

TASS-Progress Report 12

December 7, 2006

Project Title: Sensory Substitution Device for Hearing Impairment

Team Members:

Ryan Thome, Co-Team Leader
Sarah Offutt, Co-Team Leader
Amy Weaver, BSAC
Laura Bagley, Communicator
Jack Page, BWIG

thome@wisc.edu
offutt@wisc.edu
aweaver@wisc.edu
lbagley@wisc.edu
jdpag@wisc.edu

Client:

Veronica H. Heide, Au.D.
Audible Difference
vheide@audible-difference.com
608.273.3036

Advisor:

Mitchell E. Tyler, P.E., M.S.
Dept. of Biomedical Engineering &
Dept. of Ortho-Rehab Medicine
University of Wisconsin - Madison
metyler1@facstaff.wisc.edu
608.265.3756

Date: 11/31/06-12/7/06

Problem Statement:

The goal is to design and develop an auditory substitution device that through the use of vibrotactile stimulation can substitute for regional frequency hearing loss, in order to aid in daily communication needs.

Statement of Team Goals:

1. Meet with client
2. Create Problem statement
3. Begin work on PDS
4. Begin research and design
 - a) Research all possible background information.
 - b) Research existing solutions
 - e) Develop possible design solutions
5. Continue research, design, and testing
6. Write Midterm paper
7. Create PowerPoint presentation
8. Discuss possible final design alternative
9. Finalize design

10. Build and test prototype
11. Present final design

Project Schedule:

- 9/8/06 – Choose team and project, meet with client
- 9/15/06 – Background research, preliminary design ideas
- 9/22/06 – Continue background research, develop PDS
- 9/29/06 – Brainstorm
- 10/6/06 – Decide on design alternatives
- 10/13/06 – Work on mid-semester presentation and report
- 10/20/06 – Give mid-semester presentation, finalize mid-semester report
- 10/27/06 – Decide on final design
- 11/3/06 – 11/24/06 – Work on final design
- 12/1/06 – Finalize design and final presentation, begin work on final paper
- 12/8/06 – Give final poster presentation, finalize paper
- 12/15/06 – Final meeting with advisor

Summary of Team Accomplishments:

1. Client Meeting
2. Finished prototype
3. Completed and practiced presentation

Summary of Individual Accomplishments:

1. Jack updated the website with newest progress report
2. Sarah wrote the progress report

Upcoming Week's Team Goals:

1. Write final paper
2. Meet with Professor Tyler

Difficulties:

We have yet to encounter any major difficulties.

Activities:

Ryan – class meeting 1.0 hr
client meeting 1.0 hr
circuit work 8.0 hr
presentation 3.5 hr
team meeting 2.0 hr

Sarah – class meeting 1.0 hr
client meeting 1.0 hr
progress report 0.5 hr
circuit work 10.0 hr
presentation 3.5 hr

team meeting 2.0 hr

Amy - class meeting 1.0 hr
client meeting 1.0 hr
circuit work 8.0 hr
presentation 3.5 hr
team meeting 2.0 hr

Laura - class meeting 1.0 hr
client meeting 1.0 hr
circuit work 4.0 hr
presentation 3.5 hr
team meeting 2.0 hr

Jack - class meeting 1.0 hr
client meeting 1.0 hr
circuit work 8.0 hr
presentation 3.5 hr
team meeting 2.0 hr

Team Total Hours for this week: 76.0
Cumulative Team Hours to date: 300.5