Cranberry, Dragon Fruit, & fiRmware (CDR)

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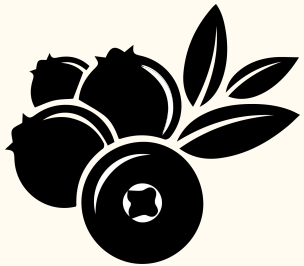
Updates - Hardware

Cranberry

- Populated one V3.2 board
- Functionality of power, MCU, and XBee modules verified
- Sensor board returns accurate readings



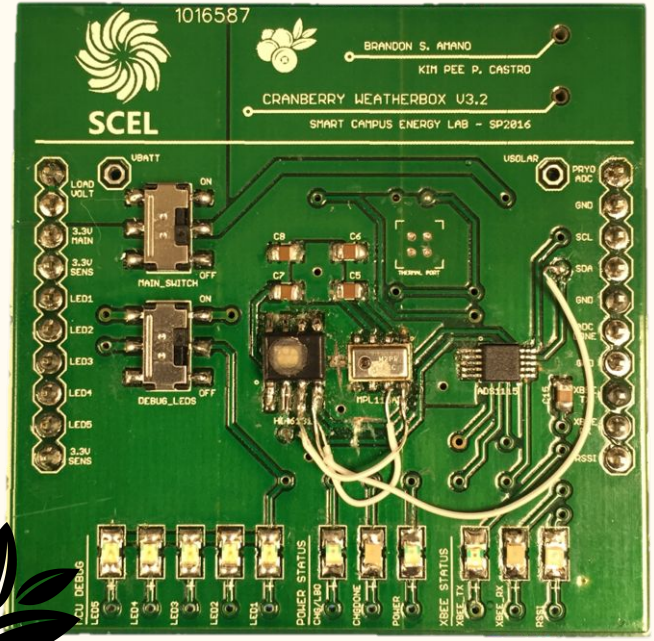
Dragon Fruit

- Populated 5 boards from versions 1 and 2
- 4 of 5 sensor boards give correct readings

Updates - Firmware

- Completed testing and confirmation of Apple, Cranberry, and Dragon Fruit's sensors
- Unique schema for Apple
- Updated schema sizes for transmission
- Apple & Cranberry pin configuration updates
- XBee configurations corrected for transmission
- Full integration implemented on all 3 current generations
- Pull request submitted for Firmware

Major Issues - Hardware



Cranberry

- Incorrect part package for humidity sensor
- Placement of components led to difficulty in soldering parts

