

IMPLEMENTATION OF LBS METHOD ON AMBULANCE CALL BASED ON ANDROID APPLICATION

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ABSTRACT

The population of Sleman is approximately 1,318,086 individuals, and the region is experiencing a notably high death rate. This research aims to address the challenges individuals face in accessing ambulance services. Consequently, an application has been developed to facilitate assistance for those in need of medical attention and to optimize the location of service delivery. This application is equipped with Location-Based Services (LBS), which enhance its functionality. Additionally, the application utilizes Firebase, a platform provided by Google that offers various data services essential for the real-time development of mobile applications. The application is developed using the Java programming language within the Android Studio environment. It establishes direct communication between journalists and medical personnel, eliminating the need for intermediaries. Moreover, the application allows users to track the ambulance's arrival at the scene and assists medical professionals in determining the most efficient routes to reach victims, particularly in cases where emergency calls are made via mobile devices. The primary objective of this application is to streamline the process of requesting ambulance services, enabling drivers to locate incidents accurately without unnecessary delays. By providing comprehensive information, this application significantly enhances the speed of victim evacuation in critical situations requiring prompt medical assistance. Given the rapid technological advancements, the author aims to empower individuals to leverage these innovations for improved accessibility to emergency medical services.

Keywords: *Ambulance, Mobile Application, LBS, Community.*