Status Update

- A device that allows users to monitor information of their choice (weather, stocks, sports, etc.) at a glance.
- Not a (portable) orb!

- Parts list mostly finalized
- Researching accelerometer choices
- No parts acquired yet
Architecture

1. 802.11b/g (TCP)
2. Visual Information Output
3. Physical User Input
Use Case: Startup

1. Power On
2. Load Previous Settings
3. Parse and Display Data
4. Receive Data
5. Request Data
Use Case: Shutdown

Store current feeds and content

Power Off \rightarrow \text{Shutdown}
Use Case: Loss of Connection

Select feed (Accelerometer)

Tap

Parse and Display Data

Display data from last update and following message on screen:
Unable to retrieve data.
This feed may be x+ minutes old.

Request Data

Attempt to Receive Data (and fail)
## Risks & Mitigation

<table>
<thead>
<tr>
<th>Risk</th>
<th>Mitigation Strategy</th>
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| We are unable to retrieve data from the internet (partial data or no Wi-Fi) | Alert user that data could not be retrieved via message on screen  
Display data from last update (if possible) |
| Accelerometer is too sensitive                                        | Recalibrate                                              |
| We are unable to interface w/ accelerometer via SPI                   | Try another accelerometer (RS232)                        |
| We are unable to interface w/ LCD or LCD does not refresh quickly enough | Try another LCD (SPI)                                    |
| Long startup time (boot time + time needed to acquire Wi-Fi connection) | Customize kernel to remove unneeded modules  
Display data from last update                                           |
| Device Configuration                                                   | Web based  
Touch-screen                                          |
| Crash recovery                                                        | Journaling file system  
Flash based memory optimizations                                  |