# Dormitory Reservation System for Students of the Faculty of Nursing

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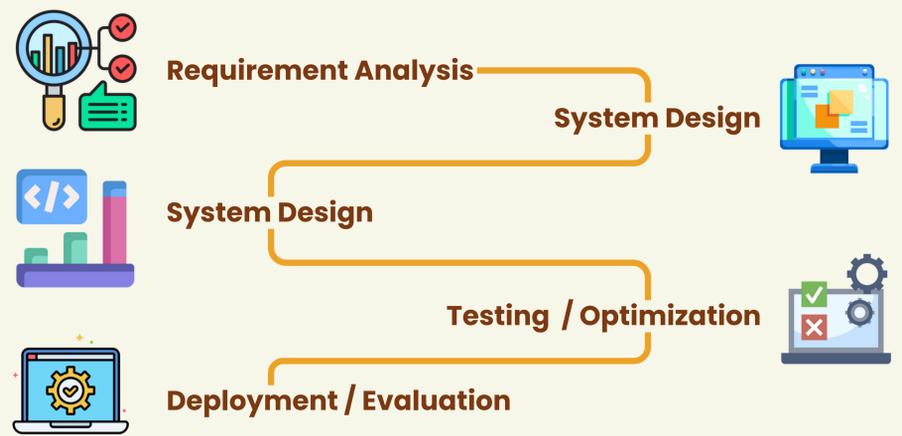Mentor: Mr. Nupong Phromchan

## Abstract

Chiang Mai University's Faculty of Nursing recognized the challenges posed by the absence of an online dormitory reservation system, as the current process relied heavily on outdated paper-based methods and Google Forms. This reliance created significant issues with document management and led to disorganized data storage. Moreover, there was no centralized platform for dormitory announcements and regulations.

In response, a transformative web-based dormitory reservation system was developed. This system allows students to make and cancel reservations, manage their resident information, and stay informed with timely notifications and updates on dormitory-related news. The result is a more efficient and stable system that meets the needs of both students and staff, reduces workload, and significantly improves overall dormitory management.

## Introduction

The Faculty of Nursing at Chiang Mai University is a leading institution dedicated to advancing nursing knowledge and skills. To enhance its operations, the faculty integrates information technology into various administrative processes. However, dormitory reservations for nursing students still rely on paper-based methods and Google Forms, leading to inefficiencies in data management and communication. To address these challenges, the author was assigned to develop a dormitory reservation system designed to benefit nursing students, reduce the workload for dormitory staff, and increase efficiency in dormitory management. This system aims to streamline the booking process, reduce administrative burdens, and improve overall dormitory operations.
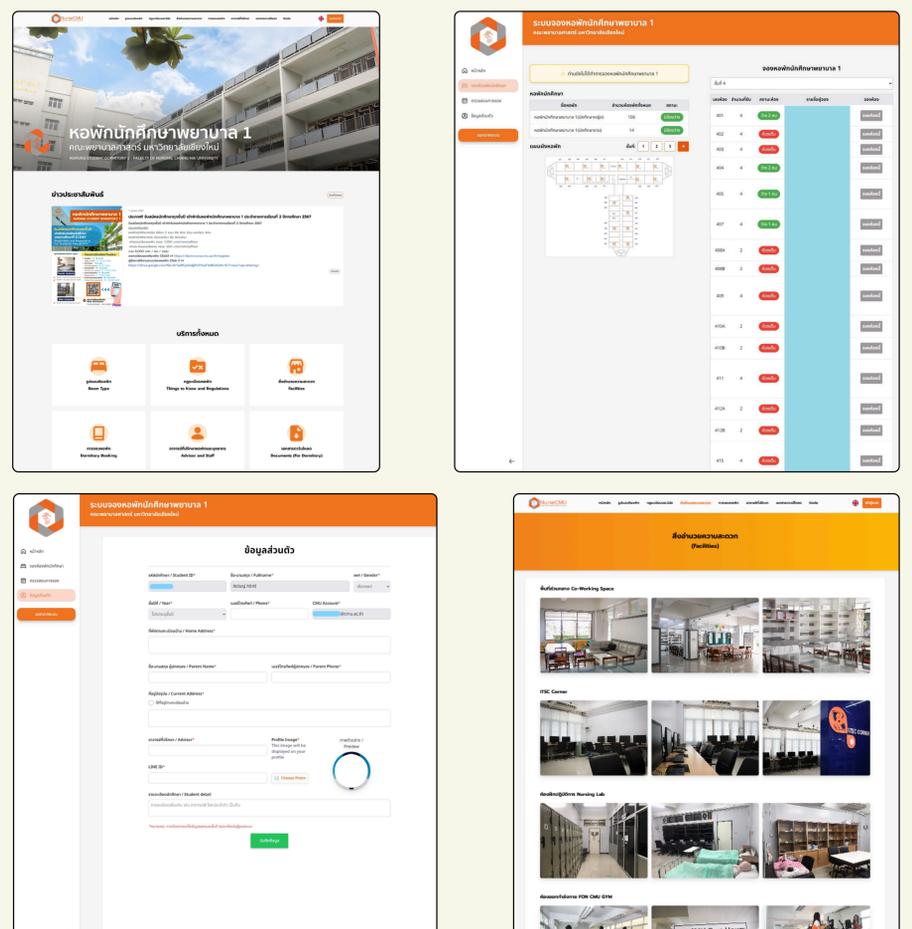
## Methodology



- Requirement Analysis
- System Design
- System Design
- Testing / Optimization
- Deployment / Evaluation

## Technology



Next.js  Typescript  Node.js  Tailwind CSS

Prisma  SQL Server  VS Code

## Results



## Conclusion

The development and testing of the Dormitory Reservation System for the Faculty of Nursing at Chiang Mai University demonstrate that the project's objectives have been successfully achieved. The system supports multiple user groups—including students, staff, and administrators—while efficiently managing room reservations, announcements, and user requests. With CMU OAuth authentication, the system ensures secure access and proper authorization for data management. Additionally, real-world simulations confirm the system's stability and performance by handling large volumes of user data and dormitory information without delays or errors. The system efficiently processes and displays critical data, providing a seamless experience for all users.

## References

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