

Sharing Educational Information Based on Blogging Platform

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Abstract: *The recent developments in the field of digital technologies have impacted the world of education in more ways than one. Blog is a new kind of collaborating and communicating tool on the Internet that competes with different media in delivering information. In this paper, we present a blogging platform as a web-based tool for virtual educational collaborative, that provide deeper levels of students and instructors' engagement within digital educational environments. This platform enables students to engage in dialogue on the web outside the classroom and encourages continuous education participation. The proposed of educational platform has been established for AL-Mustansiriya University/ Faculty of Engineering as a digital support where students and instructors can connect with each other, develop their educational routines, provide students an opportunity to work as a group and out of conventional classroom and motivate them to write and do research, read other students and instructors articles.*

Keywords: Blog, Educational Community, Sharing Information, Digital Educational Environments

1. INTRODUCTION

New technologies have an important effect on changing higher education. Using technology also has effect on improving learning and teaching in education and especially higher education. Now some universities and institutes use these technologies to apply virtual and distance education but there are another approaches to use them. Weblog is one of them [1]. Weblogs, or blogs, emerged in the late 1990s on the Web, quickly becoming a new way to communicate ideas, opinions, resources and news [2]. A generally accepted definition of blogs online is "a website that is updated regularly and organized chronologically according to date, and in reverse order from the most recent entry backwards" [3]. Weblogs can be used in conventional universities alongside the traditional classroom [1]. Nowadays weblogs are a visible movement for personal and community expression that mean an alternative of information, communication and even education [4]. From the perspective of a blog user or visitor (esp. a non-professional of computer science), a blog is merely a website, a searchable and interactive website that can be easily updated and archived with the aid of a blog server software [3]. From the perspective of journalism, weblogs can be seen as a new category of

news and current affairs communication [5]. From an educational point of view, weblogs are the development of traditional learning logs for students and teachers, whether as a complement to traditional lectures or as a e-learning tool [6]. Generally, blogs can be divided into two categories: personal blog and institutional blog. A personal blog is created, owned, and operated by an individual for his or her own interest; usually not for commercial purposes. A citizen-blogger is totally independent of any institution. In contrast, an institutional blog is created and owned by an organization for direct and applied purposes. It can be operated by one or more members of that institution. Institutional bloggers usually don't tend to include strong personal opinion and the writing mission is part of the job assignment with goals that benefit the institution [7]. There are some attempts to classify weblogs in terms of different features. For instance, classification is based on two dimensions: style and content. Regarding style, there are the interactive weblogs and the closed weblogs mostly based on whether the weblog author allows for comments on the weblog. In relation to the content, there are many sorts of weblogs: personal topics, political/social/economic commentaries, information technology, etc [6].

2. LITERATURE REVIEW

The technology acceptance model explains that "the more a user perceives a new technology to be easy-to-use and useful, the stronger will be their attitude towards the technology, and the greater will be their intention to use the technology". A Blog is regarded as easy-to-use in terms of publishing on the Web, and Blog has got developed rapidly since it appeared. [8]. The article [9] presents the results of an investigation that had as major objective to reflect on the importance of the Educational Blog as a factor of mediation between the family and the Kindergarten. The authors in [3] described how a class blog can be integrated into the study of Comprehensive English Course for English majors in China in an attempt to provide an out-of-class space for language practice and for sharing course-related ideas and information. Blackstone, B., et al. [10] have given a report on an innovative approach to the implementation of a cycle of blogging activities within different levels of courses in an English for academic purposes/composition program in an

English medium university in Japan. There are both advantages and disadvantages for blogs, the authors in [11] gives a brief overview of blogs such as advantages, disadvantages, and major software for creating blogs, and then it reviews some EduBlogs, its usage, and examples in US education. Blogs engage people in knowledge sharing and reflection, and they often attract a large readership. Instead of providing static information, blogs allow users and readers to respond, to create, and to connect. It is also simple to create and maintain blogs. Compared with discussion board, blogs have greater sense of permanence. After a course is over, the discussion board is no longer accessible to the students. When a student creates a blog, he or she also has a sense of ownership [11]. While the authors in [12] tried to present a case study of the educational exploitation of group blogging for the implementation of a “learning by design” activity. More specifically, a group of students used a blog as a communication and information management tool in the University course of ICT-enhanced Geometry learning activities.

