

IPRO 373: Design and Prototyping of Interactive Tools that Support IPRO Team Performance

Project Plan

I. Team Charter

1. Team Information

- a. All team members are accessible through the following Google Groups email address: ipro373summer2012-group@iit.edu
- b. Team member strengths, needs and expectations will evolve throughout the semester as the project becomes more concrete. Therefore, we have not included this information in the project plan.

2. Team Purpose and Objectives

- a. Team purpose: The purpose of this IPRO project is to develop a single, consolidated, interactive information resource for IPRO teams that replaces information currently found at the IPRO web site.
- b. List the objectives that the team has set: The IPRO team will focus on the following range of activities and tasks: (1) thoroughly study guidelines for publishing online content and choose one to develop the content and structure; (2) collaborate with the IPRO Office to incorporate guidelines and offer examples that include but are not limited to IPRO deliverables (project plans, presentations, posters and exhibits, videos) and a range of teamwork, communication, project management, leadership, entrepreneurship and ethical decisionmaking best practices; (3) designing and following a design process that may involve observation of teams and instructors in action accessing information, and generally collaborating with the IPRO Program to identify the most needed components in an iBook or other publishing format; (4) aggregating, analyzing and synthesizing data; (5) conducting field visits to experts in communication; (6) developing a prototype of the IPRO resource and distributing to summer IPRO teams to obtain feedback; (7) iterate the prototype by incorporating feedback and ultimately expanding trial of the prototype in the fall semester.

3. Background: The sponsor or client of this IPRO is the IPRO Office. The IPRO Office serves as a liaison between IPRO faculty, IPRO teams, and other departments at IIT, and is responsible for setting expectations for IPRO deliverables, budgeting the total cost of the IPRO Program, purchasing and distributing materials to IPRO teams for use on their projects, and hosting other resources for the IPRO Program. Kelly Murrell, Director of Sponsorships for the IPRO Program, said that, in his view, the main goal of this project is to articulate expectations to students in a more cohesive way, so that first time IPRO students have an easier time getting up to speed on the expectations for their IPRO experience.

The stakeholders for this project are end-users of the interactive tools.

These will include future IPRO students and IPRO faculty. Stakeholders may also include the IPRO Office, as someone from the IPRO Office would likely have to update the interactive tools.

4. Team Values Statement: The team agrees to communicate in a respectful manner with each other at all times.

II. Project Methodology

1. Work breakdown structure:

- a. Describe how your team will go about solving the problems: As there is no precedent for how to create an interactive tool for any purpose, our approach to solving this problem will take shape over the entire semester. Our team will use design methodologies, including a “research → analysis → synthesis” model. We see the problem presented as having three major components:
 - i. types of user interface and visual communication tools that would be the best choice for interactive tools for the IPRO Program;
 - ii. expectations of IPRO Office for the tools we will create and for the IPRO Program broadly;
 - iii. value added for IPRO students and faculty, as end users of our interactive tools, from using these tools.

To understand each component of the problem and use each component to inform our solution, we will:

- divide into teams centered on the above three categories,
 - generate specific research questions related to these categories,
 - conduct research on these questions, individually and in teams, using a variety of research and design methodologies,
 - share our research and analysis with each other on a regularly scheduled basis,
 - analyze the data generated by research, and
 - synthesize the results of our analysis to inform our prototype and other IPRO Day deliverables.
- b. Create a team structure: A graphic representation of our team structure is attached as Attachment A. This structure is subject to change. As of the writing of this project plan, we have not identified team leaders or subteam leaders because we are spending the first half of the course conducting research and sharing our results among the whole team. When we branch into more specific tasks, we will identify team leaders and subteam leaders.
 - c. Create a work breakdown structure:
Semester Forecast: Our semester forecast is attached as Attachment B. In addition to the key dates listed on the forecast, we plan for the following as a team:
 - every Tuesday, beginning of class: “mini-lesson” from our faculty

sponsor, Limia Shunia, about design principles and methods for part of the class;

- every Thursday, first thirty minutes of class: team meeting with ten minute presentations by each subteam on the work that they are doing, questions they have, and ways to coordinate and communicate with other subgroups;
- every Thursday, last fifteen minutes of class: team discussion of agenda for following week and Agenda Taker prepares a one-page, bullet-pointed agenda for the following week; and
- occasional field visits, including a visit to the Institute of Design and a visit to an ad agency, to learn more about design processes and implementing design processes to enhance communication.

