EXAMINATION INVIGILATOR ALLOCATION SYSTEM

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INTRODUCTION

Examination invigilator timetable is a subclass of timetabling for which the events take place at educational institution such as school, college or university. The process of making Examination invigilator timetable for university is more complex because it involves many hard constraints and soft constraints. As examination operation needs the role and support of the lecturers to invigilate the examination. The invigilation duties among lecturers are prepared through a system called the Examination Management System (EMS) and improvised wisely and professionally by the examination committee before the schedules are released to the invigilators (Othman et al, 2018).

The manual allocation of invigilator examination duties has become a complex and time-consuming task for the examination department. The current system is prone to errors and lacks transparency, leading to dissatisfaction among invigilators and examiners.

Objectives:

- To reduce the workload of the individuals preparing allocation duties.
- To increase the efficiency and accuracy of the allocation process by automating the scheduling and assignment of invigilators to examination rooms.
- To ensure an equitable distribution of duties among invigilators by using an algorithm that takes into account factors such as workload, and skill level.

RELATED WORKS

Simple sequential assignment algorithm for invigilation examination duties has been developed and implemented at UiTM Pulau Pinang branch (Othman et al., 2017). This algorithm is constructed using Java programming language to generate the invigilation duties for almost 400 invigilators or proctors within less than five seconds. This powerful algorithm is applied during the first cycle of processing of invigilation duties. The invigilation duties processed in the first cycle will be scrutinised and improvised manually by the examination committee before being released to all invigilators. Similar to the Exam Cell Automation System, the application for invigilation duty exchange must get approval from the examination officer.

An Automated Examination Support Systems at University of Mumbai, India, is a comprehensive examination system that consolidates all major examination functions such as the examination schedule, examination placement, invigilation module and examination marks processing management (Avinash et. al, 2015). The newly examination system allows the invigilators to view respective invigilation duties and make the duty exchange. The system examines the conditions for duty exchange such as not invigilating the subject taught, not clashing with other invigilation duties, each invigilation duty should have at least 2 days gap and the invigilator is appointed with appropriate role that has been decided and set in the system either as the chief or assistant invigilator.

METHODOLOGY

EXPECTED OUTCOME

REFERENCES

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