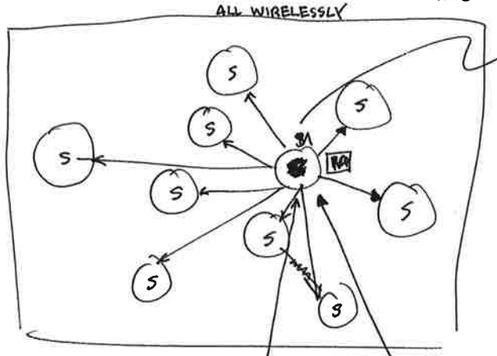
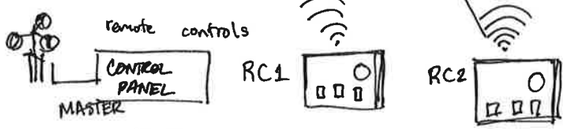
BLUMEN LUMEN
State machine
FLOWER

Overview: (M) MASTER COORDINATES ALL (S) SLAVES ALL WIRELESSLY

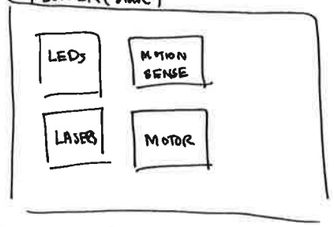


MASTER Flower has a control panel base

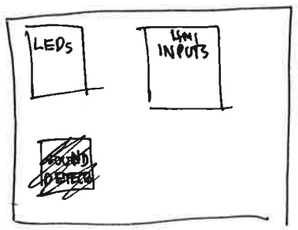


MASTER DOES ITS THING EXCEPT WHEN RC1 or RC2 is ON. ~~RC2~~ RC1 takes precedence over RC2, RC1 > Master. MASTER arbitrates SLAVES ONLY GET MESSAGE FROM MASTER

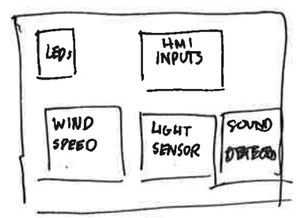
FLOWER (slave)



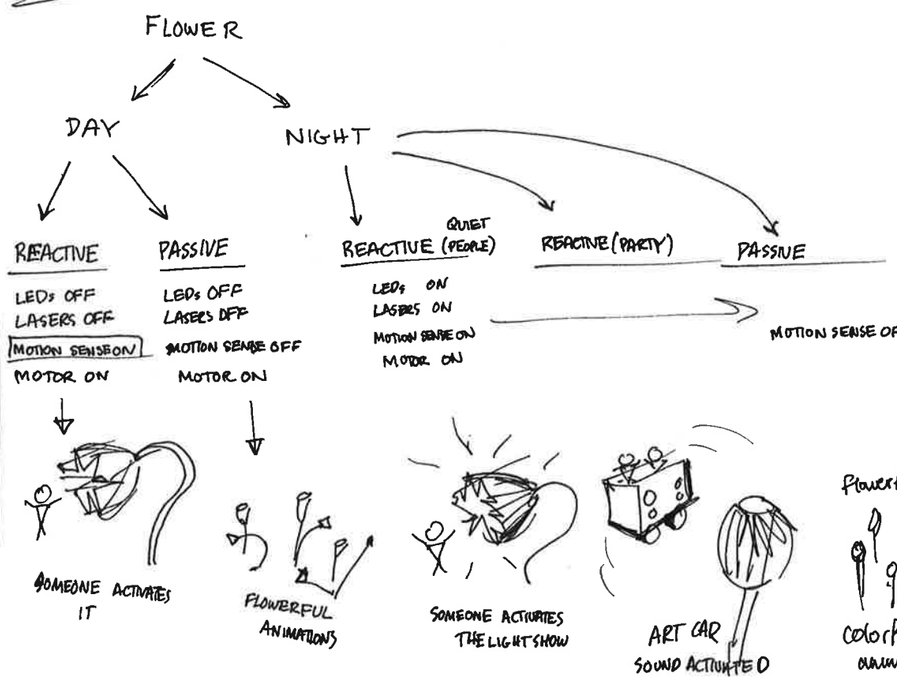
CONTROLLER (master proxi)



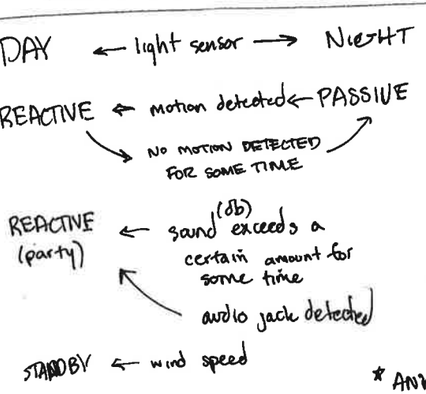
superclass
CONTROL PANEL (master)



MODES OF INTERACTION



TRANSITIONS TO DIFFERENT states MODES *



* ANY OF THESE STATES CAN BE FORCED

PROTOCOL (Design: to minimize messages)

MESSAGE FROM MASTER TO SLAVE

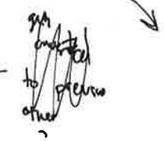
- START BYTE
- TIMESTAMP (+ bit if first message since booting up?)
- Address of recipient
- COMMAND
- parameter
- ⋮
- end ~~parameters~~ byte

