Roam

- Play a tone
- Set Neutral Face
- Do a Random Movement at random time to complete.
- Confirm discovery
- If discovered something new, or a new area.
- Switch behavior to Explore for objects
- Switch behavior to "Play" on motion detect
- Set curious Face

Explore

- Request map data, with location.
- If more then one unknowns, pick one at random.
- Play a tone
- Set Curious Face
- Send Data to memory
- Scan object or Area.
- Move to a unknown position/object
- Scan procedure
- If no more unknowns, Roam

Play

- Target location on map.
- Request map data, with locations.
- Follow Target.
- Play a tone
- Set Playful Face
- If target stops, STOP.
- Move to a target and adjust speed.
- Keep a set distance from target.

Multi Threaded
1. Current State(Behavior)
2. Awareness(interrupts)
3. Memory(Map)

Memory

Map

Behaviors
- Roam
- Explore
- Play

Current State

ACT

Logs

Logging & Self Awareness

Awareness

Display

User Control

Sense

Memory   Mapping

- Obstacle detected
- Highlight Box where obstacle
- Increment number in box
- Grid (two dimensional array)

  Size: ???
  Box contains a number to track hits

Awareness

- 2x ultra Sound Sensor
- Swivel Camera
- Motion Detector
- Advanced Gyro
- Microphone
- Temperature
- Sensor Alarm Thresholds For Interrupts
- Sensor Data
- Process Alert
- Alert
- Active Interrupt
- Alert Data
- Alerts + Sensor Data
- Memory
- **Override!!**
- Override Interrupt
- **Override!!**

Current State

- Map
- Memory
- Behavior
- Behavior function
- Logging function
- Current Function in control
- Interrupt Override
- Actuator Control
- Action
- Logs.txt
- Display function
- Interrupts / Self Image
- Awareness

Function Control Unit

- Behavior selector
- Function Body
- Memory
- Actuator Instructions
- Interrupt Override
- Map
- Awareness

Logging & Self Awareness

- User Control
- Log Data
- Log Format
- Display
- Text File

Simple Stage

Behaviors
- Roam

Current State

ACT

Logs

Awareness

Display

User Control

Sense