

**School of Computer Science  
Course 15-391**

**Spring 2007**

**Final Consulting Report**

**Himalayan Institute of Pittsburgh**

**Alex Volkovitsky**



# Himalayan Institute of Pittsburgh

## Executive Summary

Student Consultant, Alex Volkovitsky

Community Partner, Kate Mackin

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### I. Background Information

The Himalayan Institute of Pittsburgh is a non-profit branch of a national Institute run out of Honesdale, PA. Its goal is primarily:

*“to assist individuals in improving their health and quality of life through the natural integration of body, mind, and spirit.”*

The center provides instruction in Hatha Yoga through regular classes and periodic workshops. In addition, it runs a bookstore, provides training for teachers, and acts as a proxy for massage therapists and a local farmer. The center maintains a staff of around a dozen well trained yoga instructors and is managed by a board of directors of which the CP is president. She is also the only full-time employee, receiving occasional assistance from her mother, a volunteer accountant (also on the board), and several student volunteers.

### II. Consulting Task

The center pays its staff based on attendance to classes, so a staff member's salary is calculated by tallying up the number of students that attended over the course of month, and then multiplying through by a constant. In addition, classes are sold in flexible packages of one, four, ten, or unlimited annual. Since this is a rather unique system, the center tracked all transactions, attendances, and remaining class credits in a series of large book binders sorted by student. The system was very prone to mistakes, and took many hours of labor just to maintain and keep up to date. At the end of the month, the CP's mother would go through the book page by page tallying up the number of attendances recorded by each teacher in order to calculate the salary. Due to the nature of the system, students were often unaware of when their packages ran out, and would need to be confronted sometime after accumulating a decent “tab”.

The primary consulting task was the design, development, and deployment of a web-based database application to help the institute manage their student attendance. The application was designed around the Institute's unique needs, while maintaining ease of use as a primary objective.

### III. Outcomes Analysis and Recommendations

The Institute now owns and is actively using the database application that was focus of the primary consulting task. The application was written in Ruby on Rails and is hosted on the CP's computer in the back office. An Ethernet cable strung through the drop down ceiling creates a small Intranet that allows access to the application from a newly donated laptop that sits atop the front sales desk. A staff training was conducted to help familiarize the staff with the new application, during which many staff members expressed their delight and excitement with their new tool. In addition, the CP successfully managed to export the database in order to create mailing labels for a newsletter.

Unfortunately, while the CP is well versed in the use of the application, has established a regular backup procedure, and understands how to deal with minor networking issues, there are few serious risks to sustainability, most notably:

- The specific niche which the application was designed to fulfill means that should the Institute drastically change the way they run, the application will no longer be able to address their needs.
- Since the CP is not a programmer, the portion of the code base written in Ruby is inaccessible to her, and would require external assistance should it need to be fiddled with.

The SC recommends that over the next year, the Institute should attempt to:

- Acquire a part time computer technician, whether by finding an eager student, staff member, friend, high school student, or by establishing a relationship with a professional consultant. This way the Institute would have someone to turn to in the event of computer problems.
- Migrate their website to a hosting provider that gives access to eCommerce and CMS software such as SiteGround. This way the Institute will be able to expand their bookstore online and more easily maintain their website.

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Community Partner  
Kate Mackin  
*hipittsburgh@verizon.net*

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About the Consultant  
Alex Volkovitsky  
*avolkovi@andrew.cmu.edu*

Himalayan Institute of Pittsburgh  
300 Beverly Road  
Pittsburgh, PA 15216  
*http://www.pittsburghyogacenters.org*

Alex is a Sophomore dual Computer Science and  
Math student.

# Himalayan Institute of Pittsburgh

## Final Consulting Report

Student Consultant, Alex Volkovitsky

Community Partner, Kate Mackin

### I. About the Organization

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#### Organization

The Himalayan Institute of Pittsburgh's mission is:

*“to assist individuals in improving their health and quality of life through the natural integration of body, mind, and spirit. In establishing a branch of the Himalayan Institute of Yoga Science and Philosophy in Pittsburgh, we will offer classes and instruction in meditation, hatha yoga, yoga philosophy and psychology, diet and nutrition, holistic health, and related areas.”*

According to their website:

*“The Himalayan Institute is a non-profit, educational facility, which promotes self-awareness and holistic health through the practice and teachings of the yoga tradition - one of the oldest and most comprehensive systems of holistic living.*

*The local Institute is a branch of the Himalayan International Institute in Honesdale, PA, founded in 1971, by Sri Swami Rama. The Institute integrates Western and Eastern teachings to provide a modern and comprehensive approach to self-understanding and personal growth.”*

The Pittsburgh branch of the institute was founded 3 years ago.

