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Development of a Social Networking Site with a Networked Library and Conference Chat

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ABSTRACT

Social networking is an act of interacting/ sharing fun and some information popularly called profiles with known or unknown people (called friends) freely online. A social network service is an online interface, service, platform, or page that enables users exchange information and relate socially. This consists of a representation of each user (often through a profile), his/her social links, photos, fun and a variety of additional services. Most social network services are web based and provide means for users to interact over the internet, such as e-mail and instant messaging.
Our project (talk2me) is social networking site that can connect people with their friends and allow every user have a networked-library which can be customized by the user. It would serve the purpose of not just a social networking site, but also a resource center where members can get instant data/information on any assignment, project, and research from Textbooks, Journals, Editorials, Magazines, Past Project and so on. This application would enable researchers get optimal solution to problems. Since multiple users can edit an article and save the edited work to their own library - persons get efficient answers to problems. The idea behind this research is that, projects already done by someone else does not have to be developed again, instead it is improved upon. The goal is the development of a resource center where people can network knowledge is thus accomplished.

Keywords— *Social networking, talk2me, profiles, conference chat, blogging, resource sharing*

1. BACKGROUND

Social network sites is defined as a web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site.

The first recognizable social network site was launched in 1997. The name of the site was SixDegrees.com. This social site like most other SNSs allowed users to create profiles and list their friends. Each of these features existed in some form before Six Degrees, of course. Profiles existed on most major dating sites and many community sites. AIM and ICQ buddy lists supported lists of friends, although those friends were not visible to others. Classmates.com allowed people to affiliate with their high school or college and surf the network for others who were also affiliated, but users could not create profiles or list friends until years later. Six Degrees was the first to combine these features. Six Degrees promoted itself as a tool to help people connect with and send messages to others. While SixDegrees attracted millions of users, it failed to become a sustainable business and, in 2000, the service closed. Looking back, its founder believes that SixDegrees was simply ahead of its time (A. Weinreich, personal communication, July 11, 2007). While people were already flocking to the Internet, most did not have extended networks of friends who were online. Early adopters complained that there was little to do after accepting friend requests, and most users were not interested in meeting strangers. From 1997 to 2001, a number of community tools began supporting various combinations of profiles and publicly articulated Friends. AsianAvenue, BlackPlanet, and MiGente allowed users to create personal, professional, and dating profiles—users could identify Friends on their personal profiles without seeking approval for those connections (O. Wasow, personal communication, August 16, 2007). Likewise, shortly after its launch in 1999, LiveJournal listed one-directional connections on user pages. LiveJournal's creator suspects that he fashioned these friends after instant messaging buddy lists (B. Fitzpatrick, personal communication, June 15, 2007)—on LiveJournal, people mark others as Friends to follow their journals and manage privacy settings. The Korean virtual worlds site Cyworld was started in 1999 and added SNS features in 2001, independent of these other sites (see Kim & Yun, this issue). Likewise, when the Swedish web community LunarStorm refashioned itself as an SNS in 2000, it contained Friends lists, guestbooks, and diary pages (D. Skog, personal communication, September 24, 2007).

2. LITERATURE REVIEW

The numbers of social networking sites have been on the increase over the years. Different social networking sites all have their unique functions, but the

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common objective of a social networking site is to connect people.

2.1 FACEBOOK

Mark Zuckerberg wrote Facemash, the predecessor to Facebook, on October 28, 2003, while attending Harvard as a sophomore. According to The Harvard Crimson, the site was comparable to Hot or Not, and "used photos compiled from the online facebooks of nine houses, placing two next to each other at a time and asking users to choose the 'hotter' person".

Facebook is a great way to meet friends and keep up on what they are doing. Once you add a friend to your Facebook friend list you will always know when they are adding things to their blog or updating their profile.

Users can create profiles with photos, lists of personal interests, contact information, and other personal information. Users can communicate with friends and other users through private or public messages and a chat feature. They can also create and join interest groups and "like pages" (formerly called "fan pages", until April 19, 2010), some of which are maintained by organizations as a means of advertising. To allay concerns about privacy, Facebook enables users to choose their own privacy settings and choose who can see specific parts of their profile. The website is free to users, and generates revenue from advertising, such as banner ads. Facebook requires a user's name and profile picture (if applicable) to be accessible by everyone. Users can control who sees other information they have shared, as well as who can find them in searches, through their privacy settings.

Traffic to Facebook increased steadily after 2009. More people visited Facebook than Google for the week ending March 13, 2010 Fast And Blast FACEBOOK HISTORY. Facebook also became the top social network across eight individual markets in Asia—the Philippines, Australia, Indonesia, Malaysia, Singapore, New Zealand, Hong Kong and Vietnam, while other brands commanded the top positions in certain markets, including Google-owned Orkut in India, Mixi.jp in Japan, CyWorld in South Korea, and Yahoo!'s Wretch.cc in Taiwan.

