

## Team Charter

### 1. *Team Information*

#### A. Team member roster (name, contact information)

1. Yijin Wu, [ywu28@iit.edu](mailto:ywu28@iit.edu)
2. Tiauna Williams, [twilli11@iit.edu](mailto:twilli11@iit.edu)
3. Peter Binggeser - [pbingges@iit.edu](mailto:pbingges@iit.edu)
4. Tom Hammond – [hammyt88@gmail.com](mailto:hammyt88@gmail.com)
5. Raymond Harris- [rharri4@iit.edu](mailto:rharri4@iit.edu)
6. Quintin Potter- [qpotter@iit.edu](mailto:qpotter@iit.edu)
7. Trang Nguyen- [trangnguyen1089@gmail.com](mailto:trangnguyen1089@gmail.com)
8. Connor Ross [cross8@iit.edu](mailto:cross8@iit.edu)
  
9. Tryphaena Manoharan- [tmanohar@iit.edu](mailto:tmanohar@iit.edu)
  
10. Joseph Muchna- [jmuchna@iit.edu](mailto:jmuchna@iit.edu)
  
11. Max Ramminger
  
12. Danny Varghese
  
13. Anthony Lademan- 586-991-1381

#### B. Team member strengths, needs and expectations

1. Yijin Wu-
  - a. Strengths: Business Major. Have good understanding of the business work. Good research skill. Manage materials and collect information, and also I would like doing some drawing and creating poster, brochure.
  - b. Skills need to develop: Speak up and develop the writing skills, the strategy for doing some research or survey.
  - c. Expectations: To earned more experience and get along with the team. Hope more students are encouraged to ride the bike on the campus. And also improve my speaking skills.
2. Tiauna Williams
  - a. Gantt charts, network diagrams, cost benefits analysis, things of this nature.
  - b. creating posters, brochure, surveys, doing prototypes in labs. I'm pretty flexible and adaptable willing to do what needs to get the job done.
  - Weakness: drawing, creating posters, brochure, and doing prototypes.
  - c. I expect that by the end of this semester we will explored several different option and came up with one that best fits out needs at IIT and be ready shortly after to implement one of the best bike programs on a college campus that will meet the needs of faculty, staff, and students.
3. Peter Binggeser
  - a. Knowledge/views from the potential customer's perspective; bicycle commuting experience; general bicycle knowledge
  - b. Business planning, designing for a profit, market research strategies
  - c. Hopefully improve on the campus's effectiveness and leadership in the sustainable community while making it easier and more worthwhile to ride a bicycle to class each day.

4. Tom Hammond

- a. Business and design background, presentation skills, data analysis, consumer behavior, marketing, anthropological research.
- b. Team working skills, research skills, poster creation.
- c. Establishing an understanding of the existing problem and proposing a viable and adequate solution to it.

5. Raymond Harris

- a. I feel that I have a great ability to work well on a team. Also, I am willing to take on multiple tasks and assisting with others when needed. Also, I enjoy brainstorming and discussing ideas with others, especially for a project such as this.
- b. This project will help me develop my project planning skills along with team based experience and research. Also, I hope to gain knowledge on how to get sponsors for a project and instituting a unique service for campus use. In terms of skills I am looking forward to getting more experience with Microsoft Project for planning and organizing.
- c. I'm not quite sure what to expect, but I know some of the people in the class and it looks like we have a good team. As long as everyone does their part I expect this IPRO to be a success.

6. Quintin Potter

- a. Currently use a bike to commute to campus  
Experience in sociology and psychology, specifically motivation and persuasion  
Group project experience  
Previously conducted surveys and behavioral observation  
Some computer programming experience  
Strong presentation skills
- b. Creation of business models  
Acquisition of sponsorship  
Increased knowledge of bike maintenance  
Working with and building on existing organizations
- c. I expect to formulate a working solution or at least a concrete action plan to accomplish the goal of increasing alternative transportation at IIT. I also expect to develop and use teamwork, networking, and business modeling skills in pursuit of this. What I really hope is for something tangible to result from this project that we can credit ourselves with.

7. Trang Nguyen

- Extensive knowledge with CNC machines, familiar with 3D graphic design softwares.  
Good with physics and mathematics. Good handling of the scientific method and approach  
Working with people from different disciplines outside of engineering. Be creative and learn the trade of entrepreneurship, starting a business from scratch, brainstorming

8. Connor Ross

1. General knowledge of bicycles. Experience in large group projects.
2. Better understanding of designing and planning.
3. Improve the schools overall thoughts on using bicycles to commute to and from school as well as awareness of options for bicycle riders.

