## greenerthumb Requirements

- 1. Each hardware component must be optional.
- 2. Sense:
  - a. Air temperature.
  - b. Soil moisture.
- 3. Publish sensed data on a connected network.
- 4. Log sensed data from the network into rotating logs.
- 5. Plot sensed data from the network.
- 6. Allow plots to be saved.
- 7. Remove anomalous data from sensors.
- 8. Include an option in bullhorn/subscribe to automatically reconnect.
- 9. Embed the icon in the plot binary.
- 10. Don't hide errors in the utility scripts.
- 11. Emulate sensors if real sensors aren't detected.
- 12. Provide a log processor.
- 13. Provide install tools.
- 14. Include data ranges in the plot legend.

## **Future Requirements**

- Sense soil pH.
- Push a notification to a connected phone when the soil moisture from the network is below a user set threshold.
- Water plants when the soil moisture from the network is below the user set threshold.
- Make sensors wireless.
- Provide IC packages for sensors.
- Monitor networks.
- Provide a web interface.
- Discover addresses and ports automatically.