Dual Handheld and video otoscopy unit

Date: 11/29/2024

Client: Dr. Lara Tomich & Dr. Amy Nechelason Advisor: Professor Paul Campagnola Team:

Sam Tan — Leader

Aaron Marattil — Communicator

Haoming (Bobby) Fang — BWIG

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Problem statement:

The current designs of handheld otoscopes for animal practice do not allow video transfer to a distant view compared to a video otoscope, which is practiced differently in simulations. The goal is to design a handheld otoscope with video capabilities to allow student-performed examinations to be visualized to the faculty for assessments.

Brief status update

• Testing, modification on 3D parts

Difficulties / advice requests

• Securing the optical fiber to the rest of the parts

Current design:

Optical Fiber design

Materials and expenses

To be updated once some order receipt and amazon information is finalized on our end.

Item	Description		Mft Pt#		Vendor Cat#	Date	#	Cost Each	Total	Link
Electrical Com	ponent	-	-	-	-					
Camera Comp	onents									
MakerSpace H	ardwares + 3D Print	ts								
Current Total								Total		

Major team goals for the next week

1. 3d printing and evaluation

Next week's individual goals

- Sam
 - Modify 3d prints and remodel
 - Final presentation
- Aaron
 - 0
- Bobby
 - Preparation for final presentation
- Andy
 - ο.

Timeline

Task	Se	September			October				November					December	
raon	13	20	27	4	11	18	25	1	8	15	22	29	6	13	
Project R&D	Х	Х	Х												

Empathize												
Background	Х											
Prototyping												
Testings												
Deliverables												
Progress Reports	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		
PDS		Х	Х	Х	Х	Х	Х	Х	Х	Х		
Prelim presentation				Х								
Final Poster												
Meetings												
Client												
Advisor	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		
Website	Х											
Update	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		

Filled boxes = projected timeline **X** = task was worked on or completed

Previous week's goals and accomplishments

- Sam previous goal
 - 0
- Bobby previous goal
- Aaron previous goal
 - 0
- Andy previous goal
- Team previous goal 6

0

Activities

Name	Date	Activity	Time (h)	Week Total (h)	Sem. Total (h)
Sam		Final report, prototyping	2		20
Bobby		Final report	2		18.5
Aaron					
Andy					