

Cloud-Based Realtime Emergency Medical Service Platform

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In emergencies such as accidents, natural disasters and epidemics, immediate medical treatment is necessary, where patients need to be transported to the hospital from their location. In such situations, Emergency Medical Services (EMSs) as well as ambulances play an important role in saving people's precious lives. Presently, there are several systems in Sri Lanka to direct ambulance drivers to reach the patient's location in minimal time and to send the patient to the nearest hospital as soon as possible. But there are some limitations in these systems, such as the nearest hospital may not have the facilities to treat the patient, limited number of ambulances available for each of these systems, hospitals' difficulties in tracking ambulances and the fact that existing systems do not maintain patient health records. Therefore, the need for a Cloud-based Real time Emergency medical service Platform that can be used across the country is essential to address the said issues. The aim of this research is to provide a mechanism to reduce the latency of finding a suitable hospital for an emergency patient. The proposed platform is built using a Web application and an Android application that serve as the admin panel and user panel respectively. MySQL database hosted by a web server is utilized as a database connector between the Android application and the Web application. This paper presents design and implementation details of the proposed system and offers a comparative study on existing systems in Sri Lanka to understand the significance of the new system.

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