FRONT-END DEVELOPMENT OF THE CHIANG MAI UNIVERSITY NURSING DORMITORY MANAGEMENT SYSTEM

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ABSTRACT

The dormitory previously relied on paper-based administrative processes, prompting the development of a digital management system to streamline workflows and improve reservation efficiency. The front-end was developed using Next.js and TypeScript. The system provides dormitory information, room reservation functions, a reservation status dashboard, and modules for managing resident data and utility charges. Results indicate that the system meets its objectives and significantly enhances administrative efficiency.

INTRODUCTION

The dormitory aims to enhance management efficiency and transparency. However, the existing paper-based system lacks flexibility and a structured data management process, leading to delays and inconvenience. This project therefore proposes the development of a web-based booking system that streamlines operations, offers an intuitive user interface, provides accurate real-time information, and supports various devices to improve overall user experience. The internship primarily involved front-end development, including implementing several user-facing features.

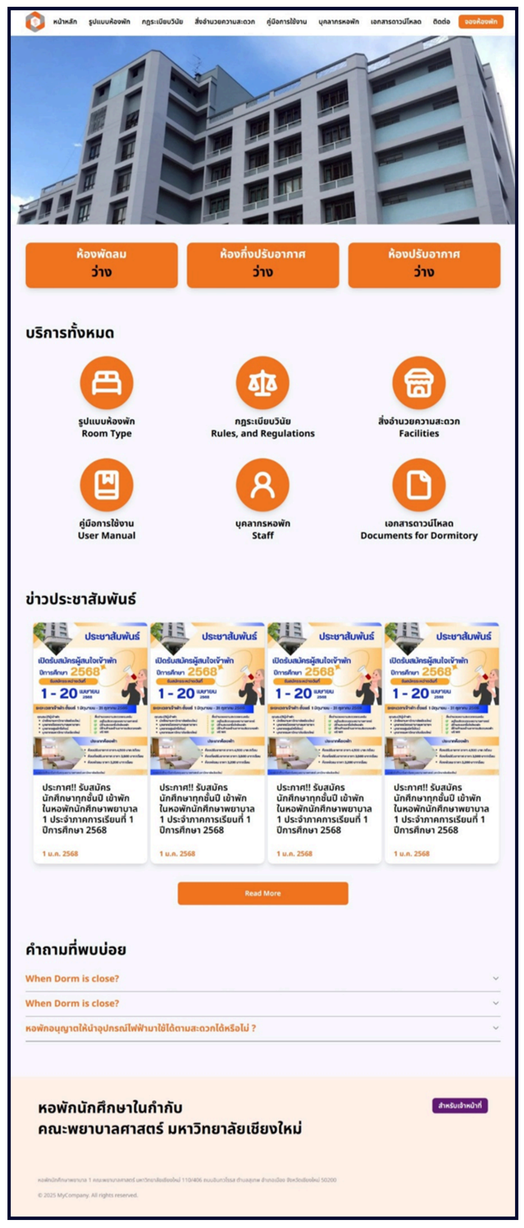
FRONT-END FEATURES

- Responsive design for mobile and desktop
- User-friendly booking flow
- Accessibility and usability considerations
- Component-based architecture
- Interactive Floor Plan

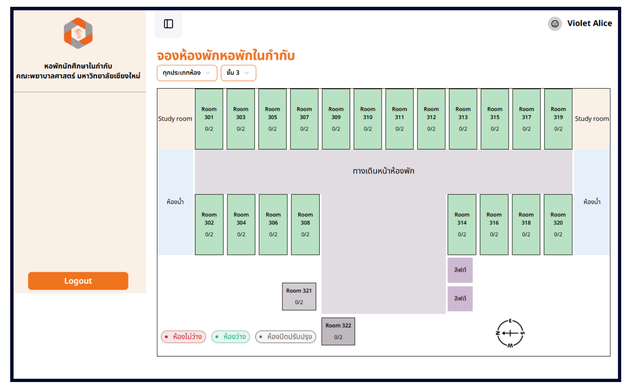
TECHNOLOGY

NEXT.JS tailwindcss

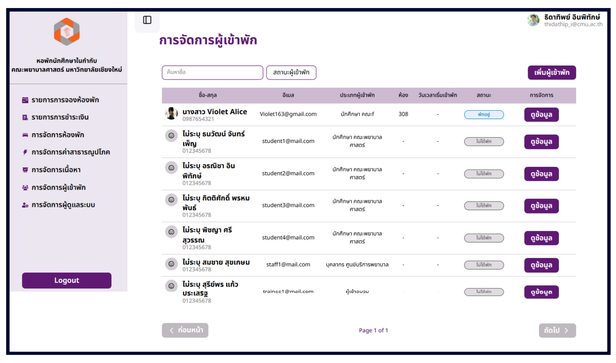
RESULTS



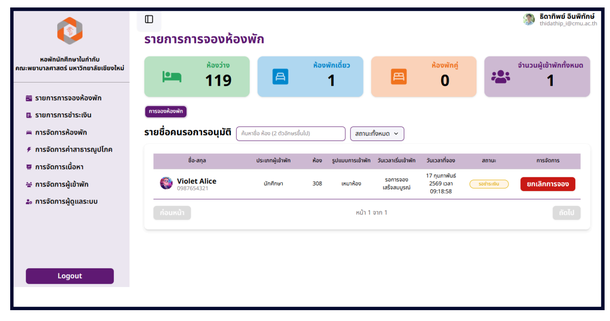
Homepage



Room Reservation Page



Reservation Status Dashboard Page



Managing Resident Page

CONCLUSION

As a result, the Front-End Development of the Chiang Mai University Nursing Dormitory Management System meets the project requirements and significantly enhances data management efficiency. However, it has not yet been tested in a real operational environment, and some features still require refinement to further improve user convenience.

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