Web application for distributor salesperson

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ABSTRACT

The objective of this project is to develop a web-based sales management system to support field sales representatives and sales managers in improving operational efficiency and performance monitoring. The system enables sales representatives to search and manage store information, add new stores with automatic geolocation detection, capture real-time images using device camera integration, and record sales transactions. For sales managers, the system provides a dashboard to monitor team performance, track sales targets, and analyze sales reports in real time. The application is developed as a Progressive Web Application (PWA) to ensure cross-platform accessibility without installation. The results indicate that the system enhances data accuracy, reduces redundancy, and improves transparency in sales operations.

DESIGN PROCESS

Empathize

- Interview sales representatives and sales managers
- Identify pain points in manual reporting and store registration

Define

- Define system requirements for store management, sales recording, and performance monitoring
- Identify functional requirements for manager dashboard

Design

- Create user flow diagrams and activity diagrams
- Develop low-fidelity and high-fidelity wireframes
- Design role-based interface

Prototype

- Develop interactive UI prototype
- Implement responsive dashboard layout

Implement

- Develop frontend and backend system
- Integrate geolocation API and camera access

Test

- Perform functional testing
- Conduct usability testing
- Validate data accuracy and system performance

TECHNOLOGY

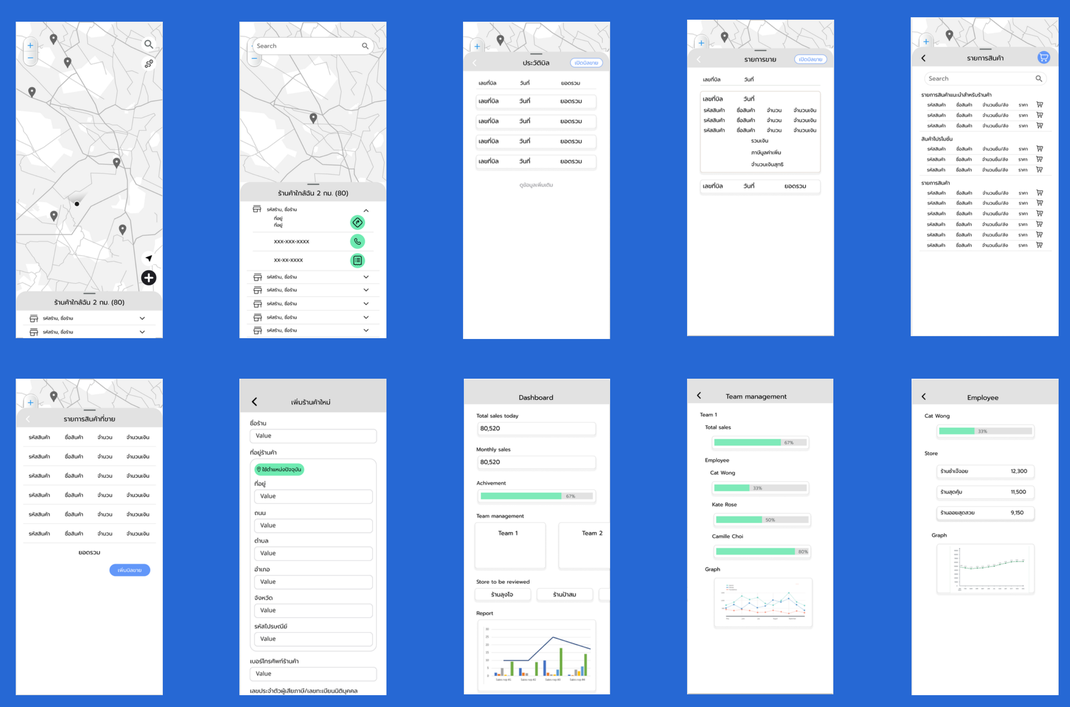
React · TS · Material UI · Figma · VS Code · PWA

INTRODUCTION

Traditional sales operations often rely on manual record-keeping and delayed reporting, leading to data duplication, inaccuracy, and limited visibility for sales managers. In field sales environments, especially those involving store visits and route-based selling, real-time information and location verification are essential.

This project aims to design and develop a user-friendly web application that supports both sales representatives and sales managers. The system focuses on improving usability, reducing redundant data entry, and enabling real-time performance tracking to enhance overall operational efficiency.

PRELIMINARY DESIGN



CONCLUSION & FUTURE WORK

After the completion of the system design and prototype validation, the project proceeds to the implementation phase. In this stage, the designed user interface and system architecture are translated into functional code using the selected technologies. The frontend and backend components are developed and integrated, including database connectivity and API communication, to ensure that the system operates according to the defined requirements and specifications. This phase focuses on transforming conceptual designs into a fully functional and deployable application.

References

[1] Interaction Design Foundation. (2024). Design Thinking (DT). Retrieved from https://www.interaction-design.org/literature/topics/design-thinking

[2] Google Developers. (2023). Progressive Web Apps (PWA). Retrieved from https://web.dev/progressive-web-apps/

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