

# The Student Social Networking Site System (SSNSS): A collaborative tool for teaching and learning

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**ABSTRACT:** Social Networking Sites (SNS) have made an enormous impact on the lifestyle of individuals around the globe. The features of the existing social networking sites focusing on sharing pictures, news feed, messaging with friends, posting photos, downloading music or videos. However, there is a lack of usage of social network sites for learning purposes. Students seldom use the social network sites to gain knowledge and learning materials, to share notes, questions and articles or to communicate with lecturers or other students. The research aims to propose a Student Social Networking Site System (SSNSS) that could facilitate collaboration among students and lecturers and to examine the opportunities for using the proposed social networking site for learning purposes. The SSNSS is developed by applying Agile Model while PHP and MySQL are used as the web programming language and DBMS, respectively. The result of user acceptance testing done on the SSNSS among the UTeM students shows that the system meets with the functional requirements of a collaborative tool to be used for learning purposes.

**Keywords:** *Social networking sites; Collaborative tool, Teaching and learning*

## 1. INTRODUCTION

Social networking sites have made a huge contribution to the daily social routine of the people in various types of communities. Social media is a powerful platform that can be utilized in so many methods to share knowledge, news, entertainment, and others. These social networking sites have played a big part in the global community in terms of communication purposes. The existing system of social networks such as Facebook, Instagram, Twitter focusing on sharing pictures, messaging with friends, posting photos, downloading music or video etc. A survey has been conducted among fifty (50) UTeM students to identify the usage of Social Networking Site (SNS) for learning purposes. According to the survey result, only 26% of the respondents use SNS for learning that shows there is a lack of usage of social networks for learning purposes among the UTeM

students. [1] also reveals that the usage of SNS is still limited for teaching and learning compared to the usage of SNS for personal and professional purposes. Findings by [2] indicate that SNS have some drawbacks in terms of education such as wasting time, minimize socializing, encourage plagiarism, violate privacy, spread harmful and unreliable information, addiction etc.

However, some research notes several key benefits of using SNS in educational institutions. According to [3], the SNS may be utilized as a supplementary community term as the institutional tool that improves learning and teaching. Additionally, to these benefits, SNS is described to impact university student education concerns and educational success [4]. Therefore, the objective of this research is to develop a Student Social Networking Site System (SSNSS) that incorporates the functionalities of existing SNS with other essential functionalities that are required by the students for collaborative learning. A social media platform to be used specifically by the students has been designed where students and lecturers can communicate and socialize with each other and yield their information about academics and all other activities that take place in the university. It will strengthen education and learning through an online platform while reducing negative aspects of the SNS to the students.

## 2. METHODOLOGY

The Agile Model is applied to develop this system. Agile methodology is based on iterative development where it breaks tasks into smaller parts also called as sprint, that do not involve long term planning. Therefore, this method helps to minimize the project risk and to reduce the overall project delivery time requirement.

The tasks for developing SSNSS are divided based on the system's functional requirements to deliver specific features for a release as follows:

### 1. Post

This system allows the users to post, edit, delete, view and download the resource materials such as articles, journals, and thesis that their friends would be able to see and comment upon in timeline.

2. Groups

This system allows the lecturers to create the new group for chat, enabling the lecturers and students to chat, upload files, share URL links and upload the images.

3. Resources

This system allows the lecturers to upload, update, delete, view the resource materials such as past year exam papers, articles, journals, and thesis. The students can download and view the tutorial materials.

4. Lab and Tutorials

This system allows the lecturers to upload, update, delete, view the tutorial and lab materials such as lab work, assignments, quizzes, and tutorials. The students can download and view the tutorial materials.

The tasks are developed using scripting language of PHP and the data involves in this system is stored in database using MySQL.

3. RESULTS AND DISCUSSION

A survey was carried out among the Student Social Networking Site System (SSNSS) users to examine that the system meets the functional requirements as a collaborative learning tool. This survey has been conducted to thirty (30) UTeM students. Twelve (12) criteria are used in the survey based on the system functionalities of the SSNSS as follows:

1. SSNSS helps students to solve the academic problem
2. SSNSS helps students to do the academic group discussion
3. SSNSS assists students in doing the collaborative learning
4. SSNSS helps students to share new ideas and knowledge
5. SSNSS helps students to do the research work
6. SSNSS helps students to get related educational resources, tutorials, exam papers
7. SSNSS assists students in getting information regarding university events
8. SSNSS allows students to share media files, documents, and links
9. SSNSS helps students to communicate and cooperate with friends and lectures through the groups
10. SSNSS allows students to socialize with lectures and students
11. SSNSS provides students education-related information that is required
12. SSNSS is useful for meaningful educational purposes

Figure 1 shows the percentage of respondents who answered each survey question based on five-point likert scale, ranging from strongly agree to strongly disagree. The result shows the highest percentage of respondents who have strongly agreed is 93% (for the criteria to provide students with education-related information).

The second highest percentage of respondents who have strongly agreed is 90% (for the criteria to allow students to share media files, documents and links). Meanwhile, the lowest percentage of respondents who have strongly agreed is 57% (for the criteria to help students to do research works). However, the highest percentage of respondents who have agreed is 40% (for the criteria to help students to do research works and allows students to socialize with lectures and students), while the lowest percentage of respondents who have agreed is 3% (for the criteria to provide students with education-related information).

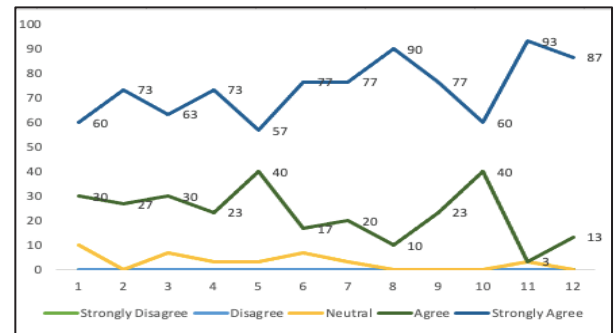


Figure 1: The user acceptance testing result

4. CONCLUSION

In conclusion, the Student Social Networking Site System (SSNSS) meets the functionalities of a collaborative tool especially to provide students with education-related information and to help students sharing learning materials. Therefore, it can be used as a collaborative tool by lecturers and students to get connected and share resources for learning purposes.

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