

Hardware Components

- TI CC3220S LaunchPad
- NFC Sensor (NXP MRFC522 or NXP PN522)
- 2 AA batteries
- LEDs, DC Motor

Software Components

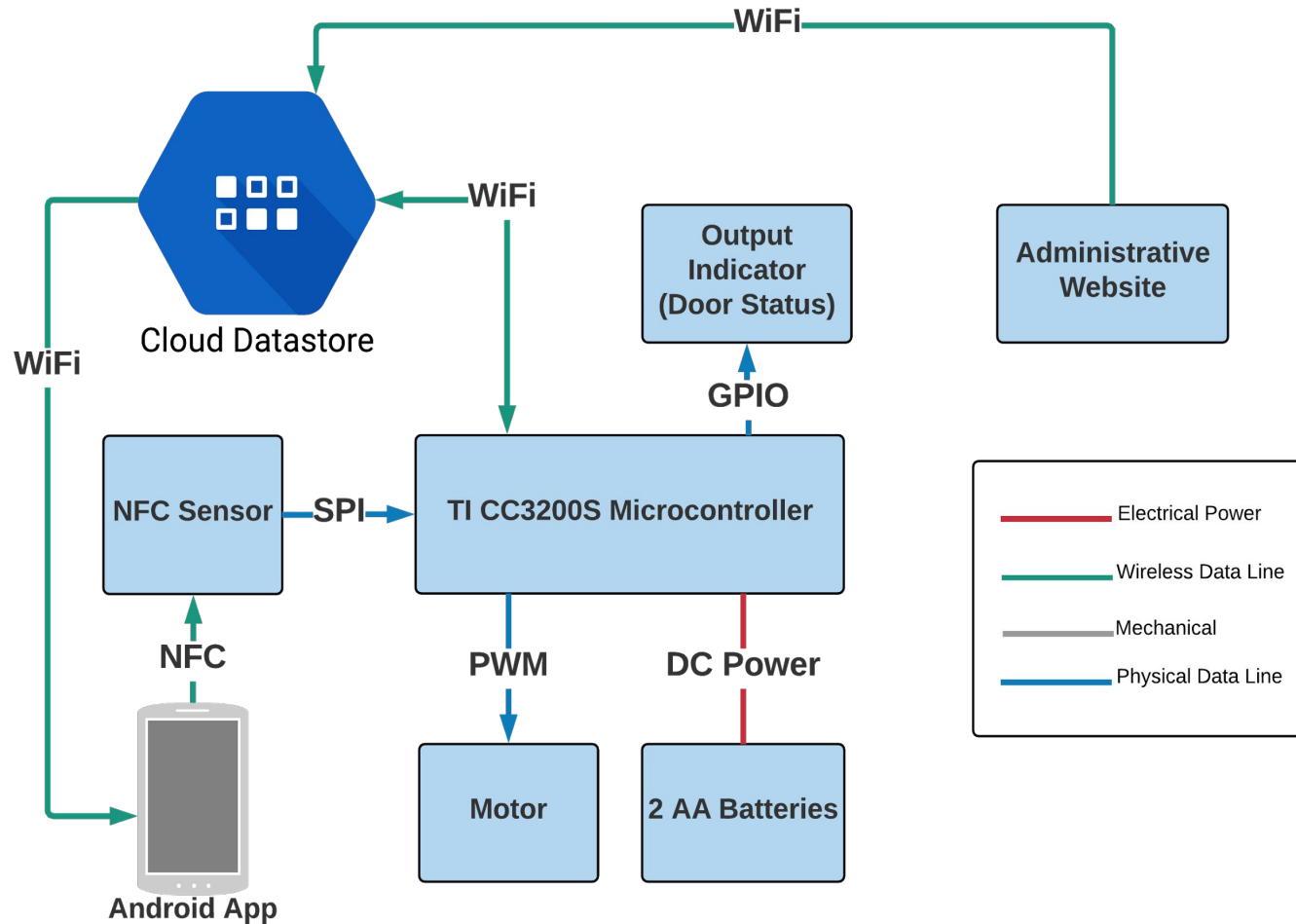
- Microcontroller
 - NFC Sensor communication
 - Google Cloud communication
 - PWM, GPIOs
- Google Cloud
 - Phone communication
 - Microcontroller communication
 - Website communication
 - Database
 - Analytics

