

Nibo

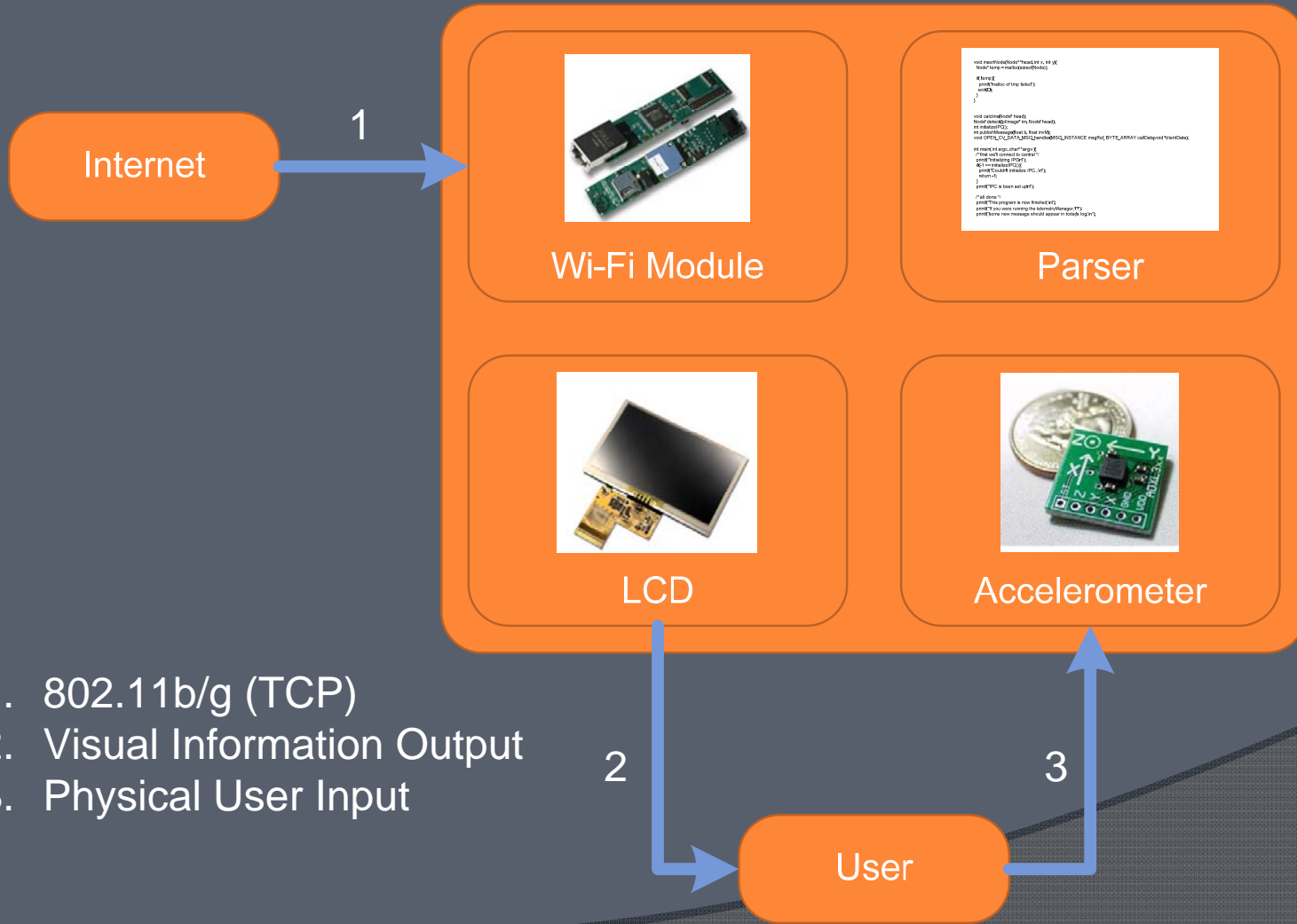
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Status Update

- 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



Internet

1



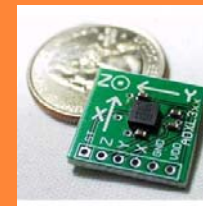
Wi-Fi Module

```
void handleWifiModule() {  
  Node* temp = moduleQueue[0];  
  if (temp) {  
    temp->send("wifi module");  
  }  
}
```

