Technical Track Proposal

Roswell Firelabs

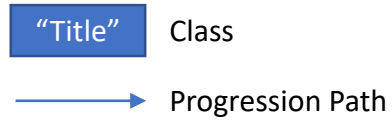
Purpose of this Document

- This document provides a framework for discussion.
  - It is going to be changed over time as we learn more about demand and “what works.”
  - Having a framework provides a starting point for discussion, not “the answer” or any kind of restriction on possibility.
- Understanding general purpose and direction is critical for creating learning opportunities.
  - “If you don’t know where you’re going, you might end up somewhere else.”
  - If you can’t explain why you’re doing something (the “so what” question), then are you ready to do it?

“Charter”

- Scope: Technical aspects of Firelabs spheres of activity
- Goal: “Make Tech Accessible”
  - Create a path to more advanced lessons and other Firelabs interests.
- Pass Along:
  - Knowledge and understanding
  - Hands-on experience
  - Resources and connections
- Constituents:
  - Primary: Firelabs members (tailor to their interests first)
  - Secondary: Non-members; some may be interested in joining.

High-level Roadmap



Knowledge Level	First Project	Hardware	O/S	Programming
Application	TBD (Slack Bot? Web Server? Dashboard?)	Makerspace Projects	Cloud, Server, Web, Machine Learning, IoT	API, GIT, Frame-works
Advanced	TBD (Robot?)	Robotics / Ham Radio	Linux	Obj.-Orient. Prog.
Intermediate	TBD (Sensor/Actuators, output log / proc.)	Arduino	Raspberry Pi (and Others)	Procedural Prog.
Introduction	On-line Weather Station (Dana)	Hardware Architecture	Connection / Interface	Scripts / Sketches

Outstanding Questions

- Where does 3D Printing fit in here? 3D Modeling? CNC?
- Can we contribute to or create other technical areas?
- Who would be interested in diving into specific topics? (The general areas need to be developed once we have the structure in hand.)
- How do we schedule in a way that allows progression, but does not stretch things out too far?

Next Steps

- Dana has put a lot of work into an introductory initial class (Weather Station) that covers all three broad categories (Hardware, O/S, and Programming). No reason to not schedule this and announce it.
- Survey the membership to learn more about what they would be interested in learning in each area. (Create a “demand map.”)
- Find people to develop specific areas and teach the classes.
- Create a “cadence” where Tech Track people can check in and trade ideas and lessons.