

Human Safety Services On /Off Safe Zone

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Abstract: *Human safety is a critical concern in today's world, and technology plays a vital role in ensuring security and protection. The Human Safety Services On/Off Safe Zone system is designed to enhance personal safety by integrating geofencing, GPS tracking, and real-time alerts. This Android-based application enables users to define safe zones, such as homes, offices, or schools, and receive instant notifications when individuals enter or exit these predefined areas. The system utilizes Java and XML for frontend development in Android Studio, with Firebase or SQLite for backend support. By leveraging Google Maps API, the application provides precise location tracking and enables users to set safety boundaries for their loved ones. In case of an emergency or if a user steps out of a safe zone without authorization, the system can trigger alerts via notifications, SMS, or emails to registered contacts. This feature is particularly beneficial for children, elderly individuals, and employees in hazardous work environments. Additionally, AI-based anomaly detection can further enhance security by identifying unusual movement patterns. With an intuitive user interface, real-time monitoring, and seamless integration of security features, this system ensures that safety measures are proactively managed, making it an essential tool for individuals, families, and organizations.*

Keywords: Safety, Safe Zone, Geofencing, GPS Tracking, Real-time Alerts