

# VIRTUAL WHITEBOARD

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## Motivation

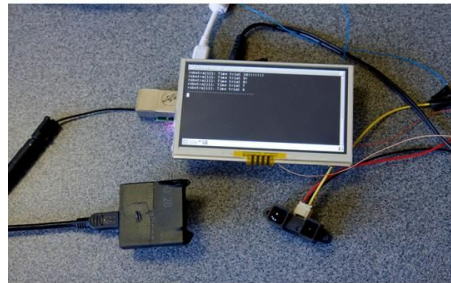
The Virtual Whiteboard is a device that can display text messages from cell phones anywhere in the world utilizing an LCD screen that can be updated over WiFi with real-time updates.

### Before



- No notification to owner when someone responds
- Owner must be present to write message

### After



- Acknowledgement message can be sent by user to owner
- Owner can text message from cell phone

## Development Environment

### Hardware

- Gumstix Verdex Pro XM4-bt
- Netpro-vx
- ConsoleLCD16-vx
- Samsung LCD
- RFID Reader
- IR Proximity Sensor

### Software

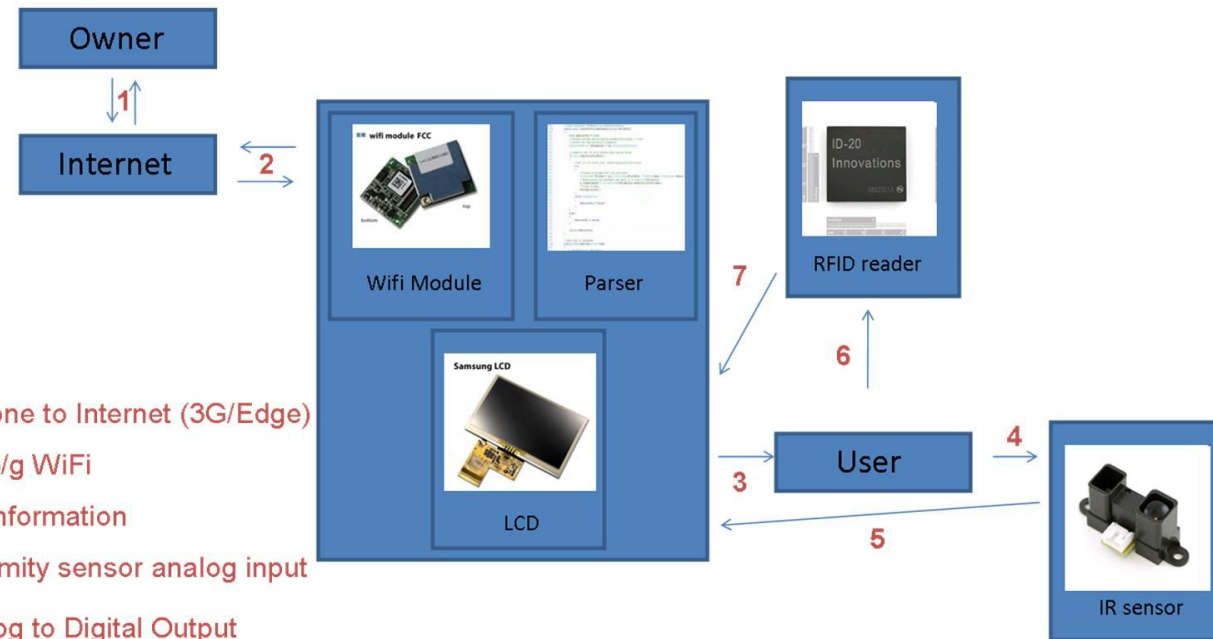
- Linux 2.6 Kernel
- Custom GUI

### Protocols

- 802.11 b/g
- RFID
- Infrared



## Architecture



1. Cell phone to Internet (3G/Edge)
2. 802.11b/g WiFi
3. Visual Information
4. IR proximity sensor analog input
5. IR Analog to Digital Output
6. If User has RFID Tag, RFID scanned
7. RFID Digital output

## Results