9. Tryphaena Manoharan

- a. Strengths: Team work, organization, good at making power points.
- b. Knowledge/skills to develop: speaking up, programming and designing
- c. Expectations: To be able to encourage people to ride their bikes more through this project.

10. Joseph Muchna

- a. Strengths – Business experience, engineering mindset, leadership experience
- b. Needs – Communication
- c. Expectations – I expect that everyone in the class participates to complete our final project.

11. Max Ramminger

12. Danny Varghese

13. Anthony Lademan

- 1. Strengths: Web Development
- 2. New knowledge / skills to develop: I hope to learn what goes into setting up a new program like this as well as possibly picking up more information about bike-care and safety.
- 3. Expectations: I expect the project to get a pretty strong response and support from the IIT community.

*Team Purpose and Objectives –*

We want to celebrate the sustainable image of IIT by promoting bicycling at IIT. We want to increase awareness about the benefits of biking and how it is the most useful and the most easiest and fastest way of transportation around IIT

We want to continue the efforts of IIT and its attempt to be a more environmentally friendly and sustainable campus by showing the school the advantages of bicycling at IIT. We want to promote the facts of bicycles and the benefits it will bring to the community if used in a greater capacity.

*Background*

In order to ensure that the most applicable and needed bicycle service is developed for the IIT community, research needed to be done on other programs across the nation. Comparing current services at other universities will help guide and form the decisions made for this IPRO. When looking at other programs, two main types emerge: bicycle rental/sharing and secure bicycle storage.

At larger campuses, bicycle sharing systems seem to be quite popular. Multiple stations are set up throughout a campus and students are able to quickly rent the bikes and take them on one-way trips to the other stations. This gives students a much shorter walk between classes or for campus events.

Loyola University recently set up this type of a bike service for its students and allows the rentals to be checked out for up to 24 hours.

For campuses that have a large number of commuting students in a relatively urban area, a secure bicycle storage solution seemed to be much appreciated among its community. Combining an indoor storage facility, bicycle repair, parts, changing rooms, and showers, these campus programs are able to be a one-stop shop for all those who commute by bicycle. The Bicycle Cellar, in Tempe, Arizona, provides just that for its commuting community. It has received rave reviews and clearly provides a service that the Tempe community desired.

*Team Values Statement-*

Team members are expected to arrive on time for all meetings and show one another respect. If team members cannot make it to a meeting, they are required to alert either the professor or their sub-

team leader. Team members should consistently advance discussion in a constructive manner. Any concerns or conflicts should be addressed as soon as they arise.

If a team member fails to meet these requirements, they will be addressed by their sub-team leader or the professor. Team members are expected to assist each other with any issues or work related to the project.

### Project Methodology

#### *Work Breakdown Structure-*

A. The team will divide up any problems to the sub-group it relates to. The major tasks will include: surveys, collecting data, business plan, financials, and presentation. The team will adjust its sub-teams to accommodate for any unforeseen tasks. Our team will assess the viability of our business plan and financials to be sure that our solution is an option for our sponsor. It is reasonable to predict that our team will complete all of its tasks before the end of the semester.

#### B. Group Breakdown

The Business team will be in charge of assessing the financial viability of the business. They will focus completing a business plan.

The Incentive team will be in charge of determining what incentives are needed to convince students to resort to alternative transportation.

The Marketing team will present the team's idea to the campus and design a marketing plan to help bring in students and promote the service.

Business Team	Marketing Team	Incentive Team
<b>Joe</b>	<b>Tom</b>	<b>Quintin</b>
Ray	Peter	Tiauna
Tryphaena	Tony	Trang
Max	Connor	Yijin
Danny		

#### C. Scheduled Tasks and Milestones

Surveys (online and in-person)

