IPRO 363: Language Link
Final Report

April 29, 2011

Contents

1 Executive Summary

The mission of Language Link is to provide a social link between international students and students wanting to learn additional languages at Illinois Institute of Technology (IIT). The basis for this solution is an online framework allowing students to build a personal profile, matching people based on common interests, goals, schedules, and other factors, so as to promote and improve language learning via natural every-day interaction and use of languages. The envisioned efficacy of Language Link is based on the theory of immersion, widely regarded as the best way to learn a language[1].

As the developers of the website, we provided a matching system based on pairing algorithms in order to allow each user to build a relationship with a student most equipped to facilitate language learning, so that the immersion process can really begin. Language Link is not designed to equip users with lessons, translations or vocabulary; rather, the site is envisioned as a social networking site connecting those who are interested in learning languages. The development of and work for the site is designed as a two semester project. This semester, we provided a working prototype that will be molded into a working website within the next semester in order to offer this service to IIT affiliates. As the project progresses we hope to extend Language Link to other colleges as well.

Throughout the semester, the team continued interacting with and getting feedback from potential Language Link users along with international departments and groups at IIT. It established what areas students could use the most help in (e.g. understanding certain languages, speaking certain languages, learning different cultures), how they prefer to interact through the site, and what we can do to encourage them to help others learn as well. In order to accomplish this, the team conducted surveys and a focus group to interact with potential users and hear feedback in person. Furthermore, the IPRO team expects to continue our research regarding the best practices of website development and social network design.

Once a prototype site was completed, it was tested to make sure the teams desired results and outcomes were being accomplished. Students were asked to give feedback.. By the end of this semester the team has completed a running prototype version of the site on IITs servers available for next semester. This brings us to the final stage of the semester in which the team prepared a poster and presentation for IPRO day that displays our progress. Data was then archived for future semesters so maximum development can continue.

Some challenges the team encountered included getting enough students to participate in focus groups and test our prototype site, along with making the site stand out when compared to other Internet based language aids. Our site accomplishes what we want it to, but remains very user friendly, taking into account the cultural diversity of our users. We also were challenged to determine and develop the intricate pieces of developing a social networking site including the secure log-in, matching algorithms, and building profiles.

2 Purposes and Objectives

The mission of IPRO 363: Language Link is to develop a social network website that connects IIT students to learn languages, integrate cultures and build friendships. The basis for this solution is an online framework allowing students to build a personal profile, matching people based on common interests, goals, schedules, and other factors, so as to promote and improve language learning via natural every-day interaction and use of languages. The envisioned efficacy of Language Link is based on the theory of immersion, which is widely regarded as the best way to learn a language[1]. As the developers of the website, we have provided a matching system based on pairing algorithms in order to allow each user to build a relationship with a student most equipped to facilitate language learning, so that the immersion process can really begin. Language Link is not designed to equip users with lessons, translations or vocabulary; rather, the site is envisioned as a social networking site connecting those that are interested in teaching, learning and studying languages. We plan to start off providing this service to IIT affiliates. As the project progresses we hope to extend Language Link to other city colleges as well.

2.1 Team Purposes and Objectives

2.1.1 Spring 2011 Semester

- Write and format full site map and web content
- Secure server space
- Write code for and design home page, log-in page, profile pages, logo, and legal script
- Build and thoroughly test matching algorithms
- Promote the project, keeping constant contacts with relevant individuals and organizations, including international and study abroad centers
- Facilitate student testing of site and prototypes
- Complete full prototype - with registration and matching features - for IPRO Day

2.1.2 Fall 2011 Semester

- Expand of website prototype from previous semester
- Final test of website, addition of final features, and implementation at IIT
- Continue work on upgrading the website and maintenance on the website
- Research on extending the website to other schools and universities
- Consider finding a corporate sponsor and transitioning from IPRO to EnPRO

2.2 Background

The resources at many universities, especially IITs campus, are not sufficient to meet the language learning needs of students. Sixty-eight percent of subjects surveyed felt strongly or very strongly that their university should provide more opportunities and resources for learning languages[0]. At IIT, international and ESL students complain that they have insufficient language resources to participate effectively in other English-based classes.

