

Your Awesome Title Here

Your Name Here

{your username}@clemsun.edu

CPSC 4820 / 6820

System Overview Document

Executive Summary

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur non ornare turpis, id mollis metus. Nam congue mi erat, aliquet maximus ante iaculis vel. Vivamus sit amet pellentesque mi, sed pretium mi. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Curabitur euismod a sapien eu ornare. Suspendisse posuere magna eget rhoncus faucibus. Ut dignissim et dolor id elementum. Nulla fermentum euismod ligula ac porta. Nam at pulvinar eros.

Aliquam a volutpat magna, non efficitur felis. In et consequat purus, sit amet posuere nisi. Donec ultricies ac justo vel efficitur. Maecenas vel eros volutpat, mattis risus nec, aliquam nunc. Phasellus ac.

System Description

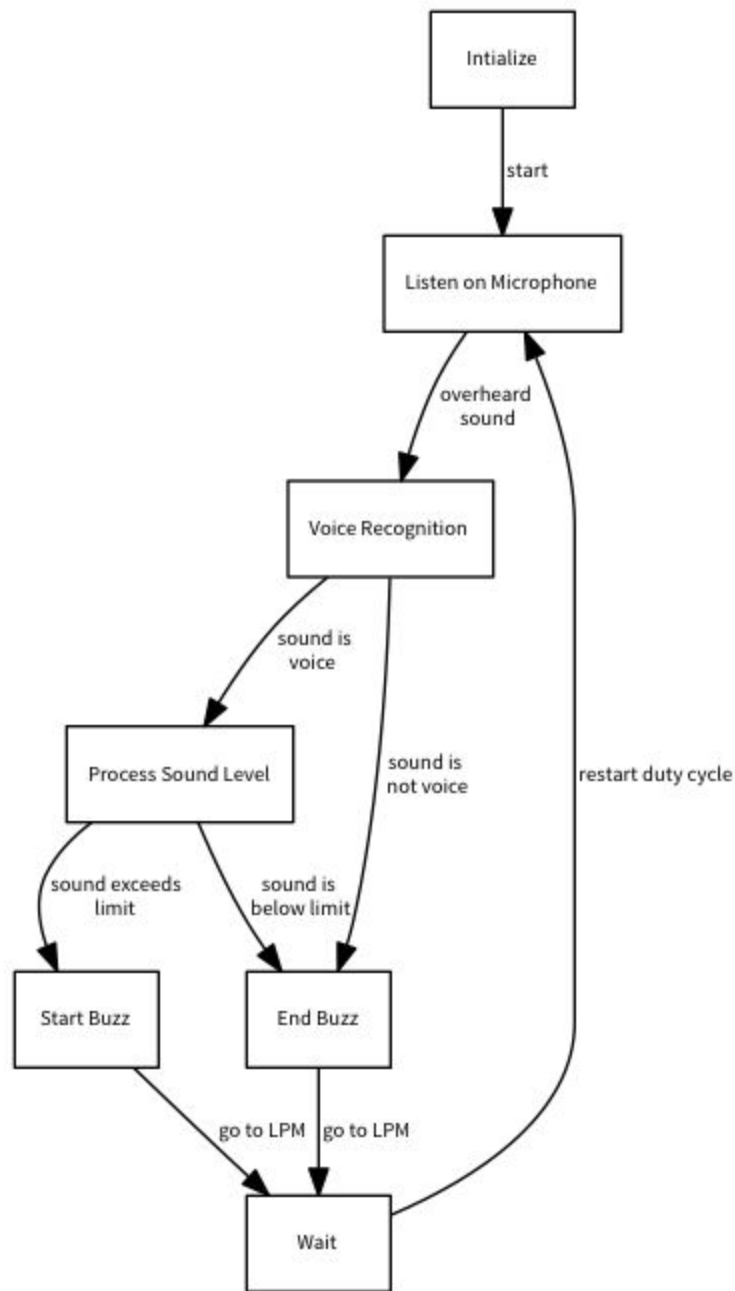
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam efficitur laoreet dolor quis ultricies. Phasellus sapien neque, cursus id leo eget, tincidunt pretium magna. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Morbi vel magna augue. Cras fermentum ipsum nisl, vitae hendrerit odio finibus in. Maecenas tincidunt justo ligula, nec bibendum elit iaculis nec. Quisque non mauris id arcu porta feugiat. Ut nec ornare diam. Aenean porta turpis quis neque auctor, et sagittis tortor molestie. Nunc aliquet lacus quis velit vulputate pulvinar. Morbi maximus lacus eu elit pellentesque, quis finibus tortor posuere. Aliquam ornare pretium ornare. Nulla condimentum ipsum at dolor feugiat pharetra. Etiam dignissim mi non ipsum blandit sodales. Pellentesque at porta sapien, vel aliquet tellus.

