

IPRO357 Project Plan

9 / 22 / 06

1. Objectives

The objectives of IPRO 357 are two-fold: explore and expand how myWay could fit into a viable business model and continue the exploration of context-sensitive touring with the development of gWay. These tasks will be divided among two teams who will each take separate responsibilities; the business team and the technical team.

The Business team will be involved with market research, competition analysis, pricing, as well as marketing. Their final deliverable will be a business plan, professional presentation, and an innovative booth design. The Technical team will perform tasks such as maintaining myWay, adding features, bug fixing and so forth, while pursuing the technical possibilities behind gWay. If time and technicalities allow, their final deliverable will be in the form of an updated myWay and myWay tour designer in addition to a prototype of gWay.

Furthermore, the entire team will participate and give feedback to the other teams on their deliverables and activities. In addition, all team members will receive Segway training in order to allow them to become more familiar with the product they are developing and marketing.

Teams will also be involved in multiple project management conditions, these include, implementing Microsoft Project software, submitting weekly reports, working together to complete project plan and other various reports. These steps will ensure that the team stays productive and on task for the course of the semester, as well as provide future IPROs with some knowledge of the work progress and how efficient the chosen plan was.

2. Background

Over the course of the fall 2005 and spring 2006 semesters, under the guidance of Professor Xian-He Sun and building on previous work on a project called HawkTour, IPRO305 (now IPRO357) developed a product called myWay. The current version of myWay, as of the beginning of the fall 2006 semester, is a tour application and accompanying tour creator software designed to run on a tablet PC with Windows XP. The myWay project also included a custom-designed mount for the PC which attaches the tablet PC to a Segway personal transporter via universal mounts.

The myWay tour application is different from other tour applications in many ways. First, because of the challenge posed by riding a Segway while using the application, the program was made to be very simple and easy to interact with. It was designed to be run on a touch screen tablet, with large buttons, bright colors, and intuitive graphics. Active elements on screen are highlighted to quickly focus attention, allowing the user to concentrate on safely navigating the path ahead. And the tour content is delivered via audio, so that the user need not focus on the screen of the tablet while taking the tour.

Secondly, the tour content is customizable. On a customize screen that can be accessed and modified at any time, a user can select content preferences from a list of up to eight different types of information. Only these information types will be played during the tour. During the tour, the user sees a small audio bar with tabs indicating the type of information being played,

and can select another type of information about that point of interest by simply touching the tab associated with another information type.

Thirdly, the content plays automatically when a user approaches a point of interest. Using GPS positioning, the myWay software recognizes when a point of interest is near, and depending on the user's pre-selected preferences, can determine whether to introduce that point of interest, and what related information to play. Thus, the myWay program requires no interaction from the user while touring.

The other piece of the software package is the tour creator tool. Using this tool, either the company or the client can easily define points of interest and their geographical location, define information types that the end user can select from, and input the actual audio and visual information that the user will experience during the tour. The tour creator compiles this information into the myWay tour that the client desires.

As of the beginning of the semester, the myWay project is married to the tablet PC hardware and the Segway transporter. We hope to find a market for the software/hardware packaged as it is, and also to expand our thinking to other uses the software may have.

3. Methodology & 4. Expected Results

(Please note that these sections have be jointed together to make the report more cohesive)

Business Team

This IPRO has decided to break the process of creating a business plan into multiple phases.

Phase I – Initial Research

- Define possible markets for myWay and gWay.
- Define myWay and gWay competitors
- Expose myWay and gWay risks
- Define any barriers to market entry

This phase of the business plan is to answer the question of the uniqueness of myWay and gWay in the marketplace? This phase also provides the framework for phase II.

Phase II – Financial and Marketing Research

- Funding requirements
 - What are the start up costs?
 - When do we need it?
 - Where do we get it?
- Cost analysis
 - How much does the product actually costs us?
- Preliminary business plan report work
- Name research/finalization
 - Is the name of our product/business marketable?
 - Copyright/Trademark name

- Advertising
- Price determination
 - What will the market pay for our product?

At the end of phase II the IPRO will have all the necessary information to write a finalized business plan.

Phase III – Collaboration and IPRO Deliverables

- Write business plan
- Exhibit/Poster finalized
- Project Abstract
- Web Site
- Final Oral Presentation
- Final Report
- Team Information
- Comprehensive Deliverables CD

Phase III concludes with the completion of all deliverables for IPRO day.

