

## SCHEDULE MANAGEMENT APP

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### ABSTRAK

This project aims to improve students' time management skills through the development of the "manageUtime" Android application, inspired by USING THE TOOLS OF TIME MANAGEMENT AT STUDENT'S WORK (Z. Kolarovszká & J. Fabuš, 2017). The app provides intuitive scheduling features to help students organize their daily, weekly, and monthly schedules, and key features include customizable reminders and priority settings designed to improve students' time management efficiency and academic performance. The project explored the use of learning analytics in optimizing student time management strategies to address time management challenges in the educational model through a data-driven approach. The project successfully identified and evaluated effective time management strategies, designed and developed a smart course scheduling app, and evaluated its usability and effectiveness through user testing. Despite facing time and quality constraints, the project delivered a high-quality, user-friendly application that provides students with an effective time management solution through careful planning, design, and development.

### INTRODUCTION

In the modern educational landscape, effective time management is a paramount concern for students. Many undergraduate students grapple with confusion and a lack of motivation when it comes to planning and managing their academic schedules. The traditional educational model often falls short of equipping students with the tools and strategies needed to optimize their time effectively, resulting in low engagement, inefficiency, and academic stress.

Collaboration among students has been proven to enhance critical thinking, problem-solving skills, and overall academic performance. However, fostering meaningful collaboration in diverse educational contexts remains a significant challenge. The absence of structured methods and tools to assess and enhance collaboration hinders its full potential. This problem statement underscores the issue of limited collaboration within educational settings, particularly in the context of time management, and explores how Learning Analytics can be harnessed to identify barriers, optimize collaboration, and ultimately contribute to improved student

outcomes and empowerment.

In the digital age, educational institutions have access to a wealth of student performance and behavioral data, including their time management habits. However, the challenge lies in effectively utilizing this data to improve time management strategies for students. Learning Analytics has emerged as a valuable tool for data-driven decision-making in education, yet its implementation varies widely, and many institutions struggle to harness its full potential for enhancing students' time management skills. This problem statement underscores the urgent need to unlock the untapped potential of educational data through Learning Analytics, particularly in the context of time management, to empower students and improve their efficiency in academic scheduling and task management.

### **STUDY METHODOLOGY**

In this project plan to use Android Studio to develop software and use the techniques I learned in Android development to complete the project.

First of all, I plan to plan every component that needs to be implemented in this software and stage the requirements. Then I will draw the design of the software and finally code and test the software.

This software will implement the following functions:

1. Allow users to add their schedule, course information, etc. to the software
2. Set scheduled notifications according to the user's schedule, as well as notifications and reminders about course information.
3. Based on the schedule information set by the user, it can only help arrange time and prevent missing things such as homework.

To identify and assess effective time management strategies: Explore existing time management techniques and strategies to identify the most suitable approaches for student time management.

To design and develop an intelligent course schedule application: Create an intelligent course schedule application that allows students to efficiently plan and manage their academic timetables, assignments, and tasks.

To conduct usability testing of the application: Evaluate the usability and effectiveness of the intelligent course schedule application through user testing, gathering feedback, and implementing improvements.

This Research looks at the application of learning analytics in college students' time management. Focus on student challenges with planning schedules, task management, and more and how learning analytics can help solve these challenges. It may not cover all aspects of time management but focus on specific data and specific methods, It is expected that the research results will provide feasible suggestions or solutions for improving college students' time management, data-driven strategies based on

learning analytics

The project has two main constraints. One is time and another is quality.

Time - Developing an Android application requires a long time. Before starting to develop the application, we must determine the UI, it takes time to determine a suitable and user-friendly UI. After deciding the UI requires some studies to understand the project scope.

Quality- The quality of the application is an important factor. The application may not meet the project scope and the final product can be different than the initial idea.

### **DECISIONS AND CONVERSATIONS**

In summary, the development of a collaborative student timetable management and reminder application meets the urgent need for effective time management for university students. The challenges faced by students in balancing their studies, as well as the limitations of traditional educational models, emphasize the urgency of an innovative solution.

The proposed solution is a smart course schedule application that aims to empower students by providing a user-friendly platform to organize course schedules, manage assignments, and receive timely reminders.

