

# A REVIEW OF THE STUDENT ACADEMIC PLANNER SYSTEM

Fathi, A.M.Z., and Nurdiana, A.\*

*Faculty of Science and Technology, Universiti Sains Islam Malaysia,  
71800 Nilai, Negeri Sembilan, Malaysia.*

*\*Corresponding author: nurdiana@usim.edu.my*

**Keywords:** *Planning, time planning, time management, planner, organize learning*

## ABSTRACT

This paper presents a review of research on UniPlanner, a student academic planner. The objectives of the research are to investigate the gaps in the existing student academic planner for USIM students, to develop a student academic planner named UniPlannner, that has a security feature, and to conduct a user acceptance test to ensure the UniPlanner is working. The scope of the research includes a web-based system named as UniPlanner, that aims to help students to solve their time management problems while increasing the effectiveness of their studies. The security features that will be implemented in this system are password encryption by using the Bcrypt hashing algorithm, password complexity, Google reCAPTCHA, and uploaded file restriction. This system is expected to allow users to record their daily routines and calculate CGPA scores. UniPlanner also allows users to set a reminder and display the important task that must be done. Users also can update the information that has been entered. In a conclusion, this research can benefit users to improve their daily schedules. For future research, the system can be extended to include more features and could be enhanced as a mobile application.

## INTRODUCTION

In March 2020, the World Health Organization (WHO) declared a pandemic situation with the spread of a new type of coronavirus that caused the outbreak of COVID-19 [1]. In line with this epidemic declaration, all countries have closed all sectors. The education system is one of the areas severely affected by the COVID-19 pandemic nationwide [2]. The closure of the education department led to the closure of all schools and universities to break the chain of transmission of this dangerous epidemic. As a result, the ancient face-to-face teaching and learning process had to be stopped and replaced with online learning also known as e-learning [3]. In the critical situation of the outbreak of COVID-19, the transition to online learning was the only one [4]. As e-learning is being practiced in student life these days, some students have difficulty managing their time properly between family, studies, and entertainment resulting in substantial disruptions in learning [5]. Students can slip right on the deadline for the assignment or project easily without being noticed. Based on these issues, the researcher decided to develop a system named UniPlanner which will help students to solve their time management problems while increasing the effectiveness of their studies and productivity.

Among the problems that arise from the implementation of new teaching and learning processes which is e-learning is that students have poor management of time. According to [2], time management consisted of several indicators. Activities such as time productivity planning, organization, mobilization, and control are time management efforts. At the beginning of the virtual learning period, students spend more time at home causing them poor at dividing time spending time with family, entertainment, and education. Balancing studies with the fun stuff in life can be challenging to maintain [5]. This unfamiliar learning method and poor time planning cause many students unconsciously miss classes that are conducted virtually or have insufficient time to complete the assignments given because they miss or forget the deadline. When students have too many assignments, students also tend to have

trouble determining and completing assignments according to the priority deadline. To add to this, students had to be more independent and disciplined in their learning process as the physical presence and direct supervision of their educators were not possible [6].

Other than that, a student's academic performance is measured using the Cumulative Grade Average (CGPA). CGPA calculates the overall average of student coursework for all assignments and examination grades for all semesters throughout the study at the university [7]. Since students rely heavily on the CGPA exam results issued by the university, students' academic performance and learning outcomes in the new semester depend a lot on previous achievements. Thus, it can make it difficult for students to plan their studies to achieve their targets and if students do not know how to calculate examination results, they may not be good at planning to score in certain subjects.

Next, in the existing planner system, the reminder features are functioning by sending notifications through email. For students who regularly receive emails, it can cause them to miss reading the email and cause them not to be alerted by the due date. According to [8], the reminder features are designed to help people to remember future tasks that they might otherwise forget. At a minimum, the reminder features should include the types of tasks, task description, the date and time the reminder was created, and the time between the reminder and the notification creation.

Finally, some students are too focused on learning and chasing the deadline causing them to have health problems because they do not wisely divide their time accordingly and spend long hours in a sitting position with supine bent forward while using electronic devices [9] where they study too often without resting or enjoying the entertainment. Although this is good for their academic achievement, it is not good for their mental and physical health.