Compile Data

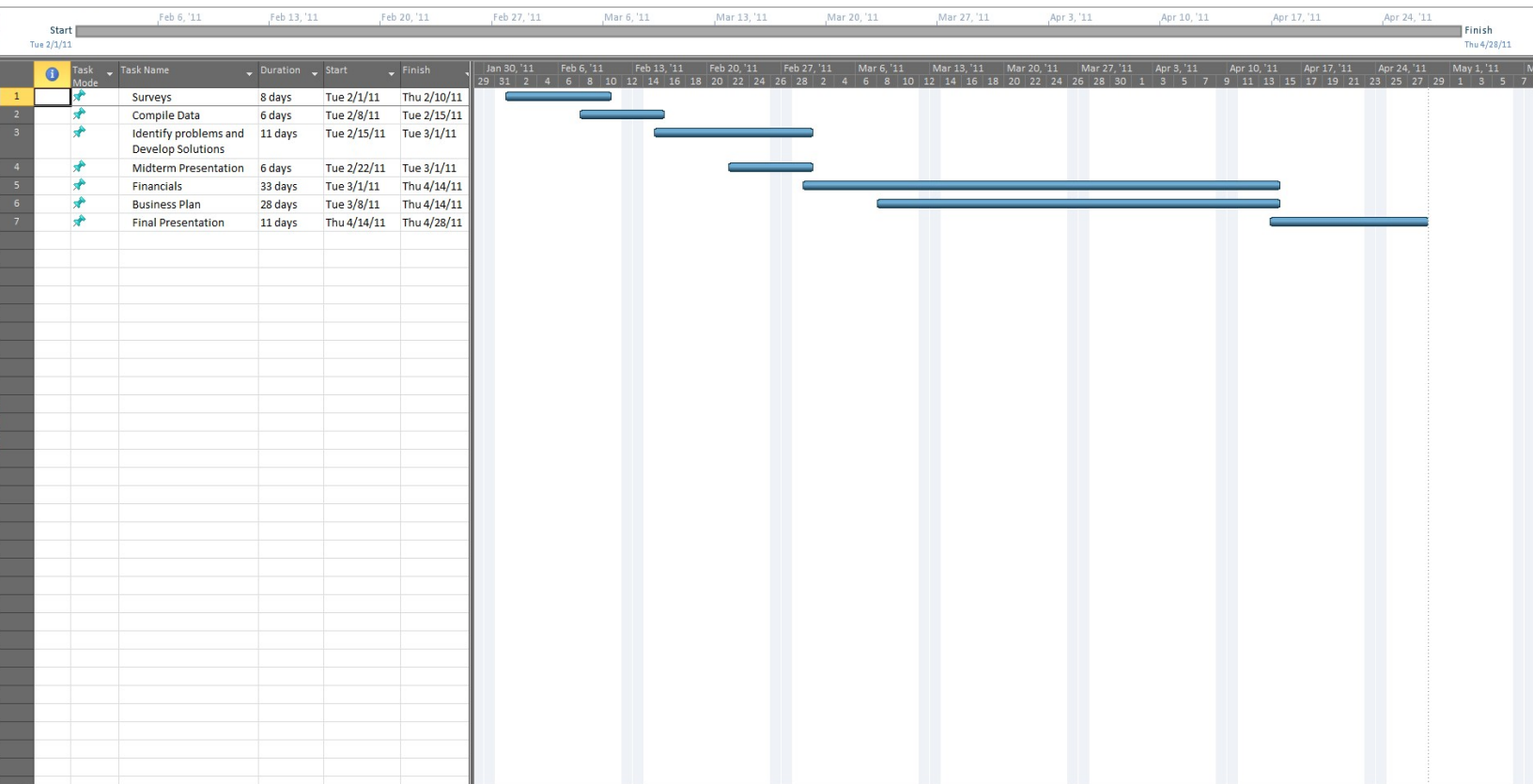
Identify Problems and develop solutions (for midterm)

Midterm Presentation

Business Plan

Financials

EnPro preparation



### Expected Results

The EnPro will provide a survey to assess the bicycle situation at IIT. We will compile the results and develop a solution for current problems and assess the financial viability of this venture.

IIT gets an affordable, popular, and eco-friendly bicycle service that appeals to avid bike riders as well as the casual non-rider. Other schools will take notice and want to design their own eco-friendly rental facility as well. The EnPro offers a solution for the student body that reduces the carbon footprint of the campus and potentially reduces emission not only at IIT, but other campuses around the country.

This EnPro expects to have a completed business plan to propose to our sponsor and potentially corporate sponsors.

*Project Budget - \$2200*

Live Survey Incentives- \$250

Printing - \$1000

Snacks/Team-Related Purchases -\$100

Website - \$200

Team T-shirts -\$500

Research - \$150

*Designation of Roles*

Sub-team leaders- Joe, Quintin, Tom

Minute Taker- Tryphaena