Public PC Guard

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         Yerim Chu   Woojoo You

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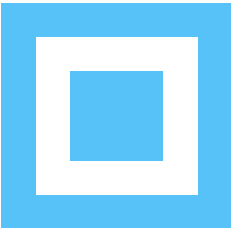- The effect we get from our program

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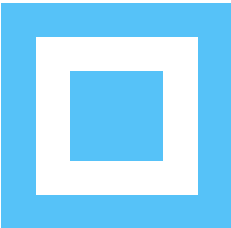
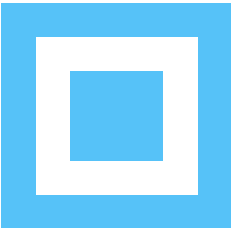# Public PC Guard

1. Overview

1) Why we need our program

Who?

µTorrent

1) Why we need our program

You!

μTorrent

1. Overview

2) Team member role

Geonryun

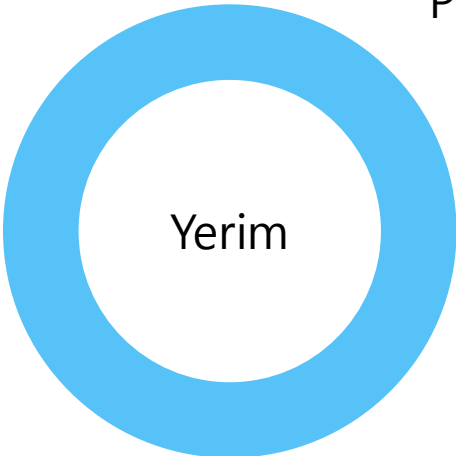**Project Manager**

Jaekyung

PC remote control

Kyungtae

Manage server & DB

Yerim
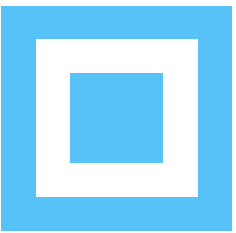
**Log transport &
Create presentation**

Woojoo

**Development
android app**

Public PC Guard
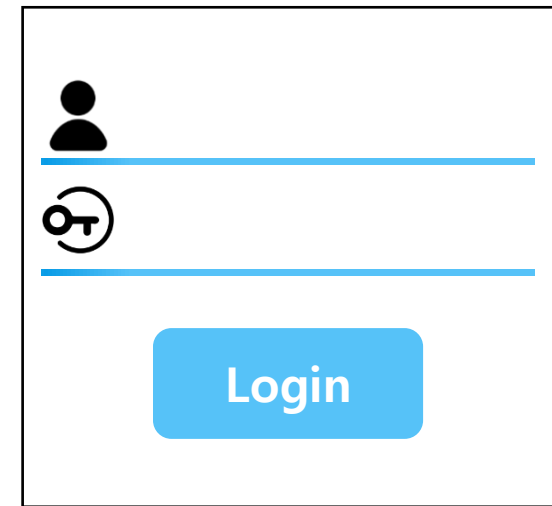
2. Purpose

2. Purpose

1) The effect we get from our program
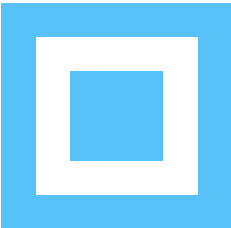

This prevents the use of the PC indiscriminately.

