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# **Chatwolf**

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## 1.1 Chatwolf

Chatwolf is a small bot to play the popular Werewolf game in a group over a videochat. Until now it only works on Skype, but maybe I will add other chat services.

## 1.2 Rules of the game

Here you can find the basic rules of the werewolf game in german language: [www.werwolfspielen.info](http://www.werwolfspielen.info)

## 1.3 install the executable distribution (easiest way)

1. download the latest distribution from [here](#)
2. unzip the folder to where you want to have the program It is standalone, so you do not need to install. To uninstall simply delete the whole folder.
3. do to the folder and run the “chatwolf.exe” file

## 1.4 install by source

1. you need Python3 installed. If you haven’t got it install it from [here](#)
2. open the terminal and install chatwolf from pypi with:

```
pip install chatwolf
```

You can now use it as a package.

1. start the GUI or use the “start\_manually.py” script, which is in “chatwolf/scripts/”.

To start the GUI just enter `chatwolf` in the terminal.

If this doesn’t work, open `python.exe` and enter:

```
import chatwolf
root = chatwolf.GUI()
root.mainloop()
```

## 1.5 Quickstart with GUI:

- you need one additional Skype account, which will be the Game-master-Account. Create one or just ask a friend who's not playing to give you his/her account
- create a group in Skype with your friends and the Game-master-Account.
- log in with the Skype account of the Game-master-Account in the program
- select the groupchat, the number of werewolves and the roles you want
- start the game and play on Skype. You will get all further commands over Skype from the Game-master-Account

## 1.6 Tip:

- if you want to use another Videochat service for the Videocalls, you can do so. Just use Skype to talk to the Game-master-Account.

## CHATWOLF PACKAGE

## 2.1 chatwolf.game module

```
class chatwolf.game.Game (sk, chatid, num_werewolfs, num_amor=0, num_witch=0,  

num_prostitute=0, num_visionary=0, lang='en',  

wait_mult=1, log_dir='c:\\users\\max\\anaconda3\\lib\\site-  

packages\\chatwolf\\user_data\\logs', bkp_dir='c:\\users\\max\\anaconda3\\lib\\site-  

packages\\chatwolf\\user_data\\bkp', do_debug=True,  

do_save_conf=True)
```

Bases: object

This is the main game class, that starts all the other necessary classes to play!

**sk**

logged in Skype Object of the Game-master

**Type** skpy.Skype

**chatid**

chatid of the group-chat, where all players and the game-master are in

**Type** str

**chat**

the group chat

**Type** SkypeChat

**skc**

object of the SkypeCommands class for the group chat

**Type** *SkypeCommands*

**num\_werewolfs**

number of werewolfs for the game

**Type** int

**num\_amor**

how many times the amor role should be in the game

**Type** int

**num\_witch**

how many times the witch role should be in the game

**Type** int

**num\_prostitute**  
how many times the prostitute role should be in the game  
**Type** int

**num\_visionary**  
how many times the visionary role should be in the game  
**Type** int

**lang**  
language to use for the messages of the Game-master  
**Type** str

**wait\_mult**  
multiplier for the waiting seequences  
**Type** int

**log\_dir**  
directory path as str for the logging file  
**Type** str

**logfilefilename**  
filepath of the logger file  
**Type** str

**bkp\_dir**  
directory path as str for the backup file  
**Type** str

**do\_debug**  
should a debug logging file be created  
**Type** bool

**do\_save\_conf**  
should the actual settings get saved as standards  
**Type** bool

**starttime**  
starttime of the game (time when the Game object was created)  
**Type** datetime

**nn**  
number of nights played  
**Type** int

**nd**  
number of days played  
**Type** int

**log**  
the Logger of the game  
**Type** Logger

**players**  
list of all players of the game



**Type** list of Players

**roles**

list of all the roles in the game

**Type** list of Roles

**bkp ()**

Backup the game.

