Software Requirement Specification

For

Android LAN Messenger

Version 1.0

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**1.1.1 Purpose**

To provide easy, efficient, secure, cost effective and reliable communication in an intra-net.

**1.1.2 Scope**

By installing Android LAN Messenger program in an organization, the instant messaging system composes a centralized contact list which will provide the list of all authorized users of the application. It’s mainly used in organizations which don't want to connect to the Internet because of security reasons. So, Android LAN Messenger is an effective application to convey messages instantly to the employees in case of sudden changes in plan or in taking important decisions. It is mainly used for people who can't afford Internet connection. It is very secure and reliable way of communication because the information remains inside the organization.

**1.1.3 Hardware Requirements**

* **RAM:** minimum 128 MB
* **Hard Disk:** minimum 5 GB
* **Screen resolution:** 1280x800 minimum screen resolution
* **Processor:** Intel Pentium 4 or higher
* **Router**

**1.1.4 Software Requirements**

* **OS Version:** Microsoft Windows XP and above
* **Java version:** Java Development Kit (JDK) 8
* **Softwares:** Intel xdk, web sockets, material design, MySQL
* **Security:** Salted MD5

**1.1.5 Constraints**

* If two people want to chat with each other, then both of them should be the registered members and should be within same network.

**1.1.6 Assumptions and Dependencies**

* There should be LAN or Intranet.
* Clients should know each other.
* There must be multiple clients.

**1.1.7 Functional Requirements and Non-Functional Requirements**

**Functional Requirements:**

1. **Work with in INTRA NETWORK**

Users should be able to use this application within a LAN.

2. **User Registration**

User must be able to register for the application through a valid phone number. On installing the application, user must be prompted to register their phone number. If user skips this step, application should close. The user’s phone number will be the unique identifier of his/her account on LAN Messenger.

3. **Display contact list**

Contact list should have all the members name using the application along with their mobile number, email id.

4. **Send Message**

User should be able to send instant message to any contact on his/her App’s contact list. User should be notified when message is successfully delivered to the recipient by displaying a tick sign next to the message sent.

4. **Broadcast Message**

User should be able to create groups of contacts. User should be able to broadcast messages to these groups.

5. **Message Status**

User must be able to get information on whether the message sent has been read by the intended recipient. If recipient reads the message, 2 ticks must appear next to the message read.

6. **Provide security with Salted MD5**

**Non Functional Requirements:**

1. **Scalability**

This application should be able to provide instant messaging services to people with in the network.

1. **Robustness**

In case user’s device crashes, a backup of their chat history must be stored on remote database servers to enable recoverability.

1. **Performance**

Application must be lightweight and must send messages instantly

1. **User Friendly**

It should provide easy to use and attractive user interface