Responsibility

Login

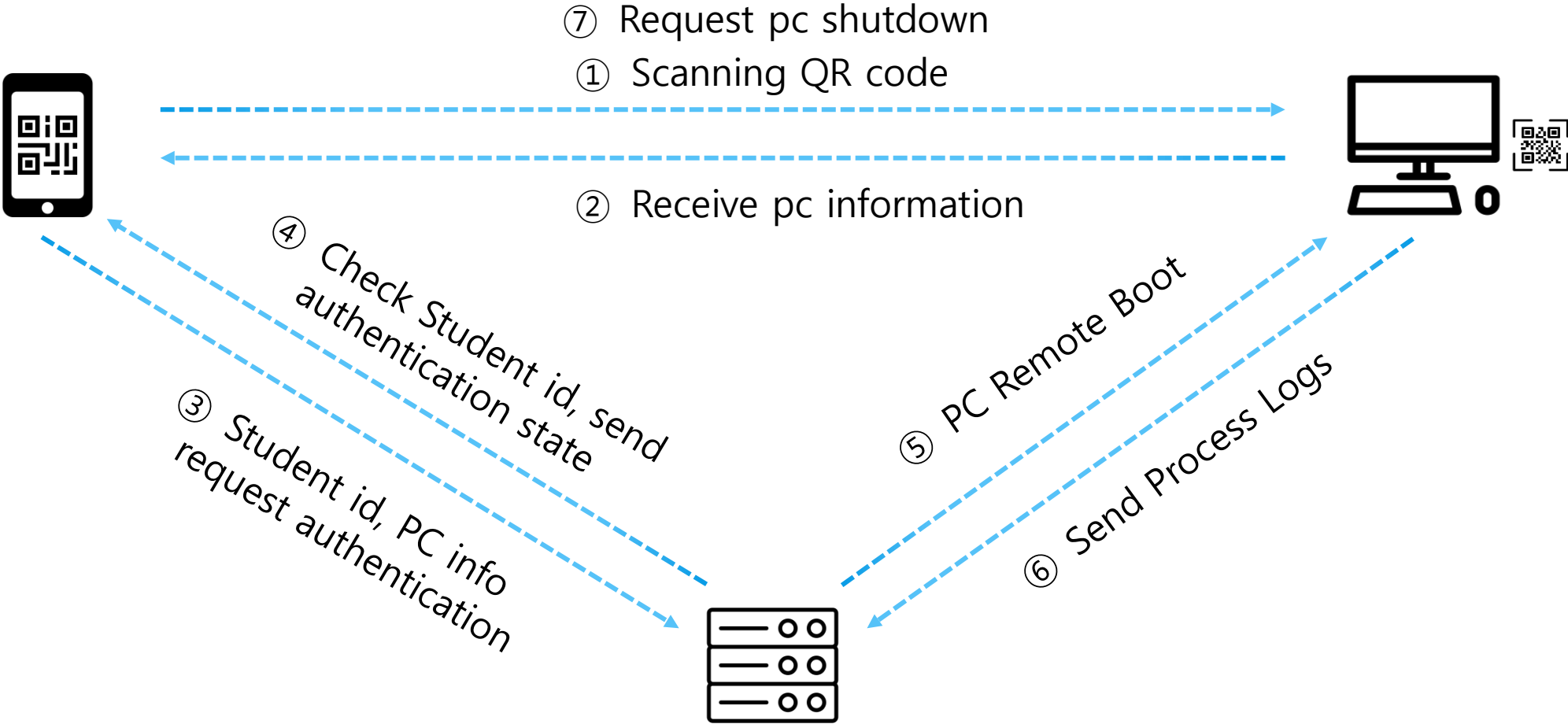This reinforces responsibility through login authentication.
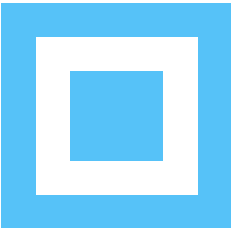
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3. Contents