Phase IV – IPRO Preparation/Review

- Practice IPRO presentation
- Review all final documents
- IPRO booth construction

Phase IV is the final phase, it is the culmination of this semester work. At the end of this phase all tasks for IPRO day will have been completed.

Technical Team

The Technical Team has 3 main tasks which will all be worked on simultaneously. The Technical Team will begin by researching possible solutions to each problem which will then be prototyped on standard laptops. The chosen solution will then be tested on the tablet PC and PDA's used in the myWay and gWay system.

I – Connectivity and Communication

- Wi-fi networking multiple computers
- Voice streaming

The goal is to find a solution for connecting multiple computers so that users can communicate with each other. The ability for communication between tour guide and tourists will be used in the gWay system.

II – Mounting and Security System

- Mounting the new tablet PC to the Segway
- Tablet PC locking system

The more powerful and cost effective myway Tablet PC requires a new mounting system and security system to prevent the Tablet PC from being removed from the Segway.

III – Software

- Maintain myWay and myWay Tour Designer software
- Design the new gWay system

The myWay software requires maintenance and some improvements. In addition, the Technical Team will begin designing the new gWay system.

5. Budget

IPro357 Semester Budget	
Business Team	
Surveys	\$50.00
Subtotal	
\$50.00	
Technical Team	
Java Bridge	\$300.00
Tablet PC Segway Mount	\$100.00
Subtotal	
\$400.00	
Team Total	
\$450.00	

6. Project Deliverables and Milestone

Microsoft Project 2003 will be used to control project deliverables, and any milestones and tasks that need to be accomplished over the semester. The leader from both the business and technical teams went to an initial seminar reviewing the software and how it can be implemented to assist with the teams operations and control.

In the figures below outline the timeline for the semester. The timeline includes milestones, tasks, and other various objectives the teams have for the semester. These were created by having initial team meeting which determined what the objectives of the teams were. After the objectives were determined the team leaders were then able to put the information into a timeline which should help both teams and the IPro as whole stay on track for the semester.