**continue\_bkp ()**

Continue a game that was loaded from a backup-file.

**day ()**

Do a day phase!

**Does:** ask whom to kill this day if game not over, start a night phase by calling Game.night()

**dist\_roles ()**

Distribute the roles to the players.

**end ()**

End the game!

**get\_alive ()**

Get a list of players that are alive!

**Returns** list of players that are alive.

**Return type** list of Player

**get\_alive\_string (noone=True)**

Get a list of players that are still alive as string entries with their number!

**Keyword Arguments** **noone** (*bool*, *optional*) – True: add “0: noone” to the list; False: only players without “0: noone” . Defaults to True.

**Returns** list with one entry per player, each entry is the number in the alive list + 1 and the name of the player

**Return type** list of str

**get\_num\_roles ()**

Get a list of the activated roles of the game.

**Returns** list of the activated roles of the game

**Return type** list of str

**get\_players\_role (all=True)**

Get a list of all players with their roles!

**Keyword Arguments** **all** (*bool*, *optional*) – True: every player of the game is listed; False: only the living players are listed . Defaults to True.

**Returns** a list with one entry per player with: “name (role)”

**Return type** list of str

**is\_end ()**

Check if game is over!

**Returns**

**True:** game is over, on party won; **False:** Noone won yet, the game is still on

**Return type** bool

**static load\_bkp** (*filepath*)

Load a backup-file.

**Parameters** **filepath** (*str*) – filepath of the backup-file to be loaded

**Returns** the old Game object

**Return type** *Game*

**msg** (*filename, line='all'*)

Get the corresponding message in the selected language.

**Parameters** **filename** (*str*) – the name of the message file, e.g. “greeting\_all” for the first group message, this file needs to exist at least in the “msg/en/” folder

**Keyword Arguments** **line** (*str or int, optional*) – specify if the whole message should be returned (“all”) or only a specific line(int) . Defaults to “all”.

**Returns** message in the selected language (self.lang) or in english if there is no translation

**Return type** *str*

**night** ()

Do a night phase.

**Does:** create a Nightaction object as na call every Role.night(na) resume the night if game not over, start a day phase by calling game.day()

**restart** ()

Start a new game with the same settings.

**save\_config** ()

**start** ()

Start the game!

**does:** check if players did already accept the game-master as contact send greeting to the group distribute roles by calling Game.dist\_roles() inform players of them, by calling Role.greeting() start first day

## 2.2 chatwolf.gui module

**class** chatwolf.gui.GUI

Bases: tkinter.Tk

main class for the Graphical User interface

use GUI().mainloop() to start the GUI and play the game

**check\_e\_bkp\_dir** ()

**check\_e\_int** (*entrywidget*)

**check\_e\_log\_dir** ()

**check\_e\_wait\_mult** ()

**check\_e\_werewolfs** ()

**check\_lb\_chats** ()

**check\_sk** ()

**check\_start** ()

**click\_about** ()

```

    click_b_bkp()
    click_b_login()
    dict_chats()
    fill_chatid()
    get_chatid()
    get_dir(entry_widget)
    list_chatid()
    login_succes()
    start_game()
    start_w_run()
    static w_error(msg)
class chatwolf.gui.TlBkp(root)
    Bases: tkinter.Toplevel
    check_e_bkp_file()
    check_login()
    click_b_login()
    get_bkp_file()
    login_succes()
    restart_bkp()
class chatwolf.gui.TlLog(root)
    Bases: tkinter.Toplevel
    login_skype()
    login_skype_token()

```

## 2.3 chatwolf.player module

```

class chatwolf.player.Player(id, game)
    Bases: object
    Class for every player.
    chatid
        chatid of the corresponding skpy.SkypeSingleChat of the player
        Type str
    id
        Skype id of the player
        Type str
    game
        the main Game object
        Type Game

