*Software Requirements Specification*

*Group 1*

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* **Purpose**

This document outlines the requirements for communication system which allows for synchronous and asynchronous messaging.

* **Scope**

This document will catalog the user, system, and hardware requirements for the communication system.

* **Definitions, Acronyms, Abbreviations**

Read Receipts : Receipt of whether the message has been seen by the user receiving the message

Message Logs: The Storage of all the message sent and received by the communication system

* **Overview**

The Communication system allows for synchronous and asynchronous messaging within the organization.

* **Overall Description**
* **Product Perspective**
* **Product Architecture**

The system will be organized into two major modules. The server module and the user module.

* **Product Functionality/Features**

The high-level features of the system are as follows (see section 3 of this document for more detailed requirements that address these features):

* **Constraints**

Since users have different purposes, they will be split into two roles.

Message lengths are restricted to 256 characters.

* **Assumptions and Dependencies**

The communication system will be based on the TCP/IP networking.

* **Specific Requirements**
* **Functional Requirements**
* **Common Requirements:**

Users Should be allowed to login with their credentials.

System should provide display of messages sent and received by user.

* **Server Module Requirements:**

System should allow for a timeout if users are idle for a long period of time.

System should be able to store message logs

System should provide read receipts to the user.

* **User Module Requirements:**

Users Split into IT role and General User role

IT role allows for access of ALL message logs

IT role allows for creation of general user accounts

General Users should be allowed to create their own messaging groups.

* **External Interface Requirements**

System must provide an interface for both types of users to access. The interface is to be started with an ID to verify for login and have options to send message to whomever is available. The messaging field will be stored onto a txt file with the following order: FromWho, ToWho, Timestamp, Message, Read(True/False)

* **Internal Interface Requirements**

System must process data from a txt file to verify login credentials along with the users messages.

System must be able to process data received from user to be written onto a data file for future use and storage.

* **Non-Functional Requirements**
* **Environmental Requirements**

System must be deployed on a machine with access to java.

* **Performance Requirements**

 System should be able to respond to sending and receiving message within 30 seconds