(non-trivial) example

coordinate animation → send animation function name → runs indefinitely → stop frame

MESSAGE FROM RC to MASTER

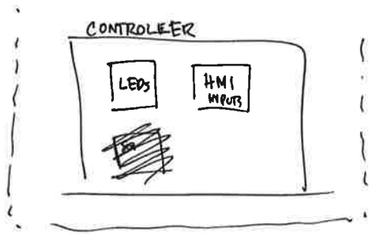
- START BYTE
- MASTER ADDR
- ~~TIMESTAMP~~ COMMAND
- PARAMETERS
- INPUTS
- end Byte



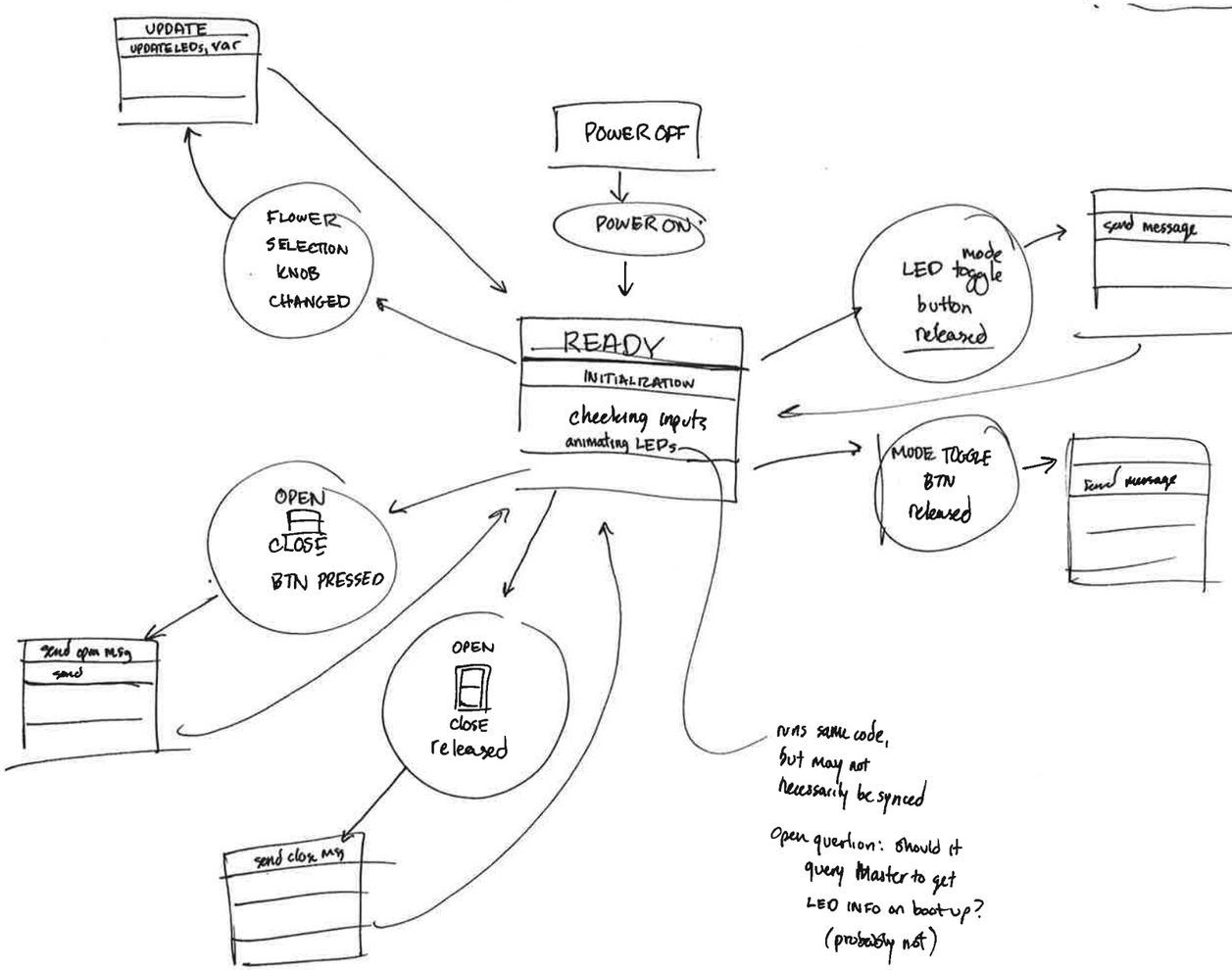
(non-trivial) example

BLUMEN LUMEN STATE MACHINE

CONTROLLER

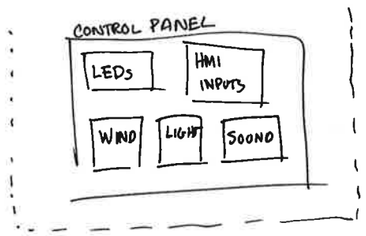


THESE GUYS CAN BE REPROGRAMMED TO CHANGE THRESHOLDS/ PARAMETERS ON FLOWERS



BLUMEN LUMEN
STATE MACHINE

Control PANEL
(MASTER)



CAN BE REPROGRAMMED