Parser



LCD



Accelerometer

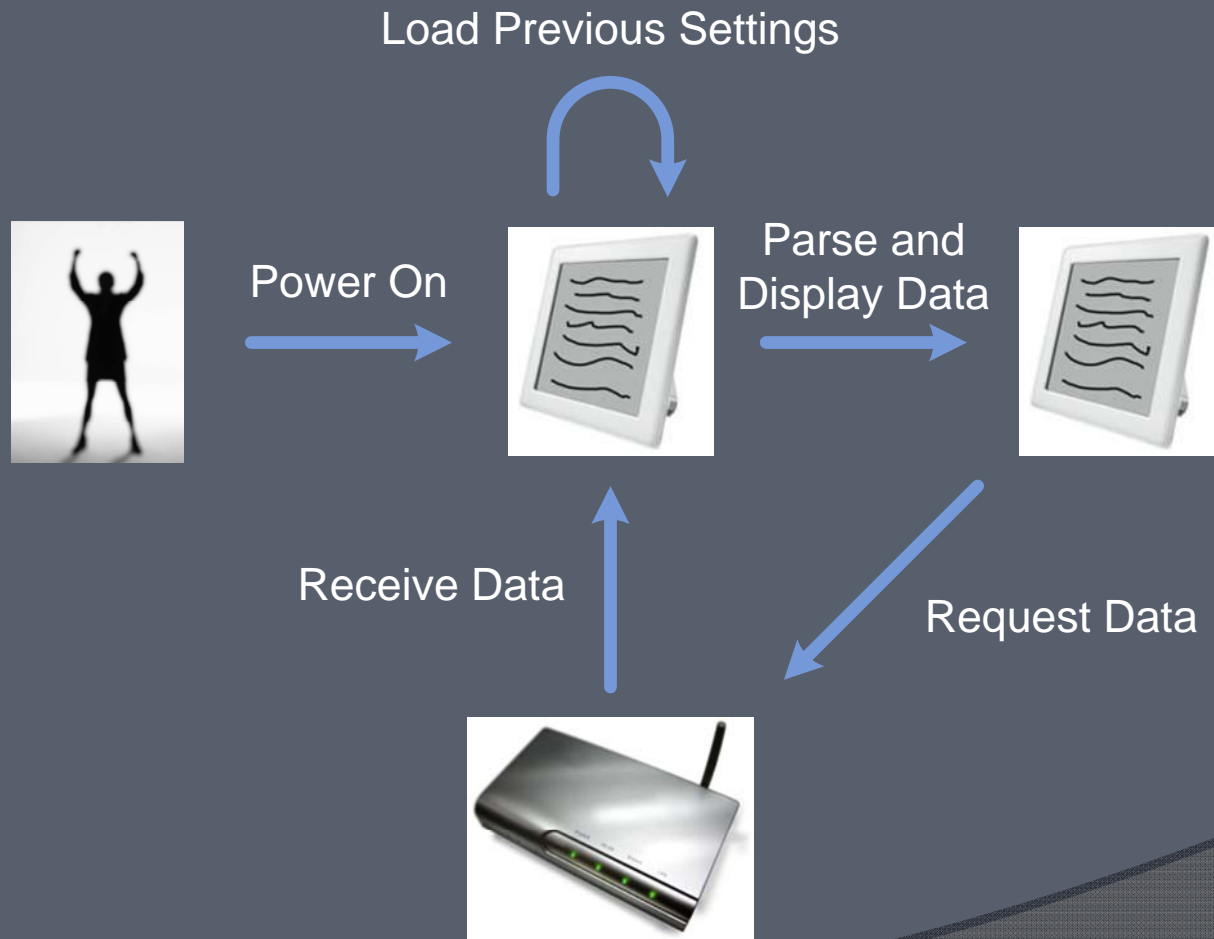
1. 802.11b/g (TCP)
2. Visual Information Output
3. Physical User Input

