Royal University of Phnom Penh
Faculty of Engineering
Dept. of Telecommunications and Electronics Eng.

The Design of a Home Appliances Controlling System Based on Internet of Things (IoT)

Presenters

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Advisor

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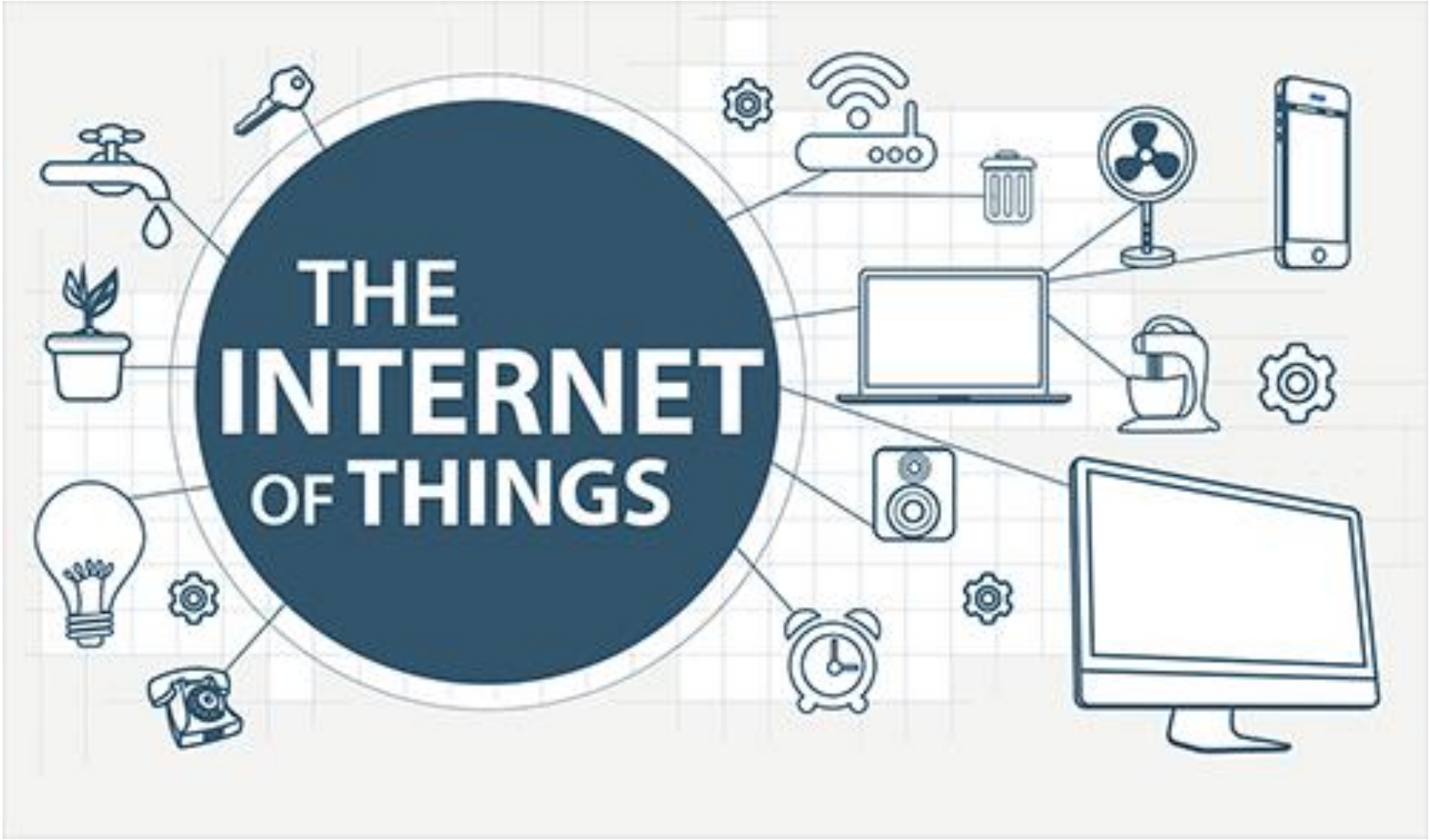
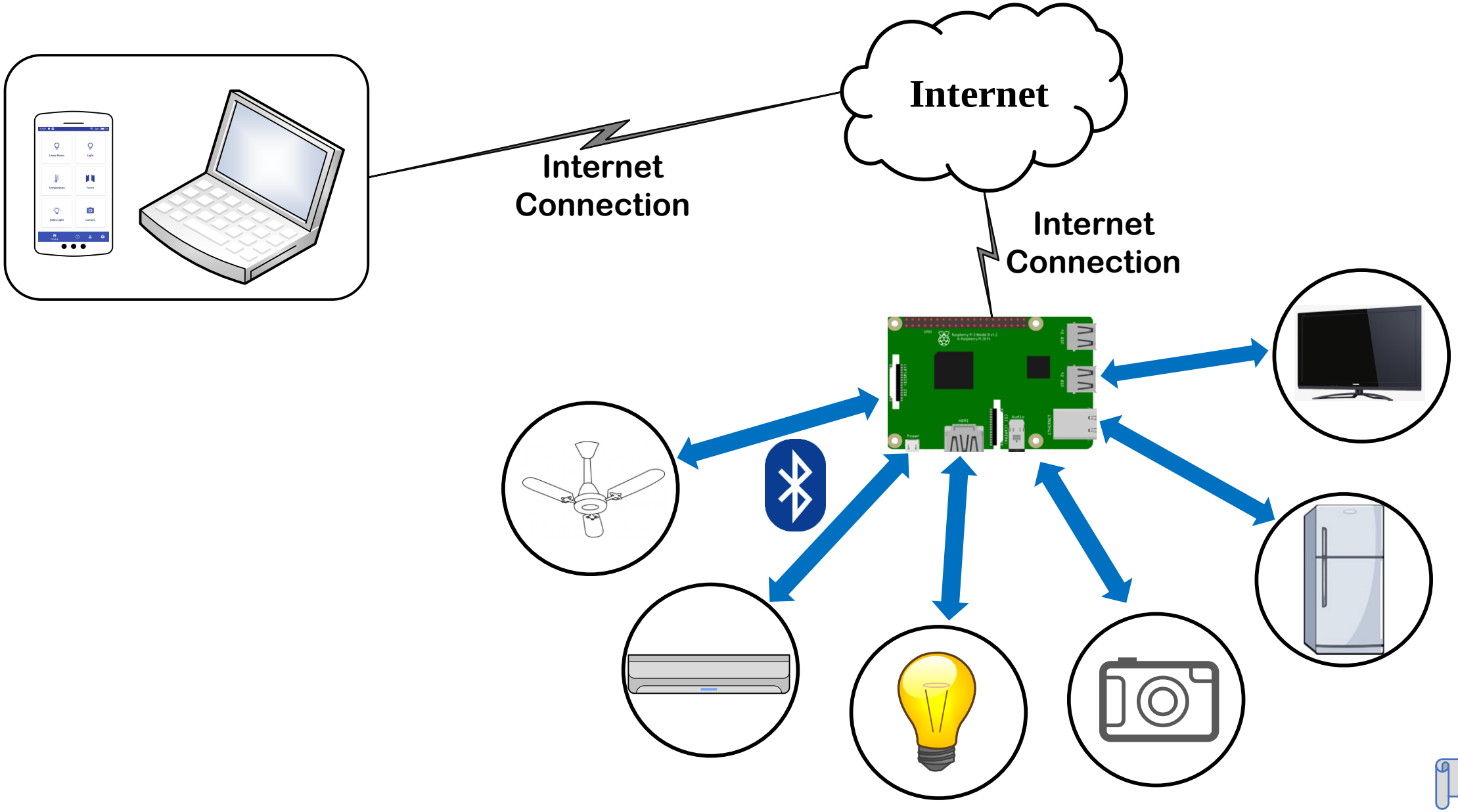
1. Introduction

