

ALLOCRAFT

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Abstract

The development of an automated examination allocation system. As student enrollments continue to rise, traditional manual scheduling methods become increasingly time-consuming and prone to errors. To address these challenges, the system automates the assignment of students to exam halls and supervisors, ensuring fairness, accuracy, and optimal use of available resources. It intelligently considers factors such as room capacity, scheduling conflicts, and supervisor availability to generate balanced allocations.

1.Introduction

The automated examination allocation system streamlines the assignment of students to classrooms and supervisors, addressing the complexities of rising student enrollments. By leveraging technology, it minimizes manual effort, reduces errors, optimizes resources, and enhances communication for a more efficient examination process. By automating the scheduling process, the system ensures equitable distribution of students and staff, enhancing fairness and transparency in examination administration. The system intelligently allocates resources by considering room capacities and supervisor availability, leading to optimal space usage and balanced workloads. With real-time data processing, the automated platform swiftly adapts to last-minute changes, reducing administrative burden and ensuring seamless exam coordination.

2.OBJECTIVE AND SCOPE

Objective:

- 1) To automate the allocation of students to available classrooms based on exam schedules, classroom capacity, and student IDs.
- 2) To assign supervisors to classrooms in a balanced and efficient manner according to exam times and available staff.
- 3) To provide real-time notifications to students regarding their allocated classrooms, exam dates, and times.
- 4) To send automated messages to supervisors detailing their assigned classrooms and supervision duties.

Scope:

Growing Student Population: Educational institutions face challenges in managing a larger number of students and limited classroom resources. **Inefficiencies:** Manual allocation can lead to errors such as double-booking rooms or failing to inform supervisors of their duties. **Timely Communication:** Notifications about exam schedules and allocations are crucial to prevent confusion and ensure smooth operation.

3.PROPOSED SYSTEM ARCHITECTURE

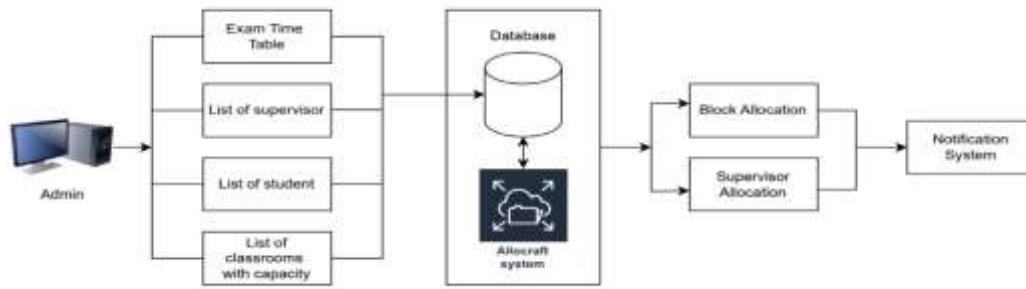


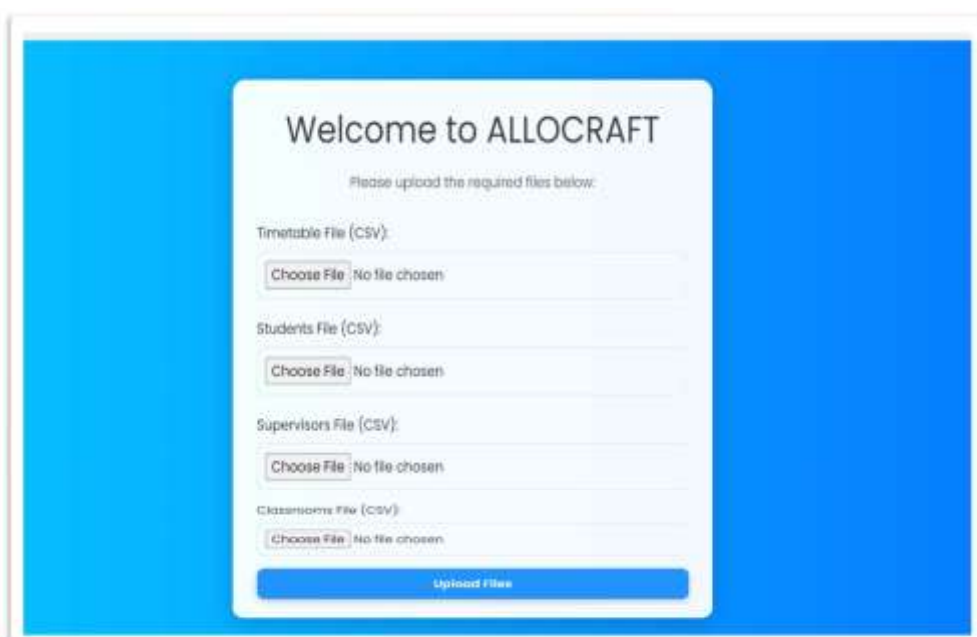
Fig. 1. Proposed System Architecture

In fig.1 Shows the system architecture of a seating arrangement and supervisor allocation system, consisting of three key components: the Admin Allocraft System, Allocation Algorithm, and Notification System. The Admin Allocraft System serves as the interface where admins input student details, exam schedules, and supervisor information. The Allocation Algorithm processes this data, assigning students to classrooms and supervisors to invigilate exams.

4.MODULES

- 1) **Admin Portal Module:** This module allows the admin to input and manage essential data such as student information, classroom availability, supervisor details, and exam schedules.
- 2) **Data Creation:** Designed for easy data management, this module generates and organizes allocation data into Excel files.
- 3) **Allocation Algorithm Module:** The core of the system, this module automatically allocates students to available classrooms based on specific criteria like exam date, time, and classroom capacity.
- 4) **Notification System Module:** After the allocation process is complete, this module sends SMS or email notifications to students and supervisors.

5.Result:



Admin Portal Dashboard

Allocation Results					
Date	Time	Classroom	Paper	Students	Supervisor
2024-08-15	09:00	C105	Data Structures	nan	Dr. David Lee
2024-08-15	14:00	C104	Database Management	nan	Dr. John Doe
2024-08-16	09:00	C103	Algorithms	nan	Dr. David Lee
2024-08-16	14:00	C105	Networking	nan	Dr. David Lee
2024-08-17	09:00	C104	Operating Systems	nan	Dr. John Doe
2024-08-17	14:00	C103	Software Engineering	nan	Dr. David Lee

[Download Final Allocations](#)

Admin Portal Dashboard

6.CONCLUSION

Condition, the automated examination allocation system helps make the exam process easier, faster, and more organized. By reducing the need for manual work, it saves time for teachers and staff while also giving students clear information about their exams. It helps avoid mistakes and makes sure that everyone is treated fairly. This system also improves communication between students, teachers, and supervisors, making the whole process smoother. In the future, the system can be improved even more by adding features like real-time changes, mobile access, and connections to other school systems. Overall, it is a smart and helpful tool for modern education. Future expansions could include features like real-time adjustments and integration with learning management systems.

7.REFERENCES

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