```

**chat**  
the single chat of the player  
**Type** SkypeChat

**skc**  
object of the SkypeCommands class for the single chat of the player  
**Type** *SkypeCommands*

**name**  
Name of the player  
**Type** str

**alive**  
True: the player is alive ; False: the player is dead  
**Type** bool

**love**  
True: the player is in love with someone  
**Type** bool

**lover**  
The player (s)he is in love with  
**Type** *Player*

**role**  
The role the player has got for the game  
**Type** Role

**die** (*answer=True*)  
The player dies.  
**Keyword Arguments** **answer** (*bool, optional*) – should the methode return the name and the group of the player e.g. True: the methode returns “name (group)” . Defaults to True.  
**Returns** “name (group)” of the player or None if the answer argument is False  
**Return type** str or None

**get\_name\_group** ()  
Get a string with the name and the group of the player.  
**Returns** “name (group)” of the player  
**Return type** str

**get\_name\_role** ()  
Get a string with the name and role of the player.  
**Returns** “name (role)” of the player  
**Return type** str

**love\_arrow** (*lover*)  
Throw an arrow at this player, so (s)he fells in love.  
**Parameters** **lover** (*Player*) – The player (s)he fells in love with

## 2.4 chatwolf.roles module

```

class chatwolf.roles.Amor (player, game)
    Bases: chatwolf.roles.Villager

    Class for the Amor role.

    name
        the name of the role
        Type str

    group
        the name of the group "Werewolf"/"Villager"
        Type str

    player
        all the players that belong to this role
        Type list of Player

    game
        the main Game object
        Type Game

    chatid
        SkypeChat id of the player(s) chat
        Type str

    game
        the main Game object
        Type Game

    chat
        group/single SkypeChat of the player(s)
        Type SkypeChat

    skc
        object of the SkypeCommands class for this role
        Type SkypeCommands

    greeting ()
        inform player about their role and give amor the oportunity to throw his arrow

    name = 'Amor'

class chatwolf.roles.Prostitute (player, game)
    Bases: chatwolf.roles.Villager

    Class for the Prostitute role.

    name
        the name of the role
        Type str

    group
        the name of the group "Werewolf"/"Villager"
        Type str

```

**player**

all the players that belong to this role

**Type** list of Player

**game**

the main Game object

**Type** *Game*

**chatid**

SkypeChat id of the player(s) chat

**Type** str

**game**

the main Game object

**Type** *Game*

**chat**

group/single SkypeChat of the player(s)

**Type** SkypeChat

**skc**

object of the SkypeCommands class for this role

**Type** *SkypeCommands*

**name** = 'Prostitute'

**night** (*nightactions*)

Do the Prostetutes night phase.

ask where (s)he wants to stay

**Parameters** **nightactions** (*Nightactions*) – log of all the actions that happen(d) in the night

**class** chatwolf.roles.**Role** (*player, game*)

Bases: object

Main class for the roles.

**name**

the name of the role

**Type** str

**group**

the name of the group “Werewolf”/”Villager”

