EWH Aspirator
Client: Dr. John Webster
Team Members: Lucas Vitzthum (Leader)
              Tyler Lark (BSAC)
              Nick Harrison (Communications)
              Fan Wu (BWIG)
Feb Mar 9-Mar 16

Progress Report #7

Problem Statement
The objective of this project is to design a suction machine that can be manufactured from locally available materials with the ability to run off batteries, electrical power (when available) or human power. This device should provide the broadest range of possible applications while still remaining under the 100$ price limit.

Last Week’s Goals
- Decide on source of vacuum
  - Talk to ME professors
  - Investigate what sources will provide enough suction/flow rate
- Start designing/fabricating one way valves
- Write individual portions of the paper for group editing on Tuesday night.

Summary of Accomplishments


Met Sunday at Wendt for weekly meeting. Exchanged sections of paper for peer editing. Made changes and sent them to tyler to put together and format paper.

Met at Wendt on Tuesday for final paper editing session. Added tables, images and references to paper. Gave paper a final read through for grammatical errors.
Everyone finished notebooks, and turned them in along with paper to ECB copy room.

This week’s Goals
- Decide on source of vacuum
  - Talk to ME professors
  - Investigate what sources will provide enough suction/flow rate
- Start designing/fabricating one way valves (Carried over from last week. Did not accomplish these goals with paper due.
- Begin writing EWH funding proposal.

Project Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/26</td>
<td>Form team, contact client, assign team roles, set up client meeting</td>
</tr>
<tr>
<td>2/2</td>
<td>Literature search, create problem statement, begin PDS,</td>
</tr>
<tr>
<td>2/9</td>
<td>PDS, brainstorming, begin developing designs</td>
</tr>
<tr>
<td>2/16</td>
<td>Brainstorming</td>
</tr>
<tr>
<td>2/23</td>
<td>Decide on 3 design alternatives, prepare for mid-semester presentation</td>
</tr>
<tr>
<td>3/2</td>
<td>Finish Mid-Semester Presentation</td>
</tr>
<tr>
<td>3/9</td>
<td>Present, work on written report</td>
</tr>
<tr>
<td>3/16</td>
<td>Hand in written report/PDS/ design notebooks. Decide on final design</td>
</tr>
<tr>
<td>3/23</td>
<td>Work on final design</td>
</tr>
<tr>
<td>3/30</td>
<td>Work on final design</td>
</tr>
<tr>
<td>4/6</td>
<td>Spring Break Start EWH proposal</td>
</tr>
<tr>
<td>4/13</td>
<td>Work on final design/ Begin testing Send EWH proposal to client and advisor</td>
</tr>
<tr>
<td>4/20</td>
<td>Test prototype Finish EWH proposal</td>
</tr>
<tr>
<td>4/27</td>
<td>Finish Testing prototype, begin preparing poster and paper</td>
</tr>
<tr>
<td>5/4</td>
<td>Final Poster Presentation</td>
</tr>
<tr>
<td>5/9</td>
<td>Hand in final written report and notebooks</td>
</tr>
<tr>
<td>5/11</td>
<td>Final meeting with advisors</td>
</tr>
</tbody>
</table>

Activities
Lucas:
Talked to ME prof Ferrier (.5 hr)
Wrote Paper (1.5 hrs)
Weekly Meeting (1.5 hrs)
Group Edit at Wendt (3 hr)
Met with advisor/attended lecture (1hr)
**Total: 7.5 hours**

Fan:
Wrote Paper (1.5 hrs)
Weekly Meeting (1.5 hrs)
Group Edit at Wendt (2 hr)
Met with advisor/attended lecture (1hr)
Updated Website (.5 hr)
**Total: 6.5 hours**

Tyler:
Wrote Paper (2 hrs)
Weekly Meeting (1.5 hrs)
Group Edit at Wendt (3 hr)
Met with advisor/attended lecture (1hr)
**Total: 7.5 hours**

Nick
Wrote Paper (2 hrs)
Weekly Meeting (1.5 hrs)
Group Edit at Wendt (3 hr)
Met with advisor/attended lecture (1hr)
**Total: 7.5 hours**