THE DEVELOPMENT OF THE LIVESTOCK CASE ALERT SYSTEM

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Abstract

At present, reporting epidemic outbreaks and natural disasters in farm areas relies on documents, phone calls, or general communication channels, which often leads to incomplete, inaccurate, or delayed information and prevents timely response by authorities. To address this issue, the Group Technology, Digital, and Data (GT&D) department has developed an internal system for managing and reporting such incidents, with this cooperative education project focusing on frontend web application development. The system uses React for the frontend and Node.js for the backend, supported by a structured database, to enable relevant units to report and manage incidents quickly and accurately, reducing coordination time and improving the efficiency of farm risk management.

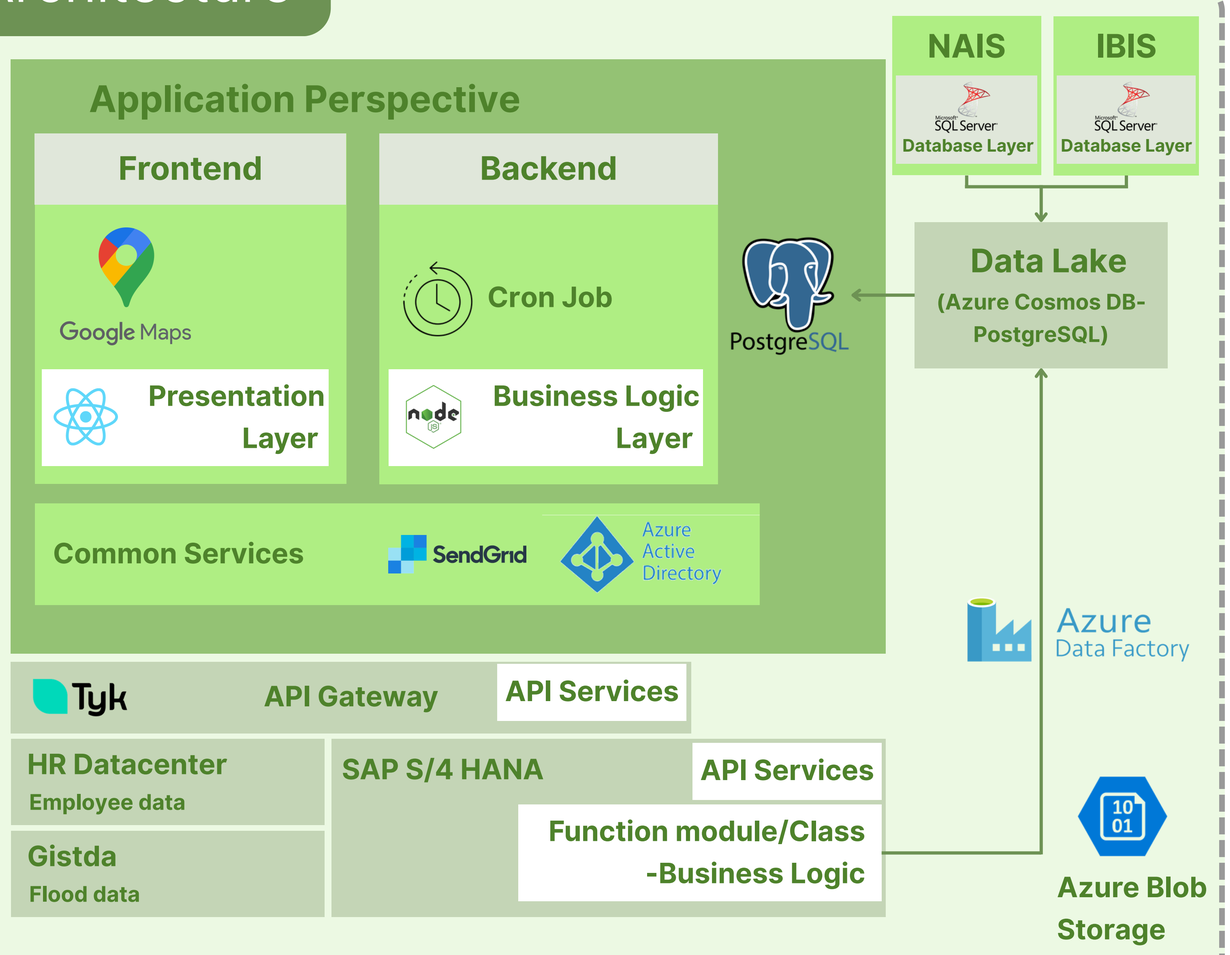
Introduction

Livestock Case Alert System is an internal web application developed by employees and internship students of Betagro Public Company Limited under the Group Technology, Digital, and Data (GT&D) Department, Application Development team. The system is designed to enable efficient reporting, review, approval, and notification of epidemic outbreaks and natural disasters in farm areas, supporting timely and accurate incident management and enhancing overall farm risk management within the organization.

Result

The development of the web application for reporting epidemic outbreaks and natural disasters in farm areas resulted in a functional system that can be effectively used within Betagro Public Company Limited. The system enables authorized users to create, review, approve, and manage incident reports in a structured manner, helping to improve communication and coordination during emergency situations. In addition, the application supports more timely information sharing among relevant units, contributing to faster response and more efficient management of farm-related risks.

Architecture



Conclusion

The web application for reporting epidemic outbreaks and natural disasters in farm areas was developed using ReactJS and TypeScript and successfully implemented for internal use within Betagro Public Company Limited. The system allows users to create, review, approve, and manage incident reports efficiently, improving communication and response to emergency situations. However, the system depends on stable internet connectivity for real-time data transmission and requires regular updates of farm information to maintain data accuracy. From the frontend development experience, clear understanding of the overall system workflow, along with proficiency in TypeScript, related libraries, and API integration, is essential for building an effective web application and supporting future improvements.

Technology



References

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