**Type** str

**player**

all the players that belong to this role

**Type** list of Player

**game**

the main Game object

**Type** *Game*

**chatid**

SkypeChat id of the player(s) chat

**Type** str

**game**  
the main Game object

**Type** *Game*

**chat**  
group/single SkypeChat of the player(s)

**Type** SkypeChat

**skc**  
object of the SkypeCommands class for this role

**Type** *SkypeCommands*

**get\_names** ()  
Get the names of the players of this role.

**Returns** list of all the names of the roles players

**Return type** list of str

**greeting** ()  
Inform players about their role.

**group** = 'not set'

**msg\_group\_night** ()  
Send a notification to the group chat, which role got called.

**name** = 'not set'

**night** (*nightactions*)  
Do the corresponding night phase.

**Parameters** **nightactions** (*Nightactions*) – log of all the actions that happen(d) in the night

**class** chatwolf.roles.Villager (*player, game*)  
Bases: chatwolf.roles.Role  
Class for the Villager role.

**name**  
the name of the role

**Type** str

**group**  
the name of the group “Werewolf”/”Villager”

**Type** str

**player**  
all the players that belong to this role

**Type** list of Player

**game**  
the main Game object

**Type** *Game*

**chatid**  
SkypeChat id of the player(s) chat

```
    Type str

game
    the main Game object

    Type Game

chat
    group/single SkypeChat of the player(s)

    Type SkypeChat

skc
    object of the SkypeCommands class for this role

    Type SkypeCommands

group = 'Villager'
name = 'Villager'

class chatwolf.roles.Visionary (player, game)
    Bases: chatwolf.roles.Villager
    Class for the Visionary role.

    name
        the name of the role

        Type str

    group
        the name of the group "Werewolf"/"Villager"

        Type str

    player
        all the players that belong to this role

        Type list of Player

    game
        the main Game object

        Type Game

    chatid
        SkypeChat id of the player(s) chat

        Type str

    game
        the main Game object

        Type Game

    chat
        group/single SkypeChat of the player(s)

        Type SkypeChat

    skc
        object of the SkypeCommands class for this role

        Type SkypeCommands

    name = 'Visionary'
```



**night** (*nightactions*)

Do the visionarys night phase.

ask whome (s)he wants to see tell him/her the group of this player

**Parameters** **nightactions** (*Nightactions*) – log of all the actions that happen(d) in the night

**class** chatwolf.roles.**Werewolf** (*player, game*)

Bases: chatwolf.roles.Role

Class of the werewolf role.

**name**

the name of the role

**Type** str

**group**

the name of the group “Werewolf”/”Villager”

**Type** str

**player**

all the players that belong to this role

**Type** list of Player

**game**

the main Game object

**Type** *Game*

**chatid**

SkypeChat id of the player(s) chat

**Type** str

**game**

the main Game object

**Type** *Game*

**chat**

group/single SkypeChat of the player(s)

**Type** SkypeChat

**skc**

object of the SkypeCommands class for this role

**Type** *SkypeCommands*

**group** = 'Werewolf'

**name** = 'Werewolf'

**night** (*nightactions*)

Do the Werewolfs night phase.

ask whome to kill this night

**Parameters** **nightactions** (*Nightactions*) – log of all the actions that happen(d) in the night

```
class chatwolf.roles.Witch (player, game)
    Bases: chatwolf.roles.Villager

    Class for the Witch role.

    name
        the name of the role
        Type str

    group
        the name of the group "Werewolf"/"Villager"
        Type str

    player
        all the players that belong to this role
        Type list of Player

    game
        the main Game object
        Type Game

    chatid
        SkypeChat id of the player(s) chat
        Type str

    game
        the main Game object
        Type Game

    chat
        group/single SkypeChat of the player(s)
        Type SkypeChat

    skc
        object of the SkypeCommands class for this role
        Type SkypeCommands

    elixier
        True: the witchs elixier is still available False: the witchs elixier got already used
        Type bool

    poison
        True: the witchs elixier is still available False: the witchs elixier got already used
        Type bool

    greeting ()
        Inform player about their role and initialize the poison and elixier.

    name = 'Witch'

    night (nightactions)
        Do the witchs night phase.

        tell her whos going to die ask if he wants to save, by using her elixier ask if he wants to kill someone, by
        using her poison
```

**Parameters** **nightactions** (*Nightactions*) – log of all the actions that happen(d) in the night

## 2.5 chatwolf.nightactions module

**class** chatwolf.nightactions.**Nightactions** (*alive, game, noone=True*)

Bases: object

Class to log all the actions that happen in the night and resume.

**game**

the main Game object

**Type** *Game*

**alive**

list of players that are still alive

**Type** list of Players

**alive\_string**

list of players, that are still alive as “id: Name” id is place in alive list + 1

**Type** list of str

**lskill**

list of one bool for every player if (s)he got killed in the night e.g. lskill[1] says if player[1] got killed

**Type** list of bool

**lstogether**

list of players ids that stayed together during the night. always as tuple of two ids, first one is the player who stays at home

**Type** list of tuple of int

**finish\_night** ()

Finish the night and get the name(group) of the plaers that died.