3. Contents

1) Schematic diagram

⑦ Request pc shutdown

① Scanning QR code

② Receive pc information

④ Check Student id, send authentication state

③ Student id, PC info request authentication

⑤ PC Remote Boot

⑥ Send Process Logs
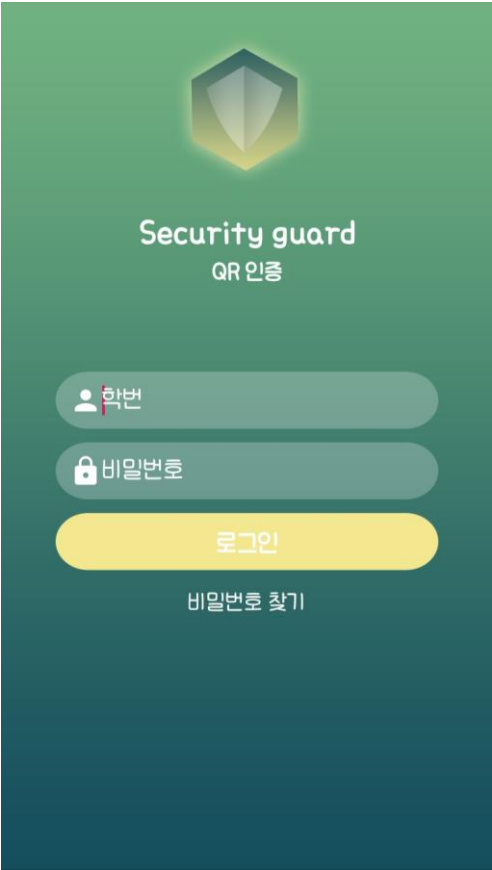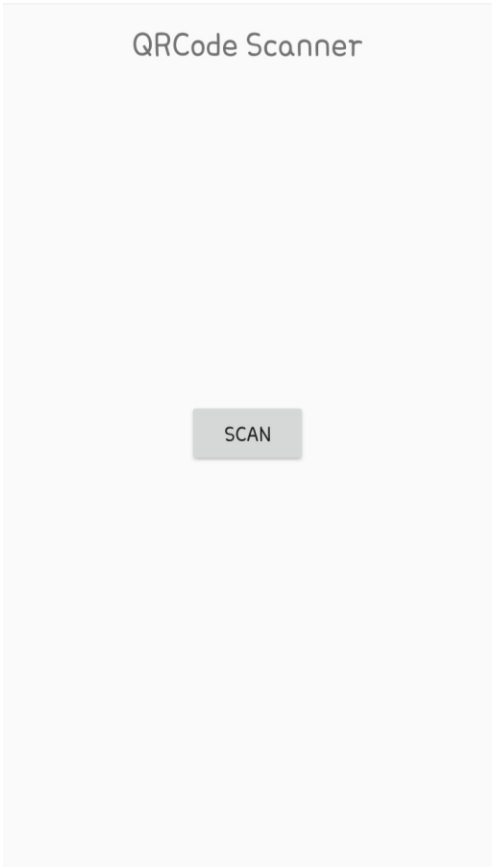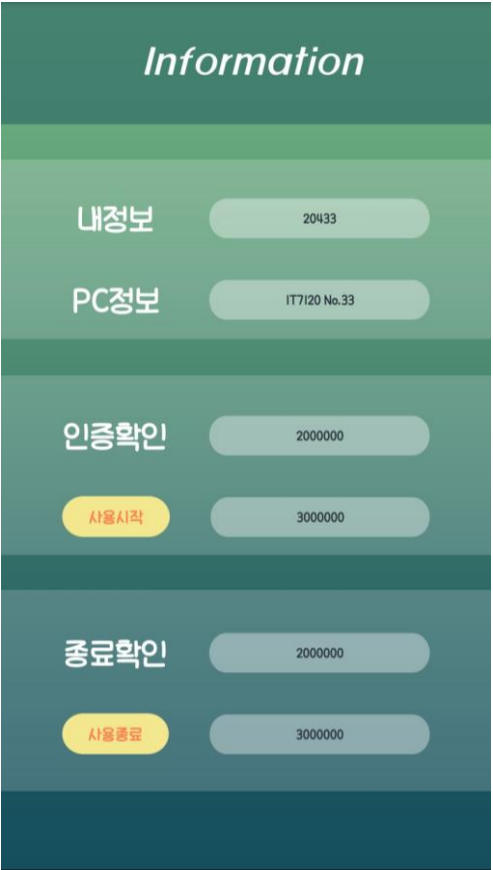
3. Contents