Internet of Things is a cutting edge technology connecting physical devices to the Internet.



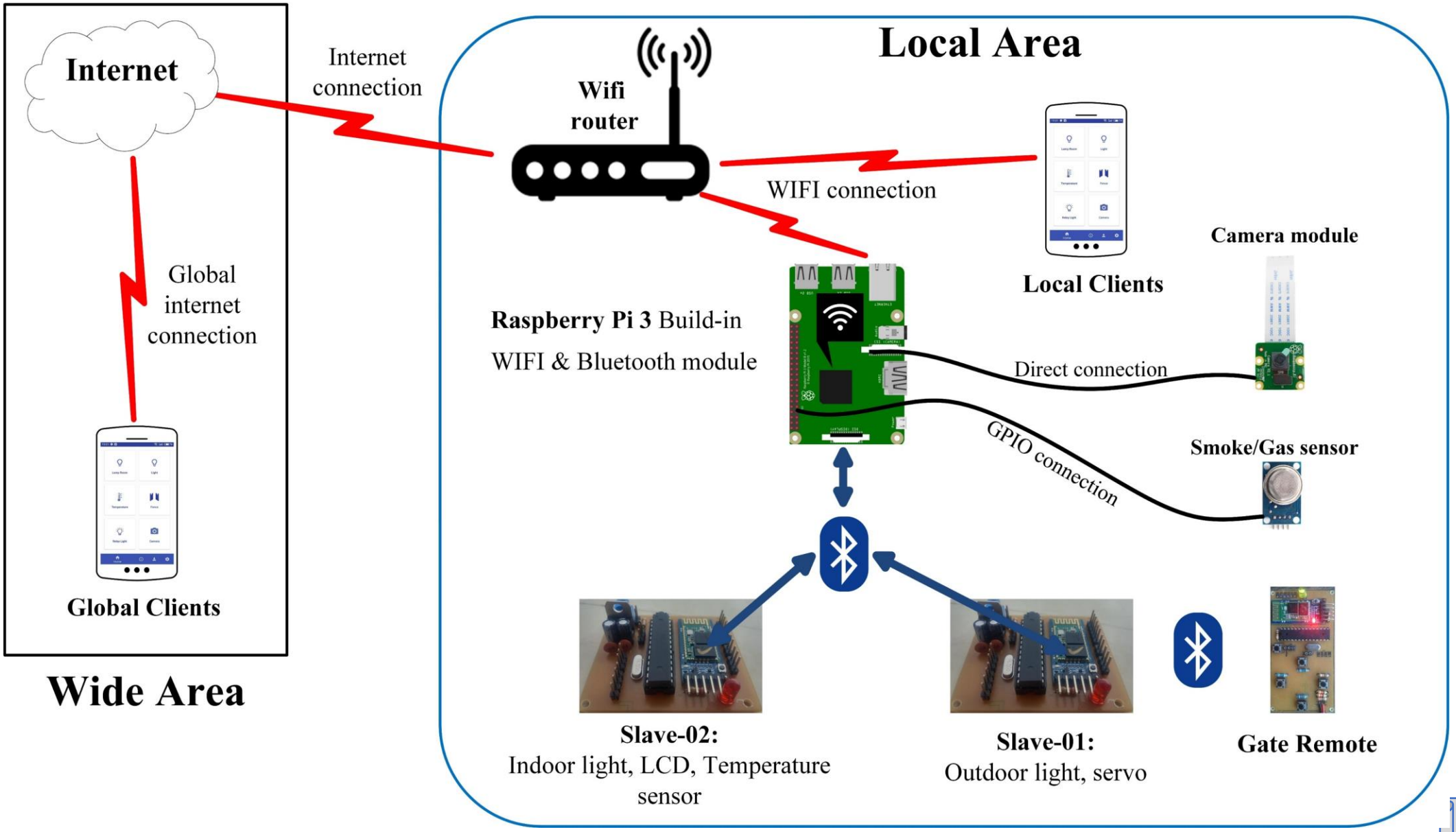
1. Introduction



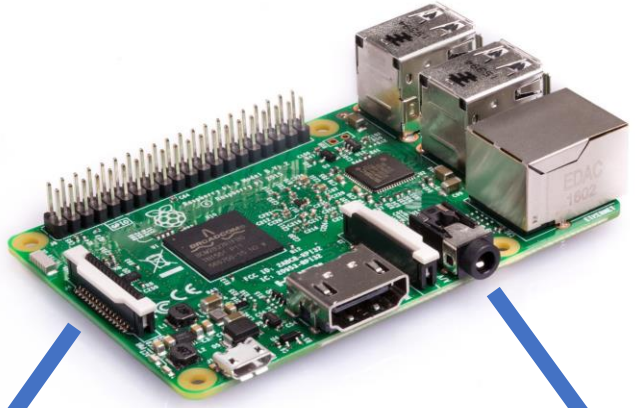
2. What we did

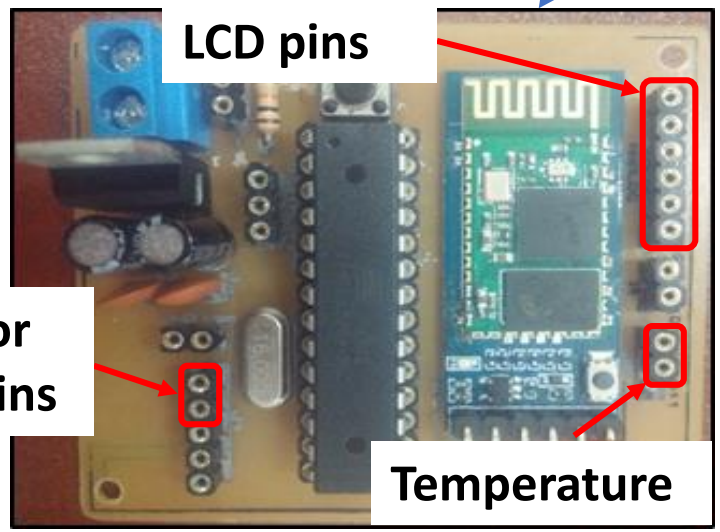
- Develop App for Smart phone.
- Webpage: for Camera controlling.
- Raspberry Pi & Sensors Configuration.
  - Camera Module, Gas/Smoke sensor, Temperature sensor
- Master ⟷ Slave connection config.
  - Bluetooth & Public IP
- Prototype Design: PCB fabrication, House modeling

