . .               | 7         |
| 2.1.2    | Attributes of Data Models . . . . . | 7         |
| 2.1.3    | Player . . . . .                    | 8         |
| 2.1.4    | Club . . . . .                      | 8         |
| 2.1.5    | Members . . . . .                   | 8         |
| 2.1.6    | Ranking . . . . .                   | 9         |
| 2.1.7    | Brawler . . . . .                   | 9         |
| 2.1.8    | Star Power . . . . .                | 10        |
| 2.1.9    | Battle Logs . . . . .               | 10        |
| 2.1.10   | Brawlers . . . . .                  | 11        |
| 2.2      | Exceptions . . . . .                | 11        |
| 2.3      | Setting Up Logging . . . . .        | 12        |
| <b>3</b> | <b>Indices</b>                      | <b>13</b> |
|          | <b>Index</b>                        | <b>15</b> |



- This library is a sync and async wrapper for the Brawl Stars API.
- Python 3.5.3 or later is required.



# CHAPTER 1

---

## Features

---

- Easy to use with an object oriented design.
- Use the same client for sync and async usage.
- Get a player profile and battlelog.
- Get a club and its members.
- Get the top 200 rankings for players, clubs, or a specific brawler.
- Get information about maps and more!
- Get information about current available brawlers.





Install the latest stable build:

```
pip install brawlstats
```

## 2.1 API Reference

**class** `brawlstats.Client` (*token, session=None, timeout=30, is\_async=False, \*\*options*)

This is a sync/async client class that lets you access the Brawl Stars API

### Parameters

- **token** (*str*) – The API Key that you can get from <https://developer.brawlstars.com>
- **timeout** (*Optional[int] = 30*) – How long to wait in seconds before shutting down requests.
- **is\_async** (*Optional[bool] = False*) – Setting this to `True` makes the client async. Default is `False`
- **session** (*Optional[Union[requests.Session, aiohttp.ClientSession]] = None*) – Use a current session or a make new one.
- **loop** (*Optional[asyncio.window\_events.\_WindowsSelectorEventLoop]*) – The event loop to use for asynchronous operations. Defaults to `None`, in which case the default event loop is `asyncio.get_event_loop()`.
- **connector** (*Optional[aiohttp.TCPConnector]*) – Pass a `TCPConnector` into the client (`aiohttp`). Defaults to `None`.
- **debug** (*Optional[bool] = False*) – Whether or not to log info for debugging.
- **prevent\_ratelimit** (*Optional[bool] = False*) – Whether or not to wait between requests to prevent being ratelimited.

- **base\_url** (*Optional[str] = None*) – Sets a different base URL to make request to.

**\_\_ainit\_\_** ()

Task created to run *get\_brawlers* asynchronously

**get\_battle\_logs** (*tag: brawlstats.utils.bstag*)

Get a player's battle logs.

**Parameters**

- **tag** (*str*) – A valid player tag. Valid characters: 0289PYLQGRJCUV
- **BattleLog** (*Returns*) –

**get\_brawlers** ()

Get available brawlers and information about them.

No parameters

Returns Brawlers

**get\_club** (*tag: brawlstats.utils.bstag*)

Get a club's stats.

**Parameters**

- **tag** (*str*) – A valid club tag. Valid characters: 0289PYLQGRJCUV
- **Club** (*Returns*) –

**get\_club\_members** (*tag: brawlstats.utils.bstag*)

Get the members of a club.

**Parameters**

- **tag** (*str*) – A valid club tag. Valid characters: 0289PYLQGRJCUV
- **Members** (*Returns*) –

**get\_constants** (*key=None*)

Gets Brawl Stars constants extracted from the app.

**Parameters**

- **key** (*Optional[str] = None*) – Any key to get specific data.
- **Constants** (*Returns*) –

**get\_player** (*tag: brawlstats.utils.bstag*)

Get a player's stats.

**Parameters**

- **tag** (*str*) – A valid player tag. Valid characters: 0289PYLQGRJCUV
- **Player** (*Returns*) –

**get\_profile** (*tag: brawlstats.utils.bstag*)

Get a player's stats.

**Parameters**

- **tag** (*str*) – A valid player tag. Valid characters: 0289PYLQGRJCUV
- **Player** (*Returns*) –

**get\_rankings** (\*, ranking: str, region=None, limit: int = 200, brawler=None)

Get the top count players/clubs/brawlers.

#### Parameters

- **ranking** (str) – The type of ranking. Must be “players”, “clubs”, “brawlers”. Anything else will return a ValueError.
- **region** (Optional[str]) – The region to retrieve from. Must be a 2 letter country code.
- **limit** (Optional[int] = 200) – The number of top players or clubs to fetch. If count > 200, it will return a ValueError.
- **brawler** (Optional[Union[str, int]] = None) – The brawler name or ID.
- **Ranking** (Returns) –

## 2.1.1 Data Models

**class** brawlstats.models.**Player** (\*args, \*\*kwargs)

Returns a full player object with all of its attributes.

