



# Database Management for the Student Dormitory Reservation System



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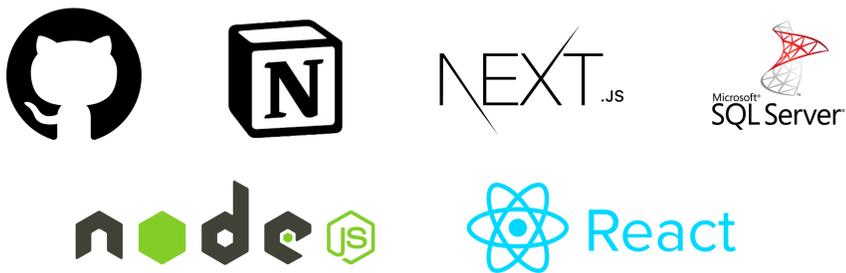
## Abstract

The Faculty of Nursing at Chiang Mai University currently lacks an online dormitory reservation system, requiring students to fill out forms manually. To address this, I developed a database and admin system that streamlines student reservations, room assignments, and news management. The system integrates with the university's OAuth authentication and is built using Node.js, Next.js, TypeScript, SQL Server, Prisma, and Tailwind, ensuring scalability. This system improves efficiency by reducing administrative workload, minimizing manual errors, and accelerating the reservation process, ultimately enhancing dormitory management operations.

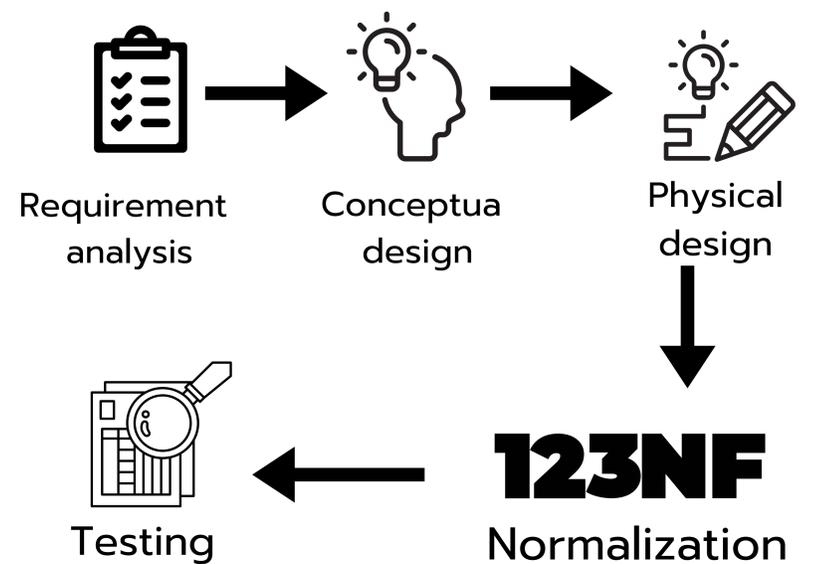
## Introduction

The Information Technology Development Unit of the Faculty of Nursing at Chiang Mai University has been assigned to develop an online dormitory reservation system for students. This system includes an admin panel with a database for managing student information, room assignments, and public announcements. Currently, dormitory reservations are processed manually using paper forms, which is time-consuming and inefficient. The new system aims to streamline the reservation process, improve data management, and enhance overall efficiency.

## Technology



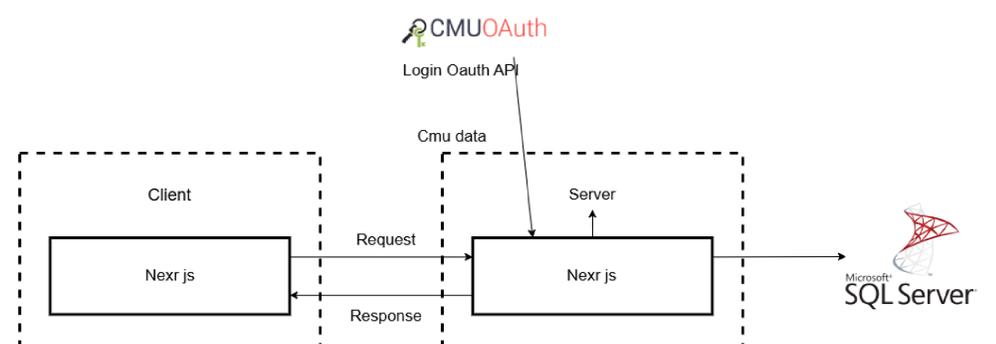
## Methodology



## Conclusion

The developed system significantly improves the efficiency of dormitory management by streamlining student reservations, room assignments, and news updates. It reduces the workload of dormitory administrators, accelerates processes, minimizes errors from manual paperwork, and enhances overall operational efficiency. With its scalable architecture, the system can be expanded and further developed to meet future needs.

## Architecture



## Reference

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