3. Methodology

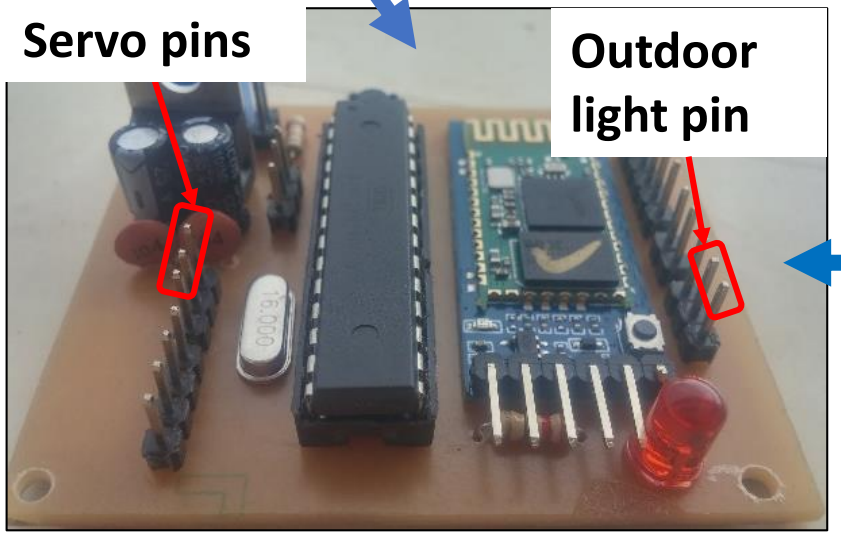


4. Experiments

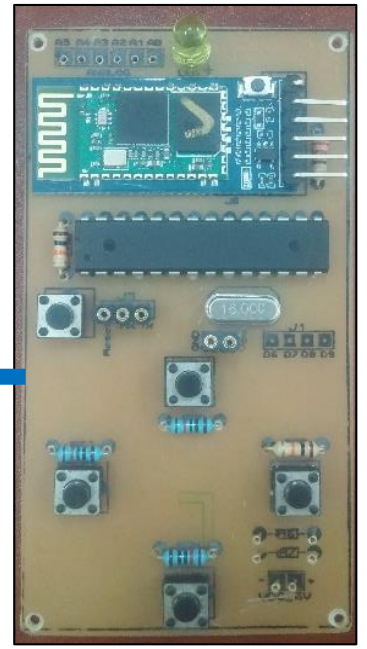




Slave02: Temperature, LCD & indoor Light



Slave01: Gate + Outdoor Light



Gate remote

4. Experiments

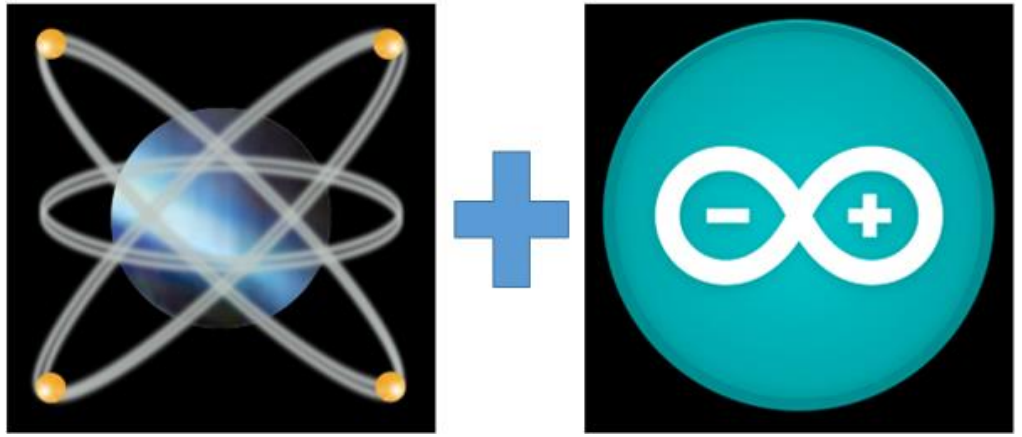
twilio