## **METHODOLOGY**

The methodology for this research is a waterfall model that includes five phases namely requirements, design, implementation, verification, and maintenance. The requirements phase is to identify the user needs, the design phase is to develop the system, the implementation phase is to execute the system, the verification phase is to test the system, and the maintenance phase is to detect and fix the problems.

## **RESULTS AND DISCUSSION**

This section presents the user interface design of UniPlanner. Figure 1 presents the board interface. On the board interface, the task is displayed based on the file. Users can create a new file and add new tasks to the chosen file. If the user wants to edit the task, the user needs to click on the task and edit it. All new tasks will be automatically added to the To-do file and the chosen file. Once the task is completed, the task will be moved to the completed file. If the task is overdue, the task will be moved to a delayed file and the time and date will turn red. The color of the file can be set as user preference.

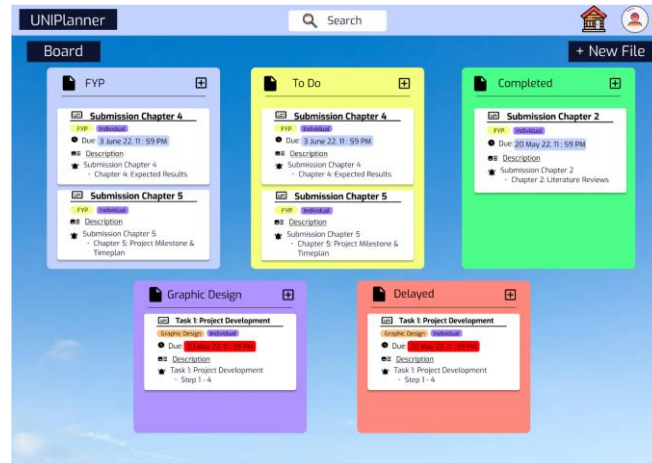


Figure 1. Board Interface

## REFERENCES

- [1] (2020) Time website. [Online]. Available: <https://time.com/5791661/who-coronavirus-pandemic-declaration/>
- [2] M. Sari, Ilhamdaniah, and T. Megayanti. "Time management during Covid-19 pandemic: The effect of students' time management on learning outcomes in basic building construction course at State Vocational High School 5 Bandung, West Java, Indonesia", *Advances in Social Science, Education and Humanities Research*, vol 520, 2020.
- [3] S. Andersen, G. Leon, D. Patel, C. Lee, and E. Simonton, "The impact of COVID -19 on academic performance and personal experience among first-year medical students," *Medical Science Educator.*, vol. 32, pp. 389-397, 2022.
- [4] M. Mahboob. "Challenges of e-learning during the COVID-19 pandemic experienced by EFL learners," *Arab World English Journal (AWEJ)*, vol. 11, 2020.
- [5] K. A. F. A. Samah, S. Q. Thusree, A. F. A. Fadzil, L. S. Riza, S. Ibrahim, and N. Hasan, "A greedy-based algorithm in optimizing student's recommended timetable generator with semester planner," *International Journal of Advanced Computer Science and Applications (IJACSA)*, vol. 13, 2022.
- [6] J. Nesamalar, T. P. Ling, and N. Singaram, "Time management behavior during the Covid-19 pandemic: A focus on higher education students," *Asia-Pacific Journal of Futures in Education and Society (APJFES)*, vol. 1, pp. 17-38, 2022.
- [7] N. A. A. Hasan, N. Ahmad, and N. A. Abdul, "Factors that significantly affect college students' CGPA," *International Academic Research Journal of Social Science 3*, vol. 1, pp. 77-81, 2017.
- [8] D. Graus, P. N. Bennett, R. W. White, and E. Horvitz, "Analyzing and predicting task reminders," *Association for Computing Machinery (ACM)*, 2016.
- [9] Q. B. Yaseen and H. Salah, "The impact of e-learning during COVID-19 pandemic on students' body ache in Palestine," *Scientific Reports*, 202