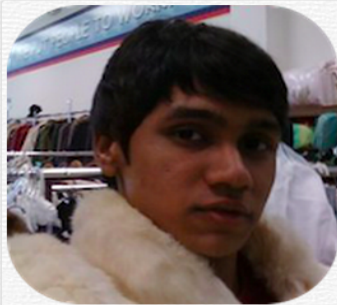


Cache Money Records Presents: QA & Test Plan

Team Members



Raj

rajagarw@andrew.cmu.edu



Saketh

spothire@andrew.cmu.edu



Scott

semartin@andrew.cmu.edu



Kirk

keweiz@andrew.cmu.edu

Status Update

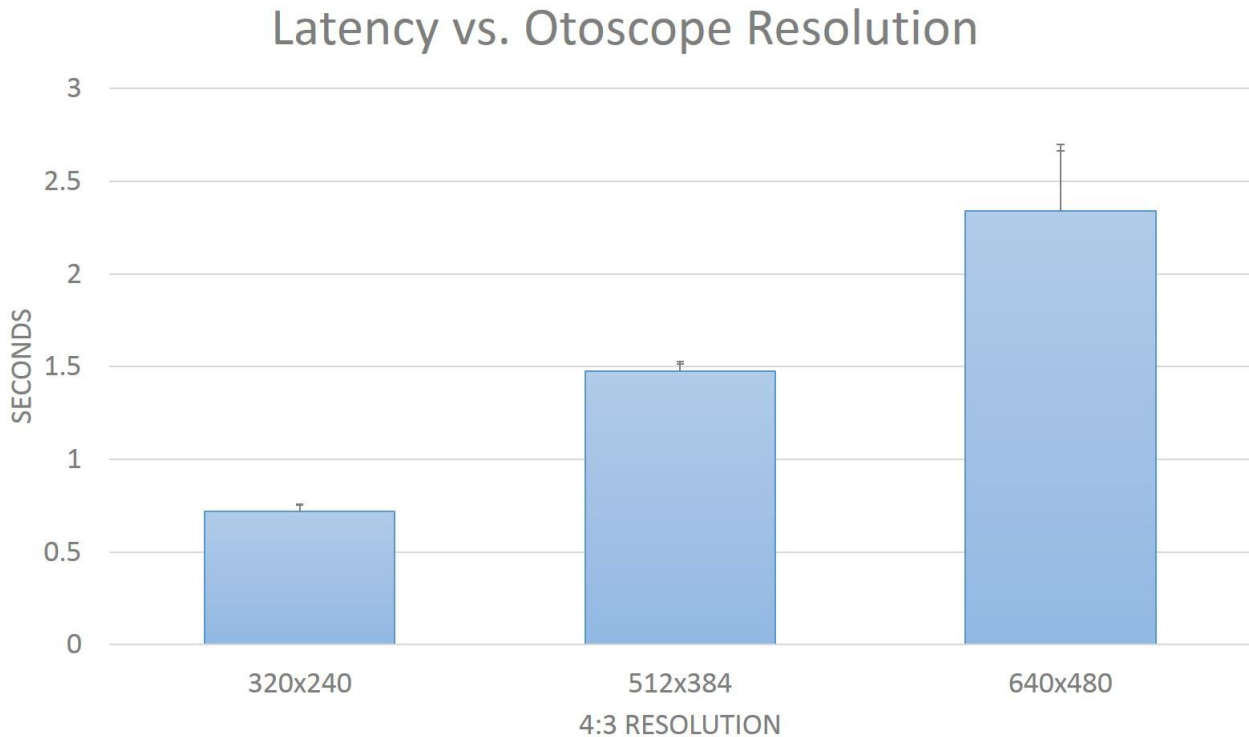
- Otoscope working
- Custom PCB pulse-oximeter broken.
 - Proposal: Reverse engineer working one.
- Stethoscope is functional and outputs sound
- Next goals:
 - Decrease latency on otoscope
 - Package data (audio + PulseOx) to stream over network

