



PROGRESS REPORT

PROJECT SUMMARY

| REPORT DATE | PROJECT NAME | PREPARED BY |
|-------------|--------------|-------------|
| 1/8/2018 | Is it Moist | N01132027 |

STATUS SUMMARY

“Is It Moist” sensor is currently in prototype form. Sensor is assembled, operational. Moisture is detected, and user is notified. Currently creating code for analog input. Testing and calibration continue.

PROJECT OVERVIEW

| TASK | PROGRESS | NOTES |
|----------------------|----------|--|
| Acquiring Components | 100% | All essential items received. |
| Component Testing | 100% | All required materials tested and functioning correctly. |
| Assembly | 100% | Product assembled and build video documented. |
| Function Testing | 75% | Product tested and functioning. |
| Prototyping | 100% | Prototype created and functioning. |
| Case Testing | 50% | Testing various use cases for product and collecting data. |
| Finalizing | 75% | Applying minor adjustments to hardware and software. |
| Documentation | 85% | Awaiting finalization to complete and publish documentation. |

BUDGET OVERVIEW

| CATEGORY | SPENT | BUDGET | NOTES |
|------------------------------|-----------|--------|---------------------------------|
| Base Components | \$ 119.23 | 59.62% | All items received on schedule. |
| Analog to Digital Components | \$ 34.41 | 17.21% | Awaiting shipment. |

CHALLENGES

| ISSUE | PLAN / SOLUTION |
|---|---|
| Calibrating Analog to Digital Sensor Signal | Potentiometer of Analog-Digital sensor needs further calibration to trigger at desired moisture level. |
| Products Software Status Response Time | Software currently checking for sensor status change too frequently. Measurement time needs to be configured for increased precision. |
| Reading Analog Signal | Currently creating code to read analog values of sensor |

CONCLUSIONS / SUBSEQUENT PLANS

“Is it Moist” prototype is currently operational and is in testing to calibrate hardware and software for increased precision. Awaiting components for integration of analog moisture values. Plans subsequent of finalizing project “Is it Moist” involve integration with project “RaspiGuard” which is targeted toward home/commercial security.