Research Article

# **EduAssist: Interactive Educational Assistant**

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Abstract: EduAssist is a system that is designed to assist university students in arranging their daily work and time as a student. This system allows users, which are students and lecturers, to upload materials that students require for their studies, such as self-notes, their routine activities information, and any important dates. There are still many university students who lack skills in daily life management and have forgotten about the importance of day-to-day life management. Some students are unable to manage their time well while they are in university. Therefore, the objectives of this system are to help students plan their daily life, arrange their time to improve student access and retrieval of notes, and ease students in obtaining notes, assessments, and activities planners all in one place. Hence, this system can help students to solve daily management and increase their awareness of the importance of everyday life management as a student. Also, it can assist university students in managing their time management and arranging their tasks properly.

Keywords: Education; System; Time management; Planner.



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## 1. INTRODUCTION

EduAssist is developed as a platform for managing students' academic life. Nowadays, technology is used in our daily lives and has become one of the most crucial things we require, particularly for workers and students. Besides, an effective daily or monthly planner is highly recommended for anyone who wants a well-organized day, particularly students. However, many university students lack skills in day-to-day life management and forget the importance of daily life management. Some students cannot manage their time well while in university. They don't effectively manage their time to complete their homework, assignments, and tasks. This may have happened because no one or anything they can refer to instructs or guides them in time management skills. Thus, there is a need for the students to have good software that can help with the problems. Therefore, our proposed innovation, EduAssist, allows students to manage their daily life and arrange their time well.

#### 2. LITERATURE REVIEW

The major objective of information technology is to benefit society and the general population. The development of a new technological system includes invention, innovation, and diffusion. According to Asif & Krogstie (2011), students tend to use a system that is useful for academic purposes. The advantages of the system in a university include a student-centric approach, enhanced student data and process handling, and higher student loyalty, retention, and satisfaction with the university's services and programs (Seeman & O'Hara, 2006).

ICT adoption is now a must for all institutions to expand access to discipline information and engagement with peers and teaching staff. New technologies simply differ from older ones, and we must comprehend these differences as well as the proper contexts to employ diverse technologies for efficient teaching and learning. To maximize gains in student education and operational efficiency, different technologies each offer a unique set of affordances that should be utilized precisely when they are most appropriate (Dawson et al., 2010). Meanwhile, Goldstein & Katz (2005) stated that higher education has invested in administrative technology for more than a decade, partly to increase the accessibility and usefulness of management information.

According to Hashim et al. (2020), studies on the significance of time management and time practices, and studies related to time management and academic achievement success abound. Time management in academics will help students learn how to manage their time in school while having responsibilities such as projects, assignments, tasks, and social life, and it will help them quit procrastinating. Students may spend more time on hobbies and leisure activities if they manage their time well. They can also focus more on key courses if they manage their time well. As a result, time management may help to avoid poor performance, stress, pressure, and time waste (Yuan et al., 2017). Students are in charge of their learning and time management at the university level. Thus, planning and prioritizing their studies amidst the competing activities are required to ensure that they will be able to manage their own time effectively (Ariffin et al., 2020).

Many university students complain about having trouble meeting deadlines for assignments or preparing for exams and quizzes, particularly if numerous assignments and tests had due dates that were too close together. Therefore, particular time management tools for college students may be helpful (Hashim et al., 2020). Even when lecturers solely interact with their students via online platforms or tools, students may still turn in assignments and monitor their academic progress. The authors also noted that the attitudes of students toward courses and learning are positively impacted when online tools and resources are used successfully in the educational process (Mohd Isnani et al., 2015).

Moreover, to keep our busy lives on track, we rely on reminders on a daily basis. Keeping notes and memos on paper might be helpful, but it can be challenging to manage these documents efficiently. Therefore, in the modern technological age, there are a variety of task planner apps for smartphones, which are essential for time management, primarily for students (Dalvi & Siddavatam, 2019). Further, scientific studies have shown that using time management tools or reminder apps may improve students' academic performance by allowing them to keep track of their tasks, reminding them when is the due date of assignments, and organizing their work in an effective manner. These tools enhance students' ability to study while also lessening their stress and anxiety levels (Christensen, 2021).

#### 3. METHODOLOGY

The methods that were used to write this paper are searching, gathering, and analyzing articles and information from other sources or research papers. Additionally, other ways, such as asking the experts' opinions, which the experts are the lecturers at our university. Next, this paper was completed using various articles from journals. The articles were collected from online databases like IEEE Xplorer, Scopus, Google Scholar, and others. Further, previous research articles were examined to gather information about the educational systems that can aid students in managing their daily life or routine. The articles were used as references for our paper.

#### 4. FINDINGS

This paper's findings will emphasize the features and functions of the EduAssist system. This system is almost similar to UiTM's Ufuture system, which is for students and lecturers to make discussions or tests, upload or download class materials and for students to tick their attendance online. However, what makes the two different from each other is that EduAssist has other essential features or functions for the students to use, although the functions are quite limited for the lecturers. This system majorly is for the students to utilize its features in their academic life.

First and foremost, the users, who are students and lecturers, have to register using their education email addresses. They will need to fill in some information, such as their full name, nickname, email address, and password. After that, they can log in using the email and password that have been registered.

