

A VIRTUAL COMMUNITY FOR LEARNERS INTEGRATION

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ABSTRACT

The goal of learning in the midst of individuals and groups with mixed potentials is performance. It is evident that learning is most effective when it is done in an integrated platform. Learning analysts encourage this integration but don't always offer practical strategies to make it happen. This paper attempts to begin to truly reduce the gap that slows down enterprise training and find ways to bring learning to an online community where interaction is never physical. The system works with computers connected to the network from different ends coupled with a viable database that can store users' information. The system has an archive that keeps record of user logs, message received, friend request and friends that have been added to the friend list. The system is also made of two users which involve the administrator and the client (the client consist of both the student and lecturers), where the administrator has a full right to the system and the clients have limited rights to the system, and this is made possible using HTML tags and java scripts for the front end (client side), PHP scripts for the server side scripts, and MYSQL for the database design.

Keywords: Members, Cyberspace, Pedagogy, Resource Sharing, Incorporeal Communities, Bulletin Board.

INTRODUCTION

Cyberspace is a special kind of social place constructed technologically where human interaction, communication and commerce can take place through interconnected computers via phone lines and data networks, these computer networks allow one-to-one and even many-to-many forms of communication. This has led to some form of communities as potential integrators of society. In real life, most communities are formed through geographical proximity, but online communities are mostly formed around a shared interest or need, and are a powerful tool for building trust, relationships, knowledge acquisition and exchange. Online communities depend upon social interaction and exchange between users online^[19].

Virtual communities are social relationships forged in cyberspace through repeated contact within a specific boundary or place. (i.e., a conference or chat line) that is symbolically delineated by topic of interest. There is no predictable relationship between computer mediated communication and virtual communities, the former does necessarily lead to the latter, especially in the context of learning possible relationships are seen in making connections amongst stakeholders within subject majors and also between curriculum planners and academic practice^[18, 19].

The increasing successes of online communities' are tied to the way they harness how people naturally use the Internet. It is the innate human nature to communicate and build relationships that has driven the development of the Internet as we see it today. Ever since the network was opened up to the academic establishment in the 1970s, 'online' or 'virtual'

communities have emerged. Virtual communities have created very helpful breeding grounds for integrating learning and learning outcomes^[8, 12]. They have facilitated connections across curricula by way of linking skills and knowledge from multiple sources and experiences; relating skills and practices in various settings; making use of diverse points of view to making sure that both contextual and behavioral issues pertaining to pedagogy are well understood. Information sharing plays a very positive role in achieving effective learning because it determines the level of trust and relationship building among individual in an academic community, this paper is aimed at creating a platform for online community specifically for sharing of resources to aid teaching and learning^[9, 11].

The remainder of this paper is organized as follows. Section 2 and 3 gives a background and review of related literature while section 4 presents the constructive framework of the online community architecture. The paper concludes with implementation report as well as some flow diagrams and screen shots that depict the processes.

BACKGROUND AND MOTIVATION

Virtual communities are powerful incorporeal communities built on shared interest; they are online forums that include contributions from, and encourage discourse among, specific sets of like-minded individuals or groups. They can be viewed as a set of on-going many sided transactions that occur predominantly through computers linked via telecommunication networks^[1, 10]. The structure, operation, and the composition of virtual communities differ from communities in the real world in certain fundamental ways at the interaction level. Virtual interactions are not constrained by geographical, territorial boundaries of the interacting individuals. Interactions in a virtual community are asynchronous. In the virtual domain, communication does not have to take place in real time. Except for chat sessions, all other means of communication on the internet allow for staggered interaction, where members need not be present in the same time to carry on a conversation. Due to its virtual nature, written words are exchanged and non-verbal cues like gesture, dress, posture, body language and facial expressions that often accompany physical communication are absent, there is a complete absence of face-to-face interaction and as such members of the community are free from any form of social stigma^[5, 8].

These qualities are often necessary ingredients for smooth transfer of knowledge among members in a learning community. Learner integration or integrated learning is made possible as it practically brings together conventionally separate subjects so that learners can grasp a more accurate understanding. The essence is that members can bring together concepts, methods, or skill from two or more disciplines or established areas of expertise in order to explain a phenomenon, solve a problem, create a product, or initiate a new approach to tackling a perceived problem area in a particular discipline. All these will then give rise to a demonstration of the fact that interdisciplinary and deep understanding of subject content is achieved^[11, 17].