2) Application detail

Log-in

Scanning QR code

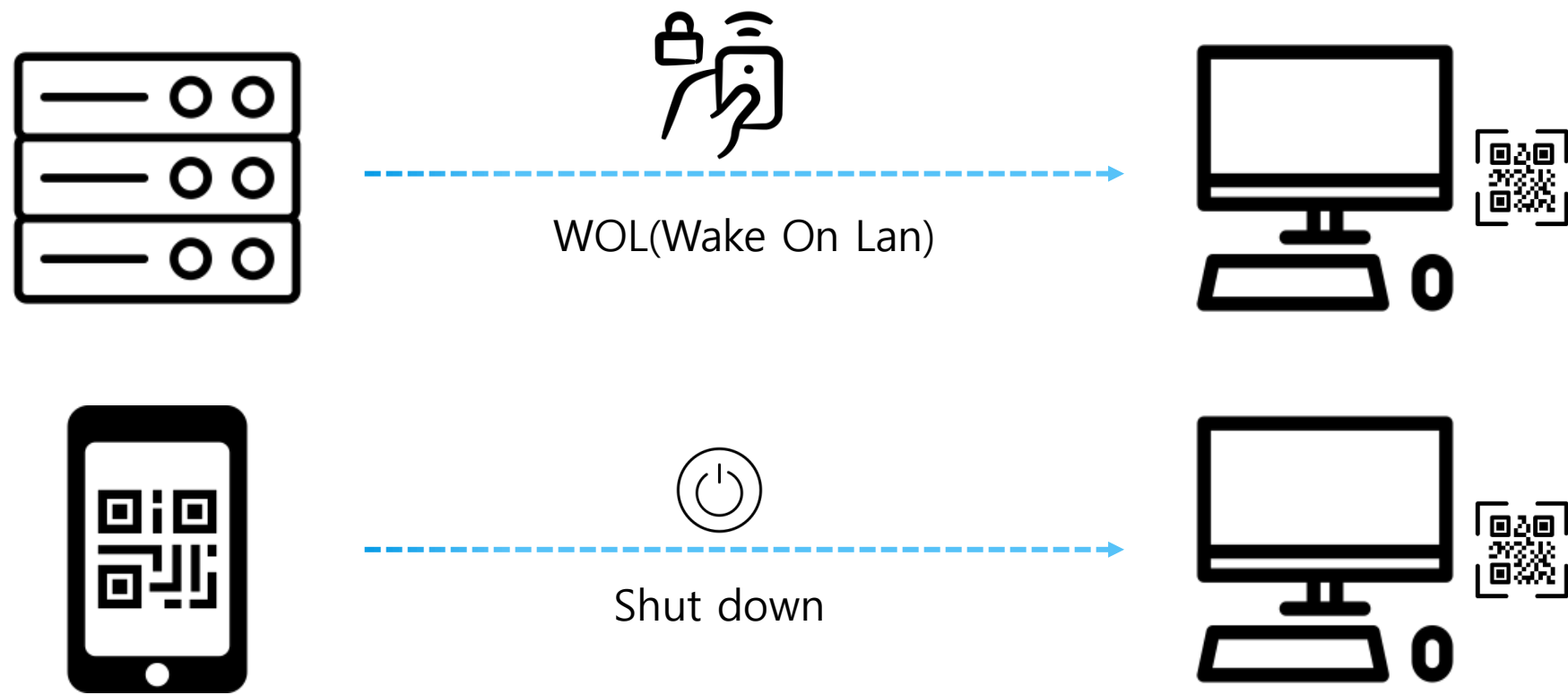