Flask

Cython

OpenCV

Proteus & Arduino



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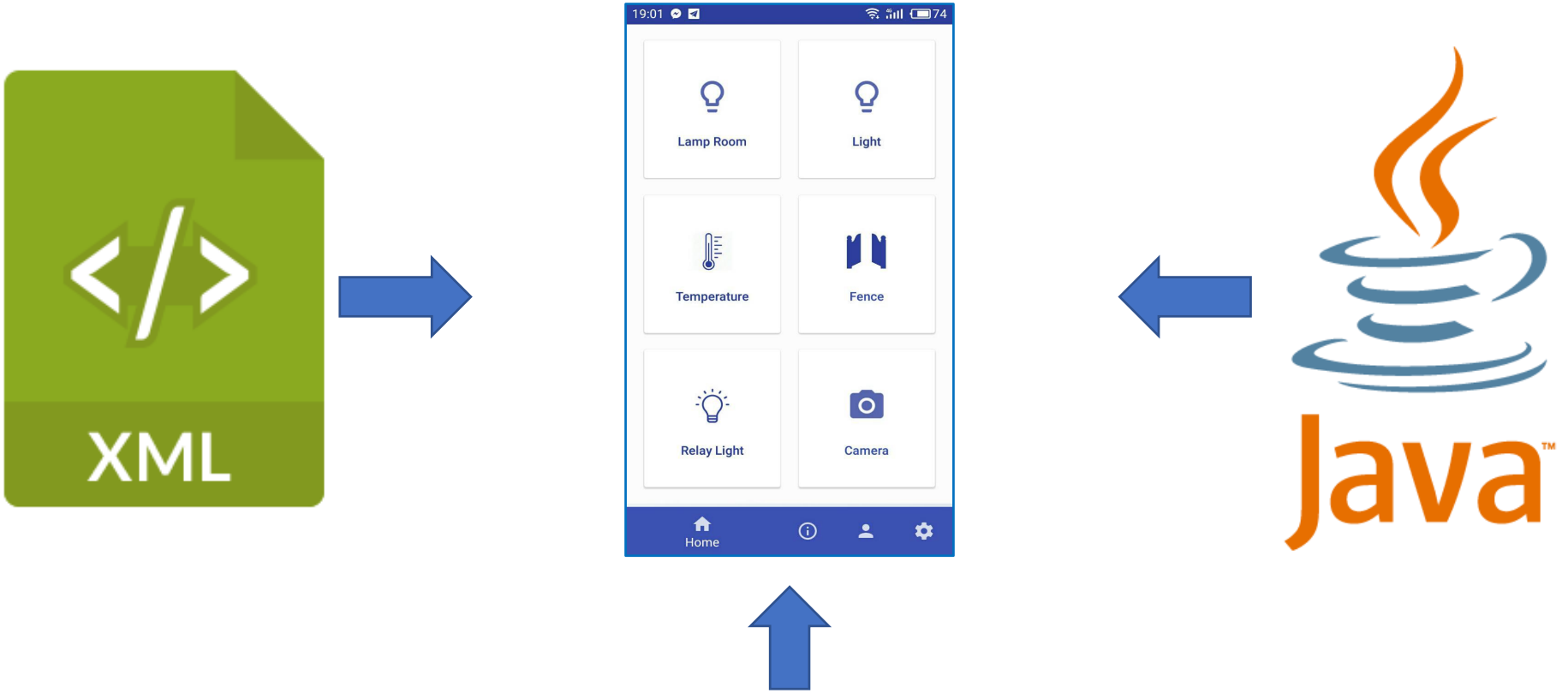

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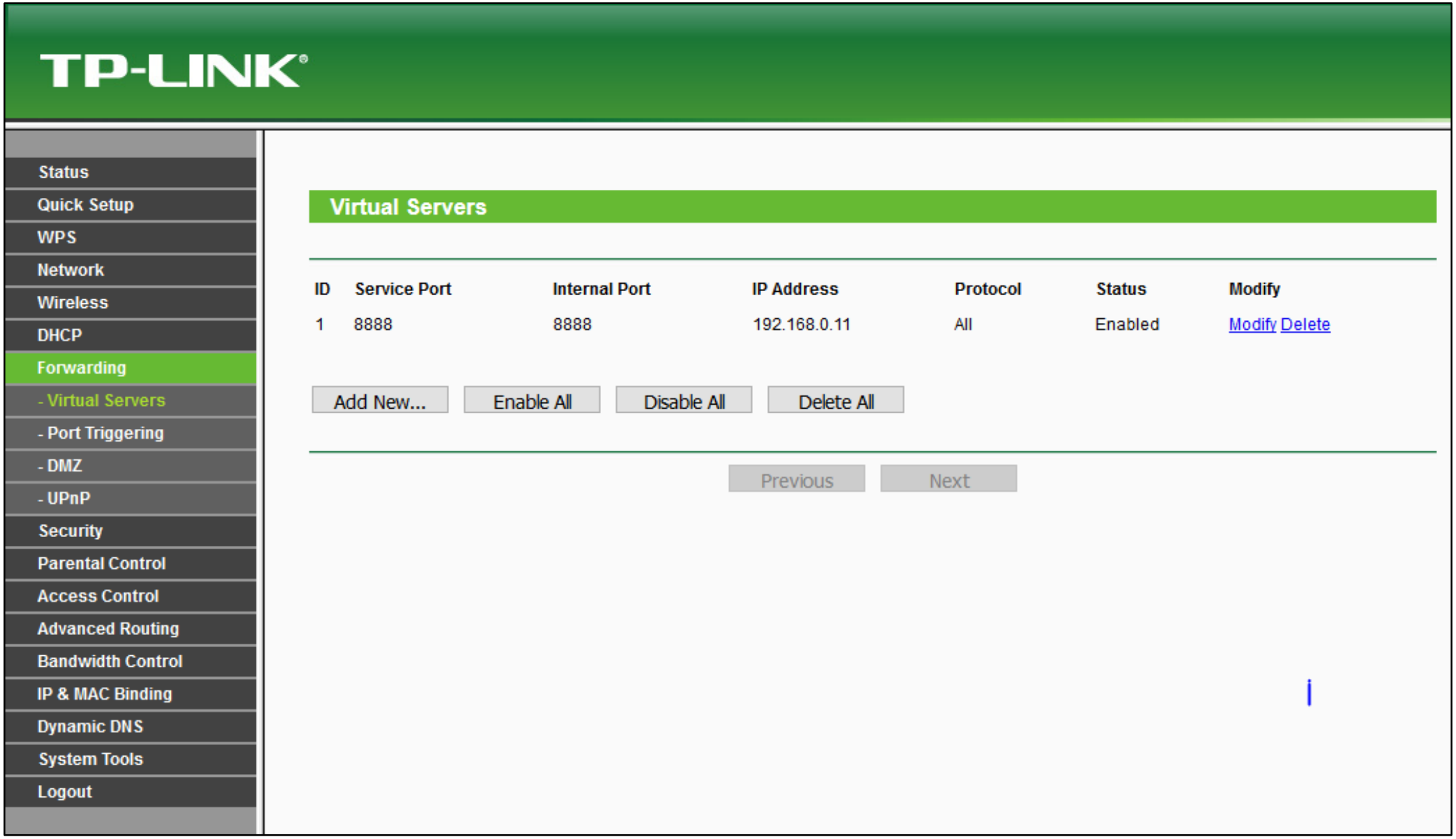
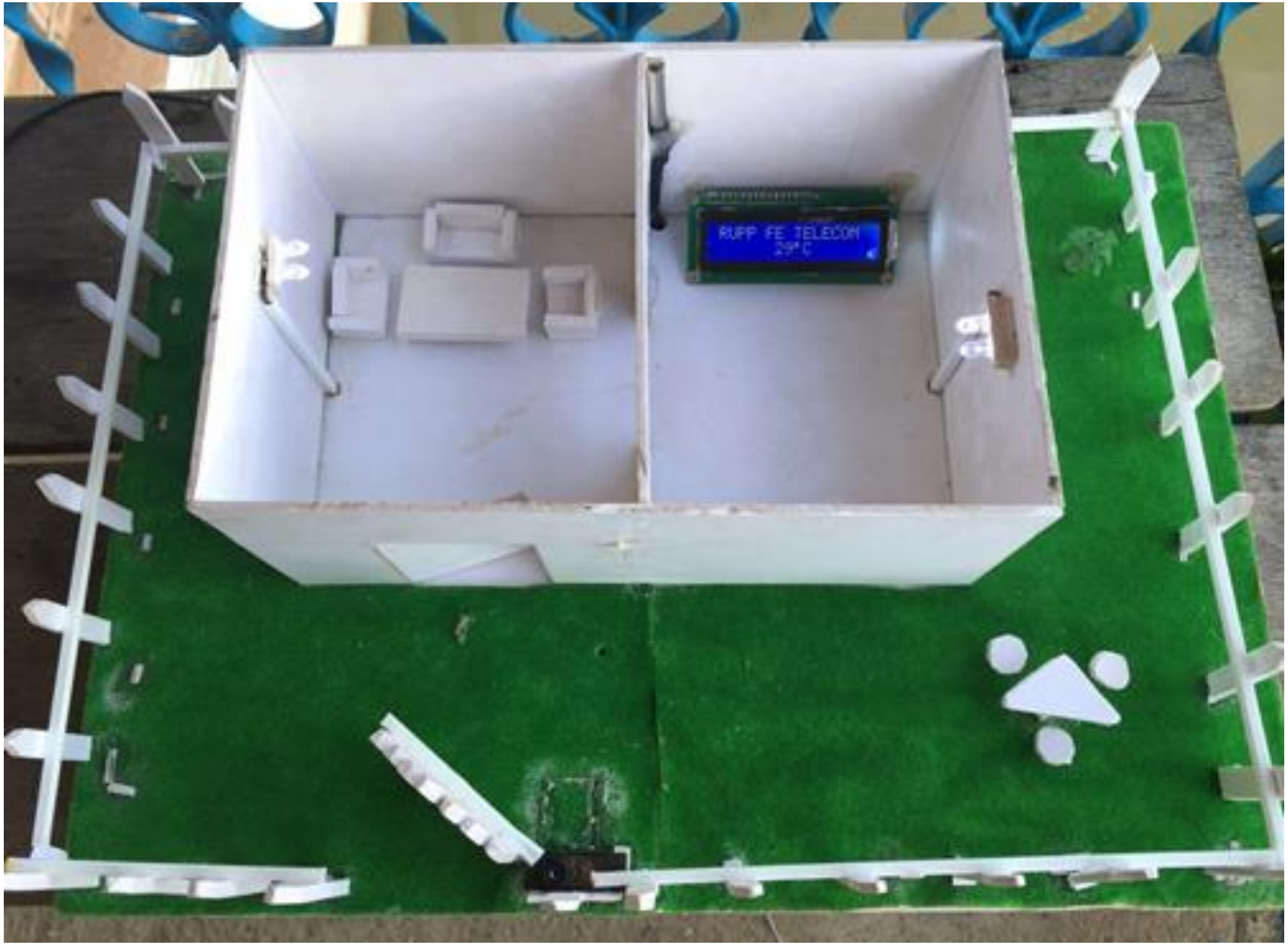