Furthermore, the opportunities provided by IITs extensive international base are missed when the students among the communities do not have proper resources for interacting with each other. The solution devised by the IPRO team is a social networking website that builds connections among users and provides an online framework to facilitate communication between compatible language learners. Because Language Link will connect people based on a wide variety of user characteristics (e.g., native languages, target languages, location, class schedules, topic interests) it has the potential to cater to a very diverse user base. The ultimate aim of this project is to enable users to realize language-learning goals by being matched with the people most likely to help them effectively.

Secondary goals that are no less cherished by the IPRO team relate more closely to the social networking aspect of the website. The IIT campus offers a uniquely and magnificently varied population and this IPRO hopes to facilitate continued and expanded interaction between students of varying cultures and backgrounds. The IPRO team believes that the social benefits of learning a new language or refreshing language skills with a partner are innumerable.

The difficulty experienced by adults attempting to learn a new language has always been a problem, resulting in frustration, failure or surrender. There have been several magical methods to aid in teaching people languages, but none have ever been as successful as immersing oneself in the desired culture and language. Currently some of the more common methods for learning a new language include Rosetta Stone (and similar programs), taking classes and reading textbooks, and the use of online resources. Rosetta Stone makes many grandiose claims about how powerful the program is, but there is very little hard data as to how effective it really is. A recent study indicates that 55 hours of Spanish with Rosetta Stone is equivalent to an entire semester of a 3 credit hour course at a university. Rosetta Stone is

significantly less expensive than an entire semester at a university, offering estimated savings of around $2000[2]. Despite these significant savings, Rosetta Stone still costs almost $700 for a full curriculum.

There have also been many free, online resources available for amateur linguists, but none are very effective. Wikitranslate is a service that allows a user to post a passage in a given language for another user that is fluent in the desired language to translate. This tool is not very effective for a user that does not already know a language, since the object is not full-scale language learning, but only used as a utility.

From this research, the IPRO 363: Language Link originated as an IPRO 2.0 idea, and the work on the project began then in the Fall 2010 semester. At that point the as-of-yet-incomplete team wrote and conducted a survey to gauge on-campus interest in the Language Link service, along with conducting extensive research on language-learning and the kind of work involved in coding for a project such as this. The information gather in the fall of 2010 was recorded diligently and has been used effectively in this semester.

The Language Link project calls for the concerted cooperation of IPRO students that know coding languages, along with students that are capable of designing a website as an effective language learning tool, with a high level of flexibility between the two groups. As a result, the technological relevance of the project ranges from extensive computer science knowledge and application to psychological and sociological research of language learning to website design. The team this semester was varied and informed, and has demonstrated its ability to accomplish these things with great success.

In regard to ethical issues, this project faced only a few problems, primarily relating to user privacy. As with any database of user information, security is incredibly important. It is also very important that the caretakers of the information do not use it for personal gain. It is common practice for corporations to attempt to buy user data from websites in order to sell more of their product or service. There is also an added issue that arises from matching strangers and encouraging them to meet one another. It is important to do everything possible to avoid putting users in harms way. Language Link sets out to protect the privacy and safety of users by guarding user information professionally and implementing user-feedback systems that allow rating mechanisms, so that users violating policies can be flagged and investigated.

2.3 Team Values Statement

As a team, our two core goals were to maintain good communication and good feedback. Information flowed freely between team members and was clear, succinct, and useful. This information was provided via timely communication and with previously agreed-upon means, whether via phone, e-mail, or other online frameworks. Team members were expected to attend all meetings on time and be prepared to participate. Last, but most importantly, team members were prepared to accept and provide feedback regarding the performance of other team members. Since a precedent of feedback and clear communication was utilized from the start, the team benefitted greatly.

3 Organization and Approach

3.1 Problem-Solving Plans and Processes

Toward the end of the Fall 2010 semester, when the idea for Language Link was first conceived, the team's main task was research. There were two research teams, one focused on language learning and the other focused on computer science; these teams attempted to determine the best methods to implement the Language Link system. This research included characteristics of the website, such as design, features, limitations, and efficiency, as well as how to encourage interaction, gauging interest among students at IIT, and whatever other factors might arise along the way of developing this social network. This research also helped the team establish objectives and some task designation for the Spring 2011 semester. At the start of the Spring 2011 semester, the Language Link team was divided into three subteams: Project, Design, and Development. The major tasks of the project team included: (i) promoting the project and the site, (ii) gathering and analyzing feedback from the prototype, (iii) completing IPRO Deliverables, including Midterm Presentation, Project Plan, and IPRO Day presentation and booth, (iv) working with international departments and groups at IIT in conjunction with their goals.

