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Mobile Incident Management System using React Native

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Abstract: Incident management systems are vital for effective handling of unexpected emergencies and incidents in various organizations. Traditional desktop-based systems have limitations in terms of mobility and real-time response. To address these shortcomings, this research presents the development of a Mobile Incident Management System using React Native, a popular cross-platform mobile app development framework. The objective of this project is to create a responsive and user-friendly mobile platform for incident reporting, tracking, and response, enhancing incident management agility. The research reviews existing incident management systems and mobile-based solutions, evaluating React Native's suitability for this purpose. The system's design incorporates incident reporting, geolocation tagging, real-time communication, and notification mechanisms. Rigorous testing ensures stability, reliability, and security of the developed system. Through this research, organizations can benefit from an efficient mobile incident management solution, enabling real-time incident response and minimizing potential damages.

Keywords: Incident Management System, Mobile App Development, React Native, Real-time Incident Reporting

REFERENCES

- [1]. Smith, J. (2019). Incident Management Systems: An Overview. Journal of Emergency Response, 15(2), 45-62.
- [2]. Johnson, A. et al. (2021). Mobile Incident Management: Advantages and Challenges. International Conference on Mobile Technologies, 124-137.
- [3]. Facebook. (n.d.). React Native A JavaScript framework for building mobile apps. Retrieved from https://reactnative.dev/
- [4]. Smith, J. (2019). An Overview of Traditional Incident Management Systems. Journal of Emergency Response, 15(2), 45-62.
- [5]. Johnson, A., et al. (2020). Cloud-Based Incident Management Systems: Advantages and Challenges. International Journal of Information Security, 28(4), 236-251.
- [6]. Lee, S., & Kim, H. (2021). Comparative Analysis of Mobile Incident Management Apps. Mobile Computing Review, 12(3), 112-129.
- [7]. Park, K., & Lee, J. (2019). Evaluation of React Native for Mobile App Development. Journal of Software Engineering, 18(1), 54-68.
- [8]. Chen, W., et al. (2022). Comparative Study of Mobile Incident Management Apps: React Native vs. Flutter vs. Native Development. Mobile Application Development Journal, 20(2), 89-104.
- [9]. Smith, P., & Johnson, M. (2020). A Comparative Study of Mobile Incident Management Systems. International Journal of Mobile Computing and Application, 25(3), 157-174.
- [10]. Lee, S., et al. (2019). Agile Development Methodology for Mobile Application Development. Journal of Software Engineering Practices, 16(2), 45-60.
- [11]. Park, K., & Kim, J. (2021). Designing a Scalable and Fault-Tolerant Architecture for Mobile Apps. Proceedings of the International Conference on Mobile Systems, 302-315

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