

Innovation & Research

Sunday, June 7, 2026 3:07 PM

Component 1: Innovation and Research

Module: ACCA5033

Course: BSc Applied Computing

Student Name: Maylanne L. Silva

Student ID: 2424997

Project Title:

A Mobile App to Help University Students Manage Study Time and Wellbeing

Submission Date:

02 July 2026

Task 1 – Ideation & Mind Map

Sunday, June 7, 2026 3:08 PM

The selected project idea for this proposal is A Mobile App to Help University Students Manage Study Time and Wellbeing.

<https://mm.tt/map/4021204417?t=VSEkdYoFi8>

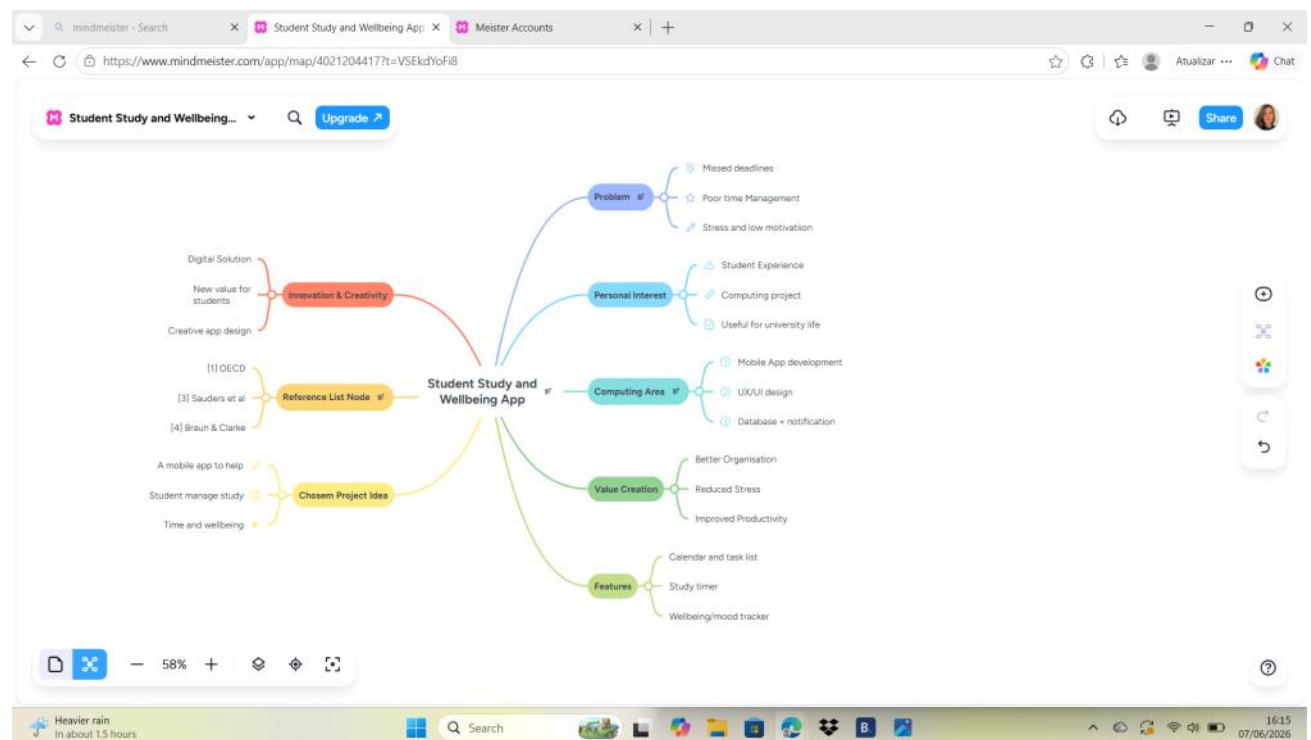


Figure 1: Mind map for Student Study Wellbeing APP.

The following mind map has been drawn in an attempt to explore the possibility of creating value using the power of innovation and creativity in relation to an existing problem for which the computing solution could be developed. The proposed project aims to develop an application for students who need assistance in organizing academic responsibilities and promoting wellbeing. The choice was made due to personal interests, the course I am taking now and the possibility of a good result from the project implementation.

One of the themes included in the mind map represents issues facing university students. Often students cannot meet deadlines or lack the necessary time to do the assigned work properly. They are experiencing stress, low motivation, inability to find a work-life balance. This can negatively affect their academic progress, productivity, mental health and well-being. The understanding of what students struggle with allows one to consider the ways to improve the situation with the help of digital innovations.

The other significant part of the mind map is connected with personal interest in this particular area. I'm studying Applied Computing at university and trying to apply the gained knowledge to help me create useful inventions. This project can be viewed as quite a meaningful way of solving some common problems of students and applying

computing skills to benefit their lives in any way possible. This idea is realistic and doable and is worth considering.