LITERATURE REVIEW

There are also many ways in which online communities have been found to be similar to physical communities. Both are characterized by communication and relationship building among people. Members offer each other social support, a sense of belonging, and solidarity. They help each other work together, cooperate and engage in trade. People basically do the same kinds of activities in both physical and virtual communities – they discuss, argue, fight, reconcile, make friends and amuse themselves^[5, 7]. The above similarities suggest that virtual

communities are really extensions or virtual substitutes for their physical counterparts. Since the medium of communication is different in virtual communities, many interaction of the real world are simply transformed to suit the medium. The transformations may lead to differences in operation structure and composition of virtual communities but these online communities are very similar in spirit to the physical communities. A virtual community very closely resembles the 'third place' in real life ^[3,6].

Smith (1995) also argues, virtual communities, in spite of their differences with communities located in real life, are "communities" and that the 'virtuality' is only in the nature of the seemingly non-existent medium. He compares virtual communities to the communities of correspondence of the 19th century, where groups separated by great distances were brought together by shared interest. It is only the speed of interaction that is much faster in today's virtual communities, and it is the speed that makes the dynamics of virtual communities different from the physical communities ^[2,4].

Online communities due to their differences offer certain advantage and disadvantages over real communities. They make relationships possible between people without regard to geographical and time constraints. People from different nations, those across time zones, and those who are homebound due to handicaps can all connect together. It is therefore possible to have aggregations of larger number of people than in the real world. Many more people can be accommodated at any point of time in a virtual meeting room ^[8, 14]. They allow members to experiment with and explore new identities and personalities, leading to more uninhibited interaction than in the real world. However the problems with virtual communities is that it could lead to unpleasant encounters and the only recourse is to deny offender access to the community ^[9, 13].

Some examples of virtual communities include the America Online (AOL). It has its origins in the Control Video Corporation (CVC), a small online video-games firm that started in the 1980s and after many changes finally emerged as AOL in 1991. When AOL went public in 1992, it offered games, email, chat, news, forums, travel and other information. The Motley fool is an online investing forum on AOL that was attracting about 250,000 visitors per month in July 1998. It provides company news, commentary on market trends, offers tutorials on how to build portfolios and as well offers a mix of content, community, and entertainment ^[9, 12]. Tripod.com is a 50-employee company, which in the last three years has become one of the most visited sites on the web. Tripod targets a group of 18-34 year olds and offers information on a variety of topics. It has 33 interest areas called pods, where membership is free. Tripod creates virtual communities and offers a personalized experience to each member. This is done in part by allowing members to create their own web pages. Once these web pages are created, members are more likely to come back to them and hence to Tripod's site ^[18, 19]. The personal member information gathered in the process can then be used to tightly segment the customer base. IVillage.com, was launched in 1995 as a site targeted at Baby Boomers but over time it has evolved into a leading women's online virtual community and reportedly attracts about 2 million visitors in a month. IVillage.com offers a relevant and specialized online environment for women where they can find others with shared interests, exchange information, seek advice and support on issues in their day-to-day lives including parenting, work and health ^[12, 19]. Geocities.com an online neighborhood founded in 1996 is very similar to tripod.com in that it provides a set of virtual communities (called neighborhoods) based on themes. eBay.com, since its inception in 1995, has become the leading person-to-person auction house on the Net and is one of the top ten most-visited

sites. EBay.com is a personal trading community that carries a vast array of products being sold by individuals as well as small businesses and provides an efficient virtual market place for buyers and sellers of goods to come together for barter and trade on a one-to-one basis^[15, 16].

THE CONSTRUCTIVE FRAMEWORK

Amongst the existing technologies that support virtual community communication, this paper focused specifically using bulletin board technology that supports resource sharing and interaction in a learning environment. In this medium a member can post a message in the form of a lecture note, assignments report sheets and notices for lectures to anyone in the community, much like the physical bulletin board after which this medium is named. Bulletin boards and newsgroups are different from other technologies, such as email distribution lists, in that member must actively choose to go to the community to review message, as opposed to passively receiving them in their email inbox. Virtual communities such as this that supports learner integration offer unique characteristic in that member can interaction via dedicated password systems to ensure that conversation in the community is preserved.

The Constructive Framework for our virtual community consists of two modules;

1. Administrative Module.
2. Client Module.

The administrative module is controlled by only one user who is known as the administrator and has the administrator's user name and password. He alone can perform the followings:

- Delete account
- View all users currently using the system.
- Block user from accessing the system

A new user account and password will be created whenever the administrator selects the option to generate a new user account; also warning notifications will be posted when the option of "Delete user Account" is send. The user accounts will then be blocked until some question(s) is fully answered by the user. These operations are relative to the system design that allows for the web server configuration, establishment of database connection, and subsequently making requests to the server via the browser on the home page. The hosted application and the database are on the administrators end. The other users at their interface interact with this database and the application as shown in figure 1.