	Task Name	Duration	Start	Finish	Resource Names
1	<input type="checkbox"/> Preliminary Research	16.04 days	Tue 9/12/06	Thu 9/28/06	
2	Competition	16 days	Tue 9/12/06	Thu 9/28/06	Mike
3	Segway Market	16 days	Tue 9/12/06	Thu 9/28/06	Joe
4	Develop Growth Model	16 days	Tue 9/12/06	Thu 9/28/06	Karina,Emily
5	Survey Market	16 days	Tue 9/12/06	Thu 9/28/06	Kim,Jennifer
6	End of Preliminary Research	0 days	Thu 9/28/06	Thu 9/28/06	
7					
8	<input type="checkbox"/> Financial Research	19 days	Thu 9/28/06	Wed 10/18/06	Erick,Ryan,Karina,Emily
9	<input type="checkbox"/> Expenses	19 days	Thu 9/28/06	Wed 10/18/06	
10	Operating	19 days	Thu 9/28/06	Wed 10/18/06	
11	Personnel	19 days	Thu 9/28/06	Wed 10/18/06	
12	Marketing/Advertising	19 days	Thu 9/28/06	Wed 10/18/06	
13	<input type="checkbox"/> Funding	19 days	Thu 9/28/06	Wed 10/18/06	
14	Methods	19 days	Thu 9/28/06	Wed 10/18/06	
15	Acquisition Timeline	19 days	Thu 9/28/06	Wed 10/18/06	
16	End of Financial Research	0 days	Wed 10/18/06	Wed 10/18/06	
17					
18	<input type="checkbox"/> Marketing Research	19 days	Thu 9/28/06	Wed 10/18/06	Kim,Joe,Jennifer,Mike
19	<input type="checkbox"/> Advertising	19 days	Thu 9/28/06	Wed 10/18/06	
20	Source of Revenue	19 days	Thu 9/28/06	Wed 10/18/06	
21	Product Advertising	19 days	Thu 9/28/06	Wed 10/18/06	
22	Price Determination	19 days	Thu 9/28/06	Wed 10/18/06	
23	Product Trademark Information	19 days	Thu 9/28/06	Wed 10/18/06	
24	End of Marketing Research	0 days	Wed 10/18/06	Wed 10/18/06	
25					
26	<input type="checkbox"/> Deliverables	77.9 days	Tue 9/12/06	Fri 12/1/06	Everyone
27	Project Plan	5 days	Sun 9/17/06	Fri 9/22/06	Ryan,Erick
28	Midterm Progress Report	10 days	Sat 10/7/06	Tue 10/17/06	
29	Oral Presentation	35 days	Tue 10/24/06	Wed 11/29/06	
30	Exhibit / Poster	29 days	Tue 10/24/06	Wed 11/22/06	
31	Project Abstract	29 days	Tue 10/24/06	Wed 11/22/06	
32	Web Site	34 days	Tue 10/24/06	Mon 11/27/06	
33	Deliverables CD	37 days	Tue 10/24/06	Fri 12/1/06	
34	<input type="checkbox"/> Business Plan	61.83 days	Tue 9/12/06	Tue 11/14/06	Erick,Karina
35	Rough Draft	7 days	Tue 9/12/06	Tue 9/19/06	
36	Rough Draft Editing	27 days	Wed 9/20/06	Tue 10/17/06	
37	Rough Draft 2	8 days	Mon 10/23/06	Tue 10/31/06	
38	Rough Draft 2 Editing	8 days	Wed 11/1/06	Thu 11/9/06	
39	Final Draft	4 days	Fri 11/10/06	Tue 11/14/06	
40					
41	IPRO DAY	0 days	Fri 12/1/06	Fri 12/1/06	Everyone
42					
43	Team Debriefings	11 days	Mon 12/4/06	Fri 12/15/06	Everyone

