

# BADCAT BEHAVIOR TRAINING

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Because Cats

# WHY CAT BEHAVIOR TRAINING

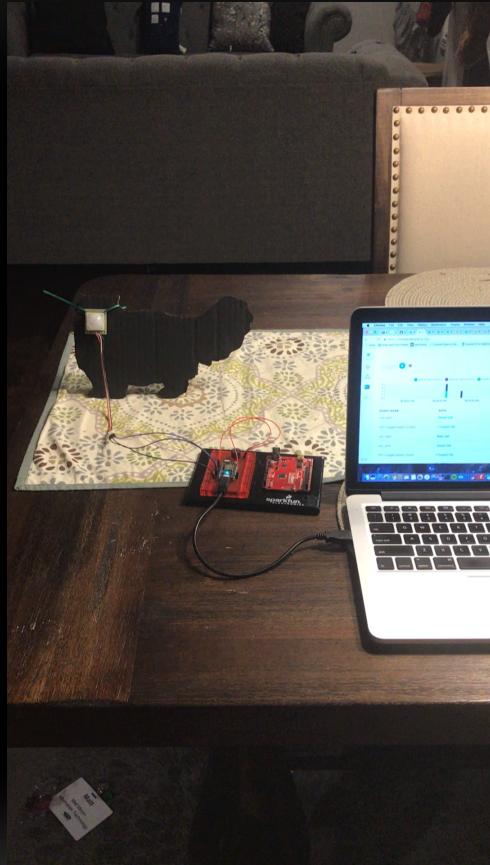
- Approximately 30-37% of all households have a cat. (Source: APPA)
- Approximately 3.4 million cats enter animal shelters nationwide every year
  - Of those 3.4 million cats, 1.4 million are euthanized (Source: ASPCA)
- Cats are often surrendered due to financial issues, behavioral or unseen barriers like medical or living situations.
- Common behavior problems in cats: Clawing Furniture & Climbing



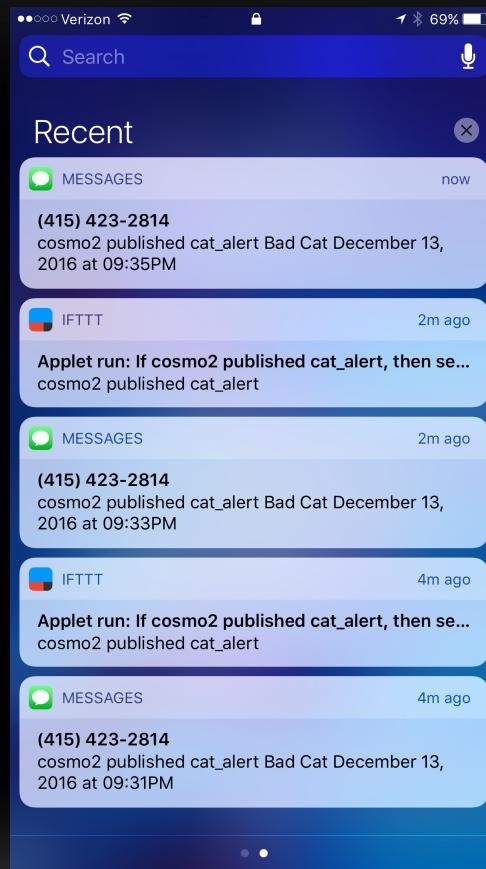
# DEVICE OVERVIEW

- PIR Motion Sensor & Piezo Buzzer Connected to the Particle Photon
- Firmware checks every 30 seconds for motion
- If no motion is detected with a count of < 2 it publishes the cat\_alert status Good Cat
- If motion is detected the piezo buzzer plays a song
  - When the motion count is  $\geq 2$  it publishes the cat\_alert status Bad Cat
- IFTTT particle recipe sends a SMS text & notification if the Event Name = cat\_alert and Event Contents = Bad Cat adds the created date/time

