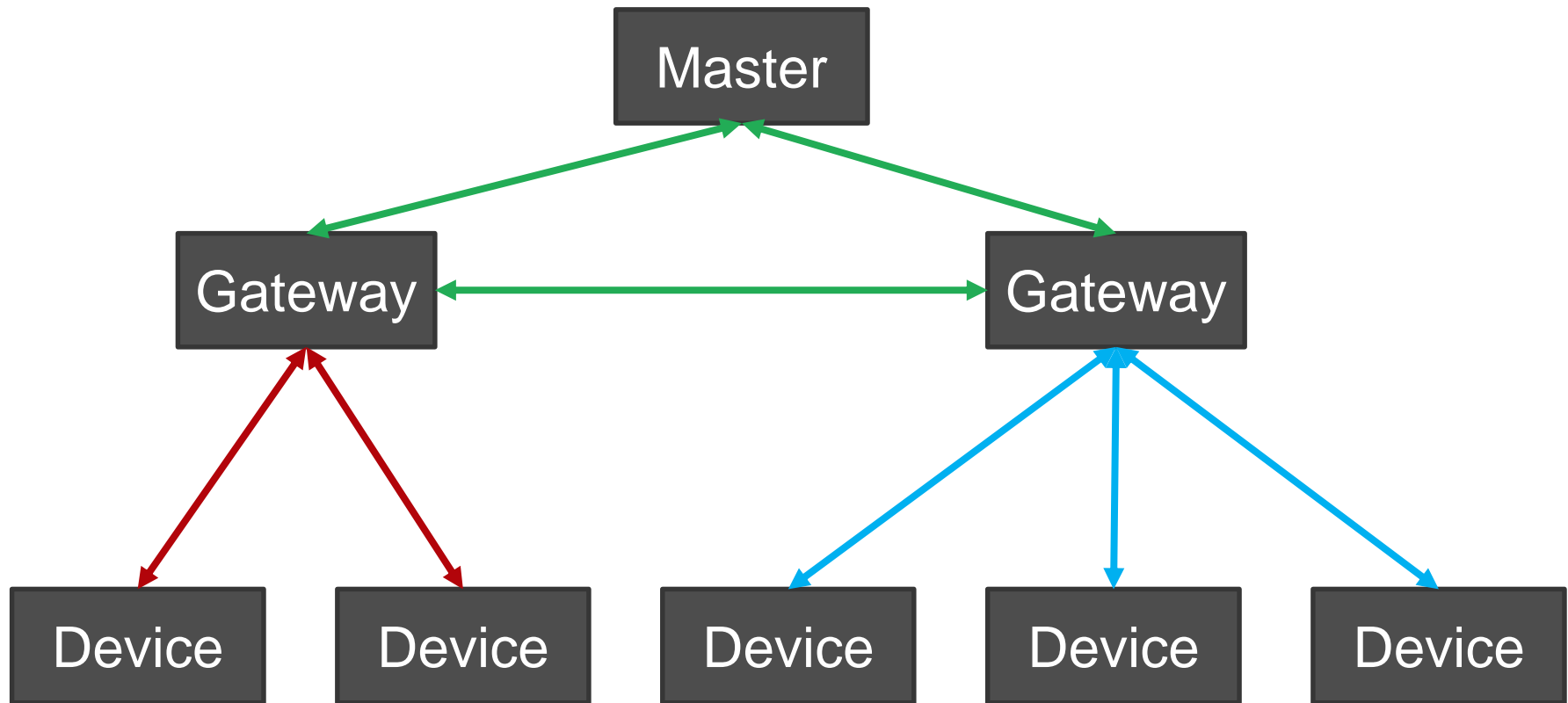




# Lab Week5

▸2016/10/11  
▸周君哲

# WuKong Topolog



# WuKong Master

- Manage gateways
- Manage devices
- Manage applications
- Map applications to devices
- Deploy applications



# WuKong Gateway

- Communication bridge between Master and devices, or between devices and devices
- Monitoring service