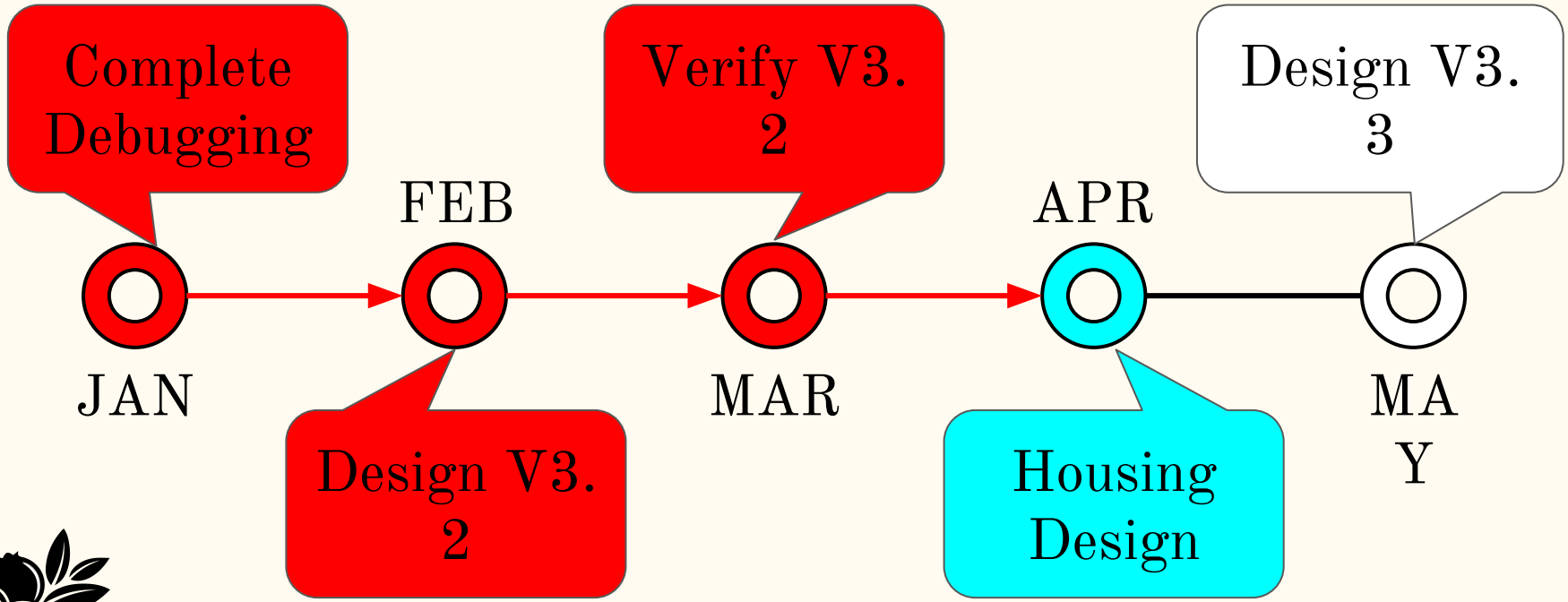
Dragon Fruit

- Random phantom volt from XBee

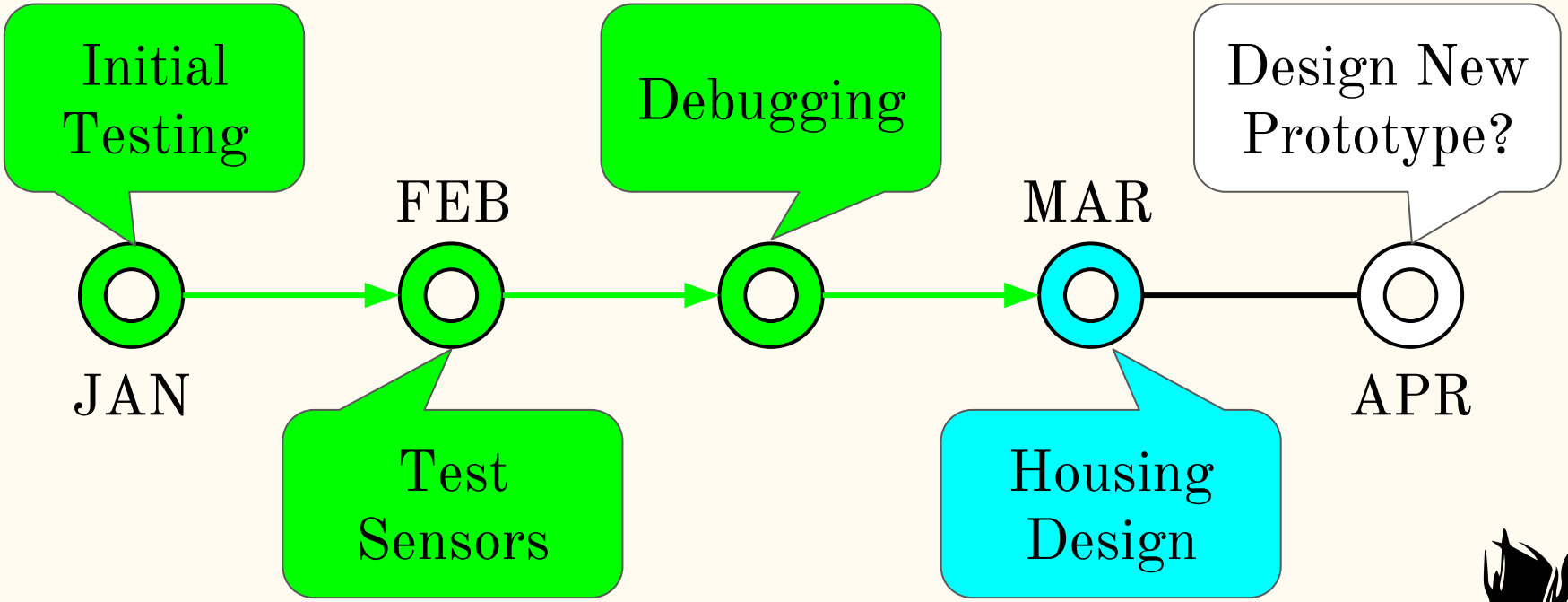
Major Issues - Firmware

- Incorrect XBee configurations resulted in failed transmissions (Resolved)
- Packets weren't transmitting consistently (Resolved)