As of January 2011, Facebook has more than 600 million active users. A January 2009 Compete.com study ranked Facebook as the most used social network service by worldwide monthly active users, followed by MySpace.

2.1.1 Major Features of Facebook

- Friend finder: This feature allows you to find people you knew by entering their names.
- Facebook queries its database and find people with related names in the order of Friends share, similar academic backgrounds, similar employer details and Current locations
- Chat: Users are only able to chat with their Facebook friends and on a one-to-one basis, although a user may chat with multiple friends simultaneously through separate chat interfaces.
- Messages and Inbox: A facebook user can send a message to any number of his/her friends at a time. Deleting a message from one's inbox does not delete it from the inbox of other users, thus disabling a sender to redo a message sent by him.
- Networks: Groups and Like Pages: Facebook allows different networks and groups to which many users can join. Groups are used for discussions and events etc. Groups are a way of enabling a number of people to come together online to share information and discuss specific subjects.
- Individuals or companies can create "Like Pages" which allows fans of an individual, organization, product, service, or concept to join a facebook fan club. Like Pages look and behave much like a user's personal private profile, with some significant differences.
- News Feed: News Feed highlights information that includes profile changes, upcoming events, and birthdays, among other updates. News Feed also shows conversations taking place between the walls of a user's friends.
- Notifications: Notifications of the more important events, for example, someone sharing a link on the user's wall or commenting on a post the user previously commented on, briefly appear for a few seconds in the bottom left as a popup message (if the user is online), and a red counter is updated on the toolbar at the top, thus allowing the user to keep track of all the most recent notifications.
- Poke: The poke feature is intended to be a "nudge" to attract the attention of another user. Many Facebook users use this feature to attract attention or say "hello" to their friends.
- URL shortener: On December 14, 2009, Facebook launched its own URL shortener based on FB.me domain name.

2.1.2 Pros and Con of Facebook

Pros

- Keep Track Of Friends: Facebook tells you when your friends are updating their profiles, adding to their blogs or have some other news on their website.
- Photo Album: Add photos and photo albums to your Facebook profile.
- Blog Merge: Use the blog feature to create your own simple blog or you can merge your existing blog right into Facebook's blog.
- Excellent Search and Browse: Search and browse for people on Facebook using just about any search features.

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Cons

- No conference Chat: A site like Facebook should have a chartroom or general forum so people can get together online and just chat and say "hi".

2.2 LINKEDIN

LinkedIn is a business-oriented social networking site. Founded in December 2002 and launched in May 2003, it is mainly used for professional networking. As of 1 January 2011, LinkedIn had more than 90 million registered users, spanning more than 200 countries and territories worldwide **http://www.thevillanovan.com/features/02/2011/linkedin-crucial-connections-to-career-success.html**. The site is available in English, French, German, Italian, Portuguese and Spanish. LinkedIn has 21.4 million monthly unique U.S. visitors and 47.6 million globally Quantcast reports.

The membership of LinkedIn grows by a new member approximately every second. About half of the members are in the United States and 11 million are from Europe. With 3 million users, India has the fastest-growing network of users as of 2009. The Netherlands has the highest adoption rate per capita outside the US at 30%.LinkedIn recently reached 4 million users in UK and 1 million in Spain.

2.2.1 Features of LINKEDIN

- A contact network is built up consisting of their direct connections, the connections of each of their connections (termed *second-degree connections*) and also the connections of second-degree connections (termed *third-degree connections*). This can be used to gain an introduction to someone a person wishes to know through a mutual, trusted contact.
- It can then be used to find jobs, people and business opportunities recommended by someone in one's contact network.
- Employers can list jobs and search for potential candidates.
- Job seekers can review the profile of hiring managers and discover which of their existing contacts can introduce them.
- Users can post their own photos and view photos of others to aid in identification.
- Users can now follow different companies and can get notification about the new joining and offers available.
- Users can save (i.e. bookmark) jobs which they would like to apply for.

2.3 TWITTER

The concept of Twitter relies on messaging services, whether it uses a cell phone, instant messenger, such as Yahoo Messenger or MSN Messenger, or through specific websites. It allows the user to send messages to friends and family quickly and easily. Twitter only asks one question, "What are you doing?" As long as an answer is 140 characters or less, it is possible for thousands of people to see the answer immediately.

Twitter can be linked to other social networks, blogs, and websites. For instance, post a blog update and use the Twitter button. The blog entry will be sent to the people specified by the sender. This only works when logged into the Twitter account.

A user can also follow other users as well. It's easy to have conversations with other people, and before long, many people will be watching updates from many different people.