Innovation and creativity are among the key points raised in the proposal. Innovation is not only developing anything new but improving an existing idea and adding value for other people [1]. The combination of academic planning features with wellbeing promotion in a single application is one such case of innovation. Creativity is the ability to generate ideas that would serve different student needs and not only solve their problems. In this regard, the method of design thinking can be employed. It implies the understanding of users, definition of problems, creation and improvement of solutions [2].

The second part of the map discusses some computing-related issues that will play an essential role in the development of the application. This solution involves mobile application development since most students today actively use smartphones to gain easy access to technology. Moreover, the UX & UI design should be taken into account in the process of application development. Effective user interaction requires good user interface that should be attractive to eye and make navigation easy [3]. Also database functions and notification systems can be implemented for more security and convenience.

There are several possible features discussed in the mind map. These include a calendar and task list to help with organizing assignments and deadlines, a study timer to encourage students to spend more quality time doing their assignments and a wellbeing/mood tracker to help them know their state during this time. Features of the application are supposed to help the users achieve academic success and promote wellbeing.

The last but not least theme that has been discussed in the mind map concerns value creation. The mentioned application may help increase educational and social values of the students due to better organization, less stress and increased productivity. The latter can be achieved with proper organization that would help students prioritize their activities and reduce stress. The latter might lead to greater emotional well-being and self-confidence of the students. Also research and critical thinking will be needed to define students' needs and address them accordingly [4].

In conclusion, the mind map illustrates the interrelationship that exists between creativity, innovation, and value creation in computing. The chosen project seeks to solve actual problems faced by the students through user-centered design and problem-solving approach. Through integrating study management and wellness, the app can improve the experience of students in university life. Therefore, for the above reason, this project has been selected.

Reference List

- [1] OECD and Eurostat, Oslo Manual 2018: Guidelines for Collecting, Reporting and Using Data on Innovation, 4th ed. Paris: OECD Publishing, 2018.
- [2] T. Brown, Change by Design: How Design Thinking Creates New Alternatives for Business and Society. New York: Harper Business, 2009.
- [3] J. J. Garrett, The Elements of User Experience: User-Centered Design for the Web and Beyond, 2nd ed. Berkeley, CA: New Riders, 2011.
- [4] M. Saunders, P. Lewis, and A. Thornhill, Research Methods for Business Students, 8th ed. Harlow: Pearson, 2019.

Task 2 – Aim Objectivos and Research Area

Sunday, June 7, 2026 3:08 PM

Research Area

The subject area that this investigation concerns is educational technology and mobile app design in the context of tertiary education. The potential for research involves studying whether it is possible to create a mobile application that will enable university students to plan their time and take care of themselves properly while performing their academic duties. Indeed, it happens to many young people to find it hard to manage between studies, work, and private life, causing such phenomena as stress, demotivation, and poor time management skills. It fits well into the sphere of Applied Computing because it incorporates several important concepts there.

Aim

The goal for this project is to study and develop a mobile application that can assist students in managing their time effectively, as well as taking into account their academic schedule and health.

Objectives

- For identifying the major issues related to time management and wellbeing that university students face.
- For assessing any existing applications for studies and wellbeing and analysing their pros and cons.
- For finding out which features students find the most useful in an application for managing studies.
- For developing a prototype of the application designed for managing studies and wellbeing.
- For conducting a preliminary assessment of the developed prototype.

Research Philosophy

The most appropriate research philosophy that could be adopted in this project is **pragmatism**. This is because pragmatism focuses on addressing existing real world problems through developing a viable means of solution and hence the selection of methods would be guided by the need to find solutions to these objectives [1]. Given the nature of the current project which seeks to come up with a solution based on the needs of university students, pragmatism is appropriate.

Moreover, pragmatism offers an opportunity to utilise both quantitative and qualitative methods. Quantitative methods would help determine the number of students who have problems such as planning for their studies or stress due to missed deadlines. Qualitative methods on the other hand would offer information on how these students perceive the issue and what they expect from the suggested solution [2].

Search Tools and Databases

There are several search tools and databases that will be utilised to conduct a thorough literature review on this project. These include **Google Scholar** that will be useful for identifying peer-reviewed journal articles and academic publications on

student wellbeing, education technology and time management. Other sources include the **UWTSD Library** where **books, journals and electronic publications** will be accessed.

Other sources include **IEEE Xplore** and **ACM Digital Library** which will be useful for finding computing research literature especially regarding the development of mobile applications and software among other issues [3].

Search Strategies

Proper search techniques will be employed to ensure that the literature generated is of high quality and relevance. This can be achieved by the use of Boolean terms such as AND/OR. Also, quotation marks and filters will be used in the search process.

- "student wellbeing" AND "mobile applications"
- "time management" AND "higher education"
- "study planner" AND "university students"
- "user experience" AND "mobile application"

Using effective search techniques helps researchers identify relevant evidence efficiently and supports the development of a robust research proposal [4].