Located in a small shopping center in Mt Lebanon, the main facility is a huge suite located on a second floor above other stores. There is one large room for yoga, a big central area for the bookstore and front desk, a back office, and various other rooms for massage, kids, etc. Two of the back rooms are currently unused and undergoing renovation.

#### Facilities

The area is open and there is a general and purposeful lack of doors which contributes to the atmosphere of the center. There are no explicit security guidelines or devices other than one locked cabinet which stores financial documents.

#### Programs

The center provides Yoga Classes, Workshops, Teacher Training, a Bookstore, Consignment Sales, Food Sales, and proxies for Massage therapists. Classes are held daily in the mornings and sometimes in the evenings as well, while the workshops only happen periodically. The Teacher

Certification program is held once every few years and serves as a major source of income for the center.

The main institute assists the local center by running the printing press and participating in the Teacher Certification program.

In addition, the CP would like to organize outreaches at schools, but currently she does not have time or resources to do so.

## Staff

The CP is the president of the Board of Directors, and is the only full-time employee. She is the primary staffer and also occasionally teaches. There are several volunteers and about 13 other teachers. The center officially deals with all instructors as external contractors, although there are strong social bonds between students, instructors and the CP. Bhavna, another teacher and also a member of the Board deals with most of the center's accounting needs.

## Technical Environment

Most of the center's technology resides in the back office and consists of:

- 1 Windows XP Computer
- Includes Microsoft Office, Frontpage and Quark
- DSL modem and 4-port router
- Attached Fax/Printer/Copier (The Fax part is currently not working)
- Standalone Copier/Scanner

The front desk also contains some equipment, most notably:

- A cash register machine
- A digital credit card machine with pin-pad
- 2 digital cordless phones (each with its own phone line)
- A used laptop is to be donated in the near future

A back room is currently being used to store old computer parts, most notably:

- A Dell L500r PC

Additionally, the CP owns a cell phone which she often uses to communicate with students.

## Technical Management

The CP is by default in charge of all technology and acts as the resident “accidental techie”. When equipment breaks she seeks help from friends and family, though this does not seem to occur often.

## Technology Planning

There is no concrete technology plan as there has been no serious need or expertise in the matter. The CP arranges to purchase equipment and software on a need by need basis.

## Internal and External Communication

Most communication is done by phone, with the CP's cell phone number being widely available to students. Calls to the center are frequent, and the CP is often juggling several calls between her cell phone and the center's land lines. In addition, the CP has both a work and home e-mail which she often checks.

The center sends out periodic mailings and advertises in special interest magazines. These graphic based advertisements are designed by the CP using Quark.

A website is hosted off-site with iPower and managed by the CP using Microsoft FrontPage. Although the website is occasionally updated, the CP has noted that is often a laborious and error prone task.

## Information Management

Information about classes and students is stored in a big book at the front desk, and is sorted by student name. A student buys a set of classes (1,4, 10 or annual) and then has those 'credits' filled in when they come to class. The current system is very error prone and causes frustration to both teachers and students. Volunteers are needed to help manage this book and update records. The CP's mother is responsible for tallying up how many students came to each teacher's class. As this process dictates the pay of the teacher's, it is important that it be conducted with as few errors as possible.

Workshop registrations and attendance are managed by a small pile of registration forms on which payments and other comments are noted.

Recently, the CP has been trying to store information about the Workshops, Massage Therapy and Food Sales in Excel spreadsheets. Although this method has led to an easier method for looking up data, it was redundant and led to many fragmented files.

## II. Scope of Work

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Task 1. Design, develop, and deploy a database application to help manage class, workshop, and massage registration and attendance.

The institute needs to track student attendance and payments in a way that will let them know how many paid classes each student has remaining and how much salary is owed to every instructor. The center accomplished this by a redundant and error prone paper system that revolves around large binder that contains files for every student. When a new student first registers for classes, a file is created for them. The file contains their personal information such as name, address, and phone number. Upon purchasing a series of classes, the number of classes paid for is noted in the file, usually by writing the numbers 1 to 'n' (where 'n' is the number of paid for classes). When a student comes to class, they sign in on a sheet at the front desk, and if a desk attendant is present, will have their attendance noted in the book by having a number crossed off. If an attendant is not present, which is often the case, the instructor or the CP will go through the sign in sheet after class and mark down every student. Students do not usually keep track of how many classes they have remaining, and they often go over and keep coming to classes out of habit. Since the CP and the instructors do not find out until after class which students have run out of paid classes, it often takes several weeks before a student is notified of this. As a result, students become frustrated when asked to not only renew their account, but also pay retroactively for classes that they have already attended.