Research and Analysis Plan: Attachment C is a sample of our research and analysis plan as of June 15, 2012 (the date of submission of this Project Plan). The plan includes what questions we plan to ask and to whom, the activities and methods we plan to use to find answers to those questions, the name of the team member who is taking the lead on finding the answers to each question, and the expected timeframe in which the answers to these questions will be found. This research and analysis plan is a spreadsheet available to all team members in GoogleDocs, and as such, is a “living document” that will grow over the course of the semester as we learn more about the needs of the end users, the expectations of the IPRO Office, and the technical aspects of interactive tools. We plan to complete most of our research prior to the midterm evaluation.

Synthesis and Prototyping: After the midterm evaluation, we will spend two weeks analyzing our data to find patterns and draw insights about the problem. We will use these insights to inform our presentation, video, and prototype. At that time, we will regroup as a whole team and decide the best course of action to produce the final deliverables for IPRO Day.

2. Expected results: By the end of the semester, we expect to create a framework and a prototype of an interactive tool that will consolidate the information from the IPRO website into a single, usable resource for IPRO faculty and students. We hope to beta-test this prototype on past students of IPRO. However, we want to emphasize that we are not trying to find a statistically-relevant population size (i.e., we will look at maybe twenty or so IPRO students and five or so IPRO faculty, ask them the right questions about their IPRO experience, and beta-test our prototype on maybe ten students and two faculty). We are seeking quality not quantity -- it is better to ask the right questions to a small number of people rather than the wrong questions to many people. At the end of the semester, we will include in our report to the IPRO Office our recommendations for what the next IPRO group will do to follow up and conduct further testing.
3. Project budget: Because of the short length of the summer term, we do not have

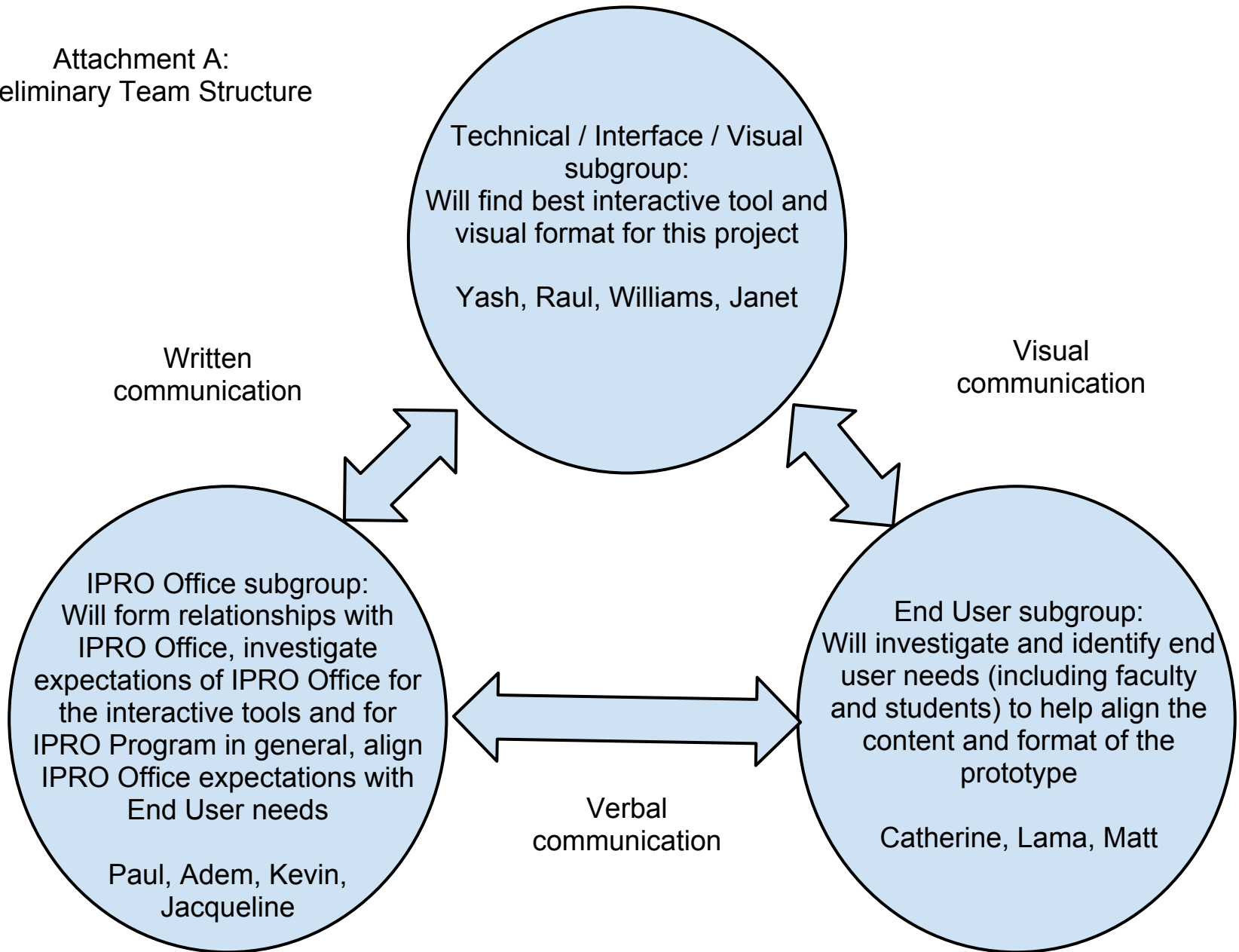
a comprehensive budget prepared at this time. We expect there will be three items that we will need:

