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# hypixel.py Documentation

*Release 0.6.5*

**Snuggle**

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This is a simple, unofficial Python library which allows you to get values from the Hypixel-API.

It is open-source and hosted on [GitHub](#).

Contents:



# CHAPTER 1

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## About

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This is a simple Python library which allows you to get values from the [Hypixel Public API](#). With this library, you can get statistics and information from most things on the Hypixel Network.

It was created for free by [Snuggle](#), a volunteer-moderator for the network.

You should totally take a look at the [GitLub page](#), too!

## 1.1 Installation/Usage

You should use pip to install this library, using the following command: `pip install hypixel`. If you're unsure how, please search for a good tutorial online.

Once `hypixel.py` is actually installed, you can type `import hypixel` at the top of your Python file to import the library. You should then be able to use `hypixel.setKeys(['API_KEY_HERE'])` to set your API key.

You can then do `hypixel.Player('Snuggle')` to create a Player-object and you can use any of the functions that are documented within the [API Reference](#) or even take a look at some of the provided [Examples](#).

## 1.2 Project Idea

I was developing a Discord bot for Hypixel and I was a massive fan of the Discord Python API I was using, [Discord.py](#). After a few days of creating this bot, I realised that a lot of the functions I was using could be used by other people.

The original [Hypixel-bot](#) was a complete mess of spaghetti code, so I decided to split that project in twain. One project for all the Hypixel-related functions, `hypixel.py`, and a rewritten [Hypixel-bot](#) that actually uses the API.

I have taken a lot of inspiration from how [Discord.py](#) had organised their documentation and code, and started using it as a way to learn how to actually create something for people to use.

From this, I have learnt how to actually use GitHub, how to publish packages to [PyPi/pip](#), how to use automated/CI testing, how to actually document code (Automatically, too!) and countless more things about Python as a language.

This is my first publically-released project, I'd love any feedback if you actually use this!

## 1.3 Technical Details

This library sends simple GET requests to Hypixel's REST API and serves as an object-oriented wrapper for people developing in Python, and who wish to use Hypixel's API. Also comes with a simple implementation of caching retrieved JSON and utilizes asynchronous requests for extra speed.



This section outlines the functions and methods that are available as part of `hypixel.py`. It is automatically generated and updated from the Docstrings present within the source.

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**Note:** This documentation is designed to be as easy to read and understand as possible. It aims to be a comprehensive reference for the API, but please note that there may be missing functions or methods.

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## 2.1 Version Information

There is one main way to get the version for this library.

`hypixel.__version__`  
Return the version number as a string. Example: `'0.6.5'`

## 2.2 Miscellaneous Functions

`hypixel.setKeys(api_keys)`

This function is used to set your Hypixel API keys. It also checks that they are valid/working.

**Raises** `HypixelAPIError` – If any of the keys are invalid or don't work, this will be raised.

**Parameters** `api_keys` (*list*) – A list of the API keys that you would like to use.

Example: `['740b8cf8-8aba-f2ed-f7b10119d28']`.

`hypixel.setCacheTime(seconds)`

This function sets how long the request cache should last, in seconds.

**Parameters** `seconds` (*float*) – How long you would like Hypixel-API requests to be cached for.

## 2.3 Player

**class** `hypixel.Player(UUID)`

This class represents a player on Hypixel as a single object. A player has a UUID, a username, statistics etc.

**Raises** `PlayerNotFoundException` – If the player cannot be found, this will be raised.

**Parameters** `Username/UUID (string)` – Either the UUID or the username (Deprecated) for a Minecraft player.

**JSON**

The raw JSON received from the Hypixel API.

**Type** `string`

**UUID**

The player's UUID.

**Type** `string`

**getGuildID()**

This function is used to get a GuildID from a player.

**getLevel()**

This function calls leveling.py to calculate a player's network level.

**getName()**

Just return player's name.

**getPlayerInfo()**

This is a simple function to return a bunch of common data about a player.

**getRank()**

This function returns a player's rank, from their data.

**getSession()**

This function is used to get a player's session information.

## 2.4 Guild

**class** `hypixel.Guild(GuildID)`

This class represents a guild on Hypixel as a single object. A guild has a name, members etc.

**Parameters** `GuildID (string)` – The ID for a Guild. This can be found by using `Player.getGuildID()`.

**JSON**

The raw JSON received from the Hypixel API.

**Type** `string`

**GuildID**

The Guild's GuildID.

**Type** `string`

**getMembers()**

This function enumerates all the members in a guild. Mojang's API rate-limits this weirdly. This is an extremely messy helper function. Use at your own risk.

## 2.5 Exceptions

**exception** `hypixel.HypixelAPIError`

Simple exception if something's gone very wrong and the program can't continue.

**exception** `hypixel.PlayerNotFoundException`

Simple exception if a player/UUID is not found. This exception can usually be ignored. You can catch this exception with `except hypixel.PlayerNotFoundException:`



## CHAPTER 3

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### What's New

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This page shows what has changed in different versions of the API.

#### 3.1 v0.7.7 - v0.7.8

Switched the project over to GitLab. Made a few changes here and there, mostly updated documentation.

#### 3.2 v0.6.5

Implemented URL-by-URL caching. This makes everything suuuuper fast. It doesn't cache any key-requests and cleans the cache over time. The default caching time is 60 seconds, but you can change this by using `hypixel.setCacheTime(60.0)`.

Cached single-requests usually take ~0.005s and non-cached single-requests take ~0.5s in basic tests.

#### 3.3 v0.6.0

Made all requests asynchronous! This has reduced the loading time of seven players, for example, from ~14s load time to ~5s load time.

#### 3.4 v0.5.0

This is a pretty polished version now. Just a few things to clean-up and a few improvements. It's relatively slow, though. The next minor version number, v0.6.x, will focus primarily on speed.

## 3.5 v0.4.0

Create Travis Ci tests and simplified use of the library.

### Old:

```
variable = hypixel.Player('username').getJSON()  
print(variable.getLevel())  
>>> 96.3424329924  
print(variable.getJSON.JSON['networkExp'])  
>>> 4723883
```

### New:

```
variable = hypixel.Player('username')  
print(variable.getLevel())  
>>> 96.3424329924  
print(variable.JSON['networkExp'])  
>>> 4723883
```

#### 4.1 Simple Example

This is a super-simple example that just gets a player's username, level and rank. [View simpleExample.py](#).

#### 4.2 Advanced Example

This is a more advanced example that asks for input of a player's name/uuid and prints a bit more information. [View advancedExample.py](#).

#### 4.3 Game Statistics Example

To be added.

#### 4.4 Guild Example

To be added.





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## Frequently Asked Questions

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### 5.1 How do I use this?

Ahah! A perfect guide has been written for you already! Please see *usage information*.

### 5.2 Is it Hypixel.py or hypixel.py or HyPiXeL.pY?

It is definitely “hypixel.py”. Nothing else. Everything else is wrong. >:C

### 5.3 Who the heck are you?

I’m Snuggle! A moderator for the Hypixel Network and a bit more. I’m also known for my [Hypixel-bot](#) project and you can see more information about me at <https://sprinkly.net>.

### 5.4 Can I contribute?

You are completely free to contribute, if you’d like! It would really help out and will help make this library as useful as possible.

Not all code and contributions can be added, though, for various reasons. I will try my best to accept as many useful contributions as possible, but please don’t be upset if your pull request doesn’t get merged.

I’d like to thank you for contributing and I’m sorry for my messy code.



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