**get\_club** ()

Gets the player’s club.

Returns Optional[Club]

**class** brawlstats.models.**Club** (client, data)

Returns a full club object with all of its attributes.

**get\_members** ()

Gets the members of a club.

Returns Members

**class** brawlstats.models.**Ranking** (client, data)

Returns a player or club ranking that contains a list of players or clubs.

**class** brawlstats.models.**BattleLog** (client, data)

Returns a full player battle object with all of its attributes.

**class** brawlstats.models.**Members** (client, data)

Returns the members in a club.

**class** brawlstats.models.**Constants** (client, data)

Returns some Brawl Stars constants.

**class** brawlstats.models.**Brawlers** (client, data)

Returns list of available brawlers and information about them.

## 2.1.2 Attributes of Data Models

Note: These are subject to change at any time. Visit <https://developer.brawlstars.com/#/documentation> to view up-to-date information on the API.

### 2.1.3 Player

A full player object (all its statistics)

Attributes:

| Name                                     | Type          |
|------------------------------------------|---------------|
| tag                                      | str           |
| name                                     | str           |
| name_color                               | str           |
| trophies                                 | int           |
| highest_trophies                         | int           |
| power_play_points                        | int           |
| highest_power_play_points                | int           |
| exp_level                                | int           |
| exp_points                               | int           |
| is_qualified_from_championship_challenge | bool          |
| x3vs3_victories                          | int           |
| team_victories                           | int           |
| solo_victories                           | int           |
| duo_victories                            | int           |
| best_robo_rumble_time                    | int           |
| best_time_as_big_brawler                 | int           |
| club.tag                                 | str           |
| club.name                                | str           |
| brawlers                                 | List[Brawler] |

### 2.1.4 Club

A full club object to get a club's statistics. In order to get this, you must get it from the client or a player object.

Attributes:

| Name              | Type         |
|-------------------|--------------|
| tag               | str          |
| name              | str          |
| description       | str          |
| type              | str          |
| trophies          | int          |
| required_trophies | int          |
| members           | List[Member] |

### 2.1.5 Members

Returns a list of club members. Get this by accessing Club.members or Club.get\_members()

```
members = club.members
print(members[0].name, members[0].role) # prints best player's name and role (sorted
↳by trophies)
```

Attributes:

| Name       | Type |
|------------|------|
| tag        | str  |
| name       | str  |
| name_color | str  |
| role       | str  |
| trophies   | int  |

### 2.1.6 Ranking

Returns a list of top players, clubs, or brawlers. To access this, do `ranking[index]`

Player/Brawler attributes:

| Name       | Type |
|------------|------|
| tag        | str  |
| name       | str  |
| name_color | str  |
| trophies   | int  |
| rank       | int  |
| club.name  | str  |

Club attributes:

| Name         | Type |
|--------------|------|
| tag          | str  |
| name         | str  |
| trophies     | int  |
| rank         | int  |
| member_count | int  |

### 2.1.7 Brawler

Returns a brawler object with the following attributes. You can retrieve a profile's brawler info by getting `Profile.brawlers`

```
brawlers = profile.brawlers
top_brawler = brawlers[0] # first index in list = highest trophies
print(top_brawler.name, top_brawler.trophies) # prints best brawler's name and
↳ trophies
```

Attributes:

| Name             | Type     |
|------------------|----------|
| id               | int      |
| name             | str      |
| power            | int      |
| rank             | int      |
| trophies         | int      |
| highest_trophies | int      |
| star_powers      | List[SP] |

## 2.1.8 Star Power

Attributes:

| Name | Type |
|------|------|
| id   | int  |
| name | str  |

## 2.1.9 Battle Logs

Returns a list of objects with this structure:

Attributes:

```
{
  "battleTime": "20190706T151526.000Z",
  "event": {
    "id": 15000126,
    "mode": "duoShowdown",
    "map": "Royal Runway"
  },
  "battle": {
    "mode": "duoShowdown",
    "type": "ranked",
    "rank": 1,
    "trophyChange": 9,
    "teams": [
      [
        {
          "tag": "#Y2QPGG",
          "name": "Lex_YouTube",
          "brawler": {
            "id": 16000005,
            "name": "SPIKE",
            "power": 10,
            "trophies": 495
          }
        },
        {
          "tag": "#8Q229LJY",
          "name": "Brandon",
          "brawler": {
            "id": 16000003,
            "name": "BROCK",
            "power": 10,
            "trophies": 495
          }
        }
      ],
      [
        {
          "tag": "#29RGL0QJ0",
          "name": "smallwhitepeen1",
          "brawler": {
            "id": 16000007,
            "name": "JESSIE",
            "power": 7,
            "trophies": 486
          }
        }
      ]
    ]
  }
}
```