Latency Testing for Oscope

Methods:

Pointed Oscope at timer and measured the delay between the actual time and the time reported by oscilloscope

Latency vs. Resolution Tests



Frame rate for Otoscope

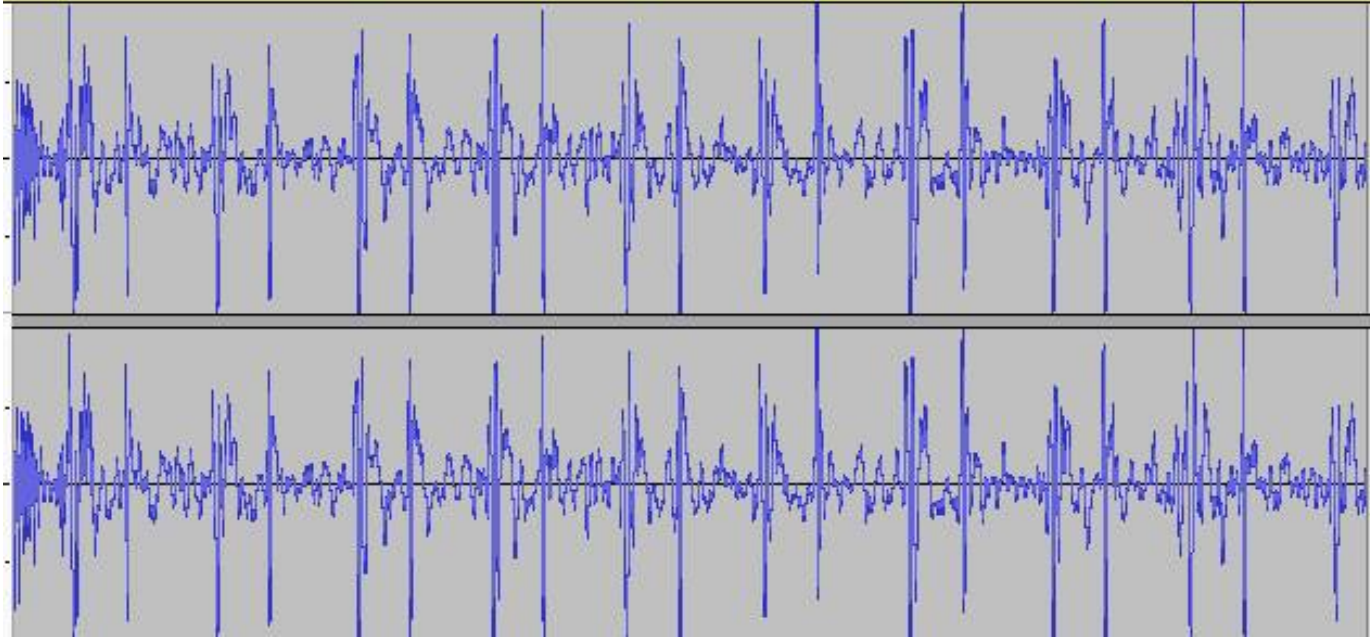
| Screen resolutions | Frames per second using fraps |
|---------------------------|--------------------------------------|
| 320 x 240 | Min: 16 frames Max: 20 |
| 512 x 384 | Min: 15 frames Mac: 17 |
| 640 x 480 | Min: 13 Max: 16 frames |

Black Box (Functional) Test On Embedded Device

- When the device is powered on, the device should automatically launch Motion Jpeg and start streaming data to the website

| Total Startup Time (See Stream on Website) | Total Shutdown Time |
|---|----------------------------|
| 20s | 66s |
| 21s | 70s |
| 20s | 69s |

Functional Test Stethoscope



Black Box Test - Web App



Black Box (Functional) Test On Web Application

- Basic functionality tests - easy to invite members.
- View otoscope + webcam simultaneously
- Works on google app-engine

Thank you!