TIMETABLE SCHEDULING APPLICATION

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Abstract— The timetable scheduling application is designed to automate the creation and management of academic schedules for educational institutions. This application leverages algorithms to optimize the allocation of classes, teachers, and resources within given constraints, such as room availability, teacher preferences, and student course selections. It ensures that conflicts are minimized, and schedules are efficiently organized.

Key features include user-friendly interfaces for inputting constraints, real-time updates, conflict resolution, and the ability to generate multiple schedule options. The system is scalable, allowing it to handle the complexities of large institutions with multiple departments and diverse scheduling needs. By automating the scheduling process, the application significantly reduces the time and effort required to create accurate and fair timetables, leading to enhanced operational efficiency and improved satisfaction for both staff and students.

Keywords— Timetable scheduling, academic scheduling, algorithm optimization, conflict resolution, automation, educational institutions.

INTRODUCTION

A timetable scheduling Android app is designed to help users efficiently organize and manage their time. This type of app allows users to create and customize schedules, set reminders, and track their activities or appointments. With intuitive interfaces and features like calendar integration, notifications, and task prioritization, the app aims to enhance productivity and ensure users stay on top of their commitments. Whether for personal use, academic purposes, or professional planning, the app provides a centralized platform to streamline daily routines and improve time management.

METHODOLOGY

The application is developed as an Android-based mobile platform using Java. The system consists of multiple modules:

- Summary Module: Provides an overview of the user's schedule.
- Exams Module: Manages exam schedules and assessments.
- Teachers Module: Stores and manages teacher information.
- Assignments Module: Tracks assignments and deadlines.
- Notes Module: Allows users to take and organize notes.
- Settings Module: Provides customization options.

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A user-friendly interface supports schedule creation, modification, and reminders. The system architecture is designed to be scalable and adaptable.

OBJECTIVES AND STUDY

- To develop an intuitive and efficient timetable scheduling application.
- To incorporate smart algorithms that optimize scheduling and minimize conflicts.
- To enhance user experience through features like notifications and task prioritization.

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Interface

Database

Lecturers timetable

Students timetable

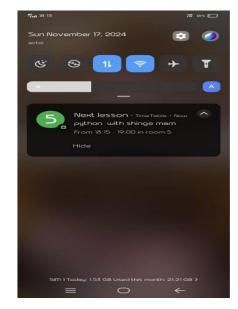
Course Timetable

class Timetable

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| Room: | G5 | | | | | | | |
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Fig:Schedule Lectures



Future Work:

List of classrooms

With some modifications ,this work can be used for marking students and staff attendance.

Fig:Reminder

System Architecture

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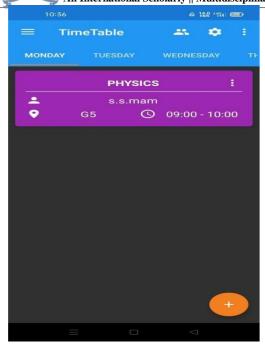


Fig:Display schedule lectures

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Fig:summary of Timetable

CONCLUSION

The app provides a reliable and easy way to manage schedules. It improves productivity by reducing scheduling conflicts and making time management easier. With realtime updates and an intuitive design, it is a valuable tool for students, teachers, and professionals.

REFERENCES

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