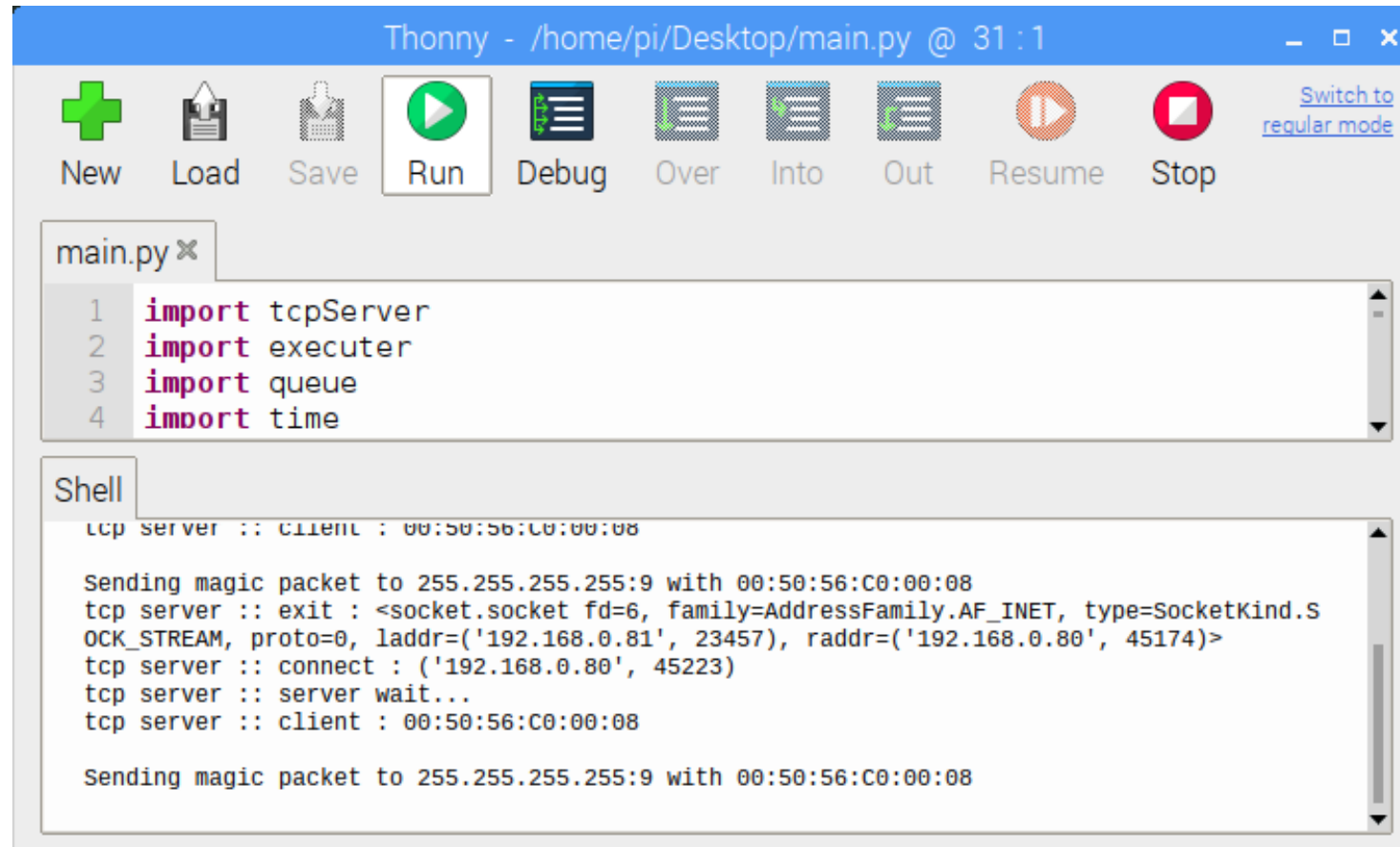PC Information