5. Result and Discussion



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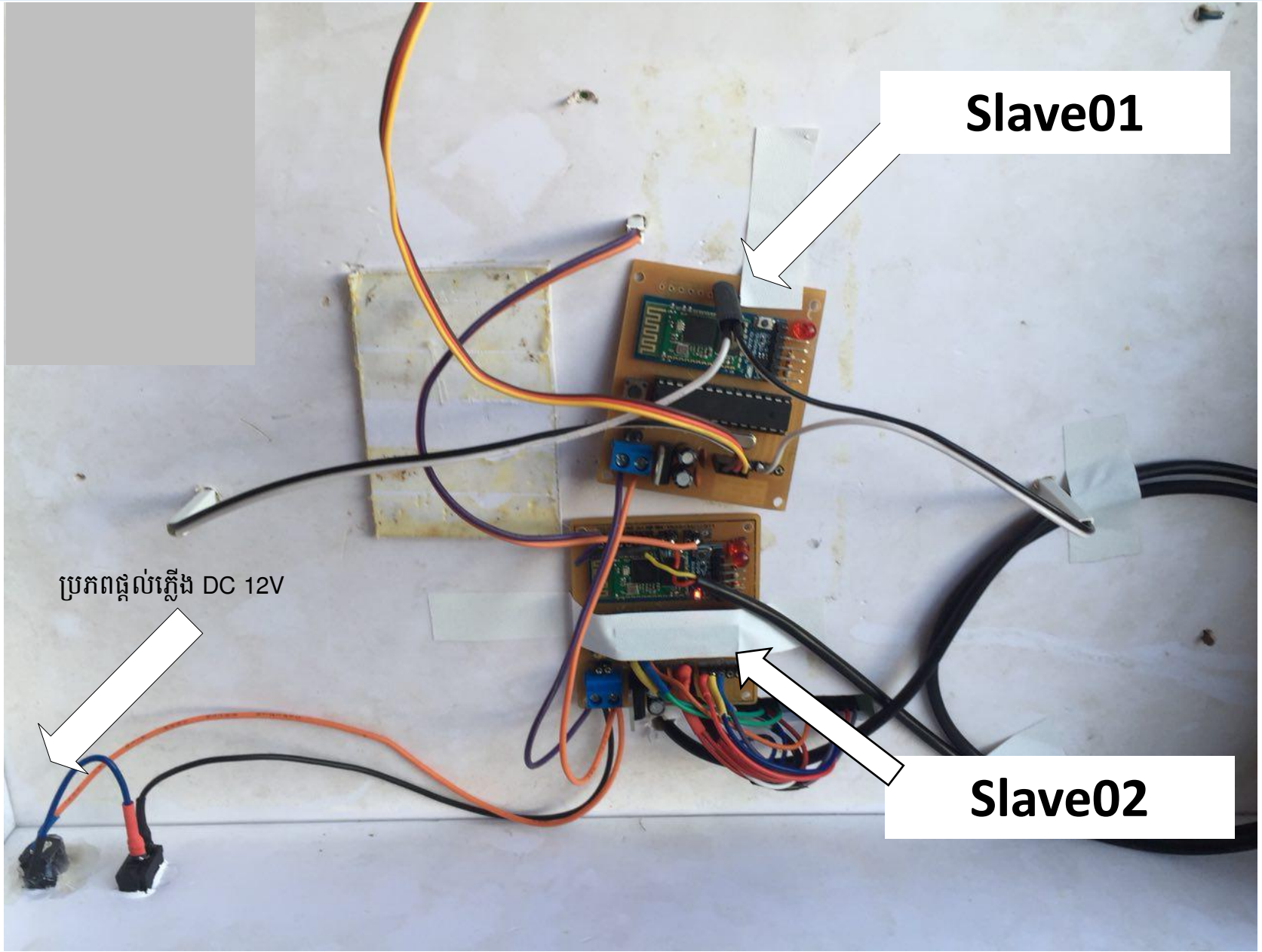