(continues on next page)

(continued from previous page)

```
    }
  ],
  [
    {
      "tag": "#CYLVL8LY",
      "name": "TST|ROYER™",
      "brawler": {
        "id": 16000019,
        "name": "PENNY",
        "power": 8,
        "trophies": 541
      }
    },
    {
      "tag": "#8P2URCR0",
      "name": "ANOTHER",
      "brawler": {
        "id": 16000023,
        "name": "LEON",
        "power": 8,
        "trophies": 559
      }
    },
    {
      "tag": "#8LRY92QP",
      "name": "Marshmello",
      "brawler": {
        "id": 16000021,
        "name": "GENE",
        "power": 7,
        "trophies": 448
      }
    }
  ]
}
```

2.1.10 Brawlers

Returns list of available brawlers and information about them with this structure:

Attributes:

```
[
  Brawler
]
```

2.2 Exceptions

The possible exceptions thrown by the library.

**exception** `brawlstats.errors.RequestError (code, message)`

The base class for all errors.

**exception** `brawlstats.errors.Forbidden (code, url, message)`

Raised if your API Key is invalid.

**exception** `brawlstats.errors.NotFoundError (code, **kwargs)`

Raised if an invalid player tag or club tag has been passed.

**exception** `brawlstats.errors.RateLimitError (code, url)`

Raised when the rate limit is reached.

**exception** `brawlstats.errors.UnexpectedError (url, code, text)`

Raised if an unknown error has occurred.

**exception** `brawlstats.errors.ServerError (code, url)`

Raised if the API is down.

## 2.3 Setting Up Logging

*brawlstats* logs errors and debug information via the `logging` python module. It is strongly recommended that the logging module is configured, as no errors or warnings will be output if it is not set up. Configuration of the logging module can be as simple as

```
import logging

logging.basicConfig(level=logging.DEBUG)
```

Placed at the start of the application. This will output the logs from *brawlstats* as well as other libraries that uses the logging module directly to the console.

The optional `level` argument specifies what level of events to log out and can any of `CRITICAL`, `ERROR`, `WARNING`, `INFO`, and `DEBUG` and if not specified defaults to `WARNING`.

More advanced setups are possible with the logging module. For example, to write the logs to a file called `brawlstars.log` instead of outputting them to the console, the following snippet can be used:

```
import brawlstats
import logging

logger = logging.getLogger('brawlstats')
logger.setLevel(logging.DEBUG)
handler = logging.FileHandler(filename='brawlstars.log', encoding='utf-8', mode='w')
handler.setFormatter(logging.Formatter('%(asctime)s: %(levelname)s: %(name)s:
↳ %(message)s'))
logger.addHandler(handler)
```

This is recommended, especially at verbose levels such as `INFO`, and `DEBUG` as there are a lot of events logged and it would clog the stdout of your program.

Currently, the following things are logged:

- `DEBUG`: API Requests

For more information, check the documentation and tutorial of the logging module.



## CHAPTER 3

---

### Indices

---

- `genindex`
- `search`



## Symbols

`__ainit__()` (*brawlstats.Client method*), 6

## B

`BattleLog` (*class in brawlstats.models*), 7

`Brawlers` (*class in brawlstats.models*), 7

## C

`Client` (*class in brawlstats*), 5

`Club` (*class in brawlstats.models*), 7

`Constants` (*class in brawlstats.models*), 7

## F

`Forbidden`, 12

## G

`get_battle_logs()` (*brawlstats.Client method*), 6

`get_brawlers()` (*brawlstats.Client method*), 6

`get_club()` (*brawlstats.Client method*), 6

`get_club()` (*brawlstats.models.Player method*), 7

`get_club_members()` (*brawlstats.Client method*), 6

`get_constants()` (*brawlstats.Client method*), 6

`get_members()` (*brawlstats.models.Club method*), 7

`get_player()` (*brawlstats.Client method*), 6

`get_profile()` (*brawlstats.Client method*), 6

`get_rankings()` (*brawlstats.Client method*), 6

## M

`Members` (*class in brawlstats.models*), 7

## N

`NotFoundError`, 12

## P

`Player` (*class in brawlstats.models*), 7

## R

`Ranking` (*class in brawlstats.models*), 7

`RateLimitError`, 12

`RequestError`, 11

## S

`ServerError`, 12

## U

`UnexpectedError`, 12