3. REQUIREMENTS ANALYSIS

The community of the proposed platform is consisting of students and lecturers. Upon that, the platform requirements are categorized into:

-Communications requirements: where two communications models should be accomplished in the proposed system: One-to-many model: for sharing educational useful resources and providing news on many scientific topics. And many - to many model: that enables students and lecturers to have conversations with large audiences.

- Information requirements: allow the whole community to be in charge of what content takes precedence on this platform, this is called rating which is an important part of any social platform. In addition members can give a blogger feedback simply by writing the comments which is a software feature that allows readers to leave their own comments and reactions to a blog’s author. Not only, but also, ability for tracking when new blog is added to this platform without having to visit it, this feature can be offered by adding RSS feed tool.

- Searching functionality requirements: As a best way for students or even lecturers to find what they are looking for, members can find blogs talking about specific subject by using search blogs functionality. Furthermore, as the educational blogs grow, is always possible that the D.B query for the blogs (which bring all the published blogs) may result into thousand of rows, and showing all the results on a single page which is no longer practical. This is where pagination comes in handy.

- Authentication Requirements: In general, this platform will requires user authentication because accessing to this platform will restricted to the students and lecturers of AL-Mustansiriya University/ Faculty of Engineering. In addition, is designed to work in the internet environment and it’s portal will be accessed through the user’s web browser, hence, The process of verifying the authenticity is necessary. Figure (1) gives an outside view of the proposed system.

- Usability requirements: Generally, an effective user interface with should be provided that characterize by easy to use and learn without technical knowledge