The goals of the project, including identifying effective time management strategies, designing the application, and conducting usability testing, were aligned with the overall goal of improving student learning outcomes and the efficiency of instructional scheduling.

While the project recognized time and quality constraints, these challenges were considered opportunities for careful planning and consideration. The approach involved careful planning, design, and development using Android Studio to overcome these constraints and deliver a high-quality, user-friendly application.

When opening the applications, the user login interface will be displayed as Figure 1. Users must log in before they can use the app. When the user logs in, the account number will be remembered and there is no need to enter the account password again the next time. Data is separated between different users.

1:53



welcome use manageUtime

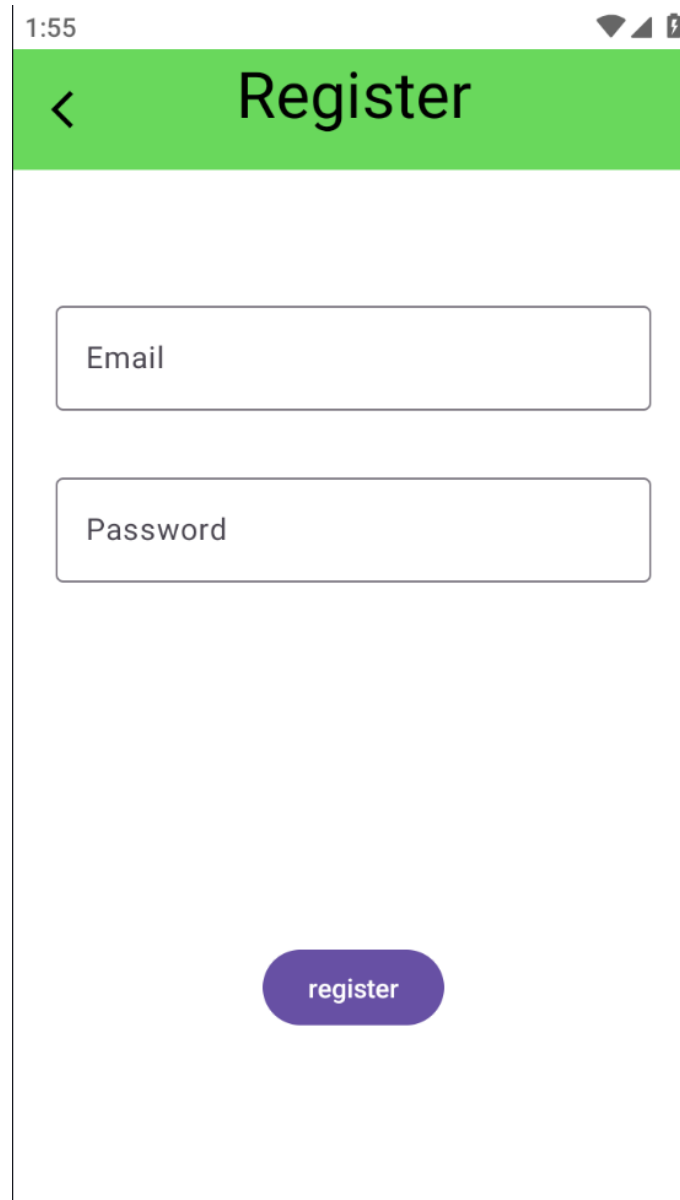
# Login

[Don't have a account?click to register!](#)

Go

Figure 1 login

If users do not have an account, they can click "click to register" to register. Users can use email and password registration here by using email and password. the interface like figure 2.



The image shows a mobile application registration screen. At the top, the status bar displays the time 1:55 and icons for Wi-Fi, signal strength, and battery. Below the status bar is a green header with a white back arrow on the left and the word "Register" in white text. The main content area contains two white input fields with rounded corners: the top one is labeled "Email" and the bottom one is labeled "Password". At the bottom center of the screen is a purple rounded rectangular button with the word "register" in white text.

Figure 2

In the course schedule interface as Figure 3, click on the upper left corner to enter the account page. In the upper right corner, add courses and homework plans. On this page, users can click on the course to view detailed information or delete the course and long press to edit the course. Users can switch between assignments and course schedules using the course and homework buttons above.

