

## **6.S196/PPAT End-of-Term Deliverables**

**Team Panel Presentations, 3 & 5 Dec 2012**

**Team Make Posting by Wednesday, 12 Dec 2012**

**Individual Final Report Due Wednesday, 12 Dec 2012**

This document details the three deliverables that you will be expected to produce for PPAT: a panel presentation (§ 1), a *team-generated* web posting (§ 2) documenting the project with enough specificity to enable its replication by others; and an *individually written* final report (§ 3). The two team deliverables have equal weight, and form part of a single assignment.

### **1 Panel Presentation**

Each team will give a group presentation about its work with a client. Presentations will be 25 minutes long, followed by 5-10 minutes of questions and discussion. Presentations must include:

- Introduce the team members and the client;
- Incorporate a clear set of slides, with text, images and video;
- Describe the client's disability and functional limitations;
- Describe the task or activity that the project was intended to enable;
- Define the success metric(s) for the project;
- Describe the design considerations and/or constraints that the team identified as relevant to the project;
- Describe the work of the team through the term, and (briefly) how the team members divided the effort;
- Show the final assistive technology (as a physical prototype brought to the panel, and/or as images or video of the technology in use) developed for your client;
- Evaluate the success metric(s) for the prototype technology; and
- Describe any additional work that would be required to make the assistive technology solution actually usable, without abandonment, by your client.
- Finally, briefly describe what you have learned from your work in this class.

To ensure that we make it through all of the team presentations, we will enforce the time limits for each presentation. You should coordinate with your team in order to ensure that each person has an opportunity to speak and that each of the points are addressed in sufficient detail. Finally, as with the mid-term panel presentations, you should be ready to answer questions from other members of the class, the course staff, and our guest panelists. You are also welcome to invite your client to attend, although this is not a requirement.

## 2 Team-Written Project How-to

Each team must produce a persistent web repository, using the “Make:Project” web site ([makeproject.com](http://makeproject.com)), which includes enough information for the project to be replicated by an independent group. The repository should include:

- A clear statement of the problem (but without any identifying information about the client);
- A brief description of the approach, end-to-end, and the required mechanical, electronics, and software components;
- A detailed description of each component, as appropriate. This could include vendor and part number information, wiring diagrams, CAD drawings, source code, photographs, build instructions, and/or operating instructions. Photographs of your actual components are preferred to vendor images.

## 3 Individual Final Report

The *individually written* final report should be brief (7-10 pages). In it, you should summarize and reflect on your work throughout the term. This report will be due on Wednesday, December 12<sup>th</sup>, the last day of classes at MIT. The next section gives more detailed expectations for your report.

Your individual writeup should address the following topics:

### 3.1 Guest Lectures

- For each guest speaker that you heard, briefly recap one or two of the speaker’s main messages.

### 3.2 Contextual Inquiry and Task Analysis

- Describe the client and the team’s contextual inquiry findings;
- Describe the team member’s understanding of the task or activity of interest;
- List and evaluate the success metric(s) defined at the start of the project.

### 3.3 Assistive Technology Design Process and Results

- Discuss the design considerations and constraints implied by the client’s disability, desired activity, context, and affect;
- Discuss the design effort and rapid prototyping activities;
- Discuss the series of prototype assistive technologies produced, along with (for each prototype) an evaluation of the client’s success metrics for that prototype;
- Evaluate the success metric(s) as of the end of the project;

- Discuss what additional effort would be required in order to actually produce an assistive technology that your client would continue to use (i.e., would not abandon).

### 3.4 Project Reflection

- Describe how the team member's understanding of the task or activity of interest, or of the success metric, changed as the term proceeded.
- Describe one or more aspects of the effort that turned out to be easier than expected. Which aspects turned out to be harder than expected?
- Identify three ideas discussed in any of the guest lectures or regular lectures, or in the mid-term panels. Discuss how those ideas arose within the context of your project with your client, and how you incorporate them into your work.
- Describe each team member's individual contributions to the effort.

### 3.5 Improving PPAT (Optional)

- Optionally (and outside the page limit given above), describe your ideas about how this class could be improved in the next offering.

While we urge team members to share data, images and figures among themselves while writing the reports, students shall not share or duplicate text in their writeups. In other words, each student **must write every word of his or her writeup** without using text written by any other student.

## 4 Grading

The course staff will assign a letter grade to each team presentation, to the team "Make" post, and to each individual final report.