**Returns** A list of all the players that died this night as name(group)

**Return type** list of str

**get\_killed\_id** ()

Get the id of the killed player.

**Returns** id of the killed player

**Return type** int

**kill** (*player\_number*)

Kill a player.

**Parameters** **player\_number** (*[type]*) – number of the player in the alive\_string

**save** (*player\_number*)

Save a player.

**Parameters** **player\_number** (*[type]*) – number of the player in the alive\_string

**together** (*player\_home\_number, player\_visit\_number*)

Set 2 people together for this night.

**Parameters**

- **player\_home\_number** (*int*) – the number in the alive\_string of the player, who’s at home
- **player\_visit\_number** (*int*) – the number in the alive\_string of the player, who’s visiting the other

## 2.6 chatwolf.skypecommands module

```
class chatwolf.skypecommands.SkypeCommands(chatid,  
                                           game,  
                                           tokenFile='c:\users\ymax\anaconda3\lib\site-  
                                           packages\chatwolf\user_data\temp\token.txt')
```

Bases: `skpy.main.SkypeEventLoop`

Class to ask players for answers in Skype.

**chatid**

chatid of the corresponding chat

**Type** `str`

**game**

the main Game object

**Type** `Game`

**chat**

the group chat

**Type** `SkypeChat`

**ask** (*command*, *alive*=[*None*], *num\_ids*=1, *min\_id*=0)

Ask for an answer in the corresponding chat.

**Parameters** **command** (*str*) – command to ask for, e.g. “kill” for “kill: number”: return int or “bool” for “yes/no”: return bool or “name” for “name”: return str

**Keyword Arguments**

- **alive** (*list of Player*, *optional*) – all the alive Players that are at disponible . Defaults to [*None*].
- **num\_ids** (*int*, *optional*) – number of ids that must be asked for and returned . Defaults to 1.
- **min\_id** (*int*, *optional*) – the smallest id possible to choose from, basically if there is an id 0 for “noone” disponible . Defaults to 0.

**Returns**

**either the number(s) of the corresponding player(s) (alive[return-1]) or a bool, depending on the command or a name(str), if command = “name”**

**Return type** `int or bool or str`

**get\_bool** (*msg*)

Check if the message received was a “yes/no” answer and return it.

**Parameters** **msg** (*str*) – the message text someone send to the chat

**Returns**

**the answer to the question “yes”:True; “no”:False or None if the message wasn’t a correct answer**

**Return type** bool or None

**get\_id** (*msg*, *command*, *alive*=[None], *num\_ids*=1, *min\_id*=0)

Check the message for an id and return it if the message was right.

**Parameters**

- **msg** (*str*) – the message text someone send to the chat
- **command** (*str*) – command that was asked for, e.g. “kill” for “kill: number”

**Keyword Arguments**

- **alive** (*list of Player*, *optional*) – all the alive Players that are at disponible . Defaults to [None].
- **num\_ids** (*int*, *optional*) – number of ids that must be asked for and returned . Defaults to 1.
- **min\_id** (*int*, *optional*) – the smallest id possible to choose from, basicaly if there is an id 0 for “noone” disponible . Defaults to 0.

**Returns**

**the number(s) of the corresponding player(s) (alive[return-1])** or None if the message wasn't a correct answer

**Return type** int or None

**get\_name** (*msg*)

Get the name the player sended.

**Parameters** **msg** (*str*) – the message text someone send to the chat

**Returns**

**the Name entered** or None if the message was not a correct answer

**Return type** str or None



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## 3.2 dependencies

### 3.2.1 skpy-package:

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### 3.2.2 Icon:

source of icon: <https://icons8.com/icons/set/werewolf>



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