3. Contents

3) PC remote control detail

WOL(Wake On Lan)

Shut down

3. Contents

Thonny - /home/pi/Desktop/main.py @ 31 : 1

New   Load   Save   **Run**   Debug   Over   Into   Out   Resume   Stop   Switch to regular mode

main.py ✕

```
1  import tcpServer
2  import executer
3  import queue
4  import time
```
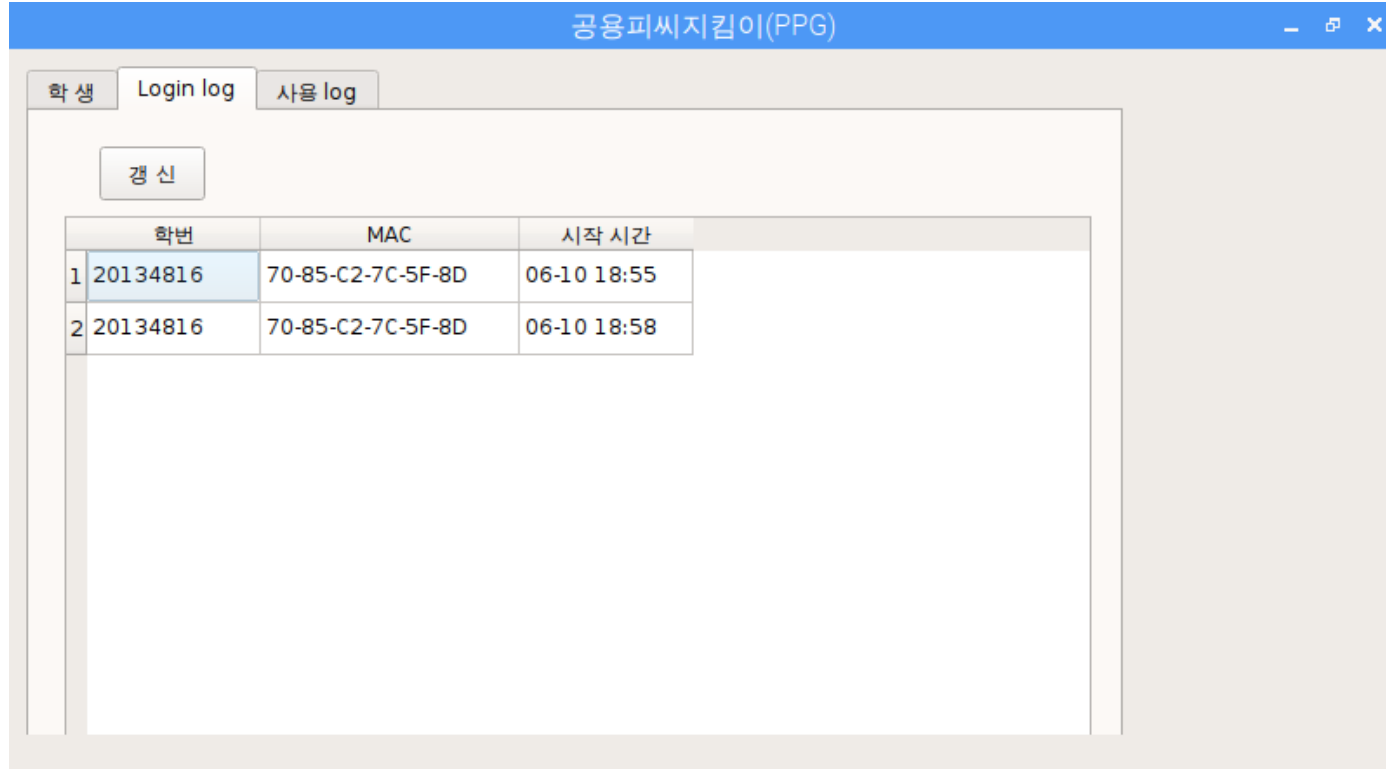
Shell

```
tcp server :: client : 00:50:56:C0:00:08

Sending magic packet to 255.255.255.255:9 with 00:50:56:C0:00:08
tcp server :: exit : <socket.socket fd=6, family=AddressFamily.AF_INET, type=SocketKind.S
OCK_STREAM, proto=0, laddr=('192.168.0.81', 23457), raddr=('192.168.0.80', 45174)>
tcp server :: connect : ('192.168.0.80', 45223)
tcp server :: server wait...
tcp server :: client : 00:50:56:C0:00:08

Sending magic packet to 255.255.255.255:9 with 00:50:56:C0:00:08
```

With communication between pc and server, remote boot was realized using wol function.