- a. the funds allotted to every team for team-building activities (\$10 per participant, for a total of \$110);
 - b. items to incentivize participation from research subjects (e.g., everyone who spends an hour testing our prototype and answering questions gets a \$5 gift card to Mother Butters on 35th); and
 - c. a platform for our interactive tool that aligns with the technology needs of the IPRO Office and IIT students.
4. Designation of roles:
- a. Minute Taker: At each whole group meeting, one person will take comprehensive notes of the discussion and add those notes to the GoogleDoc titled "IPRO 373: Meeting Minutes" that is shared with all team members. At each subteam meeting, one person will take notes of the items discussed.
 - b. Agenda Maker: At the end of each week, this team member will create an agenda for the following week in the format attached as Attachment D.
 - c. Documenting work in written (i.e. written recordkeeping): Each member of the team is responsible for keeping good, legible records of their research. We will create a document storage system as the need for one arises later in the term. We will use Google Groups as the primary repository of written documents.
 - d. Documenting work visually (i.e. taking photographs of work we do): One member of the team will photograph information placed on the dry erase board during meetings if necessary and share those photographs with the team.

List of Attachments:

- Attachment A - Team Structure
- Attachment B - Semester Forecast
- Attachment C - Research and Analysis Plan
- Attachment D - Sample Agenda

Attachment A:
Preliminary Team Structure



IPRO 373: SEMESTER FORECAST - ATTACHMENT B TO PROJECT PLAN

Tues, June 19
Thurs, June 21

Tues, June 26
Thurs, June 28

Tues, July 3
Thurs, July 5

Tues, July 10
Thurs, July 12

Tues, July 17
Thurs, July 19

Tues, July 24
Thurs, July 26

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

SUBTEAMS CONDUCT RESEARCH AND BEGIN ANALYSIS OF RESEARCH

SUBTEAMS ANALYZE RESULTS OF RESEARCH

TEAM SYNTHESIZES RESULTS OF ANALYSIS, REGROUPS, CREATES FRAMEWORK, BUILDS/TESTS PROTOTYPE

team begins skeleton outline of presentation and video

team finalizes presentation and video

Tues, July 24:
Work on IPRO Day deliverables
Thurs, July 26: Work on IPRO Day deliverables

