# Group 4 – Communication System

Software Requirements Specification

Revision History

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| **Date** | **Revision** | **Description** | **Author** |
| 02/19/2022 | 1.0 | Initial Version | Owen Casebeer |
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# Purpose

## Scope

## Definitions, Acronyms, Abbreviations

CS – Communications System

## References

Use Case ID: 1000U

Use Case Name: Create a chat

Relevant Requirements: 3.1.2

Primary Actor: User

Pre-conditions: User is logged in.

Post-conditions: Chat is created.

Basic Flow or Main Scenario:

1. The user selects participants from the user directory to create a chat.
2. The system responds by creating a chatroom on the server.

Extensions or Alternate Flows:

1. The user creates an empty chatroom.
2. The user invites users from the user directory to join the room.

Exceptions: None.

Related Use Cases: 2000U

Use Case ID: 2000U

Use Case Name: Send a message

Relevant Requirements: 3.1.2

Primary Actor: User

Pre-conditions: User is logged in.

Post-conditions: The message is delivered to the chat.

Basic Flow or Main Scenario:

1. The user opens an existing chatroom.
2. The user inputs the desired message and sends it.
3. The server receives the message and delivers it to the chat’s participants.

Extensions or Alternate Flows: None.

Exceptions: The message fails to send.

Related Use Cases: 1000U

Use Case ID: 3000U

Use Case Name: Access chat history

Relevant Requirements: 3.1.1

Primary Actor: Supervisor

Pre-conditions: Supervisor is logged in.

Post-conditions: The supervisor is granted access to all chat logs.

Basic Flow or Main Scenario:

1. The supervisor attempts to access user chat logs.
2. The system responds by granting a directory of logs.

Extensions or Alternate Flows: None.

Exceptions: None.

Related Use Cases: None.

Diagram

Description automatically generated

## Overview

# Overall Description

## Product Perspective

## Product Architecture

## Product Functionality/Features

## Constraints

## Assumptions and Dependencies

# Specific Requirements

## Functional Requirements

### Common Requirements:

3.1.1.1 All chats are recorded and stored in a database.SR9 QA

### Client Module Requirements:

3.1.2.1 SR9 Users should be allowed to log in using their issued id and pin.

3.1.2.2 Users should be allowed to create chats/chatrooms.

3.1.2.3 Users should be allowed enter and leave chatrooms as they please.

3.1.2.4 Chatrooms should have a participants list and security settings to limit who can join the chat.

3.1.2.5 Users should be able to set how long messages are stored before they are automatically deleted from their personal chat history.

3.1.2.6 New messages will be labeled as read if the chat is opened.

3.1.2.7 Users should have access to a directory of users.

### Server Module Requirements:

3.1.3.1 Messages are asynchronous.

3.1.3.2 Messages will be labeled as delivered if successfully sent.

## External Interface Requirements

## Internal Interface Requirements

# Non-Functional Requirements

## Security and Privacy Requirements

## Environmental Requirements

## Performance Requirements