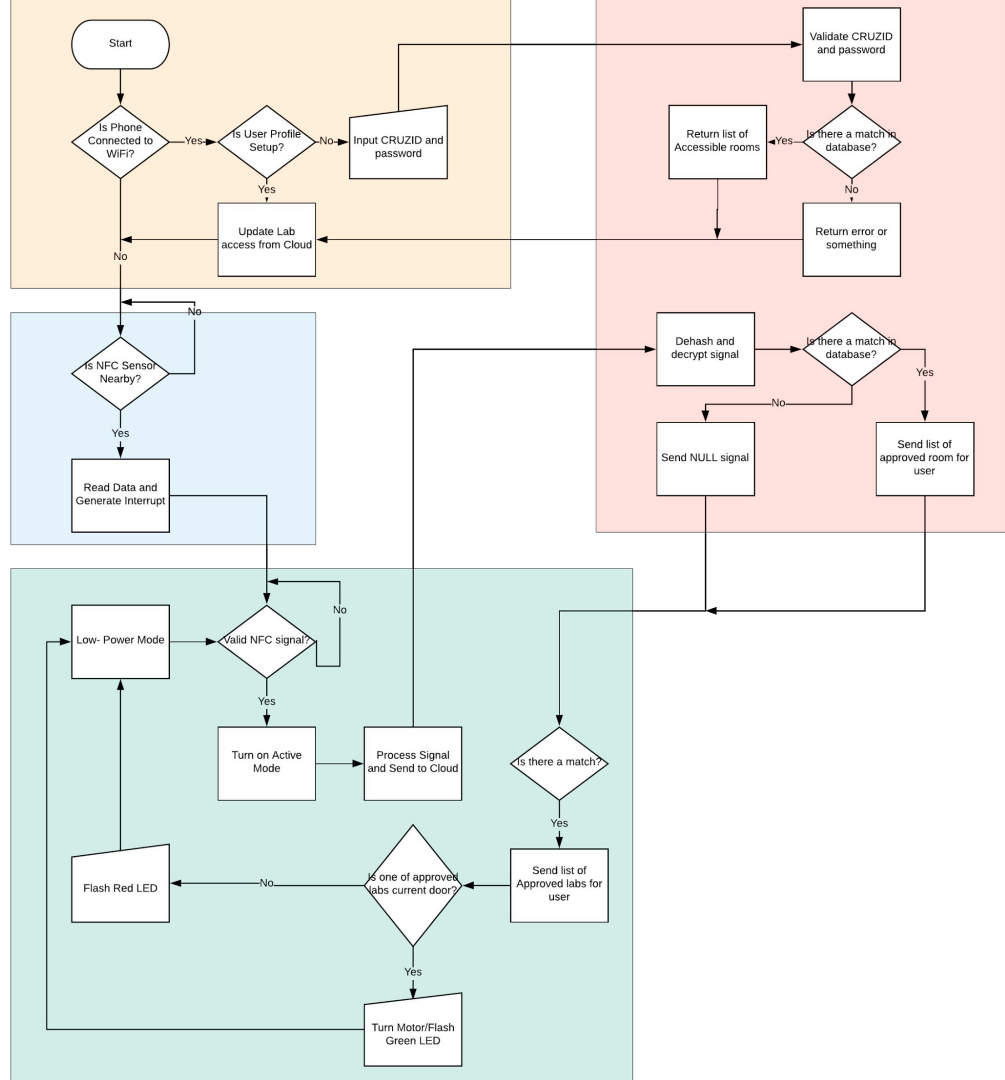
Software Components

- Android App
 - Cloud Communication (online)
 - NFC Communication (works offline)
- Administrative Website
 - Pulls data from Google Cloud
 - UI for analytics (i.e. histogram, frequency)
 - Add, remove, modify users

Components List

	Cost	Quantity	Cost*Quantity	Total
<u>TI CC3200S</u>	\$39.99	2	\$79.98	\$136.1
<u>Battery Case</u>	\$1.50	2	\$3.00	
<u>Op Amp</u>	\$0.95	4	\$3.80	
<u>Resistor Kit</u>	\$7.95	1	\$7.95	
<u>NFC Sensor MRFC522</u>	\$9.99	0	\$0.00	
<u>AA battery 20 pack</u>	\$8.54	1	\$8.54	
<u>NFC Sensor PN532</u>	\$12.99	2	\$25.98	
<u>Motor</u>	\$1.95	2	\$3.90	
<u>LEDs 5 Pack</u>	\$2.95	1	\$2.95	





Schedule

[Trello Schedule](#)