Promoting the project and the site was a very important part of the project teams work that could have easily been overlooked. By promoting the project we have helped future teams who will be able to quickly develop a diverse user base when the site is launched. The teams promotional work came in several ways: weekly international student profiles in TechNews, student surveys, and communication with IITs international departments and groups. Working with these resources helped the group decide on specific content and features for the site, opened the lines of communication with these organizations, and helped the team set future goals for the following semesters.

The project team also gathered and analyzed potential user feedback from an early student survey and a more recent focus group. We were able to decide on specific features and characteristics of the site based on questions students answered on the survey. Some examples of these were: what main languages to focus on, what non-language related interests users would like to be matched on, and how users prefer to contact or be contacted by a fellow user. We also worked alongside the Design Team to conduct a focus group and a corresponding survey. This allowed the Design Team to get critical feedback on the aesthetic aspect and helped the project team understand even more of what the user wants. All these findings were then relayed to the Development Team to translate into our actual site.

The major tasks of the Design Team included: (i) researching language learning methods, (ii) determining the best layout for the website, (iii) determining what features the website will require, (iv) designing all website templates including home page, home page links, logo, profile pages, legal script, and "link" pages.

The very earliest research conducted by the Design Team consisted of reading on the Internet about the basic principles of web design. Most of this initial research focused on such topics as font choice and size, as well as color palettes and basic layouts. The team also browsed several other well-known social networking sites for inspiration, as the goal was to make the Language Link website as accessible as possible to first-time users.

The first prototype simply focused on getting text fields and other content in the right places, without worrying too much about aesthetics. The design went through several iterations of layout and coloring. After each version, the team consulted with outside observers to determine what each did right and wrong. Several sources were consulted, including a professional web designer, average users, and members of a focus group created specifically for the purpose of assessing the website.

The professional web designer had some valuable feedback regarding the overall design process, and indicated that creating a truly attractive and functional website would take a long time. The average users were contacted via Internet survey, and were provided with still images of proposed pages. Similar images were shown to the focus group, which was composed of students from one of Professor Batsons classes.

Often, the feedback gained from these groups was not immediately usable. Many people suggested possible features which we duly passed along to the Development Team. Very few of the people from the survey or focus group had any real design experience, which had both benefits and drawbacks. It was important to know if one of the proposed pages were confusing or otherwise unhelpful.

The major tasks of the Development Team included: (i) determining a suitable data- source and web-implementation environment, (ii) development of a matching algorithm, (iii) documentation of all the data collected, research, and code (iv) coding and implementation of a prototype of the website, (v) coding and implementing a finalized version of the website that is available to the public (next semester).

In order to determine the best work environment, the Development Team tried out various options for web development. These included the content management system (CMS) Drupal, hard-coding each page, and CakePHP. The development team also discussed past coding experiences and weighed the pros and cons of each experience. Ultimately the development team settled on the CakePHP environment, because it: (i) could generate much of the basic skeleton code that would have been tedious to hard-code, (ii) allowed considerable coding maneuverability (unlike a CMS), (iii) provided an organized filing system to keep all the various files in order, (iv) had excellent documentation (unlike Drupal), and (v) implemented a website using Object-Oriented programming, a programming model that most of the development team was familiar with, and liked. Most importantly, these characteristics meant that the website would come out looking professional, from the perspectives of both a client and a developer. The development team decided to use MySQL as a data-source to house the Language Link database because MySQL is a free, user-friendly SQL (structured query language) implementation.

In order to develop the matching algorithm the team first brainstormed how it could be logically

implemented into the database, using their past computer science education as a resource. The team also researched different known matching problems that arise in algorithm-research, to see if any were a good fit for the Language Link match suggestion tool. However, most elementary algorithms only match clients based on one or two characteristics, and therefore, the algorithmic concern is only efficiency. At these early stages of Language Link, it is more important that the matching algorithm is capable of determining if two people are compatible; optimization of the algorithm can come next semester. The development team decided that the information to match users would be stored on a table in the database, where each entry in the table would include the two users who "matched", as well as the magnitude (>0) of their match. The job of the matching algorithm was to determine the magnitude of each match.