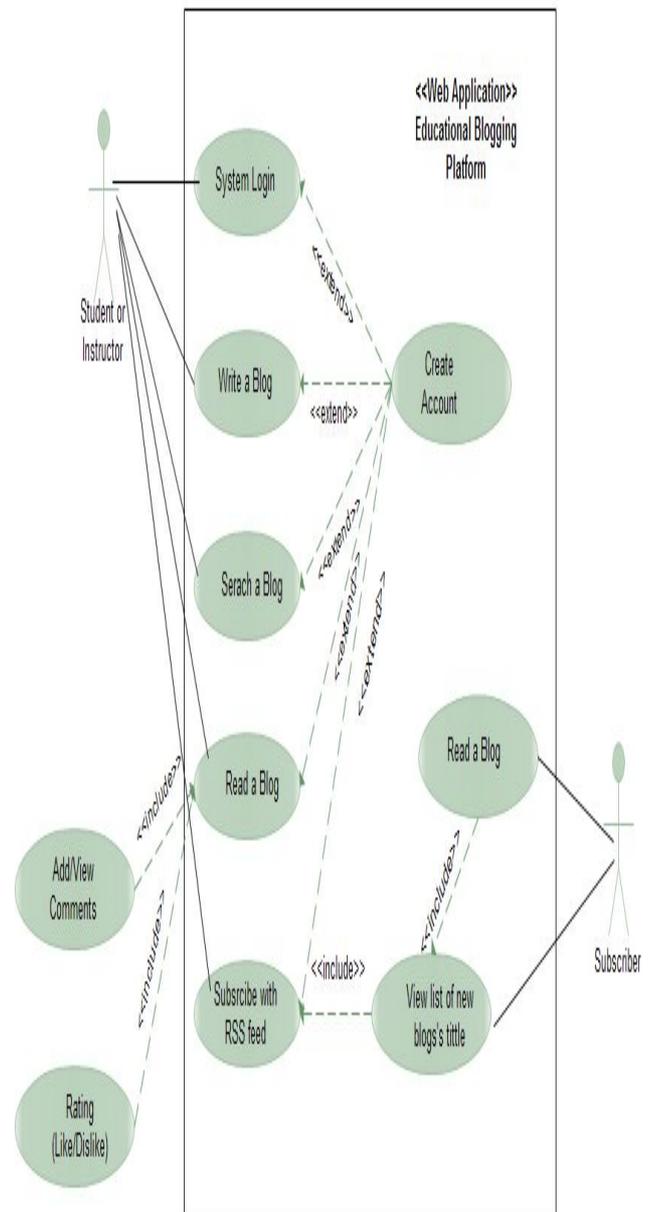


Figure 1 Interfaces with the educational blogging platform

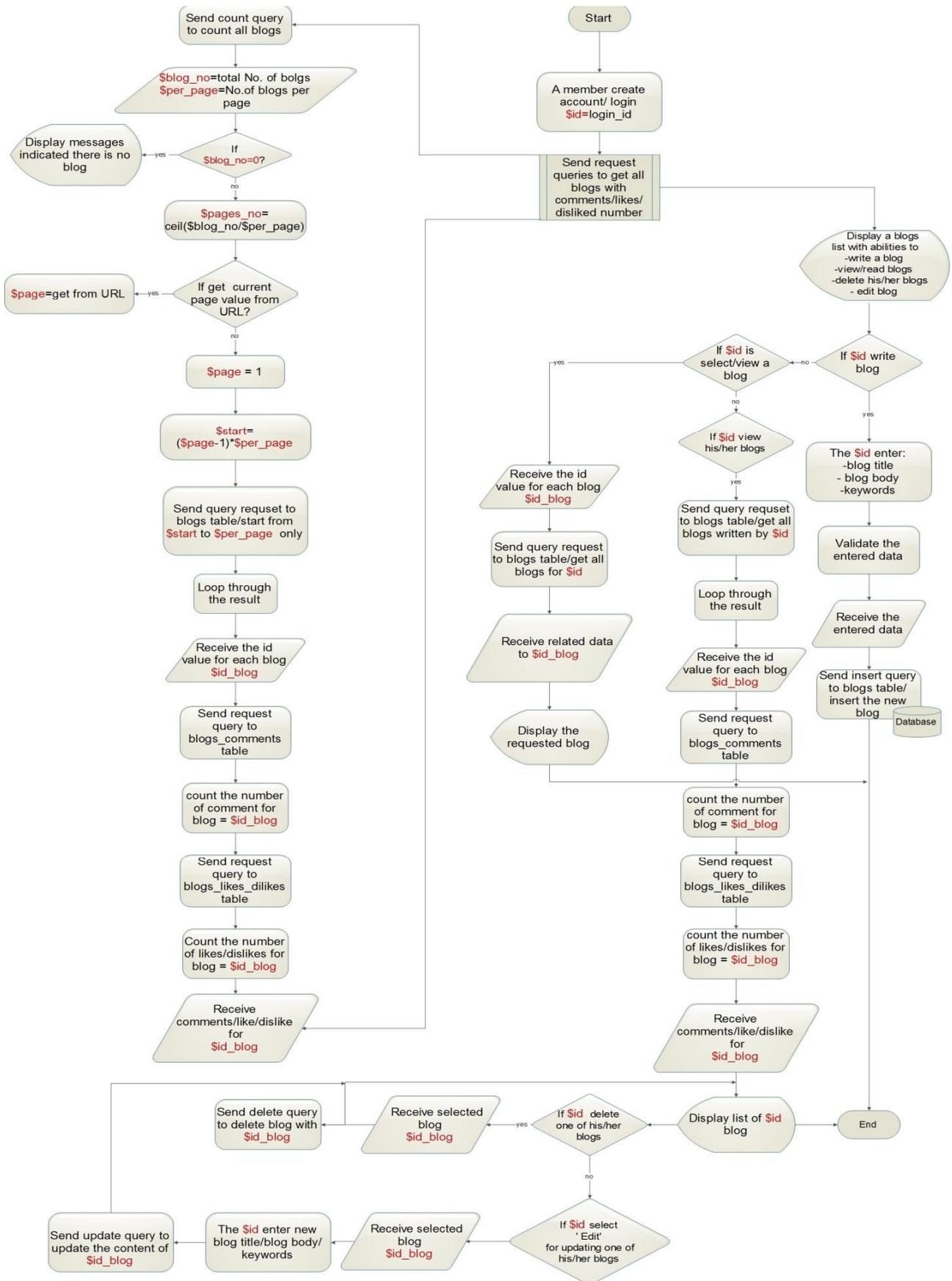


Figure 2 Implementation steps flowchart

4. SYSTEM DESIGN AND IMPLEMENTATION

Based on requirements analysis, the implementing phase consists of several steps:

- Implementing Interfacing component: which includes system portal interfaces that comprising login and registration interfaces, where end user can access and use the platform's services. Furthermore, interfaces that enable members to easy navigation throw the published blogs, write a blog, search for a blog with space for displaying all the searched blogs, and view a selected blog. In addition, RSS interface that enables the subscriber to be updated with the new published blogs. The steps of implementation are shown in figure (2).