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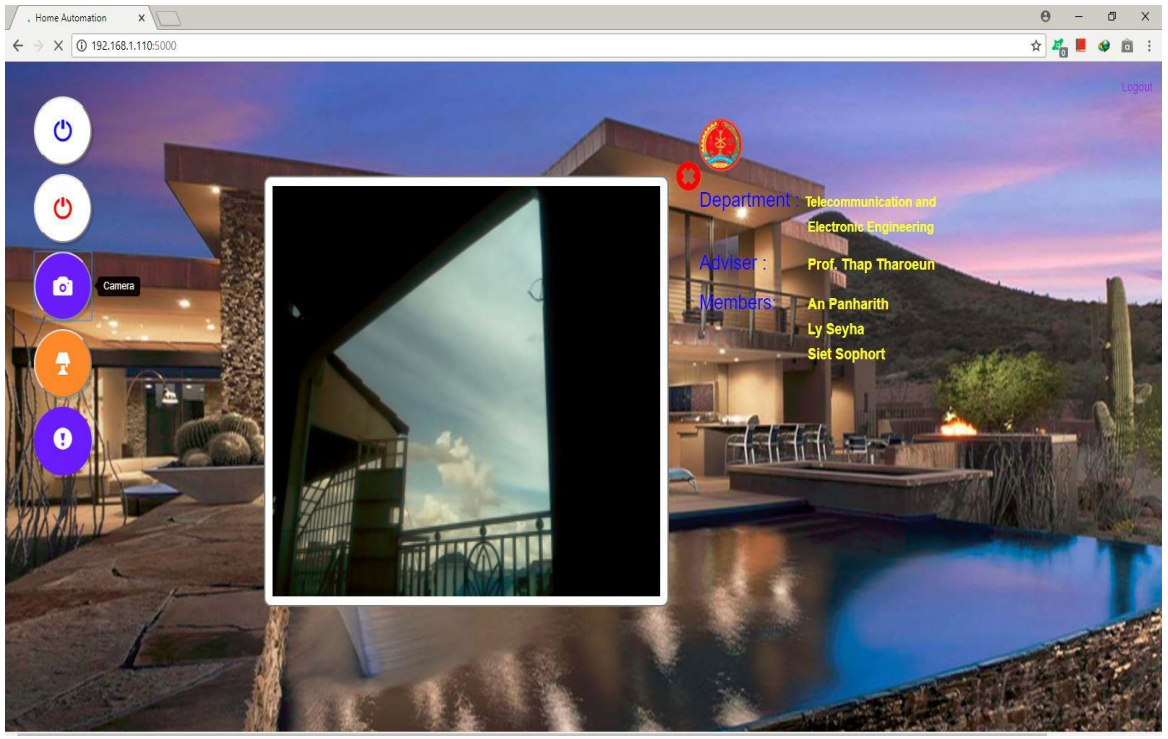