2

User

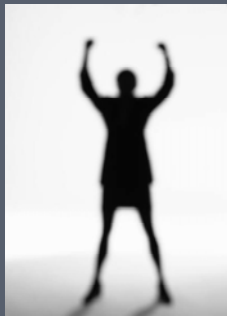
3

Use Case: Startup

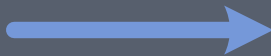


Use Case: Shutdown

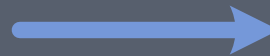
Store current feeds
and content



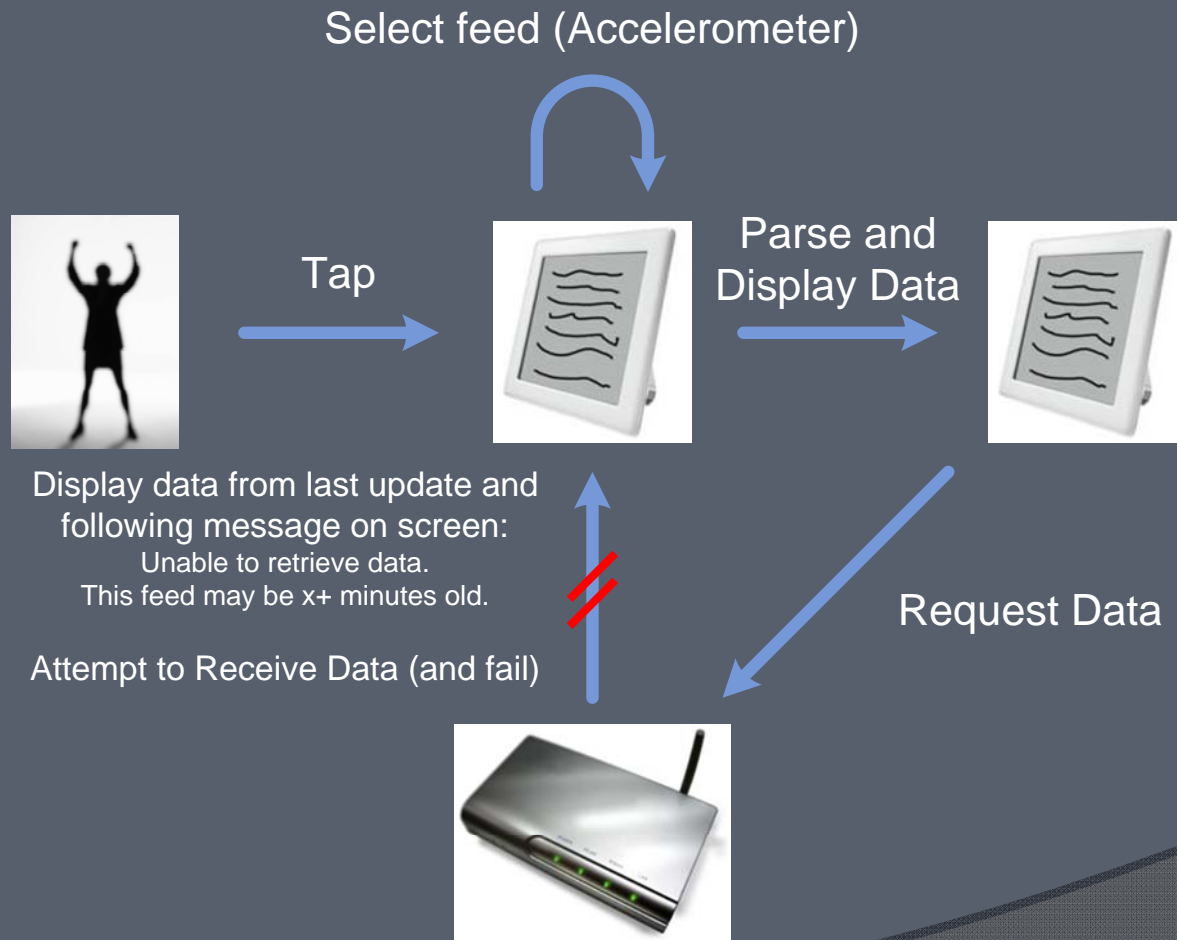
Power Off



Shutdown



Use Case: Loss of Connection



Risks & Mitigation

Risk	Mitigation Strategy
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