The students can view their today's schedule. That feature makes it easier for the students to view their class timetables, notes, or materials for the class while even on the go, and they can also add their own personalized to-do lists. It means that students can add other activities or tasks that they want to do on that particular day. They can add assessments or assignments and extracurricular activities that they have to do to their to-do lists. Then, they can set reminders for vital tasks like assignments that they have to complete before the due date. The reminders and notifications will be sent to their email to alert them about the tasks.

Next, students and lecturers can also upload their own personalized notes and class materials in the folders of EduAssist, which they can view anytime or anywhere. They can edit their notes and materials whenever they want. They can also upload their own mind maps of any subjects that they are taking in the folders.

### 5. DISCUSSIONS

The study identifies several interesting results. The EduAssist system indicates some of the features that students and lecturers require for educational purposes, including making discussions or tests, uploading or downloading class materials and for students to tick their attendance online, viewing their schedules, viewing their class timetables, notes, or materials for the class, adding their todo lists, adding assessments or assignments and extracurricular activities, and setting reminders for important tasks like assignments that they must complete before the due date. As a result, this system can assist in managing students' everyday life and increase their knowledge of the significance of this kind of management while they are students. Although this system is primarily for students to use capabilities in their academic life, lecturers may also benefit from it.

### 5.1 Limitation

This study is not without a limitation. Data gathering is regarded as a crucial stage in conducting research because it has a big impact on the findings and integrity of the study. In order to reduce problems during data collecting and raise the level of research outputs, the sources of these difficulties should be determined and addressed. There is a limited amount of research regarding system implementation for university students. Thus, it is difficult to get vast information about this topic which makes the research slower than expected. Besides, not all research techniques can be used for every topic. For instance, when conducting a user acceptance survey, it's important to keep the intended user group in when devising the test tasks. The research methods used in this research, such as searching, gathering, and analyzing articles and information from other research papers and experts' opinions are limiting the end result of this research as there is not much information gained from the method mentioned alone.

#### 5. 2 Future Research Recommendation

The current research can be seen as the start of a larger investigation into Interactive Educational Assistant systems. However, because of the small size and the absence of information, the study's findings should be interpreted with caution. Future studies could focus on the different research methods to gather vast amounts of information regarding the topic. For example, experiments, surveys, and statistical tests. This step can solve the data-collecting problem. Besides, future researchers should choose a longer time frame so that they can record perfect participation throughout the entire research process.

# 6. CONCLUSION

In conclusion, EduAssist is a platform used to manage students' academic life. Many university students lack skills in day-to-day life management and forget the importance of daily life management. Besides, students tend to use a system that is useful for academic purposes. Time management in academics will help students learn how to manage their time in school while having responsibilities such as projects, assignments, tasks, and social life, and it will help them quit procrastinating. The limitations faced are limited past research about the Interactive Educational Assistant systems and unsuitable research methods. Thus, future researchers should focus on different research methods to collect information. Overall, EduAssist, a system that allows students to manage their daily life and arrange their time well, is a significant innovation system that fulfills current requirements of technology development and academic needs.

# References

Ariffin, K., Noor, N. A. M., & Alias, A. (2020). MyMobileSLT: Mobile apps for student time management skills.

Asif, M., & Krogstie, J. (2011). Mobile student information system. Campus-Wide Information Systems, 28(1), 5–15. https://doi.org/10.1108/10650741111097269

Christensen, C. (2021). Working remotely and moving forward with your Ph.D. during a pandemic. IEEE Potentials, 40(5), 27–30. https://doi.org/10.1109/mpot.2021.3075923

Dalvi, A., & Siddavatam, I. (2019). SnoopMe- Interactive task scheduler mobile application for students. 2019 International Conference on Nascent Technologies in Engineering (ICNTE). https://doi.org/10.1109/icnte44896.2019.8945836

Dawson, S., Heathcote, L., & Poole, G. (2010). Harnessing ICT potential: The adoption and analysis of ICT systems for enhancing the student learning experience. International Journal of Educational Management, 24(2), 116–128. https://doi.org/10.1108/09513541011020936

Goldstein, P. J., & Katz, R. N. (2005). Academic Analytics: The uses of management information and technology in higher education. EDUCAUSE Center For Applied Science, 8(1), 1-12.

Hashim, A., Alias, A., Noor, N., & Ariffin, K. (2020). The Development of MyMobileSLT: A tool for student time management skills. Journal of Physics: Conference Series, 1529(2), 022030. https://doi.org/10.1088/1742-6596/1529/2/022030

Mohd Isnani, Z., Ramly, S., Mohd Yunus, S. Y., Jamil, N. I., & Syed Ahmad, T. S. A. (2015). The usefulness of I-Learn system in the execution of e-Learning: A case study of UiTM Negeri Sembilan. https://www.researchgate.net/publication/311647095

Seeman, E. D., & O'Hara, M. (2006). Customer relationship management in higher education: Using information systems to improve the student-school relationship. Campus-Wide Information Systems, 23(1), 24–34. https://doi.org/10.1108/10650740610639714

Yuan, C. P., Wahid, N., Kasim, S., Md Fudzee, M. F., Ramli, A. A., Mahdin, H., & Sen, S. C. (2017). UTHM student planner. Acta Informatica Malaysia, 1(1), 17–21. https://doi.org/10.26480/aim.01.2017.17.21