- Implementing social services component: implementing server-side services is dealing with several modules that are:

- User registration/login modules: that compromises the information module which used for creating new account and getting the authentication information. And login verification module to verify the validity of the entered login information.
- Getting feedback and rating modules: which consist of view/add comments modules which used for bringing all written comments under a specific blog and enables anyone to add a comment, give his/her impression using like/dislike (rating) tool and view how many members impressed or not impressed by a specific blog
- Writing and viewing blog modules: where writing blog function will be offered to enable members writing blogs. While view blog module will start its function when a member selects a blog from the blogs list.
- Blog search module: These modules will help visitors when they looking for specific information, then filtering the search results as blogs listed chronologically.
- Pagination modules: several modules will be used for showing the search query result in multiple pages. So blogs list can be displayed over a number of pages by breaking up the blogs list into several pages, each linked to the next. This would reduce server processing time and page load time, and at the same time, improve readability and usability.
- RSS feed modules: special XML-based format module automatically accesses the database to check for adding new blogs then displaying a list of blogs with high lighting the new blogs titles as a way to notify of new and unread blogs.

5. RESULT

The proposed platform which is called (Learn Together) is designed to work in the internet environment and it's portal will be accessed through the user's web browser. The login screen is displayed below in figure (3). For a new member, the account creation process comprises a form for both students and instructors as shown in figure (4). This includes the username, full name, email, password, email/password confirmation and students'/instructors' ID card numbers should be provided as a way to make sure that the current user is a member in Al-Mustansiriya University/ College of Engineering. Figure (5) displays the home screen for writing blogs and starting point of the experience. To write a blog, the blogger should write the blog body, blog title and keywords which consider an important part as it will be used to filter search results. the links on the right side is essential to allow members navigate through the platform.



Figure 3 Learn together portal (login page)

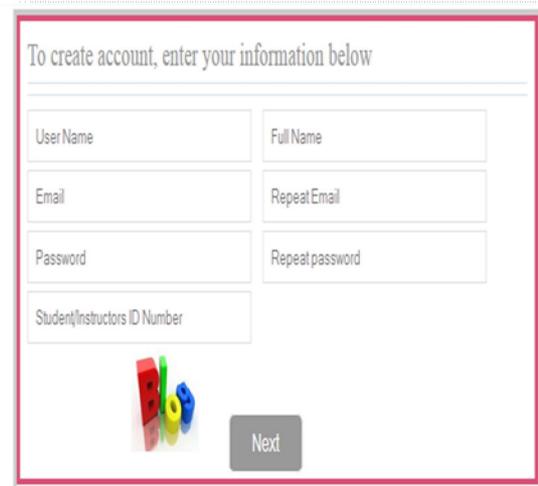


Figure 4 Account creation page

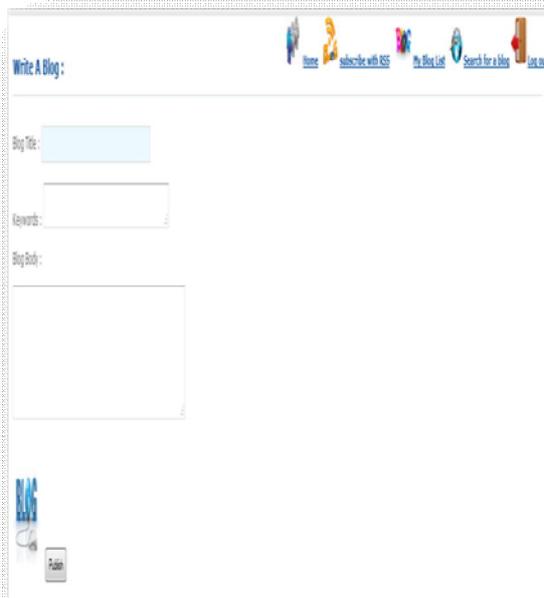


Figure 5 Interface for writing a blog

With Learn Together blogs, members can find blogs talking about specific topic by using search blogs functionality. In addition, a member who is interested in finding out the latest blogs headlines or changes can subscribe to the feed by clicking to the RSS icon which will direct him/her to select the way that she/he likes to receive updated blogs. Figure (6) gives an example when searching for blogs about a subject.

