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Timetable Scheduling – Promise Algorithm

Sai Krishna Durvasula[1], David Joshua Raj G[2], Santosh Adhvaidh Chemmani[3], Sai Prakash Gaddangi[4], Mr. K. V. Subba Raju[5]
Students, Department of Computer Science & Engineering[1-4]
Associate Professor, Department of Computer Science & Engineering[5]
Maharaj Vijayaram Gajapati Raj College of Engineering (Autonomous), Vizianagaram, India
saikrishnadurvasula@gmail.com, mailtojoshua22@gmail.com, adhvaidh02@gmail.com
gaddangisaiprakash123@gmail.com, kvsubbaraju@mvgrce.edu.in

Abstract: *Timetable generation in educational institutions is a complex process that requires careful coordination of faculty availability, lab schedules, and student preferences. Manual scheduling is not only time-consuming but also prone to errors, leading to conflicts such as overlapping classes and faculty assignment clashes. This project introduces an automated timetable generation system that utilizes a custom-developed algorithm to optimize scheduling while considering various constraints, including faculty availability and institutional requirements. The system enhances accuracy, minimizes manual effort, and allows for real-time adjustments, ensuring operational efficiency. With its scalability and adaptability, the proposed solution provides a well-balanced and optimized schedule suitable for institutions of all sizes.*

Keywords: Institutional policies, faculty availability, lab schedules, student elective preferences, dynamic updates, optimization algorithm, database management, scalable structure, Promise Algorithm, data security and privacy, User Acceptance Testing.

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