Project Title: Sensory Substitution Device for Hearing Impairment

Team Members:
Ryan Thome, Co-Team Leader  thome@wisc.edu
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Client:
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Advisor:
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Date: 11/10/06-11/16/06

Problem Statement:
The goal is to design and develop an auditory substitution device that through the use of a
digital hearing aid and vibro- or electro-tactile stimulation can substitute for regional
frequency hearing loss.

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. Began collecting needed supplies for final prototype
3. Completed system diagram

**Summary of Individual Accomplishments:**
1. Jack updated the website with newest progress report
2. Jack attempted contact Mr. Crabb for vibro-tactile buzzers
3. Sarah wrote the progress report

**Upcoming Week’s Team Goals:**
1. Contact Mr. Crabb and begin looking for alternatives
2. Analyze audio signals
3. Build amplifier

**Difficulties:**
We have yet to encounter any major difficulties.

**Activities:**

Ryan – class meeting 1.0 hr
client meeting  3.5 hr
team meeting 2.0 hr

Sarah – class meeting 1.0 hr
client meeting  3.5 hr
team meeting 2.0 hr
progress report 0.5 hr
Amy - class meeting 1.0 hr
    client meeting 3.5 hr
    team meeting 2.0 hr

Laura - class meeting 1.0 hr
    client meeting 3.5 hr
    team meeting 2.0 hr

Jack - class meeting 1.0 hr
    client meeting 3.5 hr
    team meeting 2.0 hr

Team Total Hours for this week: 33.0
Cumulative Team Hours to date: 191.5