Enhancing Patient-Medical Staff Interaction using Technology

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Abstract

In the context of digitalization in the healthcare sector, effective communication between patients and clinics is essential to improve the quality of medical services. This paper proposed the development of a web application aimed at facilitating interactions between patients and medical staff through an accessible, secure, and user-friendly platform. The application provides essential functionalities, such as appointment scheduling, automated notifications, management of the patient's medical history, and a real-time communication system between users. In addition, the solution integrates a secure authentication module, ensuring the protection of personal and medical data. We analyzed first the existing market solutions to identify their limitations and justify the need for such an application. A client-server architecture is proposed, based on web technologies, including frontend and backend frameworks and scalable databases. Furthermore, a detailed work plan was outlined, covering the stages of development, testing, and implementation. The anticipated results include improving patients' access to medical services, optimizing clinic workflows, and creating a more efficient user experience. Our study highlights the potential of the proposed solution to contribute to the digitalization of healthcare services and increase user satisfaction.

Keywords: Communication; Web Application; Vue.js; Spring Boot; JWT; Postman; PostgreSQL.



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