The development team was then split into two sub-teams, one working to develop the matching algorithm, and the other implementing the rest of the website prototype's features using the CakePHP environment and functionality. The matching algorithm sub- team determined they should use C++ because logical algorithms were significantly easier to implement in C++ than in PHP, and because it is an Object-oriented programming language, which makes a transition from a database easier than other languages, such as C. They thus cloned necessary database tables into C++ objects, and wrote a program that would periodically search the database for potential matches, and, upon finding a match, would determine its magnitude, and add it to the Matches table in the database.

The prototype-implementation sub-team worked on developing the basic features of the website, such as login, registration, and profile viewing. This involved researching various aspects of website development, such as authentication and security, as well as learning the various functions available in CakePHP, and determining how they could be used to accomplish our goals. Thus, the main research methods used in this process were reading primary sources, such as the CakePHP documentation, as well as some trial-and-error, because often, the easiest way to learn was to do.

Throughout the development process, testing was performed on the team members' individual computers, using servers obtained via WAMPserver^{TM}. The reasons for using individual servers instead of the server obtained from OTS at IIT, was because this allowed the development team easy access to the MySQL database, as well as the ability to compile the C++ matching code with Visual Basic. Neither of these were possible on the server obtained from OTS. Files were shared over a group Dropbox^{TM} folder.

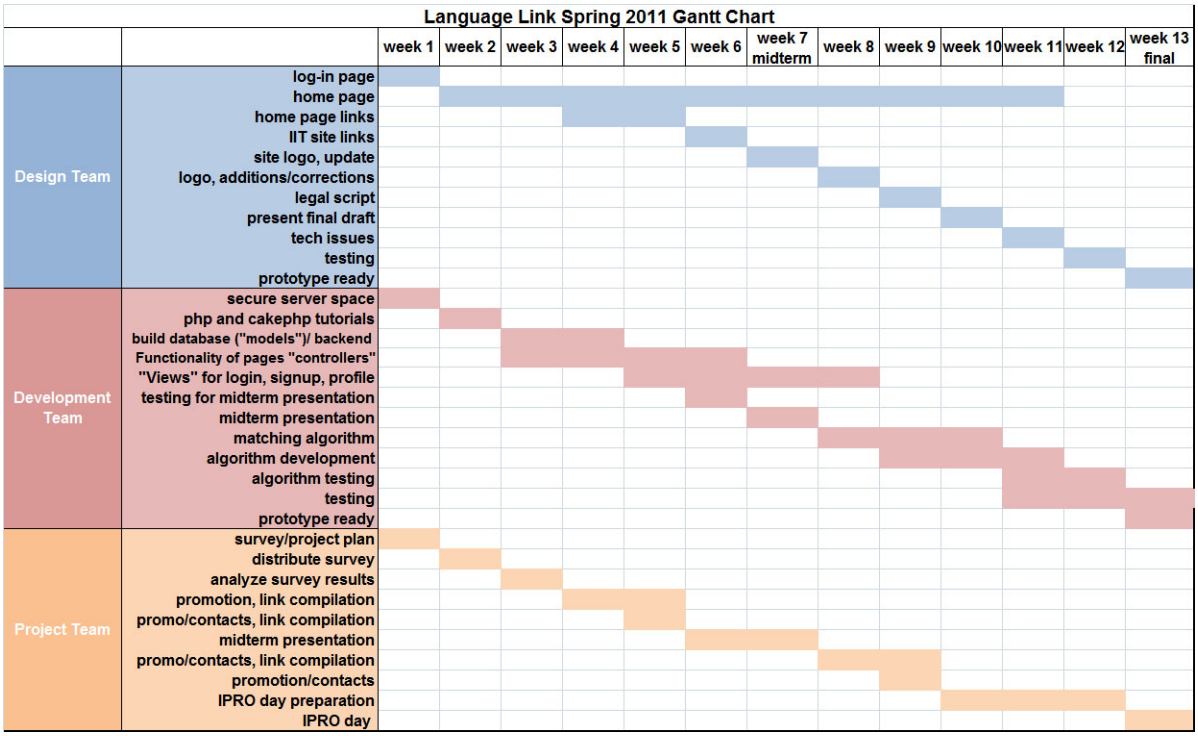

Figure 1: Gantt Chart Work Breakdown

4 Analysis and Findings

The Language Link team devised a list of outcomes to accomplish as it designed and built our website. The team planned and has developed a functional prototype site this semester. Our goals were to make sure the website stands up to our expected outcomes as follows:

- Maximize access of individuals to assistance in the process of learning a language
- Maximize teaching of languages by promoting the ability to teach
- Minimize website obstructions
- Maximize student interactions at IIT
- Maximize cooperation and interaction between student groups
- Minimize social stigma of Internet interactions on campus
- Maximize socialization among IIT students of all culture

4.1 Project Team

The project teams work focused mainly on the groups public interactions, coordinating the IPRO deliverables, and managing the overall project progress. We did a lot of the behind the scenes work to ensure the design and development teams hard work would be as effective as possible. With this type of project we felt that it was extremely important to reach out to the IIT community so the site is built to suit them and will be appealing to them. Reaching out was also important to eventually develop a large and diverse user base which we have discovered can be ample resource here. We have accomplished this in a few ways. First, our survey (appendix IV) gave us valuable information on what the IIT community wants from our site. We were able to summarize this information into topics that the development team could work into the site. We also contacted IITs Office of International Affairs and the Study Abroad Office for any potential feedback or further integration with our project. One final way we received potential user feedback was working alongside the design team to conduct a focus group which gave us specific feedback on site design and what features students like or dont like.

The project team also worked with the design team to coordinate all three teams work into the IPRO deliverables like the presentations and posters. This was an important step because without good organization all three teams work could get under appreciated. We also wanted to make sure we were presenting to specific information that was required for each deliverable.

4.2 Design Team

The Design Team used an iterative process to create the individual web pages and integrate them into a coherent whole. Along the way, several sources were utilized to gain feedback to help refine the pages and the overall design. These sources included simple articles on the Internet, a focus group, and an electronic survey.

The overall map of the site was the first thing to be created. It consisted of a general list of all the pages that would be included, as well as links between them to show how they connect. Very little consideration was given to the design at that point, as the project was just getting started.

Each individual screen was designed through a standardized process. Each member of the team would be given a description of what the expected content was for the given page, then asked to sketch a prototype. The prototypes were compared, and the best elements from each were combined into a rough draft. The rough draft was colored in using the current color scheme and compared to the overall design to ensure consistency. After the page layouts were chosen, the actual content was put in place and formatted properly. Usually, the completed prototype was then sent out for feedback and redesigned using the new information. Each screen went through at least two or three of these iterative steps.

4.3 Development Team

The majority of the Development Teams research focused on website development environments and proper technique. After researching several different techniques and environments for website production, ranging from hard coded PHP to Drupal, we decided upon the open source development framework CakePHP. Cake is widely regarded as the best option for PHP-based website creation. Cake provides built-in access to Ajax and javascript, as well as integrated database manipulation and powerful security. This decision was made through a large amount of independent research as well as dialogue with friends and family who are active web site developers and designers. After deciding what framework to implement, the Development Team began the arduous journey to understand the inner workings of Cake. There was a significant amount of new content to explore. Fortunately, Cake provided very thorough documentation which gave the team a wonderful starting point to begin our development. After studying Cakes provided Cookbook, the development team also researched several example projects, varying from dating sites to blogs. This provided the team with a very broad understanding of Cake and allowed it to successfully complete the website prototype. The final area of research conducted by the development team concerned the matching algorithm used in Language Link. Once again, this topic is very well documented, providing the team with a vast array of options. After examining all the different options, the development team decided to create an algorithm from scratch. Using the data gathered through research, a program that weights certain traits of and pairs users based on them was written and implemented.

5 Conclusions and Recommendations

5.1 Project Team

The Project Teams main focus this semester involved acting as a liason between the Language Link team and IITs campus. The purpose of this role was to ensure that Language Link was developed with the students in mind, and that the launch of the site in the coming semesters (hopefully Fall 2011) was met with success and enthusiasm from the student population. The Project Team addressed these concerns in three main ways.

The first method of gaining support involved reaching out to organizations on campus that the team believed would be capable of representing Language Link in the future and providing suggestions that could lead to its success. To do this, Language Link explored the resources on campus and requested meetings with representatives from the Office of International Affairs, the Study Abroad Office, and IPRO in France, among others.