This problem has directly impacted the institute financially as well as socially. The CP noted that the center looks disorganized in the eyes of certain students and this is potentially hurting enrollment.



### III. Outcomes and Recommendations

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Task 1. Design, develop, and deploy a database application to help manage class, workshop, and message registration and attendance.

Design of the application was conducted by the CP and SC together. During development and as features were incrementally added, the CP would constantly review the work as a whole and recommend modifications and improvements as they became needed or obvious. One such example of an originally unplanned feature is the pagination and search functions provided on the View Students page. It was not until an Excel file containing over 2100 students was imported did it become clear that a huge unsearchable table was too slow in practice.

It also became clear early on that a particularly useful skill for the CP to have would be the ability to use the phpMyAdmin back-end interface which was automatically installed by InstantRails. While the interface is aimed at system administrators that must manage complicated systems made from multiple databases, the CP was able to figure out how to use the search features in order to locate bad records. She was also able to successfully export the database and create over 70 pages of mailing labels for use in a newsletter.

As a result of the consulting task, the CP has now acquired the following skills:

- Basic knowledge of HTML, CSS and hands-on web design
- Knowledge of InstantRails and how to use it effectively in order to monitor, run, and restart Mongrel, Apache, MySQL and the rails application.
- Basic networking skills, such as how to discover an IP address and use the 'ping' command in order to verify a connection.
- Ability to effectively use Google to find helpful resources online while troubleshooting
- Ability to use phpMyAdmin in order to access the database directly and export it to Excel or any number of other generic formats
- Extensive knowledge of the application, including extra administrative features which are not visible to the rest of the staff
- A better understanding of how the Internet works, including concepts such as the Server-Client model and Network Layers

The Institute has acquired increased capacity through the following:

- The front desk laptop adds to the positive image of the Institute
- Staff are more comfortable at using technology and have gained more trust in it
- Records are better managed and less time is spent on frivolous book keeping

- Students have a better opinion of the Institute which fosters enrollment

Another beneficial outcome of the new system is that staff members no longer have to deal with the awkwardness of notifying students of expired packages. Since a machine now deals with displaying a notice, the staff don't have to trouble themselves with the social side effects of having to confront students.

Some features of the new system:

- Ability to search through students and look up/edit information
- Ability to manage staff with two well enforced privilege levels
- Tracking of attendance to classes, and ability to look up attendances by class, student, and teacher
- Ability to manage workshops as well as regular classes and even massage appointments
- Tracking of payments for classes, workshops, and massages
- Financial summary for day, week, month, year
- Interactive calendar
- Ability to establish relationships between staff and students based on class or workshop attendances
- Monthly attendance summary for staff which is used to calculate salary
- Ability to easily export the database in order to print mailing labels for the 2000+ students



The new Laptop at the front desk

### Recommendation 1. Migrate Web Hosting Providers

The SC recommends that within the next year the Institute should attempt to migrate to a better web hosting provider. The current host, iPower provides remarkably small set of services, and unhelpful technical support. Migrating to a company that offers eCommerce and CMS software pre-installed would allow the Institute to run their bookstore online as well as give it the ability to better maintain its website. The SC recommends SiteGround due to their good reviews and wide array of features, but there are others with similar qualifications.

#### **Top Hosting Providers**

WebHostingStuff.com maintains rankings of many hosting providers including SiteGround, their rankings for Unix providers are available at <http://www.webhostingstuff.com/category/Unix-Linux-Web-Hosting.html>.

### Recommendation 2. Acquire a competent part time computer technician

While the CP should be able to handle most of the computer problems that are expected to face the Institute, a long term plan should involve a technician whose has the necessary training (or at least the interest to carry through with training). The SC recommends that the Institute find either a stable volunteer, such as a student, instructor or friend with the necessary background, attempt to