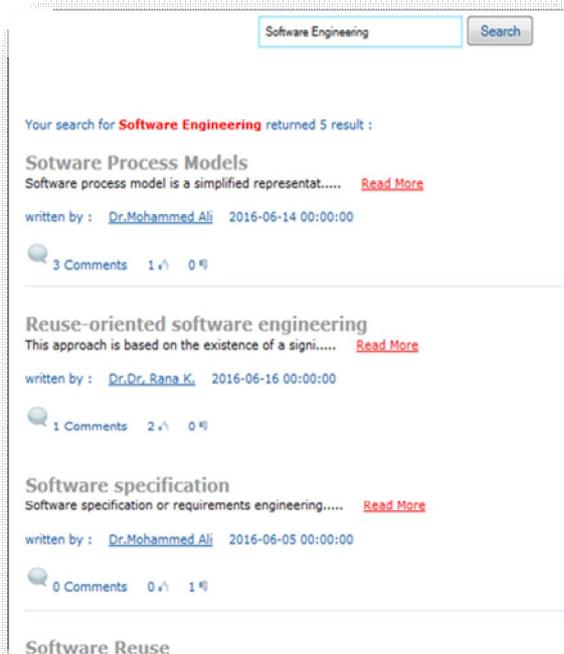


Figure 6 Results of searching a blog

Figure (7) gives an example of a full blog with all comments, and likes/dislikes associated with it.

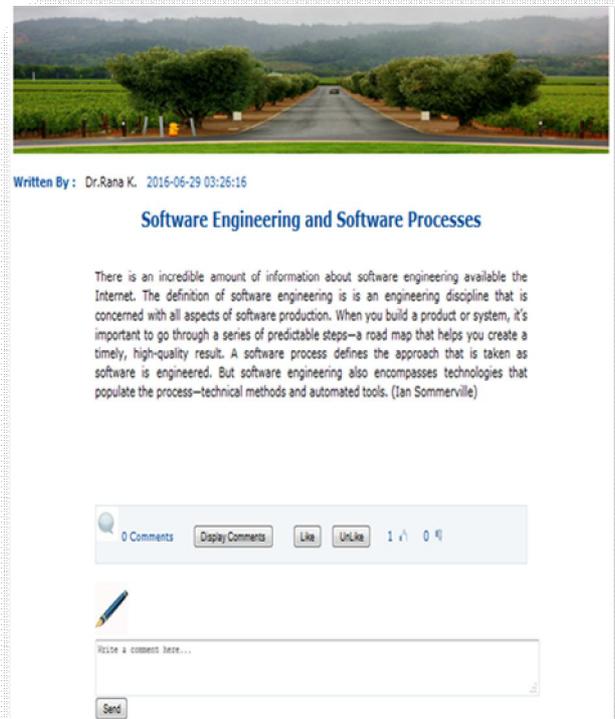


Figure 7 An example of a published blog

6. CONCLUSIONS

The process for an user to get educational knowledge on the internet is still necessary. Social media is increasingly popular platform for collaboration and quick information sharing. It can be used as way to bring educational knowledge to oneself directly. This paper proposes a framework for a blogging platform as digital learning tool for both students and instructors in Al-Mustansiriya University/ Engineering College for teaching and peer-based learning. The digital platform which called LearnTogether allows members to access, engage and share scientific thoughts, get new information from lecturers as an authentic-source of information. Students and instructors can cover several topics in their blogs and exchange experiences. Members can access, view and write comments to any blog published by a blogger in Learn Together community. Furthermore, members can get the latest updates of the published blogs through subscribing to the Learn Together blogs by using RSS tool.

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