GROUP NO = G20

**Ambulance Tracker System Requirements Specification (SRS)**

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|  | **INDEX** |
| 1 | Introduction |
| 2 | System overview |
| 3 | Functional requirement |
| 4 | Non functional requirement |
| 5 | User Roles and Permissions |
| 6 | Technologies |
| 7 | System Interfaces |
| 8 | Open Issues and Risks |
| 9 | Conclusion |

**1. Introduction**

This document outlines the software requirements for an Ambulance Tracker System (ATS), specifically focusing on the Android app component. The ATS will improve emergency medical response times by providing real-time information on ambulance location and availability.

**2. System Overview**

The ATS will consist of the following components:

* Mobile App: Used by individuals to request ambulance services, track ambulance arrival, and provide feedback on the service.
* Web Dashboard: Used by dispatchers and medical personnel to monitor ambulance activity, manage dispatch requests, and communicate with ambulance crews.
* GPS Tracking: Installed in ambulances to provide real-time location data to the system.
* Map Service: Integrates with Google Maps or similar platforms to display ambulance locations on a map.
* Communication Module: Enables two-way communication between dispatchers, ambulance crews, and patients.

**3. Functional Requirements**

3.1 Mobile App:

* Request Ambulance: Users can request an ambulance by entering their location and nature of emergency.
* Track Ambulance: Users can view the location of the closest available ambulance in real-time on a map.
* Estimated Arrival Time: The app displays the estimated arrival time of the ambulance based on its current location and traffic conditions.
* Medical Information: Users can provide basic medical information about the patient to the ambulance crew.
* Feedback: Users can provide feedback on the ambulance service after their experience.

**4. Non-Functional Requirements**

* Performance: The app must be responsive and provide real-time information.
* Availability: The system must be highly available and operational 24/7.
* Security: User data and ambulance location information must be protected from unauthorized access.
* Scalability: The system must be scalable to accommodate an increasing number of users and ambulances.

**5. User Roles and Permissions**

* Patients: Can request and track ambulances, provide medical information, and submit feedback.
* Dispatchers: Manage ambulance dispatch requests, monitor ambulance activity, and communicate with crews.
* Medical Personnel: Access patient information and communicate with ambulance crews.

1. **Technologies**

* Language : Kotlin
* Database : MySql/Firebase/Google sheet
* GPS : Google API
* SMS :

**7. System Interfaces**

The mobile app will have a user-friendly interface for requesting and tracking ambulances.

The web dashboard will have a comprehensive interface for managing dispatch operations and monitoring ambulance activity.

The system will integrate with existing emergency medical services infrastructure and databases.

**8. Open Issues and Risks**

Data security and privacy concerns.

System reliability and uptime.

**9. Conclusion**

The Ambulance Tracker System is a valuable tool that can improve emergency medical response times and save lives. This SRS provides a comprehensive overview of the system's requirements and serves as a foundation for further development and implementation.

**Additional Notes:**

This SRS is a high-level overview and may need to be further refined during the development process.

Specific technologies and tools used to implement the system will be determined during the design phase.

User feedback will be essential for improving the system and ensuring its effectiveness.