In order to ensure that Language Link was designed to meet the specific needs of the IIT campus, the Project Team sought feedback often from the student population in various thorough ways. Two surveys were conducted: the first was designed to gauge interest on campus in Fall 2010, and the second designed to both attain information on student demographics on campus and to gather the opinions and preferences of potential users at the beginning of Spring 2011. Finally, a focus group was conducted towards the end of the Spring 2011 semester in order to gather feedback on the current version of the design prototype and the conception of the site map.

Finally, the Project Team worked to raise awareness of Language Link and the project by beginning a column in TechNews. The weekly column interviewed a different international student about his or her experiences in Chicago and abroad, language details, and other interesting aspects of experiencing a new culture.

There were several other tasks for which the Project Team was responsible. The most extensive of these involved developing a comprehensive list of online language learning links and lessons that we hope will be incorporated into the site as supplementary resources for language learners. Additionally, the Project Team spearheaded project tasks such as the Project Plan, Midterm Presentation, Ethics Assignment, and IPRO Day deliverables.

5.2 Design Team

The design team has always been focused on maintaining a balance between design and accessibility. Its important that the website be visually attractive, but it must also be usable even by first-time visitors. We feel that we have somewhat achieved that goal, but there will always be room for improvement.

Web design is a never-ending process, and so the Fall 2011 IPRO team should dedicate at least a few people to making sure that the website remains visually pleasing and easily accessible. More testing will be necessary, and so we recommend that next semesters team carry out more studies like this semesters survey and focus group. Naturally, one cant please everyone, but we feel that with more work the website can be made to appeal to the majority of users and potential users.

5.3 Development Team

This semester, the development team has developed a functional website and matching algorithm.

The website is functional as a first prototype, with basic log-in, registration, links, and matching capabilities. While the visuals of the site are more basic than the final design, the framework is in place to improve the details. The website is able to register users and display the matches generated by our language link matching algorithm, these two abilities demonstrate the main functionality of the site. Some test data has been produced, and most parts of the site that are functional appear to be working correctly, though more useful feedback on the overall design and function of the site will eventually be provided when the system is tested by actual users.

In the future, the site will need to be improved to add further functionality as planned, such as a messaging system and language learning utilities. Another task for future team members is transfer the site to a web-server in order to gather feedback from a larger body of users. The site will also evolve visually and functionally with user feedback and guidance from the design team.

The matching algorithm is one of the main unique features of this IPRO. This semester, a basic matching algorithm was implemented that is able to match users registered to the site based on languages that they wish to learn and to teach. In the future, we hope to increase the capabilities of the matchmaking algorithm to include a larger variety of factors, such as the users responses to questions, their skill levels in a certain language and the number of matches they have already created within the language link community. As the main feature of the site, input from the entire team on the functioning and goals of the algorithm will be needed to create the optimum Language Link experience.

In order to help meet these development goals, it would be helpful if a number of students with web-programming knowledge would join the team, in order to effectively continue the work of the Design Team on the website. It would also be useful if students with programming experience joined as well, in order to extend our matchmaking compute application.

Ultimately, this semesters Language Link team recommends that next years team focus on the tasks involved in a successful launch of the site. Though this team hopes that next semester will see the official launch of the site (and completion of the project), it understands that a significant portion of the semester must be used to conduct thorough and informative user tests to ensure the site is ready for launch and meets student expectations and needs. The Project Team of Fall 2011 should focus on locating a midsized test group of enough students to mimic the IIT student population and observe how Language Link works with a real community.

Finally, the Project Team worked to raise awareness of Language Link and the project by beginning a column in TechNews. The weekly column interviewed a different international student about his or her experiences in Chicago and abroad, language details, and other interesting aspects of experiencing a new culture.

There were several other tasks for which the Project Team was responsible. The most extensive of these involved developing a comprehensive list of online language learning links and lessons that we hope will be incorporated into the site as supplementary resources for language learners. Additionally, the Project Team spearheaded project tasks such as the Project Plan, Midterm Presentation, Ethics Assignment, and IPRO Day deliverables.