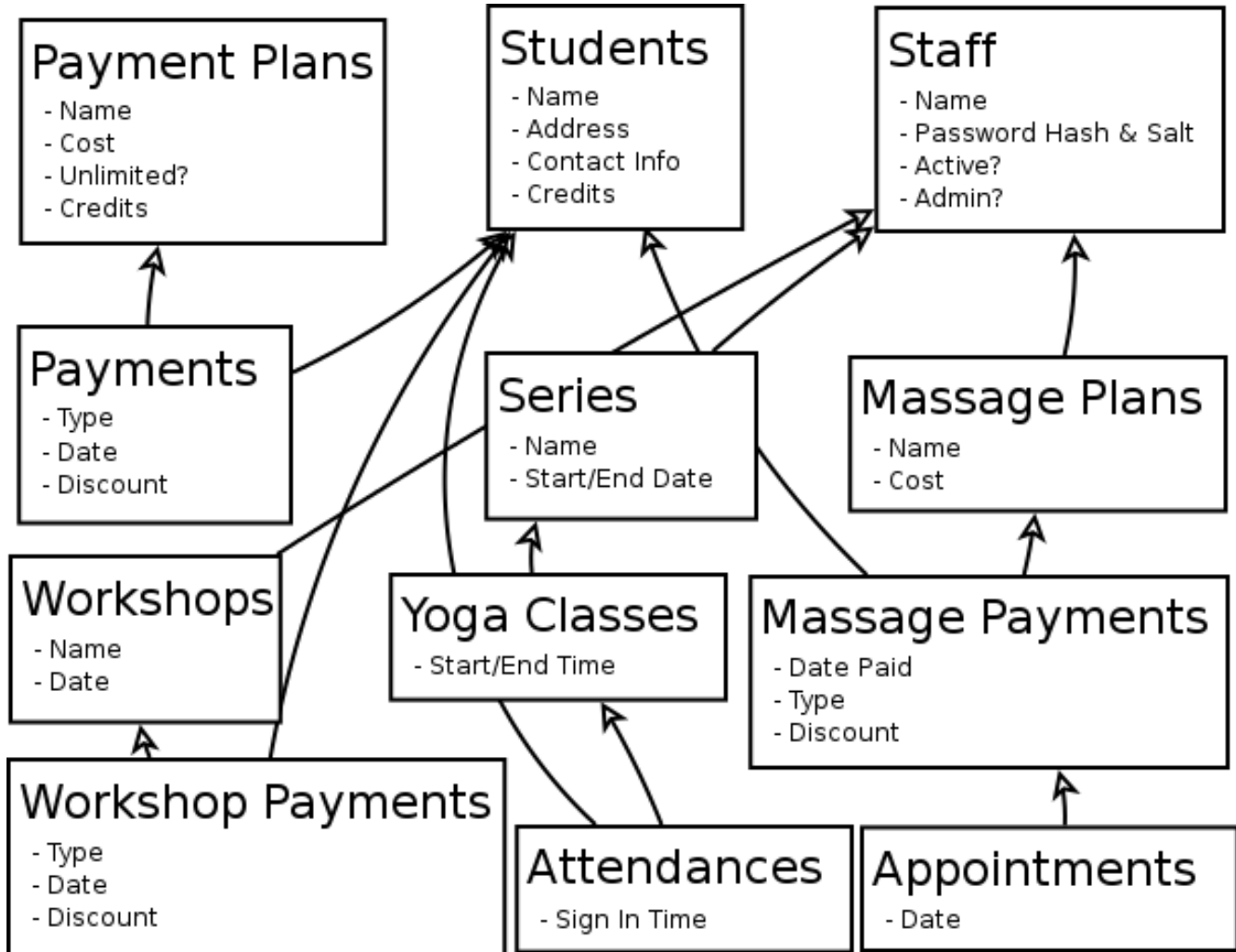
recruit a local high school student who would like the experience of learning new skills, or simply establish establish a relationship with a professional consultant who know the Institute's situation in case of an emergency. An alternative course would be to have the main Institute in Honesdale develop a policy of providing technical assistance to the branches. If the main Institute could afford to maintain a skilled programmer or systems administrator, his or her work could be disseminated to help foster the use of technology at all locations.

## About the Consultant

Alex is a sophomore dual Computer Science and Math major. This summer he will be interning with Cisco Systems in San Jose, CA. Following graduation he would like to spend several years in the Peace Corps, after which his plans are undecided.

## Appendix A.

Database layout by table with notable fields, arrows denote links to other tables (ie. since every student comes often, each attendance entry contains a student\_id field that is used as a foreign key when doing relation based lookups)



## Appendix B.

Brief overview of major software components used.

### Ruby

A scripted object-oriented language similar in many ways to Perl, PHP, and Python (among others). It licensed under the Ruby License and the GPL, the current version is 1.8.6

<http://www.ruby-lang.org/en/>

### Gems

Ruby's native package manager used to install libraries and extensions such as Rails and Mongrel.

