Dual Handheld and video otoscopy unit

Date: 11/22/2024

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

Sam Tan — Leader   stan68@wisc.edu

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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

- 3D printing, testing protocols and result evaluation

Difficulties / advice requests

- N/A

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	Manufac-turer	Mft Pt#	Vendor	Vendor Cat#	Date	#	Cost Each	Total	Link
Electrical Component										
Camera Components										
MakerSpace Hardwares + 3D Prints										
Current Total								**Total**		

Major team goals for the next week

1. 3d printing and evaluation

Next week's individual goals

- Sam
    - Prototype testing
- Aaron
    -
- Bobby
    - Prototype testing
- Andy
    - Finalize test methods for optical distortion and illumination.

Timeline

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

Task	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Empathize														
Background	X													
Prototyping														
Testings														
Deliverables														
Progress Reports	X	X	X	X		X	X	X	X	X	X			
PDS		X	X	X		X	X	X	X	X	X			
Prelim presentation				X										
Final Poster														
Meetings														
Client														
Advisor	X	X	X	X		X	X	X	X	X	X			
Website	X													
Update	X	X	X	X		X	X	X	X	X	X			

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

Previous week's goals and accomplishments

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

Activities

Name	Date	Activity	Time (h)	Week Total (h)	Sem. Total (h)
Sam			2		18
Bobby			2		16.5
Aaron					
Andy					