Thurs, June 21:
Team visit to ID

Thurs., June 28,
Midterm evaluation

Thurs, July 19:
Poster due

July 27:
IPRO Day

| IPRO 373: RESEARCH AND ANALYSIS PLAN | | | | | |
|----------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------|--|
| Research Question | Subgroup | Activities, Tasks, and Methods that we will use to research the question | Team Member(s) responsible for researching and reporting back to the subteam | Completion date for finding data to answer this question | |
| How will we find students to talk to about their IPRO experience? | End Users | Create facebook page(?) and contact former IPRO students | Lama | | |
| How will we find students to talk to about their IPRO experience? | End Users | Ask IPRO Office to generate cross-listing of students from IPRO 497 and students who are currently in Summer school | Catherine | Tues, June 19 | |
| How useful is the current IPRO website to IPRO faculty? | End Users | Primary Research: Create a list of questions to ask IPRO faculty, set up interviews with IPRO faculty, ask follow-up questions to IPRO faculty | Catherine, Lama, and Matt | | |
| What's on the IPRO website? Who maintains the IPRO website? | End Users / Office | Use commentary from Josh Tate given to class during Week 1, analyze the content of the IPRO website in more depth, contact Josh Tate to ask for more information about content on IPRO website | Williams | Thur, June 21 | |
| What are "best practices" for a functioning team? From the perspective of faculty? From the perspective of students? | End Users | Primary Research: observe of teams and instructors in action accessing information and communicating; interviewing I/O psychology faculty, business faculty, and other experts on these topics, interviewing IPRO students and non-IPRO students | Lama | | |
| What makes a compelling visual image? | End Users / Interface | Need to work with the 'Office' group and understand the expectation of an IPRO Team. Provide photos, images, icons that correlates with each procedural content. | Janet | Thur, June 21 | |
| How can information be organized visually and still convey the intended message to viewers? | End Users / Interface | Analyze from eBook case studies and bookmark those that was successful and would be beneficial for reference. Make observations of the content and the way informations are presented on the IPRO website. | Janet | Tues, June 19 | |
| What layouts are most effective for communicating the desired message? | End Users / Interface | Need to determine the device and format the ebook will be presented. Offer a selection of layouts to current or past students for feedback. | Janet | Tues, June 19 | |
| In what sense should the e-book be "not static" --how often will it be updated, and by whom? | Office | | | | |
| Are you generally disappointed with certain Deliverables? Are certain criteria not being met consistently? | Office | | Adam | | |
| Thoughts on standardizing expense items—mileage, meals, others? | Office | Contact Josh Tate | | | |
| How may we obtain and review the budgets of past teams? | Office | Contact Josh Tate | | | |

IPRO 373: Attachment C: Research and Analysis Plan

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| Are Amazon.com and McMaster adequate vendors? Are there criteria for vendor selection beyond price levels, speed, and ease of returns? | Office | Contact Josh Tate, [you will probably have to conduct research through other means, too] | | | |
| Are our sponsors generally satisfied? Do they have complaints or comments? | Office | Interview Kelly Murrell | | | |
| What device would support the ebook? | Interface | Based on popular devices | Williams | Tue, June 19 | |
| What format would the ebook be in? | Interface | Based on most supported formats | Williams | Tue, June 19 | |
| What platforms would support the ebook? | Interface | Based on most popular platforms | Williams | Tue, June 19 | |
| What guidelines are necessary to follow for publishing online content? | Interface | Review and make a note the features of well-presented eBooks and other popular websites. Offer suggestions based on past experience in online content publishing. | Williams | Tue, June 19 | |
| What ebooks are currently out on the internet? Why did the author write the ebook? Who is the intended audience? What is the experience of an end user? | Whole Team | This was Assignment 2. We each prepared 5 slides about the ebooks we found, presented the slides to the class, and discussed with Tomoko Ichikawa from ID. | Everyone | Tues, June 12 | |
| What constitutes "best practices" for a functioning team? | Whole Team | To be learned from field visits and experiences... | Everyone | all semester | |
| What constitutes "effective communication"? | Whole Team | To be learned from field visits and experiences... | Everyone | all semester | |
| What are students' expectations for their IPRO experience? | Whole Team | We can conduct this research with each other as a whole team during the team-building experience that the IPRO Office pays us to do. | Everyone | Team-building experience, date TBD | |

PROJECT PLAN
ATTACHMENT D: SAMPLE WEEKLY AGENDA

IPRO 373

Design and Prototyping of Information Tools that Support IPRO Team Performance
Summer Session 2012

WEEK 2

_Jun 12 Tuesday

12:10- 12:30

Set up room and sign up for E-Book presentations

12:30 -2:00

Presentations/Discussions

2:00- 2:40

Work session prep for Thursday workday

_Jun 14 Thursday

12:10- 1:10

Initial Discussion /Prep

1:20- 2:00

Work Session: Semester Forecast / Project Plan / Immediate tasks and goals for the following week

2:00- 2:40

Closeout / Teams update each on progress and working toward immediate goal for Tuesday June 19

_Jun 15 Friday

Project Plan due by end of day - 6:00pm