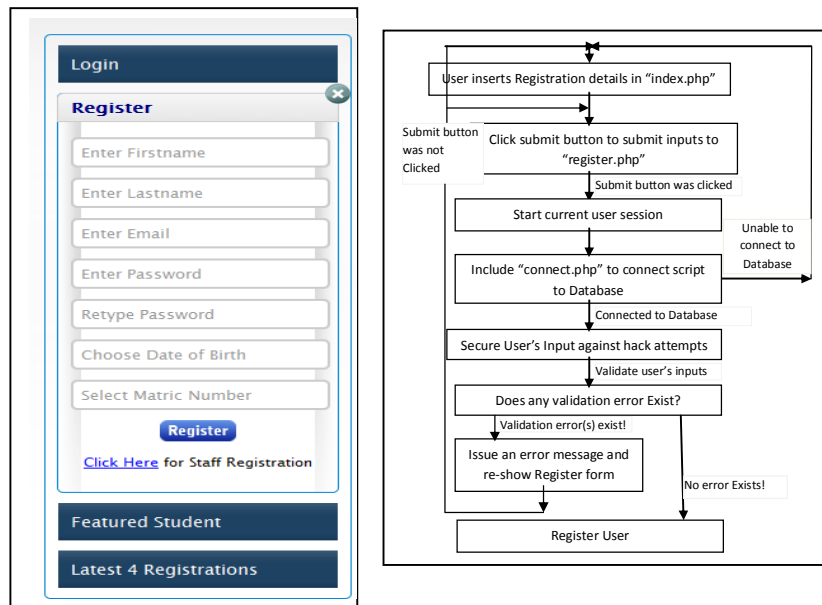


Fig 1: Process for Registration

Interactions are triggered via an IP address and allow the performance of tasks at the client end such as register as student or lecturer, login as user, chat with other users that have been accepted as friends, delete friends. Type the web address, Register as user if not yet registered, Login if registered as shown in figure 2.

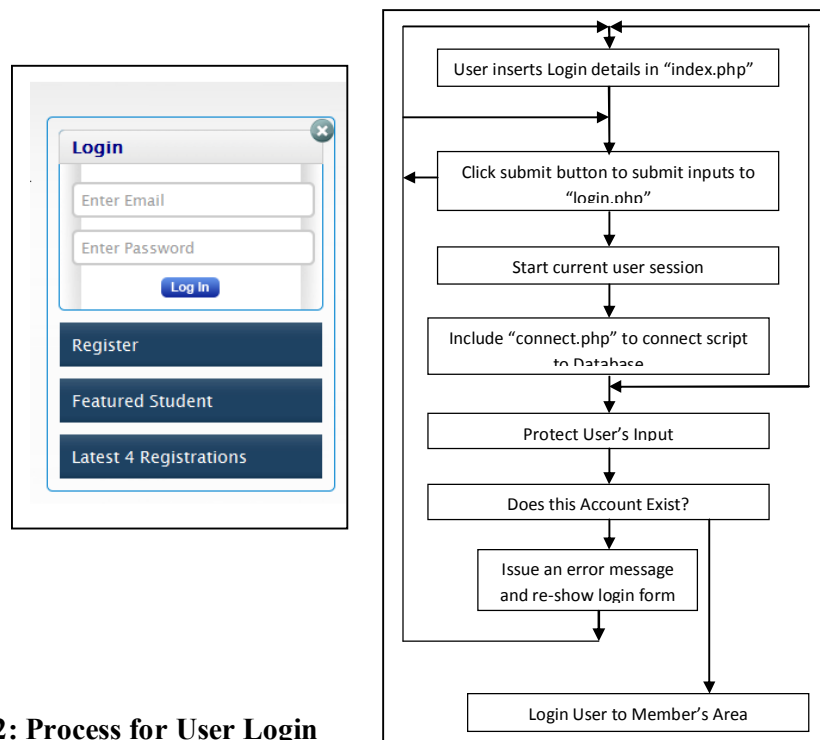


Fig 2: Process for User Login

Figure 3 presents flow charts that depicts user registration and login process where user visits site inserts login details, clicks submit button to login. User details are then verified for previous registration to be logged in or else an error message shows.