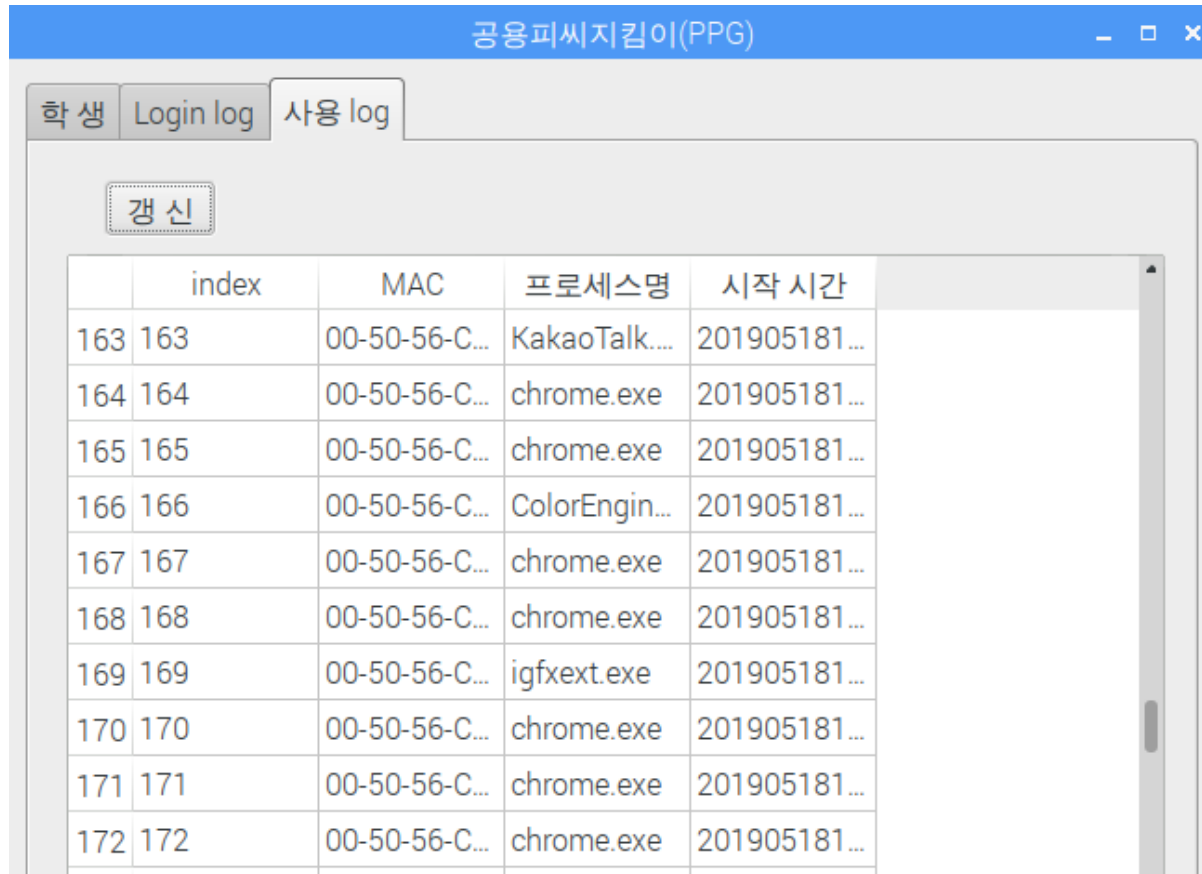# 3. Contents

4) Server and DB Management detail

We created gui with python to make database management convenient.

3. Contents

5) Log transport detail

Processes executed by the user were collected and recorded in the database.
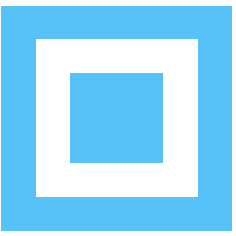
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4. Summery
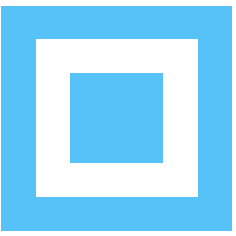
4. Summery

1) Future plan

In collecting logs, we will use machine learning and deep learning to precisely collect logs.

It will also add a function to learn the malicious process and alert the administrator if it is on database record.
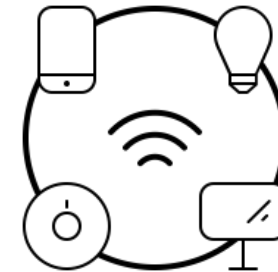
4. Summery

It can be useful in schools or public institutions that have public pc rooms.

The cost of administration will be reduced by reducing the number of people that the agency manages public rooms.

The program is suitable for IoT and can be applied to smart home systems, not just to manage public pc rooms.

Thank you
for Listening!

Contact :   https://github.com/chuyr/Cap4team_2019