

DEVELOPING A HOSPITAL INFORMATION SYSTEM TO IMPROVE PATIENT CARE AND RESOURCE MANAGEMENT

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In recent years, placing emphasis on achieving higher quality, efficiency, and agility in healthcare services has proved to be an essential aspect of the health sector worldwide.

The advances in digital communication technology have significantly impacted the healthcare business. Digital communication technology enables integrated healthcare systems, allowing healthcare participants to efficiently arrange their operations, tailored and preventative healthcare to people, and increase design and operational efficiency [1].

Hospital information systems (HIS) have been identified as a significant tool for enhancing patient care and the efficient management of resources in the healthcare sector.

The purpose of this report is to present the design of a HIS using Jakarta Enterprise Edition technologies, a specification used for extending enterprise applications in Java. Jakarta EE provides an assortment of technologies that enable the development of secure, robust and scalable business level applications [2].

The proposed HIS will incorporate various modules such as patient management, resource allocation, and healthcare analytics among others. These components will be designed using Jakarta EE technologies.

Java Persistence API, part of Jakarta EE, will provide functions for managing relational data in applications, facilitating effective data handling for various aspects of the HIS. Jakarta Security will aid in implementing the authentication and authorization process, providing a consistent security measure throughout the application [3].

By employing Jakarta EE technologies, the operational efficiency of the HIS can be significantly enhanced.

The results of this study will not only provide a better understanding of the application of Jakarta EE in healthcare but also demonstrate its effectiveness in improving patient care and efficient resource management.

References

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