# Desktop streamer

Goal is to steam desktop screen and control remotely the mouse and keyboard at high framerate (60 fps) and resolution (1920x1080 - 12Mbps) in low latency (under 100ms).

## Components of the program

User (Host)

Special browser (electron)

JavaScript

Server

python3.8

SQLite

WebRTC

User (Peer)

Browser

JavaScript

## Usage of the program

Just like a webcam chat application but user can control mouse and keyboard.

Connect to server

(only in special browser)

Login page

Password recovery

Register

Settings

Main page

add room

remove room

share room

enter room

Room

if in special browser

View the shared screen and control mouse + keyboard

Host the screen and mouse + keyboard

## Database

Login sessions:

session\_id

user\_id

last\_login

last\_ip

expire

is\_recovery

Users:

user\_id

email

username

password

Rooms:

room\_id

name

is\_open

Room permissions:

permission\_id

room\_id

user\_id

permission

# Configuration

## Server

Edit “conf/conf.json”, contains the configuration. (can modify --configuration <conf.json path>). Every path in conf.json will based on conf.json location.

Note for email:

we need to add an smtp email server to enable

* registration
* password recovery

Note for database:

* It can be nonexist path (program will create it)
* User initialization only run if database not exist

Run “server.py”

## Special browser

The server can locked in “resources/app/conf.json”

# Usage

## Account security

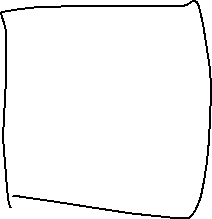
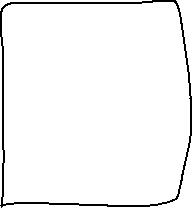
User can create account with configuration or registration (if enabled)

Password recovery only works if user use email and smtp server added (only initial user could be without email)

Any email or password changes generate 1 undeletable session key and send to the user’s email address. This available for 24 hours and not generated new one until 1 undeletable session is available.

## Room usage

In main page user can list own and shared rooms (can filter it) or join in a room



Permissions:

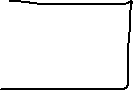
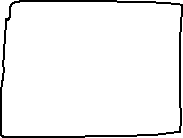
Owner – Can add and delete users to the room

Writer – Can add and delete users to the room (but cannot delete owner)

Reader – Only can use the room, cannot invite just exit from room

### In room:

There will be list about members, same account can be multiple times (e.g. admin, admin (2), …). After selecting member user can choose which monitor, sound want to use.



In a host there will be a share screen button. If user host the screen the program appear an option menu. Host can set which resources want to share and auto start option (this will remove if user exit from the room)