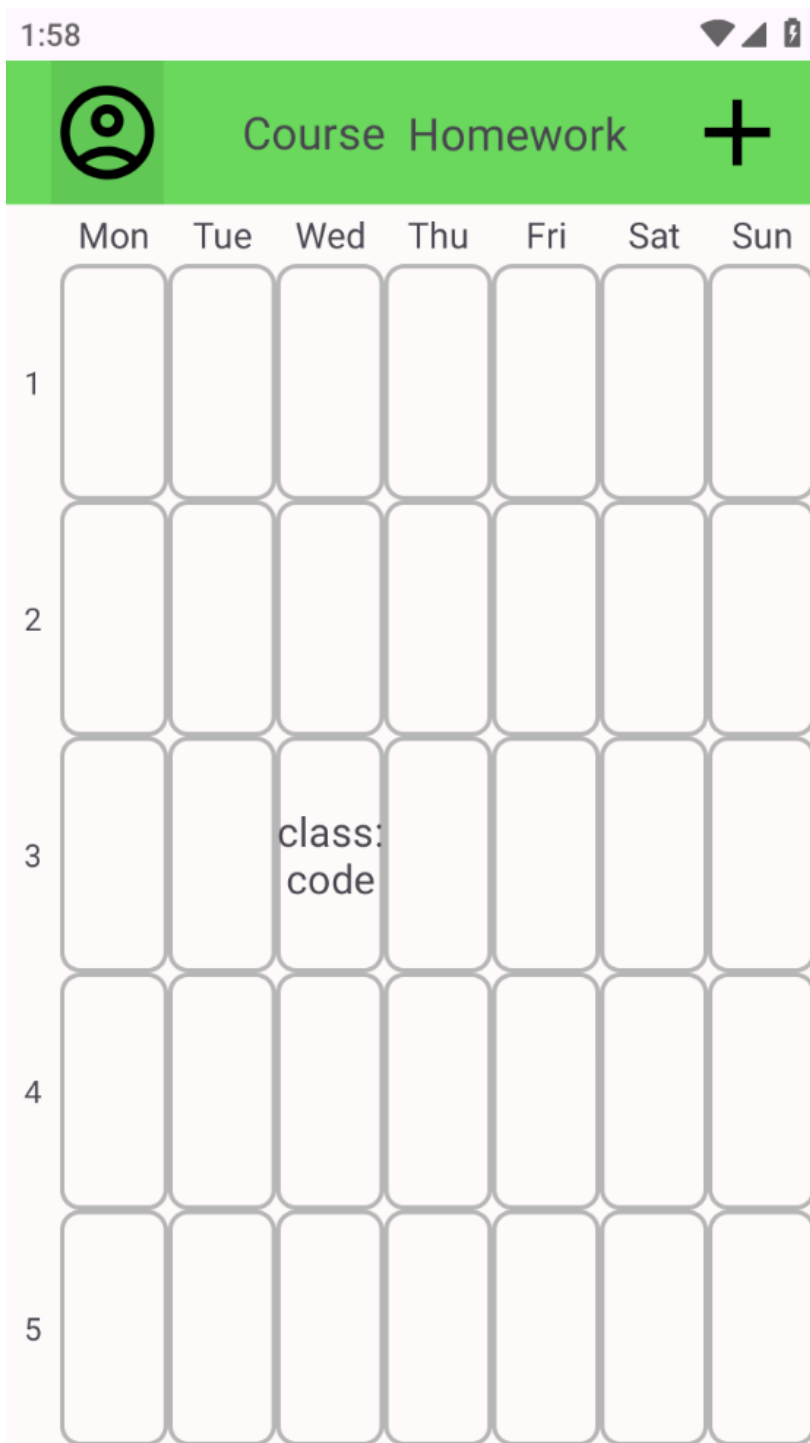


Figure 3

On the add page, the user needs to enter all the information. After completing the input, click the submit button to transfer the data to the Firebase real-time database for storage and refresh the course schedule interface. The user must enter all the data, otherwise, it will prompt "Please fill in all" the information". After clicking the button, if the submission is successful, it will return Success and return to the course schedule interface. If the addition fails, "Error" will be displayed and remain on the current page. Users can click add homework to add a homework plan, On the add homework

page, the user needs to enter all the information. After completing the input, click the submit button to transfer the data to the Firebase real-time database for storage and refresh the homework schedule interface. The user must enter all the data, otherwise, it will prompt "Please fill in all" the information". After clicking the button, if the submission is successful, it will return Success and return to the timetable interface. If the addition fails, "Error" will be displayed and remain on the current page.