### Rails

A web application framework consisting of many useful libraries for Ruby. It is licensed under the MIT License and the current version is 1.2.3

<http://rubyonrails.org/>

### Mongrel

A lightweight and reliable web server designed to run web sites written in Ruby. It is licensed under the GPL and the current version is 1.0.1

<http://mongrel.rubyforge.org/>

### Apache

The world's most used and reliable HTTP server, reportedly running 58% of all websites as of March 2007. It is licensed under the Apache License and the current version is 2.2.4

<http://httpd.apache.org/>

### mySQL

The single most used open source database. It is licensed under the GPL and the current version is 5.0.37

<http://www.mysql.com/>

### phpMyAdmin

A management tool for mySQL written in PHP. It is licensed under the GPL and the current version is 2.10.0

<http://www.phpmyadmin.net/>

### PHP

A scripted language designed for web programming. It is licensed under the PHP license and the current version is 5.2.1

<http://php.net/>

## Appendix C.

The primary consulting task relied heavily on the use of InstantRails 1.7 written by Curt Hibbs, Tanner Burson and David Morton. The project description from RubyForge (<http://rubyforge.org/projects/instantrails/>) is:

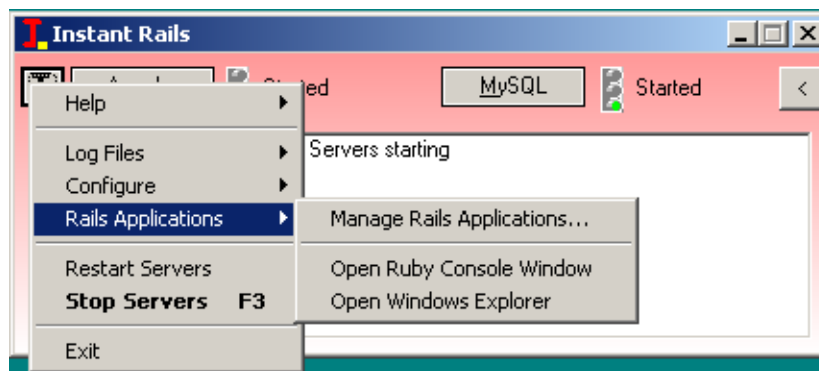
*Instant Rails is a one-stop Rails runtime solution containing Ruby, Rails, Apache, and MySQL, all preconfigured and ready to run. No installer, you simply drop it into the directory of your choice and run it. It does not modify your system environment.*

The project website is:

<http://instantrails.rubyforge.org/wiki/wiki.pl>

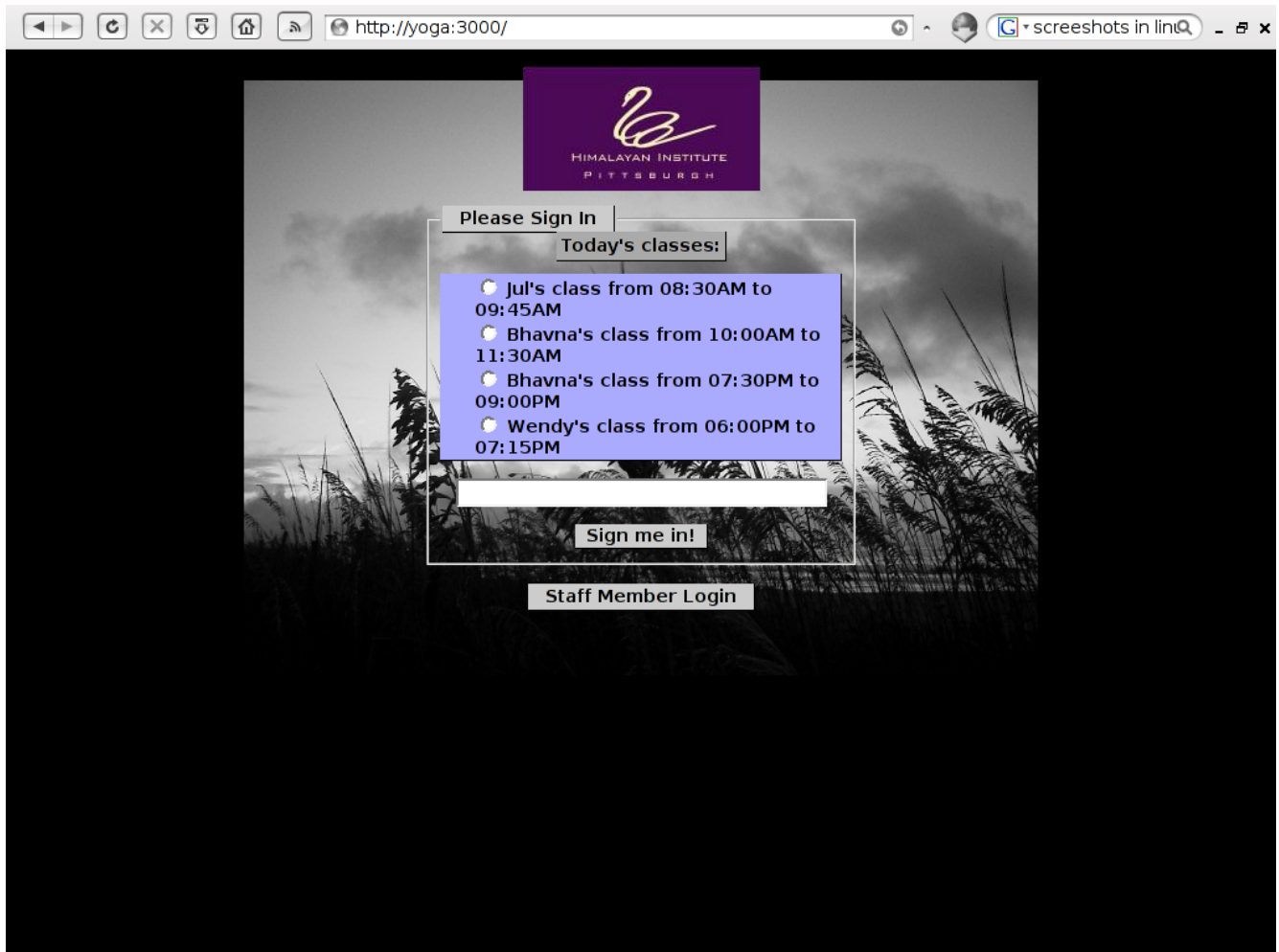
Additional screenshots are available at: <http://instantrails.rubyforge.org/wiki/wiki.pl?Screenshots>