One must create an account, but it only takes minutes. It is free to join. Simply complete a profile, including uploading a picture. Link the newly created account to a cell phone, web page, or instant messenger program, which allows the user to receive and send messages to and from others. An update that is sent to friends is called a "tweet."

2.3.1 Pros and Con of TWITTER

Pros

Twitter is a really **unique social media tool** that helps individuals with:

- Article marketing
- Social networking
- Promoting website traffic to specific websites
- Staying in touch with people

The website is user-friendly and walks a new user through the entire setup process. There is also a frequently asked questions page to help those with questions about how to use Twitter for the first time or on different devices.

Cons

The main *disadvantage of Twitter* is its confusing interface, especially if you are not tech-savvy. ezinearticles.com

3. PROPOSED SYSTEM (talk2me)

A social network service enables users exchange their photos, information, share their fun, relate socially and build relationships. For instance people who share their interests, horoscope, taught and/or activities. On a social network site, Individual users have to create profiles containing information that will be used by the system to suggest friends that share the same idea, activities, interest, and mind set with them. At the forefront of emerging trends in social networking sites is the concept of "real time" and "location based." Real time allows users to contribute content, which is then broadcasted as it is being uploaded - the concept is similar to live television

broadcasts. Users of **talk2me** can edit and make changes to their profile/library and these changes are streamed as soon as it happened. With these advantage people can broadcast to the world what they are doing, or what is on their minds.

Users can often upload pictures of themselves to their profiles, post blog entries for others to read, search for other users with similar interests, compile and share lists of contacts. In addition, user profiles often have a section dedicated to comments from friends and other users. To protect user privacy, this application allows users to choose who can view their profile, contact them, and add them to their list of contacts.

The design of **talk2me** involved building of a web application which would serve as a social networking Site (SOS) with a conference chat and a networked library. This project majorly focuses on conference chat and networked library. This application provides basic functions of a social networking site which includes blogging, commenting, uploading of pictures, sending of messages, and creation of profiles. Users signed up on this application automatically have a unique library which can be customized and networked to other users. The main idea behind the library is to enable people especially students to have a resource sharing center. Since the costs of hardcopies of books are high and people do not like storing up books due to lack of space, everyone can now have their own soft library which can be visited by others and also updated if need be. This application was developed to network people and majorly serves as a resource center where people can network knowledge. This Social networking site allows users to share ideas, activities, events, information and interests within their individual networks. The resource sharing aspect and conference chat makes it unique to all existing social networking sites. Users signed up to this application would be able to create edit and view libraries which they have created in their profile. The opportunity provided to users by our system makes it possible for users to have a virtual library which is being networked to their friend's libraries and thus, creates easy access to all manners of useful/ tangible resources which some people may not have access to.

4. STATEMENT OF PROBLEM

- Research work that has been carried out by someone is repeated instead of being improved upon.
- Lack of storage space for hard copy materials
- Contacts of old friends such as classmates or business partners that have being lost are not easily recovered
- Cost of communicating to more than one person at a time is high
- So many important dates and events are forgotten
- Students are unable to find other students who share the same idea with them

- Users of social networks cannot chat with more than one person per time. In a situation whereby ten students are sharing their ideas via the internet, one individual can only communicate with one other person per time.
- Online Social sites do not provide a platform for persons to share and store knowledge.

5. RESEARCH OBJECTIVES

The objectives of this project are to:

1. Develop a social networking site that can connect people with their friends and communicate with more than one person per time via conference chat;
2. Introduce registered user to/ and let them have a networked-library which can be customized by the user;
3. Develop an efficient system of disseminating educational resources between the students, lecturers and friends and
4. Foster better usage of the library facility as a resource center where students can work together via the web and network knowledge

6. METHODOLOGY

Open source software was used in the development of this application. Open source software (OSS) is software, whose source code is published and made available to the public enabling anyone to copy, modify and redistribute the source code without paying royalties or fees. Codes were written in HTML, PHP, Ajax, and JavaScript. The animation was done using swish max animating tool.

The site was first designed using Corel draw graphics tool. The pages were designed using Macromedia Dreamweaver. A markup language [HTML] which was styled with a cascading style sheet [CSS] was used in creating the pages.

7. RESULT AND DISCUSSION

The concept of talk2me is different from other social networking site. It has one cutting edge advantage over the number one leading social networking site Facebook because of the conference chat feature embedded in it. A chat engine is an application that enables users signed up communicate to with each other by sending text. This is different from a message because the text sent by the sender to the recipient can be viewed at real time though users of talk2me can still send messages. **talk2me** allows a user to send instant messages to more than one user at a time. These chat messages is gotten by all the recipients at the same time. Another major advantage of talk2me is that every user would have a library which would be networked just as the user is being networked to other users. The library would enable

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talk2me user upload and save documents which can include lecture notes, articles, publications, letters, textbooks and other e-books. The library would only support files in (.doc) and (.pdf) extensions. This library can be customized and arranged in order by the user so as to enable an effective search. Friends of a particular user can download books or documents from their library. A user can also send a particular book to another friend.

