Instant Messaging Software

For Instant Chat

Version 1.0

Revision History

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# Introduction

Wonder Mifflin, Inc. is a paper company situated in the east coast of the United States. The company has been growing ever since they entered into the digital world. With the market being more competitive, the company has started adopting many cutting-edge technologies to increase their sells and annual revenue. The company has several departments like marketing, tele sales, customer service and HR.

With the outbreak of the deadly COVID-19, the employees have started working from home, requiring them to communicate with the team members remotely. While phone and email are readily available as a medium of communication, the company looks for another application to have the employees chat through an instant messenger.

UtsavTech, LLC has worked with Wonder Mifflin, LLC in creating a customer relationship management (CRM) system along with the phone system for the customer service and tele sales. So, they have been contracted to create an instant messaging system that can help the team communicate within themselves effectively and efficiently.

This is a Software Requirement Specification (SRS) document for an instant messaging software, which will outline the basic features of the application required in the first phase of the development. This document takes the reference of Slack and the requirements will be built to create a very similar application.

## Purpose

The main objective of this document to give a precise picture of the application and well documented requirement document. This document will be referenced by the development team within UtsavTech to build the application. This phase of the project will be considered as complete when each of the requirement specification described in this document have been addressed in the developed application.

The software will implement many Use Cases, which are shown in Section 3. The Use Case inventory is as follows:

1. Search teammate
2. Start direct message
3. Send message
4. Start group chat
5. Create channel
6. Add teammates to channels
7. Share files by chat
8. Audio calls
9. Video calls
10. Share desktop

## Scope

The scope of the application development project revolves around the features of the instant messenger. For this phase of the project and this document the scope is limited to the above use cases. The user should be able to send direct messages, group messages and make A/V calls with screen sharing.

The user setup, roles/profile setup and other administrative features are out of scope for this phase. When any other additional features become necessary in the next iteration of the development project, the scope will be expanded to accommodate them.

## Definitions, Acronyms and Abbreviations

This document will mainly revolve around the requirements for an instant messaging system. Having used many messaging systems in the past, the Users and the developers are already aware of many of the features and the terms used in the system and its usage. Here are a few of the terms that will be used frequently in the document.

|  |  |  |
| --- | --- | --- |
| Terms | Abbr. | Definition |
| Actor |  | The users; a member in a department |
| Audio / Video | A/V | Audio or video calls |
| Channel |  | A named group, which can be private and public |
| Direct Message | DM | Messages that are sent from person to person |
| Group Message |  | Messages sent in a group |
| Instant message | IM | A short message that can be sent or received |
| Software Requirement Specification | SRS | A documented model of the desired application with the requirement specification |

## References

For this document many sources were referenced. Here is a list of the sources which includes the task that required the author to create this document.

1. Linker, S. (n.d.). Use case project description (project 1). Retrieved from https://learn.umgc.edu/d2l/le/content/545040/viewContent/21221267/View.
2. Linker, S. (n.d.). SRS template - use case. Retrieved from https://learn.umgc.edu/d2l/le/content/545040/viewContent/21221284/View.
3. Davis, B. (2013). Mastering software project requirements: a framework for successful planning, development & alignment. J. Ross Publishing.

## Overview

As the project introduction has been done in the above section, the rest of the document will elaborate on the specifications. This rest of the document consists of two prime parts: 1) Overall Description and 2) Specific Requirements.

The Overall Description (Section 2.0) gives an overview of the application requirements in a high level, which is followed by the next section which is Specific Requirements (Section 3.0). The Specific requirements describes each of the requirement in details with the use cases.

# Overall Description

The instant messaging system will aid in connecting team members with each other who are on or off site. The foremost features are to let the user communicate with each other via instant messages. Each of the user are needed to be created by an admin user and added to the system. As the authenticated users access they application, they should be able to send and receive direct messages. The users need to be able to start a conversation with multiple people in a direct message chat.

Secondly, the application must allow users to create group. A group chat, alternatively called as channels, can be a private one or a public one. A public channel can be searched and voluntarily joined by any user, whereas a private channel is not searchable, and user can join only by an invitation. The only difference between a channel and a direct message involving multiple people is, the channels are a named group chat. A group chat can always be converted to a channel. The conversion part is not in scope of this phase of the project.

The final section of the requirement specification document elaborates some of the additional features of the instant message application, that includes sending files as attachments, making audio/video calls and screen sharing.

## Use-Case Model Survey

This document elaborates on the below 10 use cases. The use cases have been detailed out in the section 3.

|  |  |
| --- | --- |
| Use Case | Description |
| 1.     Search teammate | Searches for the users within the user group that are added to the system’s database. |
| 2.     Start direct message | Starts a direct message with the found user from the search list. |
| 3.     Send message | A message is sent as the user clicks Send button or hits Enter key on the keyboard. |
| 4.     Start group chat | Starts a group chat with multiple users in the recipient list. |
| 5.     Create channel | Creates a new channel, private or public. |
| 6.     Add teammates to channels | Adds new users to a channel, who are not in the channel but exist as active users in the database. |
| 7.     Share files by chat | Attaches files and sends as attachments. |
| 8.     Audio calls | Initiates an audio call with the intended user in the instant message. |
| 9.     Video calls | Initiates a call with the video of the user. |
| 10.   Share desktop | Allows users to share their desktop as they try to demonstrate something on their computer. |

## Assumptions and Dependencies

Wonder Mifflin, Inc. would require the application to be fast and high performing. Below are the assumptions taken for this project.

* To host the application, the company has or provides the backend infrastructure, which is easily scalable, sustainable and manageable.
* Timely sign off or approval of the contracts and any other project documents in various stages.
* Budget is approved for the implementation of the project.

Some of the major dependencies for this project to be successful are listed below.

* Availability of skilled programmers and testers.
* Administrators and support staffs are required to support this application post development.
* The third-party integrations are required to accommodate some of the features like audio/video calls.

# Specific Requirements

[This section of the SRS should contain all the software requirements to a level of detail sufficient to enable designers to design a system to satisfy those requirements, and testers to test that the system satisfies those requirements.   When using use-case modeling, these requirements are captured in the use cases and the applicable supplementary specifications. If use-case modeling is not used, the outline for supplementary specifications may be inserted directly into this section.]

## Use-Case Reports

[In use-case modeling, the use cases often define the majority of the functional requirements of the system, along with some non-functional requirements. For each use case in the above use-case model, or subset thereof, refer to or enclose the use-case report in this section. Make sure that each requirement is clearly labeled.]

## Supplementary Requirements

[Supplementary Specifications capture requirements that are not included in the use cases. The specific requirements from the Supplementary Specifications which are applicable to this subsystem or feature should be included here, refined to the necessary level of detail to describe this subsystem or feature. These may be captured directly in this document or refer to separate Supplementary Specifications, which may be used as an enclosure at this point. Make sure that each requirement is clearly labeled.]

# Supporting Information

[The supporting information makes the SRS easier to use. It includes: a) Table of contents, b) Index, c) Appendices. These may include use-case storyboards or user-interface prototypes. When appendices are included, the SRS should explicitly state whether or not the appendices are to be considered part of the requirements.]