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Finally, the following is a list of potential features and tasks that this team recommends the Fall 2011 Language Link team intergrate into the final website:

- Chat and messaging features
- Improvement of algorithm
- Further integration with IITs international organizations
- Calendar feature that incorporates all of IITs culturally-themed events
- User rating system
- Language learning progress tracker
- Launch of site

To conclude, our team successfully developed an aesthetically-pleasing prototype site with a working algorithm that matches users based on their language needs. We also promoted our website and did extensive research in order to develop a diverse user base to maximize the sites potential. We did this in the hopes that Language Link will fulfill its mission to help IIT students learn languages, integrate cultures, and build social connections.

Appendices

A References

[1] Primary Source: Survey organized and conducted by IPRO 363 Team

[2] Immersion Education and Research. (n.d.). Retrieved from Center for Advanced Research on Language Acquisition, University of Minnesota website: http://www.carla.umn.edu/immersion/

[3] Gholdston, Havalah. "Hard Science on Rosetta Stone Effectiveness - TopTenREVIEWS." Rosetta Stone 2011 - TopTenREVIEWS. Web. 02 Dec. 2010. ¡http://rosetta- stone.toptenreviews.com/hard-science-on-rosetta-stone-effectiveness.html¿

[4] Cormen, Thomas H.; Leiserson, Charles E.; Rivest, Ronald L.; Stein, Clifford (2009). Introduction to Algorithms (3rd ed.). MIT Press. ISBN 0-262-03384-4

[5] Boyd, Danah; Ellison, Nicole (2007). "Social Network Sites: Definition, History, and Scholarship". Journal of Computer-Mediated Communication 13 (1). http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html

[6] Silberschatz, Korth, Sudarshan; Database System Concepts 6th edition, (McGraw-Hill 2011)

B Budget

Table 1: IPRO 363 Language Link Estimated Budget versus Spent Budget

Expense Category	Amount Estimated	Amount Spent
Materials and Supplies	**$300**	***$ 0**
Prototype testing and printing of screenshots		
Publications and Communications	**$200**	**$200**
Poster and Brochure for IPRO Day		
Other Expenses Misc. supplies and food (pizza party)	**$200**	**$200**
Total	**$700**	**$400**

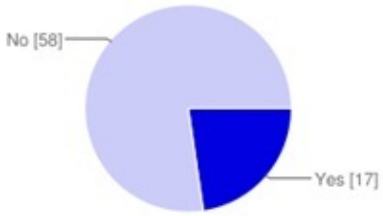
** The team was able to perform two surveys and a focus group using Google Survey Tool and students on campus at no expense for our IPRO.*

C Team Members

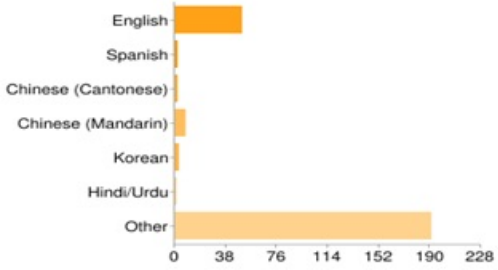
Faculty Advisor: Professor Laura Batson
Team Leader: Monica Samelson
Subgroups (subteam leaders in bold)
Subgroup 1 (Project Team): **Monica Samelson**, Nattasha Vinas, and Ian Hook.
Subgroup 2 (Design Team): **Erik Johnson**, Dilyana Stoyanova, and Ashanti Balouki, Colin Johnston, Diego Dias.
Subgroup 3 (Development Team): **Simon Freedman**, Michael Ou, Mitch Miller, and Jacob Cole.

D Survey Results

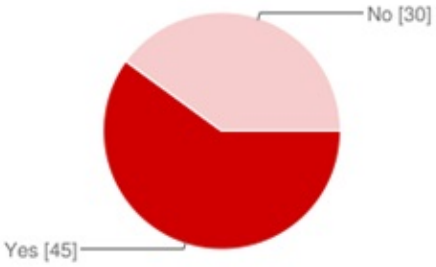
Are you an International Student?



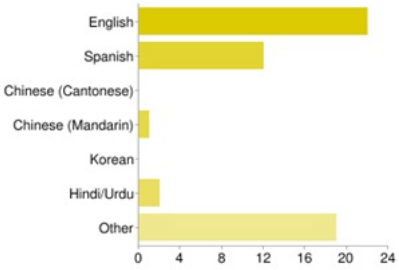
What is your native language?



