IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 7, April 2025
Impact Factor: 7.67

ROGISETU: A Web-Based OPD and Token Management System for Public Hospitals

Vishnu Yelde[1], Aditya Sharma[2], Prachiti Yadav[3], Rahul Kulkarni[4], M. R. Gorbal[5]
[1,2,3,4]Student, Department of Information Technology
[5]Assistant Professor, Department of Information Technology
Shivajirao S. Jondhale College of Engineering, Dombivli East, Maharashtra, India.

Abstract: *The increasing patient load and manual outpatient registration processes in urban public hospitals often result in long queues, inefficient administration, and poor patient experiences. To address these issues this paper proposes ROGISETU—a web-based hospital OPD management system to streamline appointment booking, real time token tracking and hybrid queue management for both online and offline patients. ROGISETU allows patients to register from home or from hospital and get automated token numbers with live status updates through SMS or web portals. Built using modern technologies like React.js, Supabase, PostgreSQL and Tailwind CSS the system ensures scalability, security and real time performance. The platform has role-based dashboards for patients, department admins and hospital admins to manage queue, tokens and inventory. With real time updates and digital verification mechanisms the system reduces reception congestion and enhances overall OPD experience. The proposed solution lays the foundation for future enhancements like ABHA integration, multilingual support, pharmacy inventory modules and doctor scheduling. ROGISETU is designed to be a scalable and modular framework as per India's vision of digitally transforming public healthcare infrastructure*

Keywords: OPD Management System, Token Queue Management, Real-Time Tracking, Public Healthcare, Web Application, Appointment Scheduling

DOI: 10.48175/IJARSCT-25451