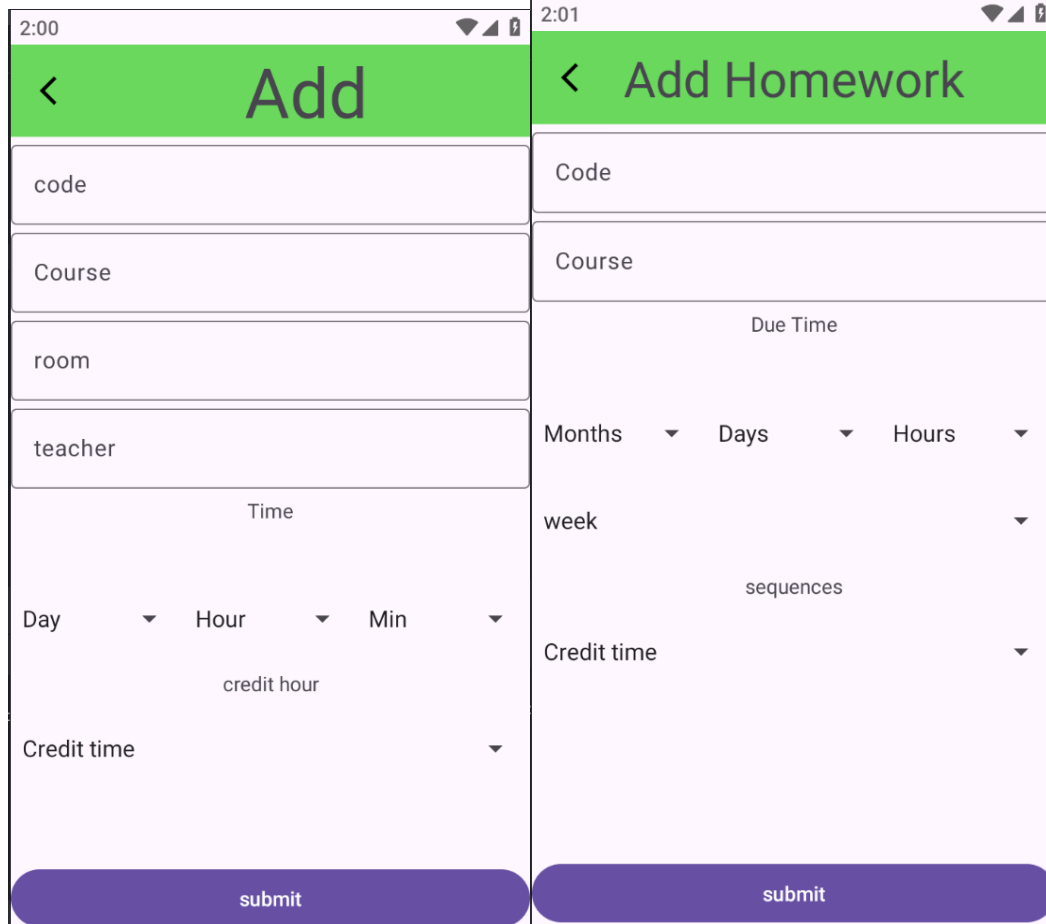


Figure 4

A long press on the course plan will enter the edit page. The user can change the data and click submit to submit the data to change the data and refresh the courses in the course schedule. A long press on the homework plan will enter the edit page. The user can change the data and click submit to submit the data to change the data and refresh the courses in the homework schedule.