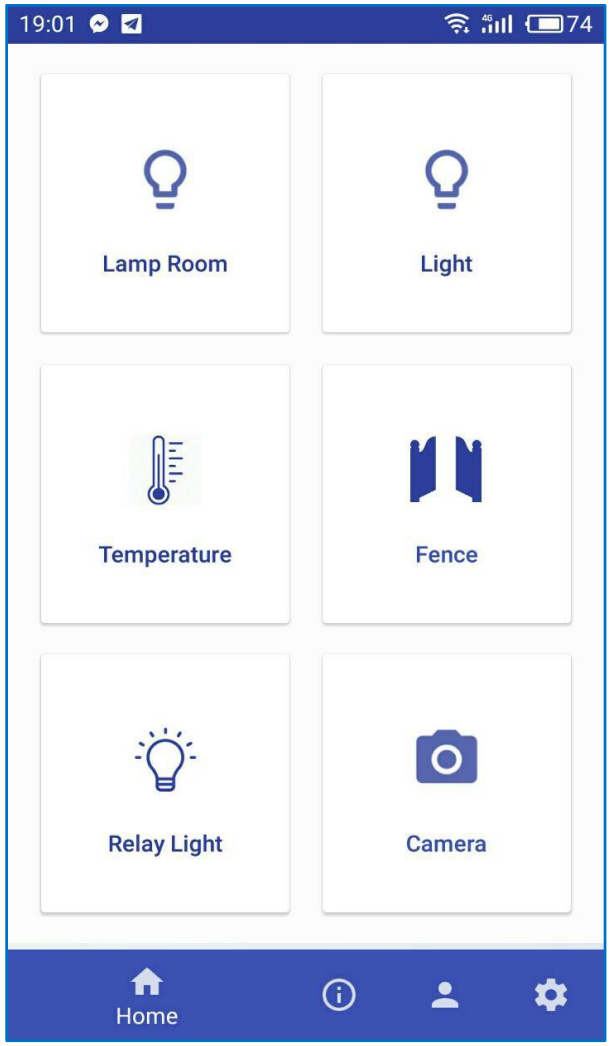
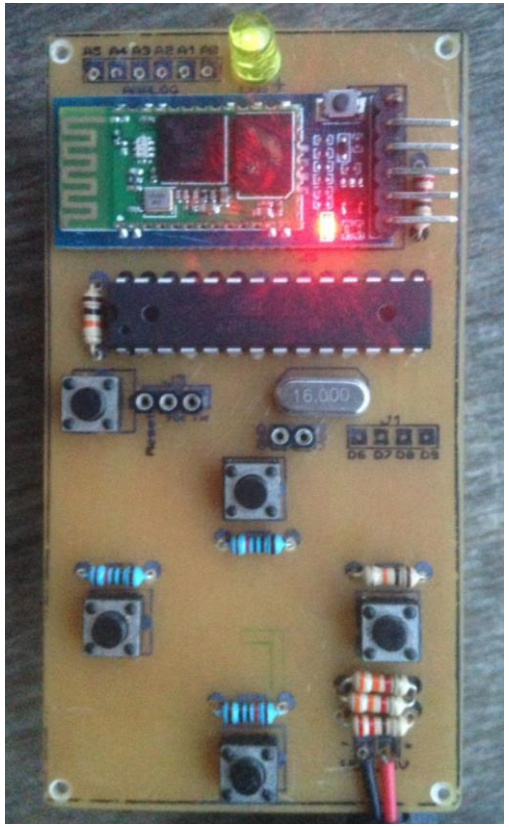
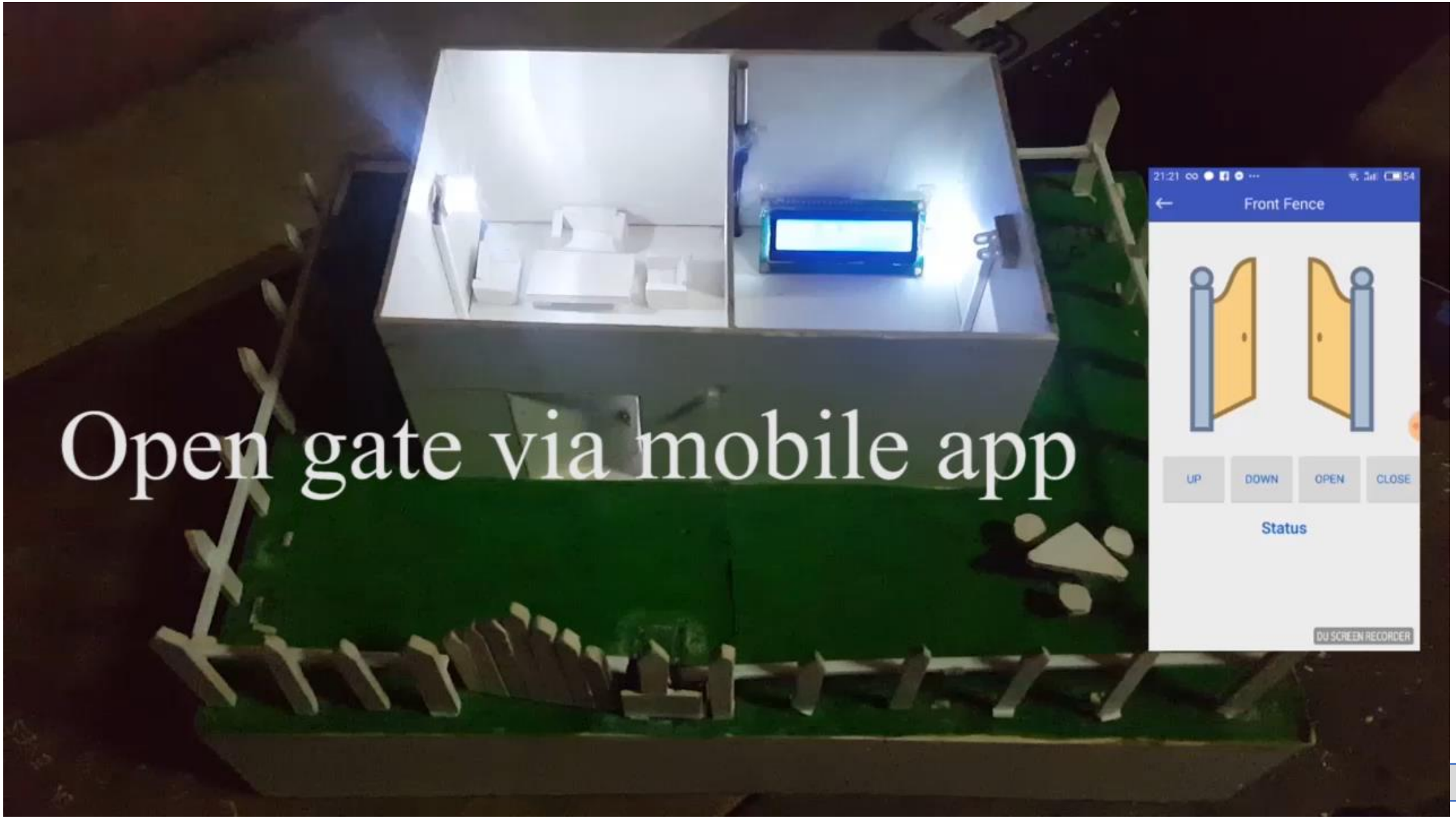