References

- [1] M. Saunders, P. Lewis, and A. Thornhill, Research Methods for Business Students, 8th ed. Harlow: Pearson, 2019.
- [2] J. W. Creswell and J. D. Creswell, Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, 5th ed. Thousand Oaks, CA: SAGE Publications, 2018.
- [3] Association for Computing Machinery, "ACM Digital Library," ACM, 2026. [Online]. Available: <https://dl.acm.org/>
- [4] Google, "Google Scholar Search Help," Google Scholar, 2026. [Online]. Available: <https://scholar.google.com/intl/en/scholar/help.html>

Task 3 - Research Strategies

Sunday, June 7, 2026 3:11 PM

Q1. Methods of Improving Validity, Reliability, Generalisability and Ethical Considerations

There are a number of methods to enhance the quality of this research. For example, validity refers to the fact that the research captures the information intended [1]. In order to achieve validity, the questions within the questionnaire would be related directly to the aims of the research as well as to the experience of students in time management, wellbeing and mobile applications.

Reliability concerns consistency in research findings [1]. In order to ensure reliability, the same questionnaire would be administered to all the participants as well as identical instructions would be provided.

In terms of generalisability, it is about the ability to apply findings beyond the particular context [2].

As this research is based on students from university, there is an opportunity to generalise the results to other higher education establishments. It is possible, however, that the limited sample would reduce the possibility to generalise the findings across all students at universities.

As far as ethical issues are concerned, they are vital in educational research. Firstly, participation in the study should be voluntary. In addition, participants should be informed of the nature of the research prior to their participation. Secondly, participants should have the right to withdraw from the study at any point in time without facing any consequences. Finally, confidentiality and anonymity should be ensured by avoiding collecting any personal details of participants [3].



Figure 2. Research strategy adopted for the proposed mobile application project

Q2. Research Strategies, Data Gathering Approaches and Pilot Study

A questionnaire has been chosen as a main method of data gathering as this approach enables effective information collection from several respondents at once [1]. Both open-ended and closed questions are intended to gather information.

A pilot questionnaire has been developed to check the quality of the questions and make sure that they are relevant and efficient. The pilot questionnaire is provided in Appendix A.

In accordance with the updated assignment brief, pilot feedback obtained through AI generation has been produced to exemplify its positive impact on focusing of the project. There were five students who reported that they found it difficult to balance coursework and job. They noted that reminders of deadlines, study timer and calendar appeared to be the most valuable functions. Some respondents expressed their desire to get motivated by notifications and to track their mood. Based on the above suggestions, the proposed mobile application gives prominence to integration of both academic and wellbeing functions.

This pilot exercise showed that there is a need for refining of questions and identifying key functions that would be most helpful to the target audience.

Q3. Quantitative & Qualitative Analysis

Quantitative analysis refers to the analysis of numeric data [2]. In relation to this research project, quantitative analysis may consist of finding the frequency and percent of individuals experiencing difficulties with deadlines or utilizing the suggested application. For example, it will be determined what percentage of students have trouble with deadlines or will want to make use of the application being developed.

Qualitative analysis refers to meaning-making with regards to textual information gathered [4]. One of the widely accepted methods of qualitative data analysis is thematic analysis, which helps determine emerging themes within participants' statements. With regard to the project, the possible themes arising from students' feedbacks are going to involve aspects such as stress, motivation, workload and other qualities that an app should provide.

Reference

[1] M. Saunders, P. Lewis, and A. Thornhill, *Research Methods for Business Students*, 8th ed. Harlow: Pearson, 2019.

[2] J. W. Creswell and J. D. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th ed. Thousand Oaks, CA: SAGE Publications, 2018.

[3] British Educational Research Association, *Ethical Guidelines for Educational Research*, 4th ed. London: BERA, 2018.

[4] V. Braun and V. Clarke, "Using thematic analysis in psychology," *Qualitative*

Appendices

Sunday, June 7, 2026 3:09 PM

The appendix contains the questionnaire used to collect preliminary feedback from participants. The results obtained were used to support the research discussion presented in task 3.

Questionnaire and Feedback

1. Are you someone who always finds it hard to manage university deadlines?
2. What kind of tools do you use for organising your tasks for studying?
3. Would you be interested in using a mobile app for organising your study, deadlines and wellbeing?
4. Which of the features do you find the most beneficial for the mobile app under discussion?

- ☐ Calendar
- ☐ Task List
- ☐ Deadline reminders
- ☐ Mood tracker
- ☐ Motivational Notifications
- ☐ Other

- Four participants reported difficulties balancing university studies, employment and personal commitments.
- Two participants chose to schedule their study activities using paper-based planners, whereas three of them made use of electronic calendars and phone reminders.
- All five respondents indicated that they would use a mobile application designed to support study organisation and wellbeing.
- Three respondents selected deadline reminders as the most valuable feature four preferred the study timer and calendar, two recommended motivational notifications, and three supported the inclusion of a mood tracker.
- Participants suggest combining academic planning and wellbeing support features make the application more effective and beneficial for students.



Figure 3. Prototype of the proposed mobile application.