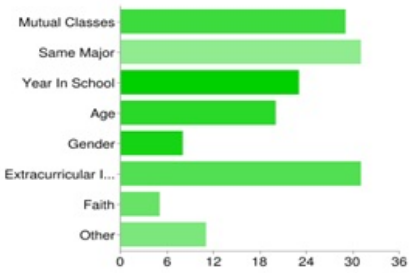
Do you speak any additional languages?



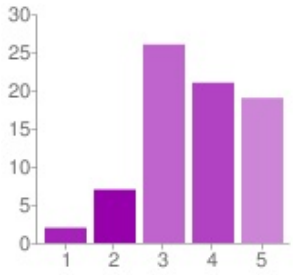
If yes, what additional languages do you speak?



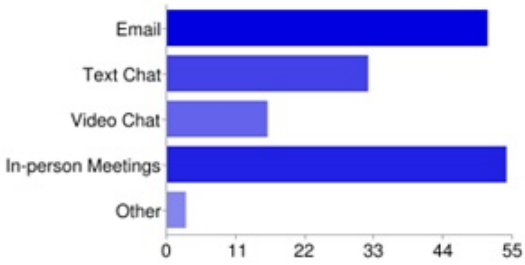
If a system like Language Link were to be developed, how would you prefer to be matched?



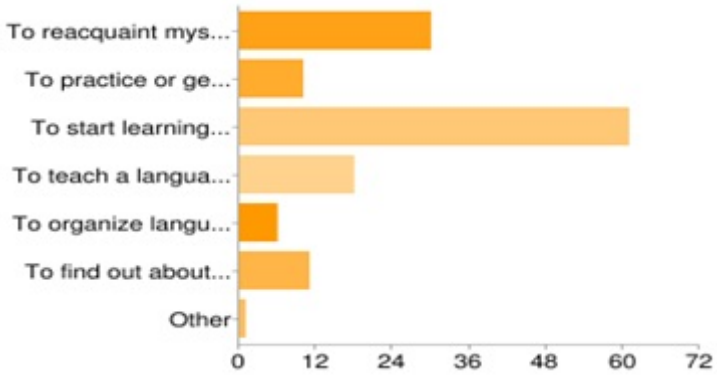
How interested would you be in meeting up with a fellow IIT student on campus to continue the language/culture immersion process in person?



How would you prefer to communicate with your match?



For what purpose would you be most likely to use Language Link?



E Focus Group

Table 2: Focus Group Responses

Do you notice any basic features missing from the site?	**What features should be added?**	**In general, does the site appear usable?**	**What websites have the most pleasing aesthetics?**	**Rate the aesthetics of the Language Link prototype.**
Nothing Obvious	Nothing Obvious	4	google, facebook	3
information about what language link is on the 1st page	ability to hide friends	5	?	4
search for people	bigger logo	3	Facebook	3
Add/Remove Friends option	Option to hide friends from those viewing your public profile. Option to not show up in reccomended links.	3	No comment	2
no	no	4	ign.com	3
no	anything	4	each language level	4
Should be someplace adjust email notifications, like if you get a message	see above; also, is the calendar necessary?	4	google, DeviantArt, likeAlittle	3
no	i can't think of any	2	Wikipedia, Grooveshark	2
No	n/a	5	netflix	4
Nope	I can't think of any	4	gmail, facebook	2
none	n/a	4	google	3
No - it looks good!	N/A	5	complimentary color schemes	3

How would you improve the aesthetics of Language Link?

- grey/white combos are both unpleasing and not as visible as a more contrasting pair.
- watch white lettering - can be hard to read
- Change the color scheme or give the option to change the color scheme of the website so that text is more visible. White text on grey is hard to read.
- Remove excessive whitespace, change white text on light gray background to black, make logo bigger, title page could have a little more color
- Right now it doesn't look very polished. The different components need to be integrated in a stylish way in stead if in the table like format they're in now. consider using curved edges when a block of color ends on screen
- I like it the way it is.
- The color scheme is really similar to facebook, which is what I assume you were going for, but it does not look as clean/streamlined as facebook. Perhaps this is just because they are pictures and not the actual site. However, if you would not like to be compared to facebook, I would recommend changing your color scheme.
- It's very clean and organized currently, but there's not much jazz to it. Perhaps you could add pictures of students interacting of different ethnicities - or add background graphics.