Project: A Child Passenger Safety Seat (Child Seat)

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Date of Progress Report: 10/06/05

Problem Statement:

The goal of our project is to develop or improve the current method of transporting a child or infant in an ambulance on a stretcher. The method or device developed must be better than the current methods. A new method or device must be collapsible, and compatible with current ambulatory stretchers. Most importantly, the final device must meet all federal safety child seat guidelines.

Restatement of Team Goals from Last Week:

The goals for this week will be to finalize our design and make changes based on the clients recommendations. We will also begin to research materials and brainstorm different methods of locking the seat in different positions.

Summary of Accomplishments This Week:

This week we met and brainstormed each aspect of our project. We also constructed a 3D model of the current concept and animated the model to show all of the working features. Plans have
been made to start the presentation and assignments have been made as to the responsibilities of
the prototyping. We will also continue research materials and try to find materials that are cheap
that we can use for our first prototype.

**Individual Goals for this week:**

1. Ross: Research materials, get progress report in on time, work on presentation
2. Aman: Research materials, communicate with client, work on presentation
3. Erik: Research materials, update the website, work on presentation
4. Karim: Research materials, go to BSAC meeting, work on presentation
5. Miguel: Research materials, go to BSAC meeting, work on presentation

**Statement of Team Goals for this week:**

The goals for this week will be to start work on our prototype and finish and practice our
presentation.

**Tentative Project Schedule:**

- 09/02/05: Formed teams and assigned roles
- 09/08/05: Met our client
- 09/16/05: Develop PDS; Brainstorm possible designs
- 09/23/05: Start writing mid-semester reports
- 10/01/05: Evaluate Ideas and work on power point; Peer review mid-semester reports
- 10/08/05: Mid-Semester Presentation; Design notebooks, PDS, mid-semester reports due
- 10/15/05: Choose a final design
- 10/15/05 – 11/26/05: Work on the final design; Testing; Modifications
- 11/26/05: Work on the final power point, paper and PDS
- 12/15/05: Poster Presentation; Final paper, PDS, evaluations and design notebooks due

**Difficulties:** group leader is forgetful

**Activities/Accomplishments:**

<table>
<thead>
<tr>
<th>Names</th>
<th>Activities</th>
<th>Time (hrs)</th>
<th>Running Total (hrs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ross</td>
<td>Made 3D models, movie, brainstorm</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>Aman</td>
<td>Contacted client, schedule meeting, brainstorm</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Erik</td>
<td>brainstorm</td>
<td>2</td>
<td>11</td>
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<tr>
<td>Karim</td>
<td>brainstorm</td>
<td>2</td>
<td>10</td>
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<tr>
<td>Miguel</td>
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<td>2</td>
<td>13</td>
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<tr>
<td>Total</td>
<td></td>
<td>15</td>
<td>69</td>
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</tbody>
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Weekly Goals for Fall 2005:

- **Week 1 (9/2/05-9/4/05)**
  - Form Teams, Assign Roles, Make an appointment with client

- **Week 2 (9/5/05-9/11/05)**
  - Meet Client, Do background research, Set up team website, Begin working on PDS.

- **Week 3 (9/12/05-9/18/05)**
  - Finish rough draft of PDS, Meet client for demonstrations, Discuss PDS with advisor, Finish up any remaining research, Email researchers Levine and Bull

- **Week 4 (9/19/05-9/25/05)**
  - Discuss PDS with client, Begin brainstorming design ideas, Collect estimates for designs brainstormed (i.e. cost, dimensions, safety tests to be used, pros and cons)

- **Week 5 (9/26/05-10/2/05)**
  - Finish brainstorming, Finalize a Design as a group, Show designs to Client, Get consent from client and decide on one Design, Order pertinent supplies (i.e. materials), Research materials and companies if needed, Look for various prototype tests and facilities

- **Week 6 (10/3/05-10/9/05)**
  - Begin constructing prototype, Prepare for Mid-semester presentations and begin writing the Mid-semester reports

- **Week 7 (10/10/05-10/16/05)**
  - Mid-semester Presentation, Invite Client, Keep building prototype

- **Week 8 (10/17/05-10/24/05)**
  - Work on the prototype

- **Week 9 (10/25/05-10/30/05)**
  - Finish the prototype, Test prototype, gather data, make observations

- **Week 10 (10/31/05-11/6/05)**
  - Modify prototype based on testing

- **Week 11 (11/7/05-11/13/05)**
  - Finish Building the prototype

- **Week 12 (11/14/05-11/20/05)**
  - Collect data and retest the prototype

- **Week 13 (11/21/05-11/27/05)**
  - Make last minute adjustments to the prototype, Begin preparing for poster presentation and Final Paper

- **Week 14 (11/28/05-12/4/05)**
  - Final Presentation, Invite Client for poster session

- **Week 15 (12/5/05-12/10/05)**
  - Turn in notebooks, final report and evaluation form, Give the Prototype to client, Meet Client