An example view of the main window:



## Appendix D.

A screenshot of the student sign in screen showing the day's classes:





## Past Community Partners

4 Kids Early Learning Centers  
Addison Behavioral Care, Inc.  
Alafia Cultural Services  
Alcoa Collaborative  
Allegheny County Housing Authority  
Allegheny General Hospital Pastoral Staff  
American Association of University Women  
Animal Friends, Inc.  
Animal Rescue League  
ASSET, Inc.  
ASTEP-Grace Memorial Presbyterian Church  
Auberle  
Bedford Hope Center  
Bedford Initiatives  
Bethany House Ministry  
Bethlehem Haven  
Bishop Boyle Center  
Bloomfield-Garfield Corporation  
Borough of Crafton  
Boys & Girls Club of Duquesne-West Mifflin  
Boys & Girls of Wilkensburg  
Braddock Carnegie Library & Community Center  
Braddock Redux  
Brashear Association, Inc.  
Breachmenders  
BTC Center  
Calliope: The Folk Music Society  
Career and Workforce Development Center East  
Carnegie Library of Homestead  
Carnegie Library of Pittsburgh  
Carnegie Science Center  
Center Avenue YMCA  
Center for Creative Play  
Center for Hearing and Deaf Services, Inc.  
Center of Life  
Central Academy  
Central New Development Corporation  
Child Watch of Pittsburgh  
Children Youth Ministry  
Children's Museum  
Christian Life Skills  
Citizens to Abolish Domestic Apartheid  
Community Day School  
Community House  
Community Human Services Corporation  
Community Technical Assistance Center  
Competitive Employment Opportunities  
Conflict Resolution Center International  
Consumer Action Response Team  
CONTACT Pittsburgh  
Creative Nonfiction Foundation  
Dance Alloy  
East End Cooperative Ministries  
East End Neighborhood Employment Center  
East End Neighborhood Forum  
East Liberty Development  
East Liberty Presbyterian Church  
East Side Community Collaborative  
Eastminster Child Care Center  
Eastside Neighborhood Employment Center  
Education Center  
Every Child, Inc.  
Fair Housing Partnership  
Faison Development & Opportunities Center  
FAME  
Family Services of Western PA  
Family Tyes  
First Charities/First United Methodist Church  
Friendship Development Association  
Garfield Jubilee Association, Inc.  
Gateway to the Arts  
Girl Scouts - Trillium Council  
Glen Hazel Family Reading Center  
Greater Pittsburgh Community Food Bank  
Greater Pittsburgh Literacy Council  
Greenfield Senior Center  
Guide Runners  
Gwen's Girls  
Hazelwood Senior Center  
Hazelwood YMCA  
Heritage Health Foundation  
Hill House Association  
Hill/Oakland Workforce Collaborative  
Himalayan Institute of Pittsburgh  
Hope Academy of Music and the Arts  
Hosanna House  
Housing Alliance of Pennsylvania  
HUB Downtown Street Outreach Center  
Hunger Services Network  
Interfaith Volunteer Caregivers  
Jane Holmes Residence  
Jewish Family & Children's Service  
Jewish Residential Services  
Joy-Full-Gospel Fellowship After School Program  
Just Harvest  
KidsVoice  
Kingsley Association  
Lawrenceville Development Corporation  
League of Young Voters  
Light of Life Family Assistance Program  
Madison Elementary School  
Manchester Academic Charter School  
McKees Rocks Terrace  
McKeesport Collaborative  
McKelvy Elementary School  
Mental Health Association of Allegheny County  
Message Carriers  
Methodist Union of Social Agencies  
Miller Elementary School, Principal's Office  
Mon Valley Initiative  
Mon Valley Providers Council  
Mon Valley Resources Unlimited  
Mon Valley Unemployment Committee  
Mon Yough Community Services  
Mount Ararat Community Activities Center  
NAACP National Voter Fund  
National Alliance of the Mentally Ill  
National Association of Minority Contractors /  
Black Contractors Association  
Negro Educational Emergency Drive  
New Beginnings Learning Center  
New Penley Place

