MEDSense: An Accessible Pill Cap Dispensing/Cutting Device

Team Members:
Ashley Martin
Ryan Pogemiller
Tim Coons
Chris Falkner
Project Overview

Side View with Bottle Upright

Internal View of Cap During Operation
Work Completed- Mechanical Arrangement
Work Completed - Mechanics

- Assembled Device
Work Completed

- Tested each component individually
Work Completed - Programming

- Wrote code for entire motor system
- Tested code for cutting motor and rotational motors
- Continued work on text-to-speech module
Work Completed - Electrical

- Added Status LEDs
- Added Voltage
  Overload LEDs
- Finalized Circuit
  Design
- Designed Preliminary
  PCB Design
Work Completed- Electrical

Finalized Schematic Diagram
## Timeline

<table>
<thead>
<tr>
<th></th>
<th>Task Name</th>
<th>Duration</th>
<th>Start</th>
<th>Finish</th>
<th>Resource Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Attach exit chute</td>
<td>3 days</td>
<td>Fri 4/11/08</td>
<td>Tue 4/15/08</td>
<td>Tim and Ashley</td>
</tr>
<tr>
<td>2</td>
<td>Test cutting of entire device</td>
<td>2 days</td>
<td>Fri 4/11/08</td>
<td>Mon 4/14/08</td>
<td>All</td>
</tr>
<tr>
<td>3</td>
<td>Manufacture Medication bottle</td>
<td>4 days</td>
<td>Fri 4/11/08</td>
<td>Wed 4/16/08</td>
<td>Tim and Ashley</td>
</tr>
<tr>
<td>4</td>
<td>Finish text-to-speech</td>
<td>3 days</td>
<td>Fri 4/11/08</td>
<td>Tue 4/15/08</td>
<td>Chris and Ryan</td>
</tr>
<tr>
<td>5</td>
<td>Debugging</td>
<td>7 days</td>
<td>Fri 4/11/08</td>
<td>Mon 4/21/08</td>
<td>Chris and Ryan</td>
</tr>
</tbody>
</table>
Hours Worked

- Chris-12
- Ryan-11
- Ashley-13
- Tim-13