Figure 1: Business Team Tasks/Milestones

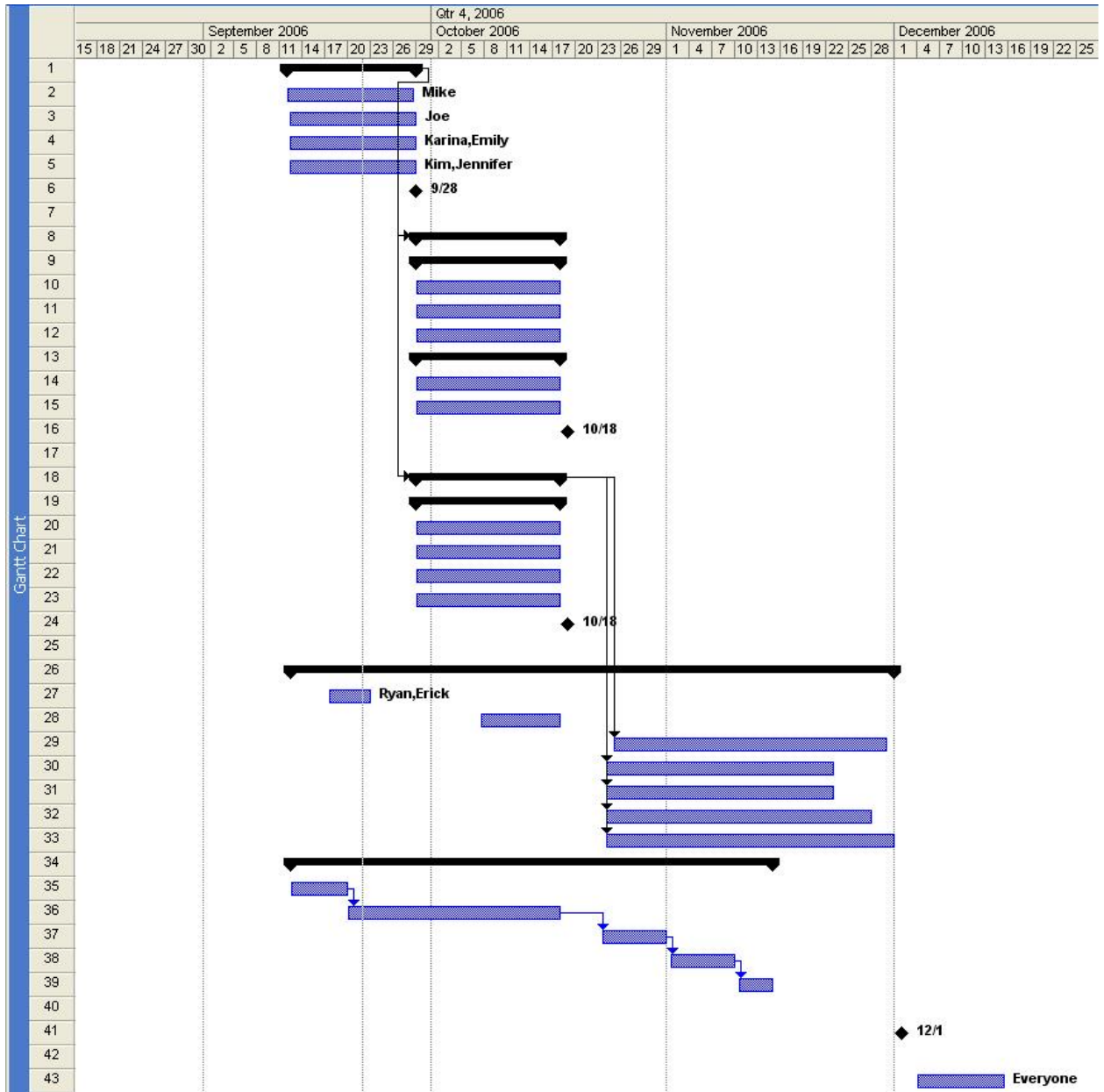


Figure 2: Business Team Timeline

	Task Name	Duration	Start	Finish	Resource Names
1	Research Connectivity Options	10 days	Mon 8/28/06	Fri 9/8/06	Technical Team
2	wi-fi networking	2 wks	Mon 8/28/06	Fri 9/8/06	
3	voice streaming options	2 wks	Mon 8/28/06	Fri 9/8/06	
4					
5	Test Voice Streaming Options	25 days?	Mon 9/11/06	Fri 10/13/06	Anton,Brian,Joseph C.
6	Windows Media streaming	1 wk	Mon 9/11/06	Fri 9/15/06	
7	alternative streaming methods	3 wks	Mon 9/18/06	Fri 10/6/06	
8	test chosen solution	1 wk?	Mon 10/9/06	Fri 10/13/06	
9					
10	Test Networking	10 days?	Mon 9/11/06	Fri 9/22/06	Anton,Brian,Joseph C.,Kim
11	wi-fi ad hoc	1 wk?	Mon 9/11/06	Fri 9/15/06	
12	network tablet PC and PDA's	1 wk?	Mon 9/18/06	Fri 9/22/06	
13					
14	Tablet PC Mount	6 wks	Mon 9/11/06	Fri 10/20/06	Kim,Brian
15					
16	gWay Software Programming	11 wks	Mon 9/18/06	Fri 12/1/06	Jesus,Anton
17					
18	myWay Software	55 days	Mon 9/18/06	Fri 12/1/06	
19	maintain tablet PC software	11 wks	Mon 9/18/06	Fri 12/1/06	Jesus
20	maintain designer software	11 wks	Mon 9/18/06	Fri 12/1/06	Anton
21	install script	11 wks	Mon 9/18/06	Fri 12/1/06	Brian

