

Blinking Orbital Prosthesis

Week 7 – March 7-March 13, 2008

Team Members: Hallie Kreitlow – *Team Leader*
Allison McArton – *Communicator*
Ryan Kimmel – *BSAC*
Joel Gaston– *BWIG*

Client: Greg Gion
Medical Art Prosthetics, LLC
Phone: 608-833-7002, Email: g.g.gion@sbcglobal.net

Advisor: William Murphy
Assistant Professor
Phone: 608-262-2224, Email: wlmurphy@wisc.edu

Problem Statement

The focus of this project is to design a blinking orbital prosthesis. When an individual loses an eye due to disease or injury, an orbital prosthesis can be used to increase the person's quality of life and allow them to look whole again. Currently, orbital prostheses do not blink or move and few attempts have been made to make them do so. Our goal as a team is to spark more interest in this study by designing and fabricating a patient model simulator with prosthesis that blinks.

Last Week's Goals

This week the team hopes to complete their mid-semester report, order materials for their design, and discuss what should be done over spring break. They will set up a time before Wednesday to meet and finalize their report.

Last Week's Events

| | | |
|----------|--|-------|
| 03.07.08 | Team: Mid-semester presentations. | 2.00h |
| 03.11.08 | Hallie: Revised mid-semester report. | 0.75h |
| 03.12.08 | Allison: Researched. | 1.50h |
| 03.11.08 | Ryan: Researched neodymium, mid-semester report. | 1.00h |
| 03.11.08 | Joel: Mid-semester report. | 2.50h |
| 03.11.08 | Team: Developed mid-semester report. | 0.75h |

Summary of Accomplishment

The team has met and finalized their mid-semester report. They have not yet decided on what materials they should purchase. Joel has been focusing in on the magnetic issue of the design and figuring out the math to determine the strength of the magnet necessary.

Statement of Team Goals

For this week, the team is going to discuss what materials they need to purchase or make in order to start fabricating their prototype. Tomorrow in class they are going to talk about everyone's responsibilities over spring break.

Individual Goals

| | |
|---------|---|
| Hallie | Designated spring break responsibilities, send out progress report. |
| Allison | Designated spring break responsibilities. |
| Ryan | Designated spring break responsibilities. |
| Joel | Designated spring break responsibilities, update website. |

Difficulties

The biggest difficulty is still determining the strength of the solenoid needed to push back the magnet.

Project Timeline

| | January- February- | | | | | | | | March- | | | | | | | | | | |
|---------------------|--------------------|---|---|---|---|---|---|---|--------|---|---|---|---|---|--|--|--|--|--|
| Tasks | 2 | 3 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 0 | 0 | 1 | 1 | | | | | |
| | 5 | 1 | 1 | 6 | 8 | 3 | 5 | 9 | 2 | 9 | 6 | 7 | 1 | 4 | | | | | |
| Project Research | | | | | | | | | | | | | | | | | | | |
| Brainstorming | | | | | | | | | | | | | | | | | | | |
| Prototype Design | | | | | | | | | | | | | | | | | | | |
| Prototype Building | | | | | | | | | | | | | | | | | | | |
| Testing | | | | | | | | | | | | | | | | | | | |
| Re-designing | | | | | | | | | | | | | | | | | | | |
| Re-testing | | | | | | | | | | | | | | | | | | | |
| Meeting with Client | | | | | | | | | | | | | | | | | | | |
| Group Meeting | | | | | | | | | | | | | | | | | | | |
| Presentation | | | | | | | | | | | | | | | | | | | |

Expenses

There are no expenses to report so far.