Software

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam efficitur laoreet dolor quis ultricies. Phasellus sapien neque, cursus id leo eget, tincidunt pretium magna. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Morbi vel magna augue. Cras fermentum ipsum nisl, vitae hendrerit odio finibus in. Maecenas tincidunt justo ligula, nec bibendum elit iaculis nec. Quisque non mauris id arcu porta feugiat. Ut nec ornare diam. Aenean porta turpis quis neque auctor, et sagittis tortor molestie. Nunc aliquet lacus quis velit vulputate pulvinar. Morbi maximus lacus eu elit pellentesque, quis finibus tortor posuere. Aliquam ornare pretium ornare. Nulla condimentum ipsum at dolor feugiat pharetra. Etiam dignissim mi non ipsum blandit sodales. Pellentesque at porta sapien, vel aliquet tellus.

Quisque auctor, arcu sit amet consectetur mollis, orci ipsum aliquam dolor, eu faucibus tortor felis ac risus. Nulla facilisi. Sed condimentum velit sed felis posuere eleifend. Morbi sodales neque ac tortor convallis, a elementum nisl eleifend. Nunc maximus, dui sit amet vehicula aliquam, massa ipsum tincidunt magna, id lobortis metus nulla a odio. Pellentesque efficitur libero et congue ultrices. Donec at dolor ipsum. Nunc et diam lectus. Etiam molestie leo est, vitae blandit sem condimentum eu. Phasellus tempus hendrerit eros, sodales laoreet eros feugiat vitae. Suspendisse et velit metus. Integer dapibus consectetur nunc, auctor porta sem tincidunt eget.

State Machine



Hardware

Aenean laoreet diam sit amet ipsum feugiat congue id eu nisi. Sed at orci ut lacus fermentum rutrum. Nullam a orci faucibus, rutrum orci eget, egestas magna. Vestibulum molestie aliquam leo nec fermentum. Vivamus eget euismod purus. Fusce ante felis, accumsan a accumsan nec, commodo sit amet libero. Donec aliquam purus eget nisi blandit, sit amet tempus nunc dictum. Suspendisse quis nunc est. Pellentesque rhoncus dui velit, vitae ultrices sem gravida a. Interdum et malesuada fames ac ante ipsum primis in faucibus. Morbi luctus varius quam id dictum.

Parts

Title	Part #	Supplier	\$	Description
BLE Mate 2	WRL-13019	Sparkfun	\$30	Simple BLE module that can allow the user to stop the buzzing remotely. However, does have high power draw and high cost.
Microphone	668-1197-ND	Digikey	\$3	Small analog microphone for listening, regular power draw, so could hurt lifetime unless used carefully. Also is quite large but has good range.
Very small mic	1428-1028-1-ND	Digikey	\$4	Short range, extremely low power omni mic which would allow me to leave it on the entire time without hurting battery life.
Small solar panel	SLMD480H12L-ND	Digikey	\$7	Small but powerful solar panel to recharge the battery. Could also serve as a light sensor so that hassler is never on if the lights are off.
Coin Cell Battery	SY616-ND	Digikey	\$4	Small rechargeable battery. Small capacity of 100mAh but good physical size to make hassler easy to hide.

Demo

Quisque auctor, arcu sit amet consectetur mollis, orci ipsum aliquam dolor, eu faucibus tortor felis ac risus. Nulla facilisi. Sed condimentum velit sed felis posuere eleifend. Morbi sodales neque ac tortor convallis, a elementum nisl eleifend. Nunc maximus, dui sit amet vehicula aliquam, massa ipsum tincidunt magna, id lobortis metus nulla a odio. Pellentesque efficitur libero et congue ultrices. Donec at dolor ipsum. Nunc et diam lectus. Etiam molestie leo est, vitae blandit sem condimentum eu. Phasellus tempus hendrerit eros, sodales laoreet eros feugiat vitae. Suspendisse et velit metus. Integer dapibus consectetur nunc, auctor porta sem tincidunt eget. Sed in sapien nec dolor gravida vulputate. Duis ullamcorper eget libero nec congue. Vivamus sit amet dui tincidunt arcu molestie ultricies at vel erat. Donec non pulvinar ipsum.

Resources, References, Appendix

1. Inspiration: *Building the Widlar Hassler* (<http://www.analogzoo.com/2015/01/building-the-widlar-hassler/>)
2. Inspiration: Bob Widlar's hassler circuit (<http://www.eevblog.com/forum/projects/bob-widlar-s-hassler-circuit/>)
3. Guide: Sound Detector Hookup Guide (<https://learn.sparkfun.com/tutorials/sound-detector-hookup-guide>)
4. Guide: Bluetooth Basics (<https://learn.sparkfun.com/tutorials/bluetooth-basics>)
5. Reference: Wikipedia on Sound (<https://en.wikipedia.org/wiki/Sound>)