
gramhopper Documentation

Release 1.0.7

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Feb 28, 2022

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1.1 Event Streak Trigger

1.1.1 event_streak

```
class EventStreakTrigger (streak_timeout_sec: float, event_count: int,
                          counting_event_trigger: gramhopper.triggers.basic_triggers.BaseTrigger,
                          resetting_event_trigger: Optional[gramhopper.triggers.basic_triggers.BaseTrigger] = None)
```

Event-streak trigger. This is used to trigger a rule in a case of a streak of events, for example when a certain phrase is written a few times in a row.

This trigger gets a defined trigger as a “counting” event and optionally another one as a “resetting” event (to stop counting). It also gets the count of events to be considered a streak, and the timeout of the streak (the allowed time period between the first event and the last event in the streak).

```
__init__ (streak_timeout_sec: float, event_count: int, counting_event_trigger: gramhopper.triggers.basic_triggers.BaseTrigger,
          resetting_event_trigger: Optional[gramhopper.triggers.basic_triggers.BaseTrigger] = None)
```

Constructs the trigger.

Parameters

- **streak_timeout_sec** – The allowed time period between the first event and the last event in the streak
- **event_count** – The count of events to be considered a streak
- **counting_event_trigger** – A trigger to identify an event that counts towards the streak
- **resetting_event_trigger** – A trigger to identify an event that resets the streak

1.2 Filter Triggers

class FilterTriggers

Text-based triggers.

chat = <class 'gramhopper.triggers.filter_triggers._ChatFilterBasedTrigger'>

A user filter trigger. See more in [_ChatFilterBasedTrigger](#).

language = <class 'gramhopper.triggers.filter_triggers._LanguageFilterBasedTrigger'>

A user filter trigger. See more in [_LanguageFilterBasedTrigger](#).

message_type = <class 'gramhopper.triggers.filter_triggers._MessageTypeFilterBasedTrigger'>

A user filter trigger. See more in [_MessageTypeFilterBasedTrigger](#).

user = <class 'gramhopper.triggers.filter_triggers._UserFilterBasedTrigger'>

A user filter trigger. See more in [_UserFilterBasedTrigger](#).

1.2.1 filter.user

class _UserFilterBasedTrigger (*nickname: str = None, user_id: int = None, username: str = None*)

A user filter trigger. This is used to trigger a rule when an incoming message comes from a specific user.

__init__ (*nickname: str = None, user_id: int = None, username: str = None*)

Constructs the trigger. *nickname* can be used if such a nickname is defined in users.json file. Otherwise, one of *user_id* and *username* should be specified.

Parameters

- **message_filter** – The filter to test if the message passes through
- **nickname** – The nickname of the user to pass messages from.
- **user_id** – The Telegram user ID of the user to pass messages from.
- **username** – The Telegram username of the user to pass messages from.

1.2.2 filter.chat

class _ChatFilterBasedTrigger (*chat_id: int = None, username: str = None*)

A chat filter trigger. This is used to trigger a rule when an incoming message is in a specific chat.

__init__ (*chat_id: int = None, username: str = None*)

Constructs the trigger. One and only one of *chat_id* and *username* should be specified.

Parameters

- **chat_id** – The Telegram chat ID of the chat to pass messages from.
- **username** – The Telegram username whose chat to pass messages from.

1.2.3 filter.language

class _LanguageFilterBasedTrigger (*lang: Union[str, List[str]]*)

A language filter trigger. This is used to trigger a rule when an incoming message is in a specific language.

__init__ (*lang: Union[str, List[str]]*)

Constructs the trigger.

Parameters `lang` – The language code/s in which to pass messages.

1.2.4 filter.message_type

class `_MessageTypeFilterBasedTrigger` (*message_type*)

A message type filter trigger. This is used to trigger a rule when an incoming message is of a specific type.

`__init__` (*message_type*)

Constructs the trigger.

Parameters `message_type` – The message type of which to filter to pass messages, for example: 'photo', 'status_update.left_chat_member' or 'document'. See more in `telegram.ext.filters.Filters`.

1.3 Text Triggers

class `TextTriggers`

Text-based triggers.

`has_exact_word` = <class 'gramhopper.triggers.text_triggers._HasExactWordTrigger'>

A word trigger. See more in `_HasExactWordTrigger`.

`has_substring` = <class 'gramhopper.triggers.text_triggers._HasSubstringTrigger'>

A substring trigger. See more in `_HasSubstringTrigger`.

`regex` = <class 'gramhopper.triggers.text_triggers._RegExpTrigger'>

A regexp-based trigger. See more in `_RegExpTrigger`.