  - Original schema was too large
- Health check logic resulted in continuous Power Save Mode (Resolved)
- Scaling factors (Resolved)
- Function conflicts with a library (Resolved)

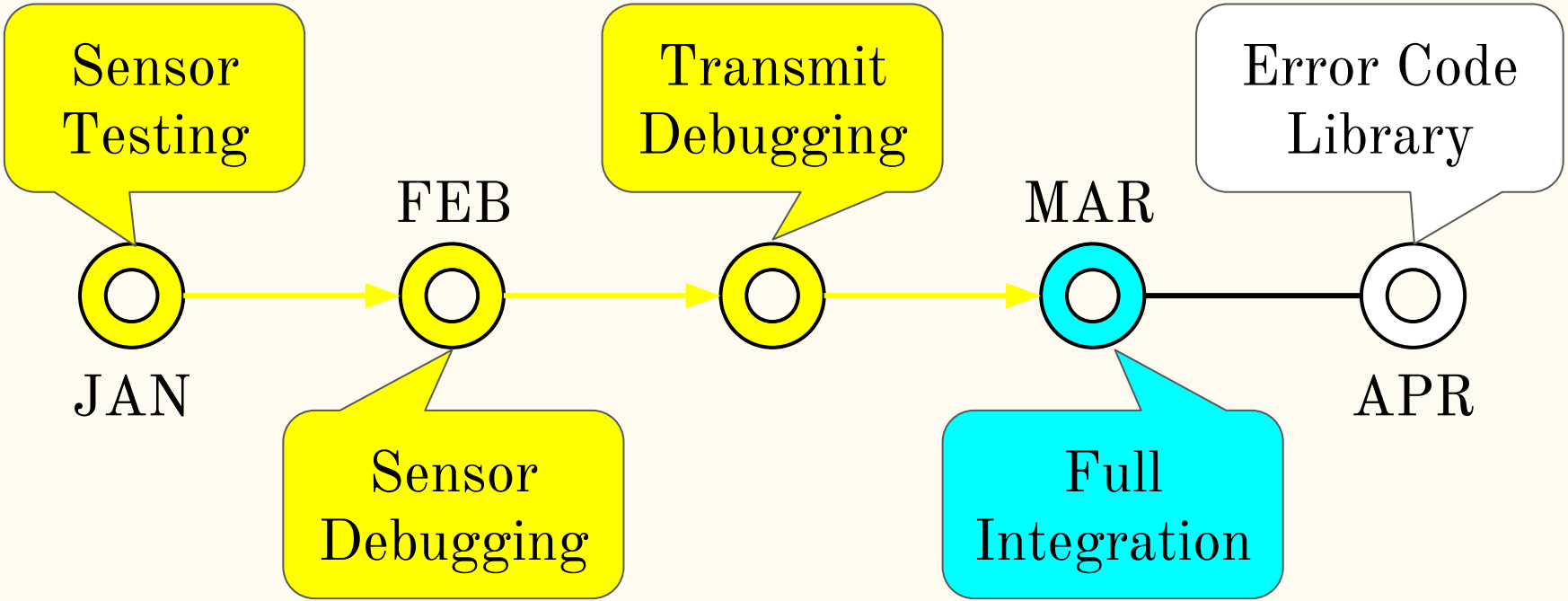
Schedule - Cranberry



Schedule - Dragon Fruit



Schedule - Firmware



Questions?