Figure 3: Technical Team Tasks/Milestones

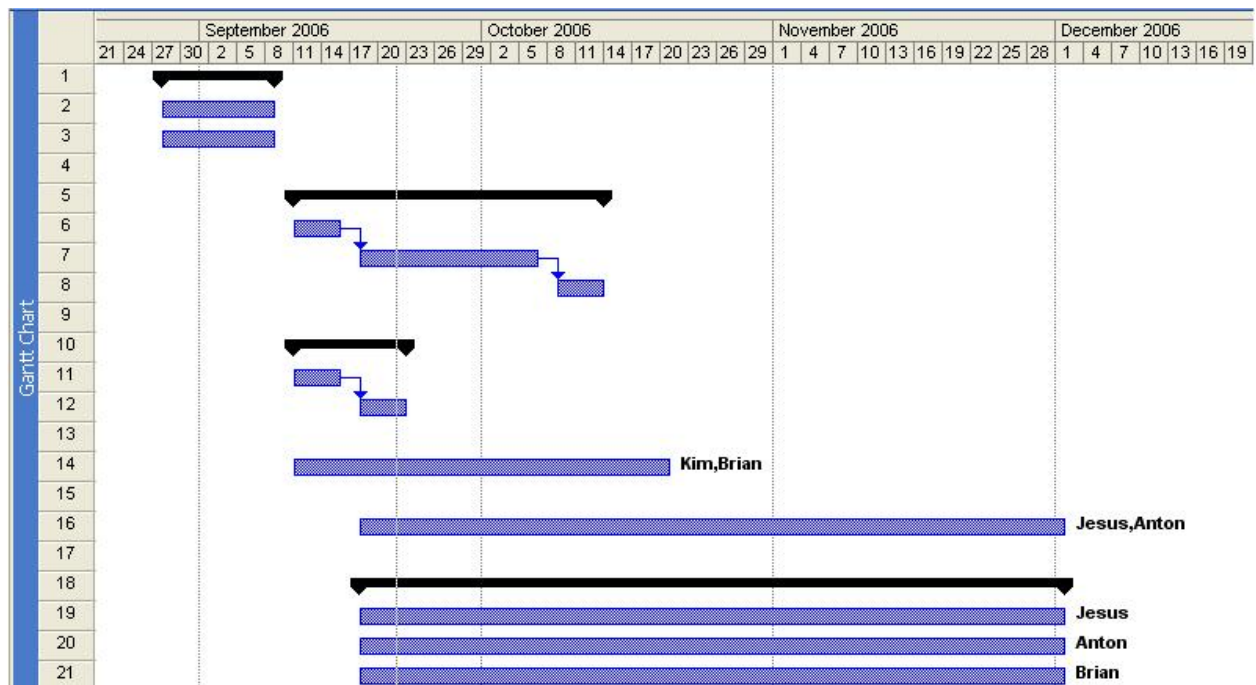


Figure 4: Technical Team Timeline

7. Weekly Assignments

IPRO357 Team Member Summary		
Ipro Member	Major	Position
Alex Pope	Computer Science	Team Leader
Business Team		
Erick Fields	Business Administration	Business Leader
Joseph Dietz	Architecture	Business Member
Jennifer Hernandez	Architecture	Business Member
Kimberly Lao	Architecture	Business Member
Michael Krauss	Architecture	Business Member
Ryan Wallenberg	Electrical Engineering / Computer Engineering	Business Member
Emily Sutherlin	Psychology	Business Member
Karina Powell	Psychology	Business Member
Technical Team		
Brian Lam	Physics	Technical Leader
Kim Kyu Hun	Materials Science and Engineering	Technical Member
Jesus Allan Tugade	Computer Science	Technical Member
Joseph Conti	Computer Science / Computer Engineering	Technical Member
Anton Varshavskiy	Computer Science	Technical Member
Advisors		
Jim Braband	-	Advisor
Xian-He Sun	-	Advisor

The Team Member Summary worksheet outlines who is contained within each subgroup, as well as, whom the team leaders, members, and advisors are. The work structure within each subgroup, and the IPRO as a whole, is hierarchical. This means that the team leader corresponds with the leaders of both the business and the technical side; they then delegate any tasks and information to their team members.

The technical team is responsible for continuing work on myWay, while simultaneously work on the gWay platform. While this is similar to what has been done in previous semester, they will now use input from the business team to attempt to improve the product in a way that will make it more marketable.

The business team is primarily responsible for developing a business plan. The other responsibilities include performing user research, making the product marketable, and making the product profitable for the stakeholders.

8. Designation of Roles

Assign Meeting Roles

- **Minute Taker:** The minute taker will be chosen before each meeting. This person will be responsible for taking notes during the meeting, as well as uploading these minutes to iGroups at the end of each meeting. (There is a predestinated folder on iGroups for these files).
- **Agenda Maker:** The agenda maker will be the team leader's, because of the fact that they should already have a good insight as to what needs to get accomplished as well as what each team member has/is working on.
- **Time Keeper:** This task is another responsibility that the minute taker must watch over. The team leader should know what needs to be discussed at each meeting, and then the minute taker will make sure that meetings don't go over the allotted time.

Assign Status Roles

- **Weekly Timesheet Collector/Summarizer:** The team leaders are responsible for creating weekly reports based on what the team members have been working on for the week. They can either have their team members write reports on what they have done or simply have their team members email them with tasks they have completed during the week; this is the team leaders' discretion.
- **Master Schedule Maker:** Due to the nature of our group a designated master schedule maker is not needed. When tasks are given out by the team leaders, they will be delegated to a small group of individuals (2/3 people), they are responsible for finding time outside of class to get there assignments done. All other communication is done through email, phone, or on iGroups.