
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

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 unistall 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 ass 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.

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, num_hunter=0,
                          lang='en', wait_mult=1, log_dir='/home/docs/.cache/Python-
                          Eggs/chatwolf-0.1.6-py3.7.egg-tmp/chatwolf/user_data/logs',
                          bkp_dir='/home/docs/.cache/Python-Eggs/chatwolf-0.1.6-py3.7.egg-
                          tmp/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

num_hunter
how many times the hunter 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 sequences
Type int

log_dir
directory path as str for the logging 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

logfilefilename
filepath of the logger file
Type str

bkp_dir
directory path as str for the backup file
Type str

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

num_roles
number of roles in the game

Type int

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: No one” to the list; False: only players. 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: No one 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 falls in love.

Parameters **lover** (*Player*) – The player (s)he falls in love with

2.4 chatwolf.roles module

class chatwolf.roles.**Amor** (*players, 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

players

all the players that belong to this role

Type list of *Player*

player

the player if only one player inherits the role

Type *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.**Hunter** (*players, game*)

Bases: chatwolf.roles.Villager

Class for the Hunter role.

name

the name of the role

Type str

group

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

Type str

players

all the players that belong to this role

Type list of Player

player

the player if only one player inherits the role

Type *Player*

game

the main Game object

Type *Game*

chatid

SkypeChat id of the player(s) chat

Type str

chat

group/single SkypeChat of the player(s)

Type SkypeChat

skc

object of the SkypeCommands class for this role

Type *SkypeCommands*

die ()

Let the hunter kill someone else if (s)he dies

class chatwolf.roles.**Prostitute** (*players, 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

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** (*players, 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

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

player
the player if only one player inherits the role

Type *Player*

game
the main Game object

Type *Game*

chatid
SkypeChat id of the player(s) chat

Type str

chat
group/single SkypeChat of the player(s)

Type SkypeChat

skc
object of the SkypeCommands class for this role

Type *SkypeCommands*

die ()
Do possible actions when the role dies!

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 and maybe do first actions

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 (*players, 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

players
all the players that belong to this role

Type list of Player

player
 the player if only one player inherits the role
 Type *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** (*players, 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

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

player
 the player if only one player inherits the role
 Type *Player*

game
 the main Game object
 Type *Game*

chatid
 SkypeChat id of the player(s) chat

Type str

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** (*players, 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

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

player
the player if only one player inherits the role
Type *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** (*players, 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

players

all the players that belong to this role

Type list of Player

player

the player if only one player inherits the role

Type *Player*

game

the main Game object

Type *Game*

chatid

SkypeChat id of the player(s) chat

Type str

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='/home/docs/.cache/Python-
Eggs/chatwolf-0.1.6-py3.7.egg-
tmp/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:”: retrun str

Keyword Arguments

- **alive** (*list of Player, optional*) – all the alive Players that are at dispoible . 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, basically 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 send.

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

3.1 own

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```

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3.2 dependencies

3.2.1 skpy-package:

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3.2.2 Icon:

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