Project Experiment



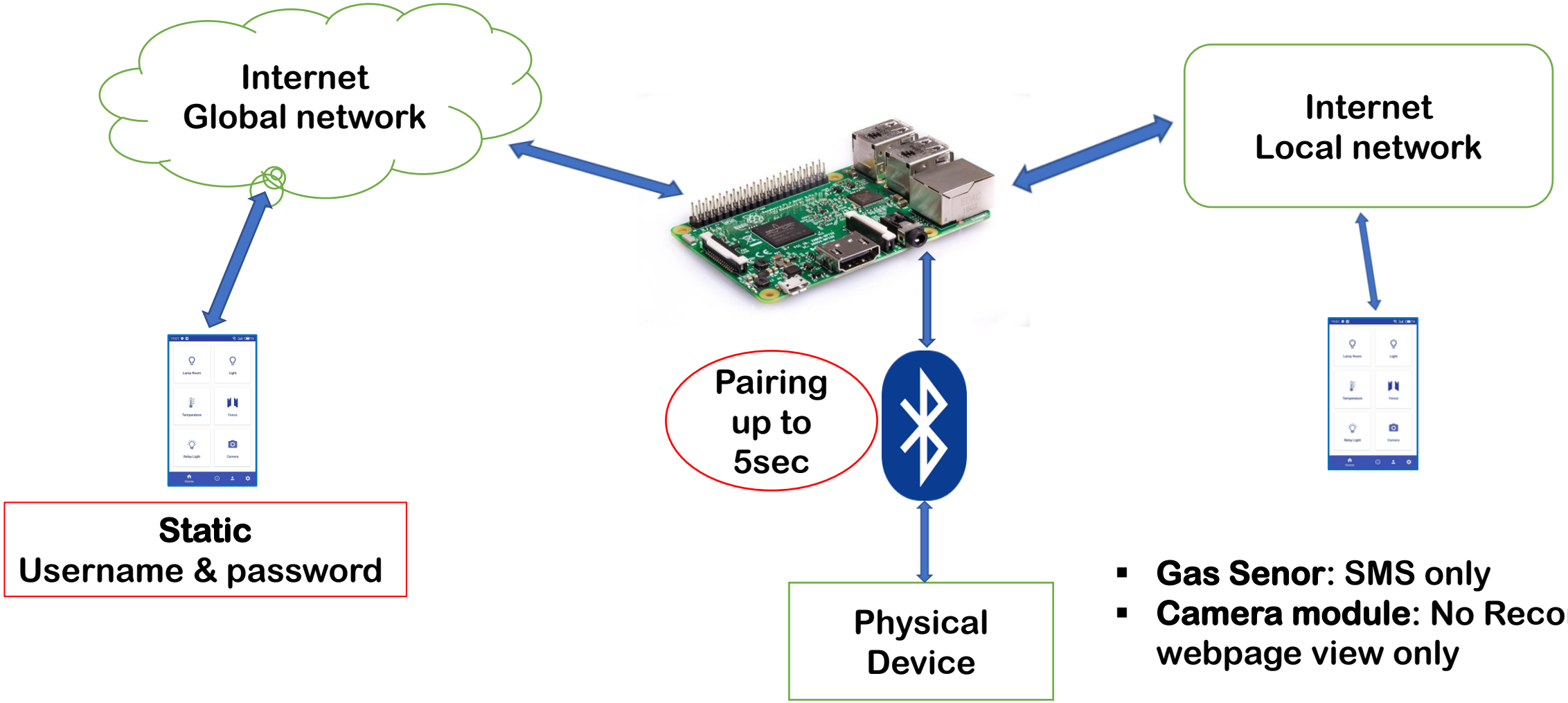
5. Extensibility and Limitation

Extensibility

- Smart farm system
- Smart office system
- Home automation system
- Smart city

5. Extensibility and Limitation

Limitation



- **Gas Senor**: SMS only
- **Camera module**: No Recording & webpage view only

References

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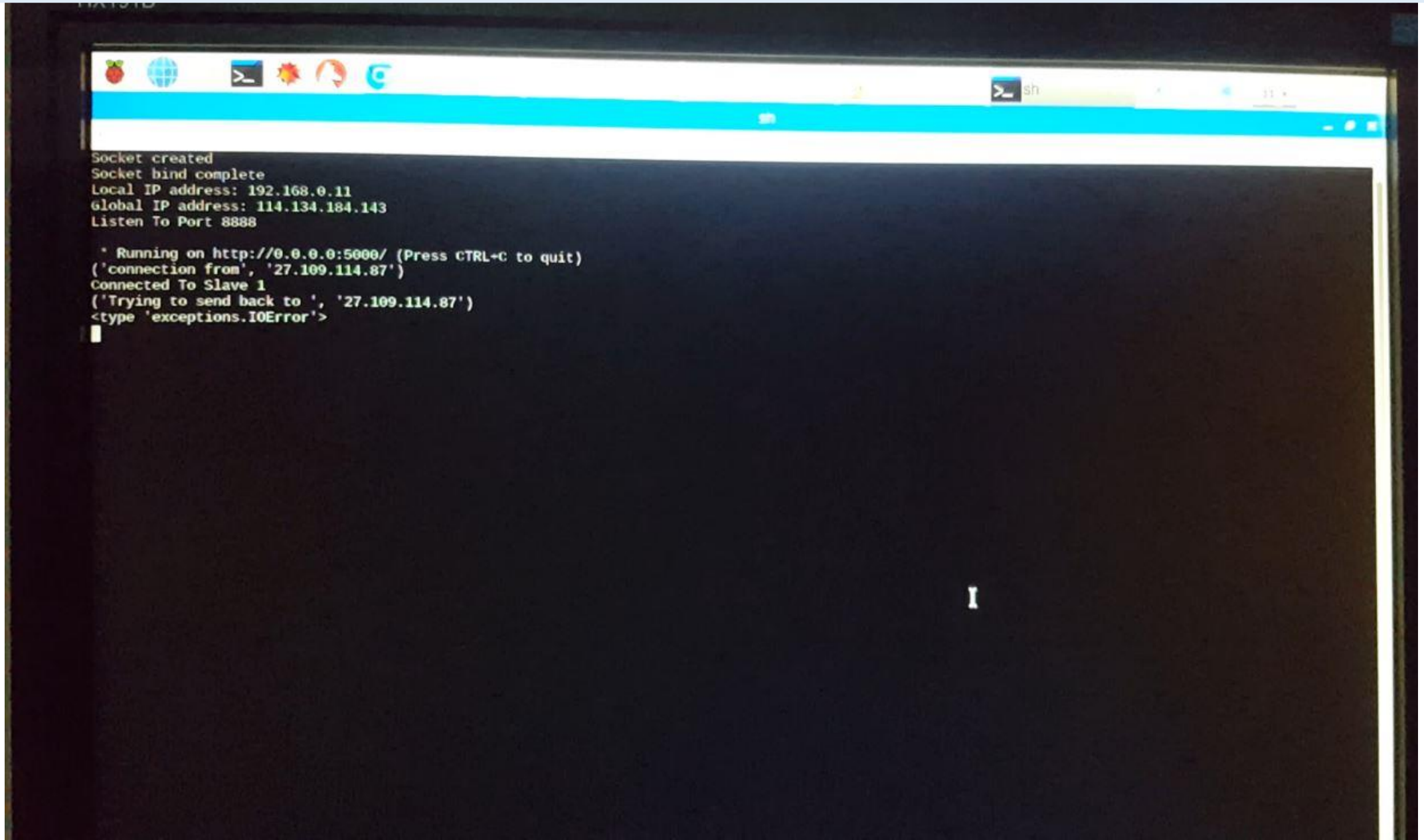
[6] Twilio.com. (2018). Twilio - Communication APIs for SMS, Voice, Video and Authentication. [online] Available at: https://www.twilio.com/ [Accessed 11 Jul. 2018].

[8] Other references are available for any request.

Thank You!

Connection from wide area client