## Past Community Partners (continued)

Northside Coalition for Fair Housing  
Northside Institutional Children Youth Ministry  
Northside Leadership Conference  
OASIS Senior Center  
Opera Theater of Pittsburgh  
Operation Better Block  
Orr Compassionate Care Center  
Outreach Teen & Family Services  
Parental Stress Center  
Pennsylvania Biodiversity Partnership  
Pennsylvania Low Income Housing Coalition  
Peoples Oakland  
Phase 4 Learning Centers, Inc.  
Pittsburgh Action Against Rape  
Pittsburgh Citizens' Police Review Board  
Pittsburgh Foundation  
Pittsburgh Health Corps  
Pittsburgh Interfaith Impact Network  
Pittsburgh Mediation Center  
Pittsburgh Social Venture Partners  
Pittsburgh Toy Lending Library  
Pittsburgh Vision Services  
Pittsburgh Voyager  
Pittsburgh Youth Symphony Orchestra  
POISE Foundation  
Program for Health Care to Underserved  
Populations  
Project Educate  
Providence Family Support Center  
Radio Information Service  
Reading Is Fundamental Pittsburgh  
Regional Coalition of Community Builders  
River Valley School  
Rodef Shalom  
Rodman Street Missionary Baptist Church  
Ronald McDonald House Charities of Pittsburgh  
Rosedale Block Cluster  
Sacred Heart Elementary School  
Rx Council of Western PA  
Salvation Army Family Crisis Center  
Sarah Heinz House  
Schenley Heights Community Development  
Center  
Second East Hills Social Services Center  
Sharry Everett Scholarship Fund  
Sixth Mount Zion Baptist Church  
Southwest Pennsylvania Area Health  
St. James School  
St. Stephen Elementary School  
Sustainable Pittsburgh  
Thomas Merton Center  
Three Rivers Center for Independent Living  
Three Rivers Youth  
TLC-USA  
Turtle Creek Valley Council of Governments  
Tzu Chi Wen Chinese School  
Union Project  
United Cerebral Palsy  
Univ. of Pittsburgh - Division of Applied Research  
and Evaluation  
Urban League of Pittsburgh  
Urban Youth Action  
Ursuline Services  
Vintage Senior Center  
Weed & Seed Program, Mayor's Office  
Wesley Center  
West Pittsburgh Partnership  
Wireless Neighborhoods  
Women's Enterprise Center  
Working Order  
YMCA McKeesport  
YMCA Senior AIDE Center  
Youth Fair Chance  
YouthBuild  
YWCA Bridge Housing  
YWCA of McKeesport

# Community Partner Information FAQ

## (continued from back cover)

### 7. What does it cost to be a Community Partner?

The cost for participating in this experience is your time and your commitment to follow through as agreed. As leaders of community organizations, we know your time is of premium value. Those who have made this investment of time have reaped returns many times over.

### 8. What does the Community Partner have to offer Carnegie Mellon students?

- Students learn to structure unstructured problems. Community organizations are complex environments with complex problems. Your organization provides excellent environments in which to practice the art of structuring problems.
- Students come from different cultural backgrounds and most have never been in a nonprofit organization. They are practicing how to communicate across cultural differences and across technical knowledge differences. They need to be able to make mistakes and learn from them. Community partners provide a supportive relationship in which students can take risks and learn about how to communicate, how to relate, and how to maintain professionalism.
- Students get the opportunity to practice process consulting. They are learning that expertise is only as valuable as the ability to help others solve authentic problems. You provide a context in which students can practice these skills.
- We've found that Community Partners are very appreciative for the students' assistance. There is nothing more rewarding than to experience your efforts as valuable and rewarding for others. You provide that experience for students.
- Finally, you offer a glimpse into career opportunities in the nonprofit arena. Students learn to appreciate those who work in the nonprofit sector, and they grow to appreciate the role and function of community organizations. We hope this appreciation not only informs the choices they make in life, but also encourages them to care and give back to the community throughout their professional careers.