Screen shots of talk2me

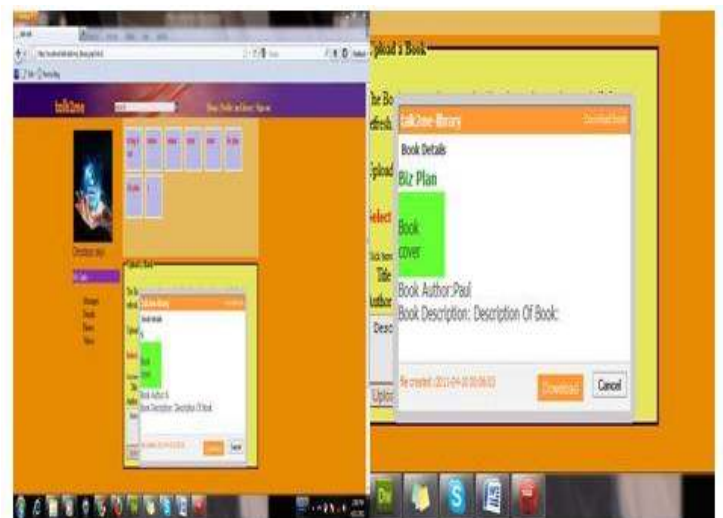

Fig 1: The home page of talk2me

Fig 2: The Login/Sign Up Page of talk2me

Fig 3: Chat pane showing users online with two users selected

Fig4: The Library Pages of talk2me

8. CONCLUSION

We have been able to develop a social networking site with library and conference text chat. This application will majorly serve as a resource center to undergraduates. The advantage of this application is that students, lecturers and researchers can share and exchange knowledge. By sharing information and knowledge with one another, they are able to "increase both their learning and their flexibility in ways that will not be possible within a self-contained hierarchical organization." Social networking is allowing groups to expand their knowledge base and share ideas, and without these new means of communicating their theories might become "isolated and irrelevant".

This social network is designed for teachers and students as a communication tool. Because many students are conversant with social networking sites, which makes teachers/lecturers to now communicate better with their students by uploading their lectures, and also have a chance to respond to student's issues and provide relevant links to get an optimal solution for a given problem. Teachers and professors can use this application to extend classroom discussion to posting assignments, tests and quizzes, to assisting with homework outside of the classroom setting. This social network could be used by University students by using the services to:

1. Network with professionals in their field of study.
2. Find internship and job opportunities.
3. Find professionals in their fields.

A conference chat engine with upgraded performance is also attached to this application through the latest technology [AJAX] that was used which makes it also100% user friendly.
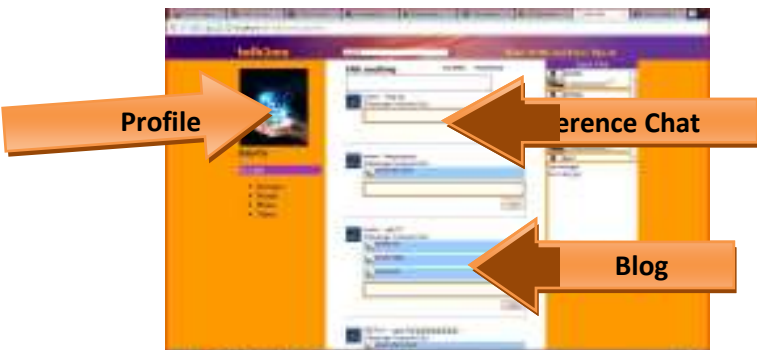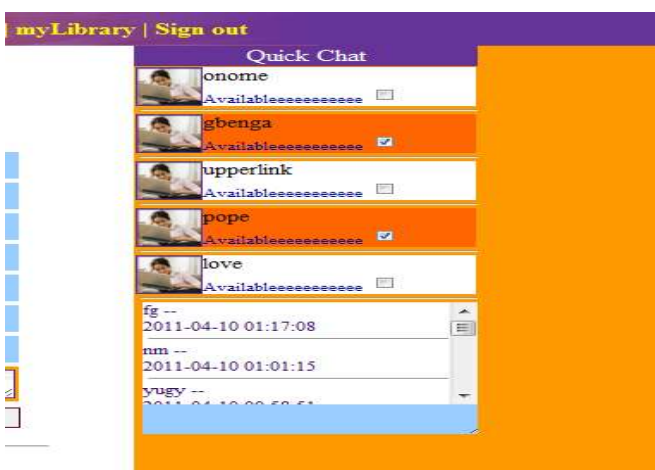
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