Project Title: EEG Biofeedback Device

Team Members:
Ashley Anderson, Team Leader     aandersoniii@wisc.edu
Chris Wegener, Co-Leader          cjwegener@wisc.edu
Michele Lorenz, Communicator      lorenz@wisc.edu
Ryan Thome, BWIG                  thome@wisc.edu
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Client:
Daniel Muller, MD, PhD
Medicine (Rheumatology)
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Advisor:
John Webster

Date: 10/14/05

Problem Statement:
(Project Description)
The goal of our project is to design and build an inexpensive, portable electroencephalogram (EEG - brain wave monitor) that teaches meditation practitioners to achieve optimal meditation by the presence of EEG alpha and theta waves.

Restatement of team goals:
1. Meet with client
2. Create Problem statement
3. Work on PDS
4. Begin research and design
   a) Research all possible background information.
   b) Research existing solutions
   c) Develop possible design solutions
5. Continue research, design, and testing
6. Begin writing Midterm paper
7. Begin with PowerPoint presentation
8. Discussed possible final design alternative
9. Finalize design
10. Build and test prototype
11. Present final design

**Project Schedule:**
- 09/02/05 – Choose team and project, set up meeting with client
- 09/09/05 – Meet with client, background research, discuss PDS
- 09/16/05 – 10/07/05 – Brainstorm, work on design
- 10/07/05 – Finalize oral presentation
- 10/14/05 – Oral presentations, written report, PDS, and notebooks are due
- 10/14/05 – 11/18/05 – Work on design
- 11/25/05 – Thanksgiving
- 12/02/05 – Final poster presentations
- 12/07/05 – Final written report, notebooks due
- 12/09/05 – Final meeting with advisor

**Summary of Team Accomplishments:**
1. Created PowerPoint presentation
2. Started making contacts and looking for parts

**Summary of Individual Accomplishment:**
1. Every team member looked for parts
2. Chris wrote the progress report

**Statement of Team Goals:**
1. Decide on best electrode and test it
2. Build the amplifier
3. Begin to investigate analogue vs. digital
4. Finish last few corrections and sections of mid-semester report.

**Difficulties:**
ECE parts shop has been running under irregular hours and has not been open when team members try to go in to purchase parts to begin prototype construction. We want to create the amplifier and electrodes ASAP as to be able to test and redesign where necessary.

**Activities:**
- Ashley - Team meetings 1 hr
  - Circuit 1 hr
  - PowerPoint work 2 hr
- Chris - team meetings 1 hr
  - PowerPoint work 1 hr
- Michele - Team meetings 1 hr
  - PowerPoint work 1 hr
- Ryan - Team meetings 1 hr
  - PowerPoint work 1 hr
- Shikha - team meetings 1 hr
  - PowerPoint work 1 hr
Team Total Hours for this week: 12
Cumulative Team Hours to date: 71.5