### 9. How do I become a Community Partner

Contact an instructor, Joe Mertz or Scott McElfresh. Send your contact information: name, title, name of organization, address, phone, fax, location of organization and your interest in being a Community Partner. You will have a telephone conversation and possibly an on-site visit. All organizations are considered, though preference is given to organizations providing services to a low-income community or a community at risk for falling into the "digital divide."

**Send email to  
instructors@tcinc.org  
(email preferred)**

**Or call  
Joe Mertz: 412.268.2540  
Scott McElfresh: 412.268.4859**

### 10. Caveats

- We do our best to ensure that students who sign-up for the class are committed to completing the class, however, occasionally, a student ends up withdrawing from the class during the semester. Typically, this happens when a student has underestimated the time they need for this class. We do our best to advise students so this does not happen. When it does happen, there is nothing we can do except to invite the Community Partner to participate in the following semester.
- The semester is short and the student has to do a lot of work in a short amount of time. For this reason, it is critical that you keep your scheduled appointments, do the work you agree to do, and maintain communication with the student. The student will need your feedback on reports quickly, often the next day. When we get to the final consulting reports, we will need fast turnaround time from Community Partners because we also need to get the reports published in time for the Community Technology Forum.
- If there is any chance that you think you will not be able to follow through with the requirements of this partnership, please wait until such time as when you are able to do it. Since the Community Partner is the focus for the student's learning, it is essential that the partnership be sustained for the semester.

# Community Partner Information FAQ

## 1. What is the goal of the partnership in this course?

The goal of this class is to expand the capacity of the Community Partner to use, plan for, and manage technology, administratively and programmatically. The student is learning process consulting, project management, communication, relationship management, problem identification, and analysis.

## 2. As a Community Partner, what can I expect to happen?

Once you match with a student consultant, you will set a meeting schedule that you and the student will keep for the remainder of the semester. The student comes to your location for 3 hours a week. During this time you and the student work together. This is not an internship in which the student merely works on site. Rather, it is a consulting partnership in which you must work together to achieve your technology goals. The student facilitates a process that moves from assessment, to analysis of problems and opportunities, to defining a scope of work, to developing a work plan, to analyzing outcomes and finally presenting that analysis. As the Community Partner, you are the consulting client. You provide information and discuss that information with the student. But you are more than a client; you are also a learner. In process consulting the client "owns the problem" as well as its solution. The consultant facilitates the client in achieving that solution. The consultant doesn't "do for" the client. Rather, the consultant works with the client.

## 3. What types of activities are typically included in a scope of work?

Each scope of work is unique and depends solely upon the specific needs and opportunities of the individual Community Partner. Partnerships have focused on a wide range of activities, including: personal information management (how to use Windows, organize files, backup files, use various software packages, use time managers, use Palm Pilots and other personal information management tools, e-mail, etc.), developing a plan for how to train staff and how to incorporate knowledge and skill into job description, designing a local area network, implementing Internet connectivity, designing and developing a web site, determining effective data storage methods, analyzing the needs for an information database, designing and implementing a database, solving technical problems, designing a public community technology access center, determining the specifications for computers, developing disaster recovery plans, and more.

## 4. Who can be a Community Partner?

This course target individuals playing an administrative or programmatic leadership role within a community organization. Typically Community Partners are Executive Directors, Directors, Assistant/Associate Directors, Coordinators, and Managers. But, we make the selection based on the organization and the role that the individual plays within that organization, regardless of title.

## 5. Why do you focus on organizational leaders?

For an organization to use information technology effectively, its leaders must have a vision for how it can support the organization's mission, they must be comfortable enough to integrate technology into their personal work practices, and they must know enough to budget, staff, and subcontract appropriately. By partnering one-on-one with a student consultant, the leader has a unique opportunity to build that vision, comfort, and knowledge, no matter where they are starting from.

## 6. What are the requirements for being a Community Partner?

- Hold a leadership role within your organization.
- Have a computer in your office or one you could or do use in your job.
- Reliably meet with the student consultant 3 hours per week, every week, for about the 13 weeks.
- Come to an on-campus gathering 2 times during the semester. Once at the beginning and once at the end.
- Share information about your organization with the student consultant.
- Read project reports prepared by the student and give the student immediate feedback.
- Complete a brief response form after reading each report and return to the instructor.
- Keep a log of consulting sessions and send to instructors twice during the semester.
- Read the final consulting report. Give feedback to the student immediately.
- Make a brief presentation at the end of the semester (with the student) at the Community Technology Forum. (This is the 2nd on-campus gathering you are required to attend.)

**(continued inside back cover)**