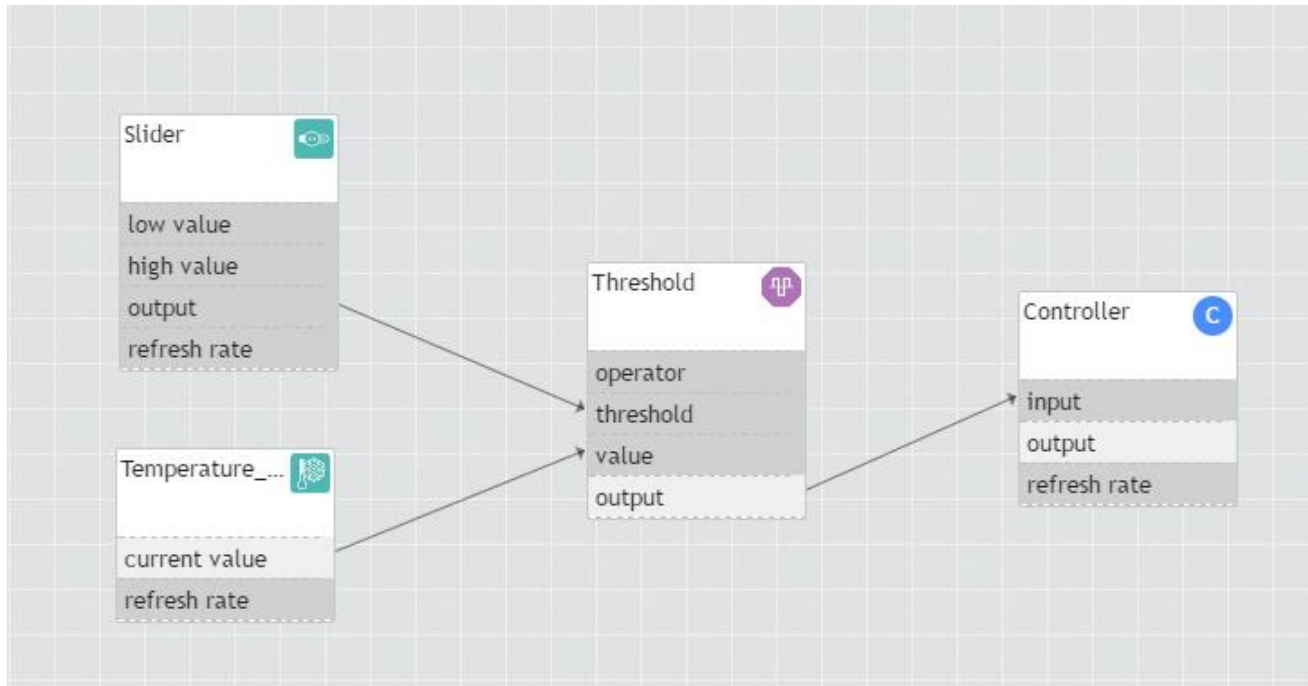


# WuKong Device

- Capability profile
- Location
- Some of sensors, actuators



# WuKong FBP



# WuKong Property

- Four attributes:
  - Name
  - Access
  - Datatype
  - Value
- Propagate when value changed



# Add WuClass Definition

- wukong/ComponentDefinitions/WuKongStandardLibrary.xml
- [https://wukongsun.gitbooks.io/wukong-release-0-4/content/Ch6/Ch6\\_Add\\_a\\_New\\_Definition.html](https://wukongsun.gitbooks.io/wukong-release-0-4/content/Ch6/Ch6_Add_a_New_Definition.html)
- You need to add the definition on both your PC and device.





# Implementing WuClass

- ▶ [https://wukongsun.gitbooks.io/wukong-release-0-4/content/Ch6/Ch6\\_Implement\\_a\\_WuClass\\_by\\_Definition.html](https://wukongsun.gitbooks.io/wukong-release-0-4/content/Ch6/Ch6_Implement_a_WuClass_by_Definition.html)
- ▶ The update function will be called when the property has been modified or been triggered by refresh rate.



# Exercise

- Make two WuClass and connect them together.



# First WuClass: Counter

- Use Touch pad
- No input, One output short.
- Start from 0. Every time touch pad has been touched, output increase 1. Return to 0 if output is 4.
- 0 -> 1-> 2-> 3 -> 0



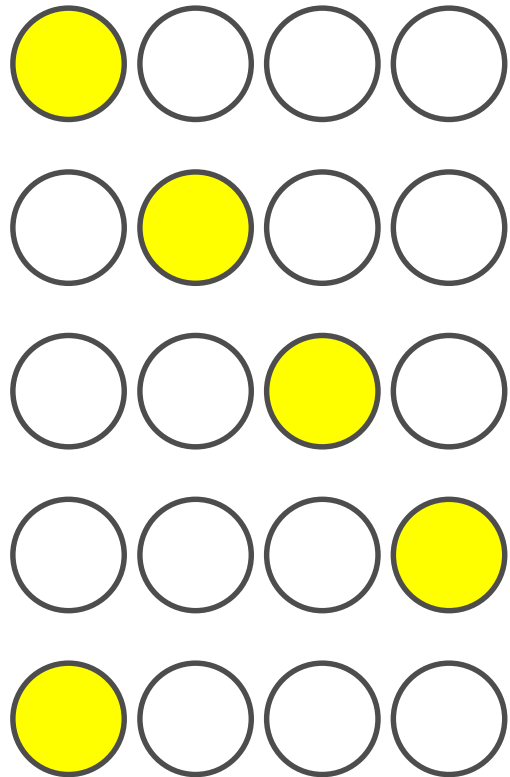
# Second WuClass: LED Patten

- Use LED stripe
- One input short, no output.
- If input is 0, turn off all LED.
- If input is 1, blink all LED with a 2Hz red light
- If input is 2, repeatedly blink all LED separately from left to right with yellow light and a 0.2 second interval
- If input is 3, do the same thing as 2, but from right to left

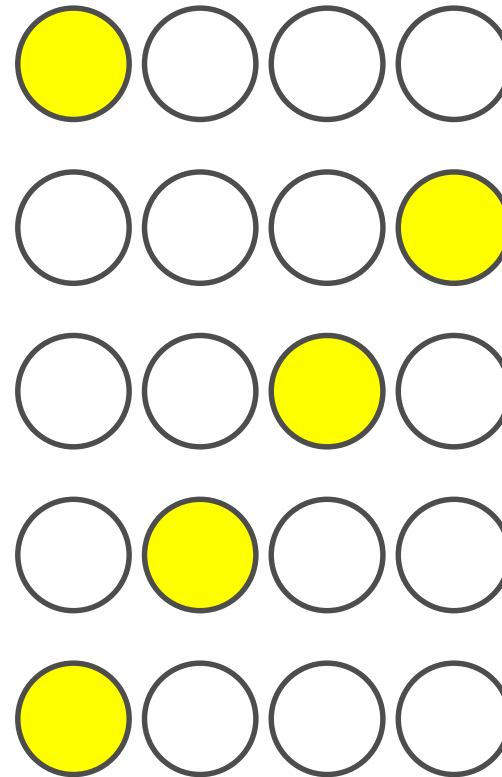


# LED example

Patten 2



Patten 3



# WuClass Recommend

- Give both WuClasses a refresh rate property, and use some variables to record the time or states instead of using while loop or sleep in WuClass update function.