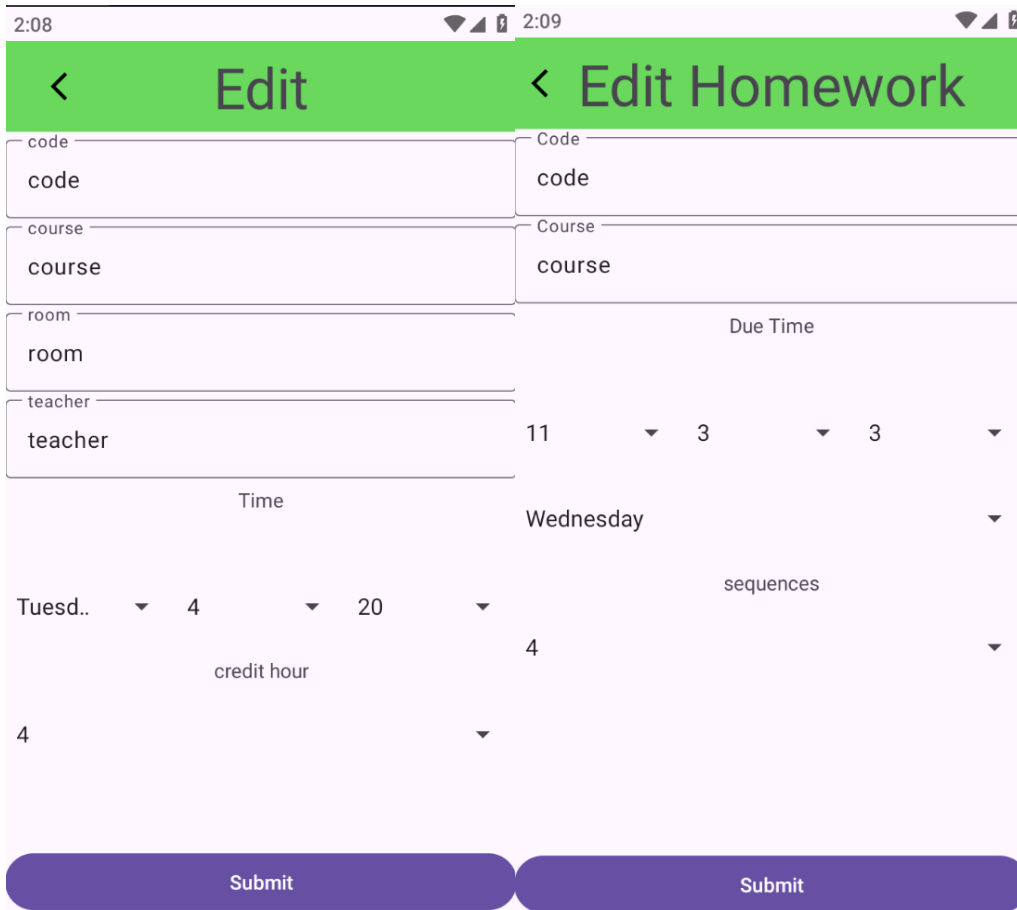


Figure 5

Click on the course to enter the press page, which displays detailed information about the corresponding course to the user. Users can click the back button to return to the course schedule or click delete to delete the course. Click on the homework to enter the press page, which displays detailed information about the corresponding homework to the user. Users can click the back button to return to the course schedule, click delete to delete the course, or click Pomodoro to help them focus on homework.