1.3.1 text.has_exact_word

class `_HasExactWordTrigger` (*word: Union[str, List[str]]*)

Word trigger - the same as substring trigger, but for exact words search. This is used to trigger a rule when a certain word (or one of a list of words) exists in an incoming message.

`__init__` (*word: Union[str, List[str]]*)

Constructs the trigger.

Parameters `word` – The word/s to search in the message

1.3.2 text.has_substring

class `_HasSubstringTrigger` (*substring: Union[str, List[str]], exact: bool = False*)

Substring trigger. This is used to trigger a rule when a certain substring (or one of a list of substrings) exists in an incoming message.

`__init__` (*substring: Union[str, List[str]], exact: bool = False*)

Constructs the trigger.

Parameters

- **substring** – The substring/s to search in the message
- **exact** – Whether the exact substring should appear (as a whole word) in the message

1.3.3 text.regex

class `_RegExpTrigger` (*pattern: str*)

Regular-expression-based trigger. This is used to trigger a rule when an incoming message matches the given pattern.

`__init__` (*pattern: str*)

Constructs the trigger.

Parameters `pattern` – The pattern to test the message’s match with

2.1 Match Responses

There are some matched-based responses, which should normally come after a regexp trigger

class MatchResponses

Regexp-based responses. These responses use the regexp match result from the trigger, as well as the given template, to build the response text.

message = <class 'gramhopper.responses.match_responses._MatchMessageResponse'>

A regexp-based **message** response. See more in [_MatchMessageResponse](#).

reply = <class 'gramhopper.responses.match_responses._MatchReplyResponse'>

A regexp-based **reply** response. See more in [_MatchReplyResponse](#).

2.1.1 match.message

class _MatchMessageResponse (*template: str, parse_mode: Optional[str] = None*)

A regexp-based response in which the response method is a normal message

__init__ (*template: str, parse_mode: Optional[str] = None*)

Constructs the response.

Parameters

- **template** – The template to use when building the response text
- **parse_mode** – Optional parse mode for the message. Read more in [telegram.ParseMode](#).

2.1.2 match.reply

class _MatchReplyResponse (*template: str, parse_mode: Optional[str] = None*)

A regexp-based response in which the response method is a reply to the triggering message

```
__init__(template: str, parse_mode: Optional[str] = None)
    Constructs the response.
```

Parameters

- **template** – The template to use when building the response text
- **parse_mode** – Optional parse mode for the message. Read more in [telegram.ParseMode](#).

2.2 Preset Responses

class PresetResponses

Preset responses. These responses use a preset response/s to respond with. If a list of responses is given, one of them will be chosen randomly for each response.

```
document = <class 'gramhopper.responses.preset_responses._PresetDocumentResponse'>
    A preset document response. See more in \_PresetDocumentResponse.
```

```
message = <class 'gramhopper.responses.preset_responses._PresetMessageResponse'>
    A preset message response. See more in \_PresetMessageResponse.
```

```
reply = <class 'gramhopper.responses.preset_responses._PresetReplyResponse'>
    A preset reply response. See more in \_PresetReplyResponse.
```

2.2.1 preset.document

```
class _PresetDocumentResponse (preset_response: Union[str, telegram.files.document.Document],
                                parse_mode: Optional[str] = None)
```

A preset response in which the response method is a document

```
__init__(preset_response: Union[str, telegram.files.document.Document], parse_mode: Optional[str] = None)
    Constructs the response.
```

Parameters

- **preset_response** – The preset document URL or document object
- **parse_mode** – Optional parse mode for the message. Read more in [telegram.ParseMode](#).

2.2.2 preset.message

```
class _PresetMessageResponse (preset_response: Union[str, List[str]], parse_mode: Optional[str]
                                = None)
```

A preset response in which the response method is a normal message

```
__init__(preset_response: Union[str, List[str]], parse_mode: Optional[str] = None)
    Constructs the response.
```

Parameters

- **preset_response** – The preset response or list of responses
- **parse_mode** – Optional parse mode for the message. Read more in [telegram.ParseMode](#).

2.2.3 preset.reply

```
class _PresetReplyResponse (preset_response: Union[str, List[str]], parse_mode: Optional[str] =  
                             None)
```

A preset response in which the response method is a reply to the triggering message

```
__init__ (preset_response: Union[str, List[str]], parse_mode: Optional[str] = None)
```

Constructs the response.

Parameters

- **preset_response** – The preset response or list of responses
- **parse_mode** – Optional parse mode for the message. Read more in [telegram.ParseMode](#).

Symbols

_ChatFilterBasedTrigger (class in gramhop-
 per.triggers.filter_triggers), 2
 _HasExactWordTrigger (class in gramhop-
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