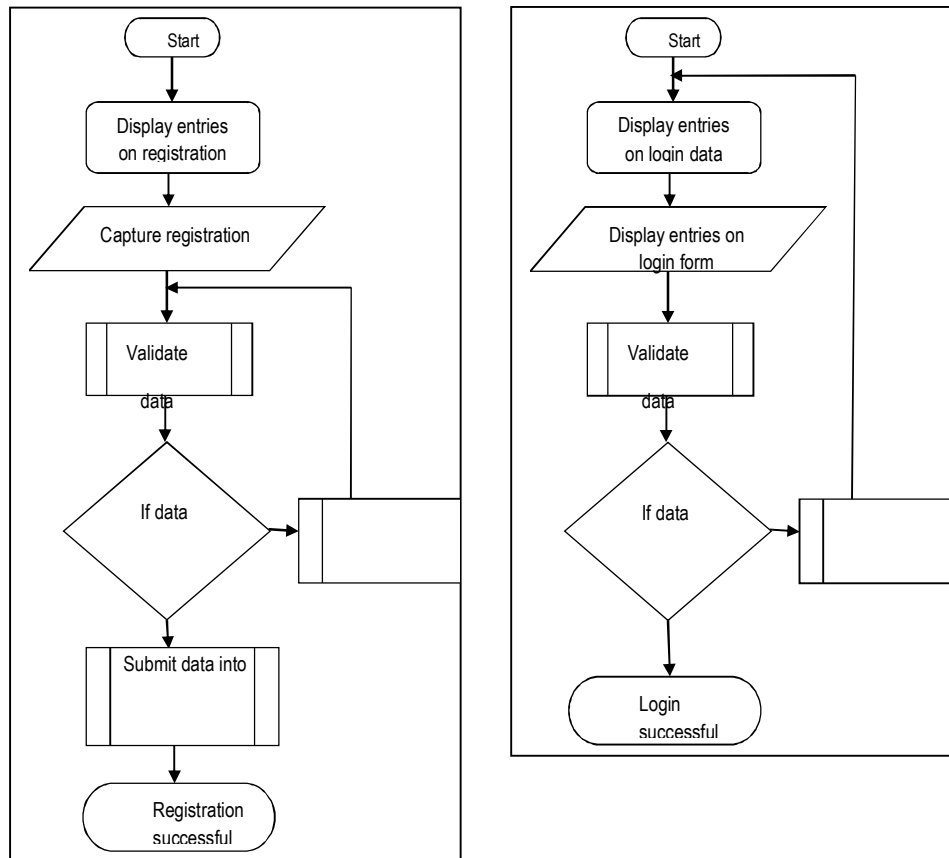


Fig 3: Registration and Login flow charts

The system response followed by successful interactions are represented in a pseudocode and in figure 4 as shown below

```
<?php
include("connect.php");

function protect($var) {
    $var = strip_tags($var);
    $var = stripslashes($var);
    $var = trim($var);
    $var = mysql_real_escape_string($var);

    return $var;}

$firstname = ucwords(strtolower(protect($_POST['firstname'])));
$lastname = ucwords(strtolower(protect($_POST['lastname'])));
$email = protect($_POST['email']);
$phone = protect($_POST['phone']);
```

```

$password = protect($_POST['password']);
$rePassword = protect($_POST['rePassword']);
$day = protect($_POST['day']);
$month = protect($_POST['month']);
$year = protect($_POST['year']);
$class = protect($_POST['class']);
$suid = md5($email);
$time = time();
$savatar = "images/noimage.png";
$sphenotype = "";
$sgenotype = "";
$sbloodgroup = "";
$dob = $day."/".$month."/".$year;
$shortmess = "";

```

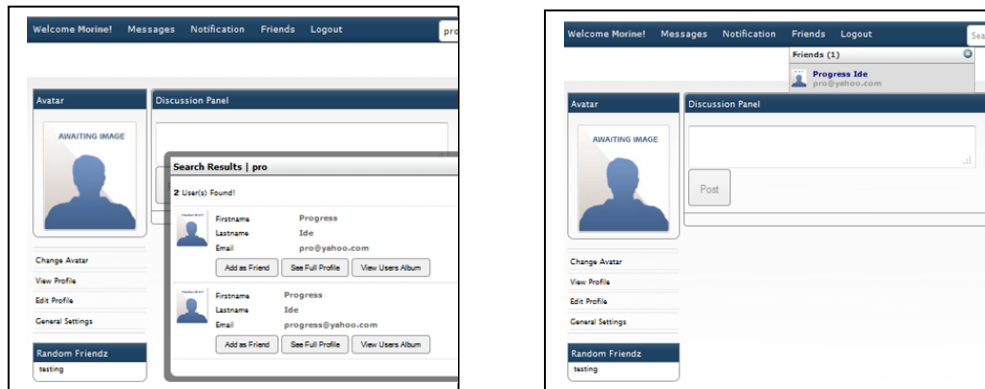


Fig 4: Successful Integration Platform

CONCLUSION

The implementation of this online virtual community brought about easy interaction between learners and content instructors on all academic environments. The members (users) of online virtual community are given a unique login id and must give the correct password for total security. These kinds of communities occur when users are given tools to use their opinion in a public and immediate way, forming intimate relationships over time. It has become a place where education gets interesting, and where information has personality.

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