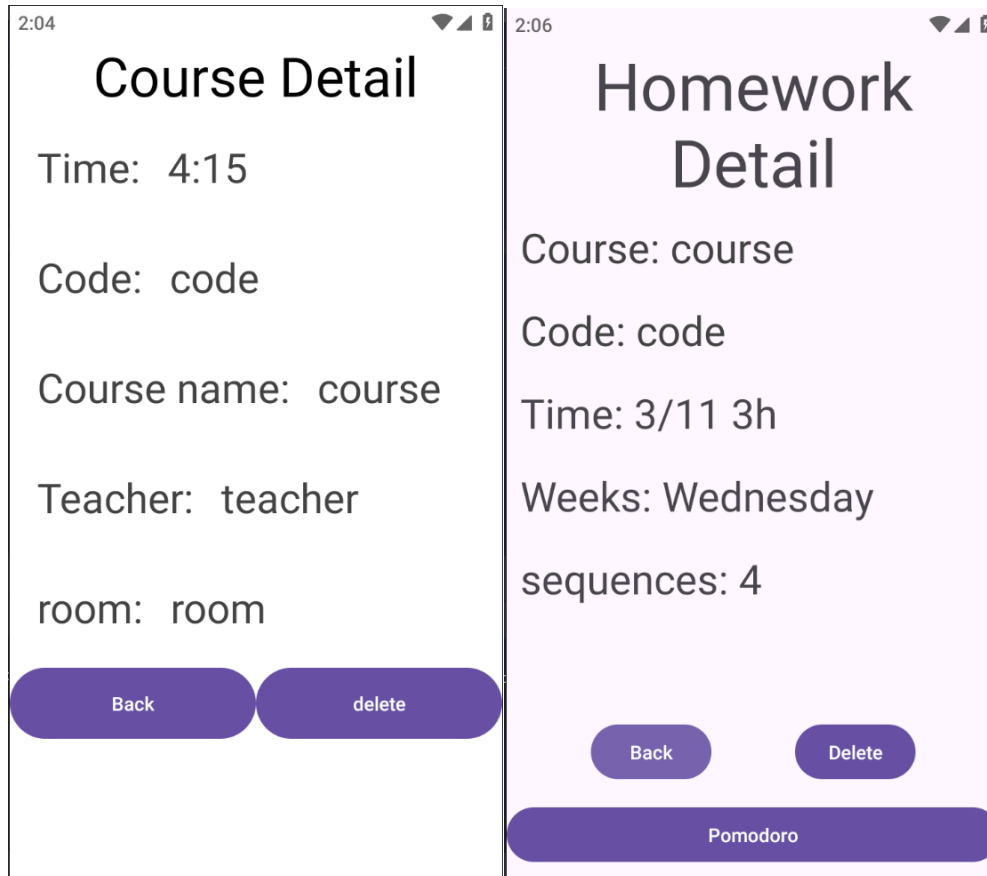


Figure 6

On the Pomodoro page, when students need to stay focused when doing homework, etc., they can use the Pomodoro Technique to help them concentrate. The user can slide to adjust the Pomodoro time and click to start the Pomodoro Technique. The Pomodoro Technique is a time management method, that uses a kitchen timer to break work into intervals, separated by short breaks. Each interval is known as a pomodoro.

### USABILITY TESTING

The core of the schedule management app is to allow users to view schedules, add, change, or delete schedules, and be reminded in time. The system owner is the user, so he can handle CRUD (create, read, update, delete) functions through Firebase. In this section, perform software testing and record the test results. Test results for an application include the purpose of testing, basic testing, and test design techniques. This test lasted a week. A total of 6 users participated in this test, A total of 5 sets of devices were tested.

### IMPROVEMENT RESERVE

To enhance this app in the future, some features can be added to the app. Due to time constraints, these features cannot be added.

1. Search feature
2. Use dark mode as an optional theme in the app.
3. Add more learning-related tools
4. Better interface optimization

## **CONCLUSION**

By developing an Android application called "manageUtime", this project aims to provide an innovative time management solution that specifically targets the college student population. By allowing students to better manage their schedules, this app goes beyond a simple time management tool to a full-fledged study assistant." The core features of "manageUtime" include customizable reminders, course schedule management, and homework planning features, all of which are designed to improve students' study efficiency and self-management skills.

The development of the project was challenged by time and quality, but through careful planning and design, we managed to overcome these obstacles. By using a Firebase real-time database, we ensured secure storage and efficient processing of data, as well as a user-friendly interface that enabled students to easily add, manage, and track their learning activities.

In addition, we implement extensive user testing to gather feedback and adjust and optimize the application functionality based on actual user needs. This ensures that the application not only meets the basic needs of students but also provides real value in real-world use.

Overall, the development of the "manageUtime" app demonstrates the possibility of solving traditional problems through technological innovation and emphasizes the importance of supporting student self-management and learning effectiveness in a rapidly changing educational environment. We look forward to the continued development of this program in the future to enhance its functionality and user experience to better serve the global student population.

## **APPRECIATION**

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