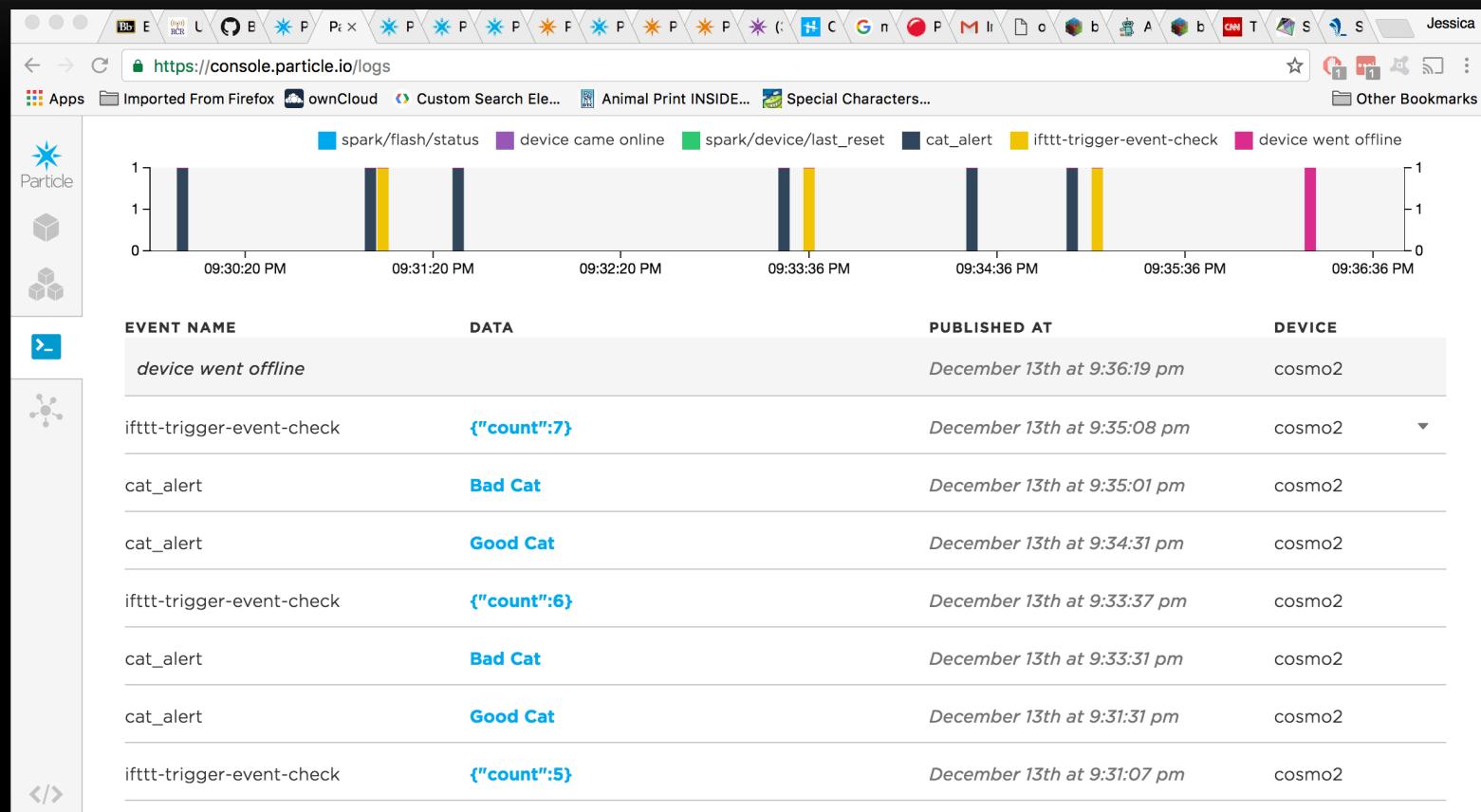
# DEMO



# IFTTT



# LOGS



# LESSONS LEARNED

- Start earlier even if the project seems easy
- Research motion sensors for range
- Use a speaker or higher frequency noise
- MAC OXS interoperability with particle or the bean was lacking
  - Couldn't get MAC address to connect to UST Open
  - Couldn't install node.js & use the CLI

# IMPROVEMENTS

- Better motion sensor
- Better louder sounds
- Send count of Bad Cat alerts on regular intervals instead of every alert trigger
- Create an app with a visualization to track cats behavior over time
- 3D print motion sensor housing
- Create another device with vibration sensor to deter cats from clawing furniture

# QUESTIONS

