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## **Blood Donor and Finder System with Real Time**

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Abstract: This paper presents the development and evaluation of a real-time Blood Donor and Blood Finder system using Full Stack technologies to bridge the gap between blood donors and recipients in emergency scenarios. Traditional systems are hindered by delays and outdated donor information. The proposed web application, developed using React.js, Node.js, MongoDB, and Firebase/WebSockets, offers real-time notifications, geo-location-based matching, and a user- friendly interface. The results demonstrate significant improvements in donor search times and user engagement, making it a valuable tool for emergency healthcare response.

**Keywords**: Blood donation, Real-time system, Blood donor matching, Full Stack development, React.js, Node.js, MongoDB, Firebase, Geolocation



