Household Environmental Monitoring

Evan Orenstein Scott Melenbrink Chris McKiernan

Final Demo

- Demonstrate ability to easily access and view current sensor data through web app
- Integrate weather data queried from internet into system
- Temporarily implement full sensor network in household
 - Record data over 1 week
 - Long and short term storage
- Demonstrate ability to model data
 - Show trends over week in household
 - Make conclusions on data findings

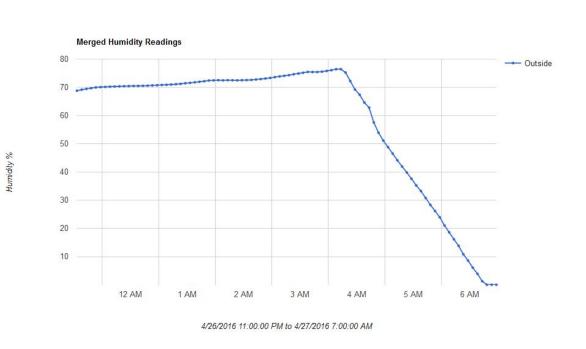
Sensor Network

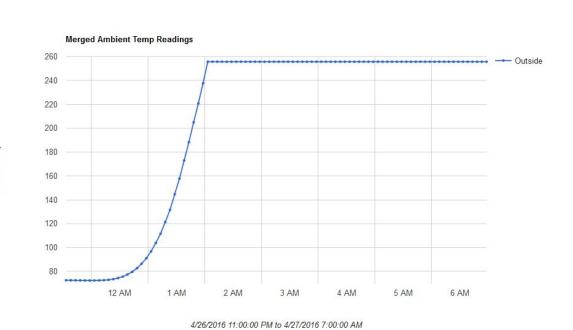
- Full 6 node network for the last ~12 hours
- TelosB troubleshooting

Power Issues

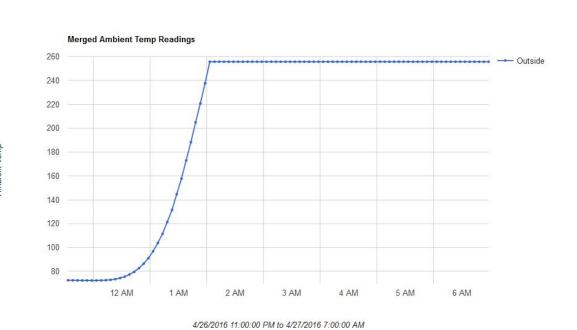






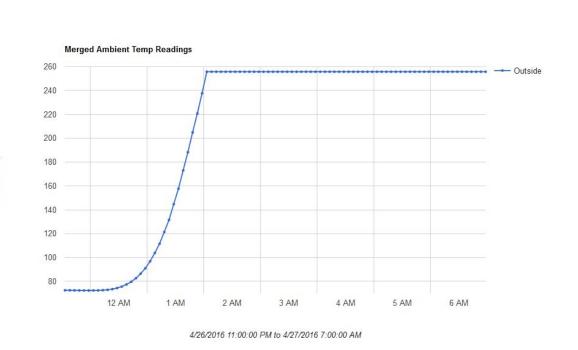


This is a result of LOW BATTERIES

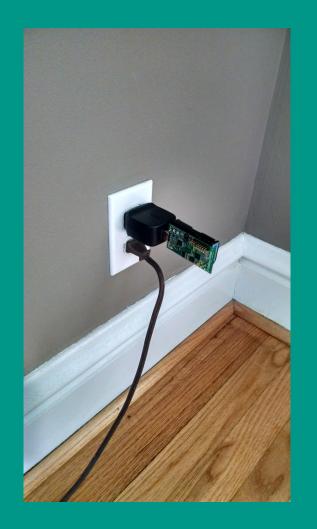


This is a result of LOW BATTERIES

 Also got us kicked off our server...



Solution!





Solution!



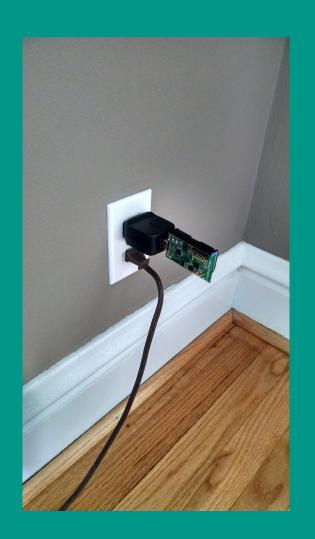
Hack?



Solution!

 Hopefully can find the cause of the battery life issue in time for the final technical paper

Hack?

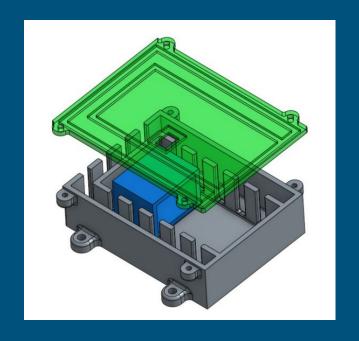


Backend

http://71.86.152.84/app.php/

Outdoor Sensor Case





Questions?