
Software Requirements Specification

for

WeChat!

Version 1.0 approved

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Revision History

Name	Date	Reason For Changes	Version
-	-	-	-
-	-	-	-

1. Introduction

1.1 Purpose

The purpose of this document is to present a detailed description of the WeChat!. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for both the stakeholders and the developers of the system and will be proposed to “Ms Shazia Tauseef” for its approval.

1.2 Document Conventions

This document uses the following conventions DB(database), Voice Calling and Video Calling.

1.3 Intended Audience and Reading Suggestions

The targeted audience for this software are social enthusiasts. People who will use this platform to make a better community for resolving problems.

1.4 Product Scope

This software system will be a Social Communication System. This system will be designed to reduce noise in voice calling and video degradation in video calling and provide a platform where users can communicate even if they have slow internet connections.

This software will facilitate communication between users via text messages, voice call and video call. Moreover you can send special characters in messages, files, images, and contact card.

The system also contains a relational database containing users and details of contacts added by user .

1.5 References

nil

2. Overall Description

2.1 Product Perspective

The product is supposed to be proprietary software. It is a cross platform software model. The WeChat! Provides simple mechanism for users to communicate with each other.

2.2 Product Functions

Main functions of the WeChat! Application are:

- Display contacts on the left window grid
- Voice call to another user
- Video call to another user

2.3 User Classes and Characteristics

There are three types of users that interact with the system: Messenger, voice caller and video caller. Each of these three types of users has different use of the system so each of them has their own requirements.

2.4 Operating Environment

The software will operate with the following software components and applications:

The software being developed will be running under windows 10 operating system, MAC OS and android and Linux.

2.5 Design and Implementation Constraints

- Language Requirements: software must be multilingual, including the following languages: English, French, German, Spanish, Mandarin, Japanese.
- Memory: Software will occupy 256MB of Hard disk storage space on the System if installed otherwise web-based application will not take any hard disk space.

2.6 User Documentation

User will be provided with a tech support on the all screens, User can communicate with any representative personal who can provide them with any query.

2.7 Assumptions and Dependencies

If the user has allocated the resources to something in the first place then the application could malfunction or one or more than one features could be unavailable.

End-User must use the latest browser if using web application and latest windows 10 if using on windows operating system.

3. External Interface Requirements

3.1 User Interfaces

A first-time user of the mobile application should see the log-in page when the user opens the application, If the user has not registered, user should be able to do that on the log-in page.

If the user is not a first-time user, he/she should be able to see the main page directly when the application is opened.

3.2 Hardware Interfaces

Since neither the mobile application nor the web application have any designated hardware, it does not have any direct hardware interfaces. The hardware connection to the database server is managed by the underlying operating system on the mobile phone and the web server.

3.3 Software Interfaces

This application uses textbox for search and a message window is displayed on the right windows where user can send text messages and add special characters to the chat, user can send attachment file to the other users.

3.4 Communications Interfaces

This application uses server communication protocols for video calling and voice calling.

4. System Features

This section includes the requirements that specify all the fundamental actions of the software system.

4.1 System Feature 1

Display contacts on the left window grid

4.1.1 Description and Priority

This use case fetches contact from database and shows them on the left window grid. User can chat, voice call or video call to any contact.

4.1.2 Stimulus/Response Sequences

- 1) The user logged into his/her account.
- 2) New window will pop up.
- 3) Get user's information from database.
- 4) On right side a grid is shown.
- 5) On grid User's contacts are shown along with name and email address.

4.1.3 Functional Requirements

Display contacts on the left window grid

4.2 System Feature 2

Voice call to another user

4.1.1 Description and Priority

This use case makes a connection between two users(User1 and User2) so that they can communicated through voice calling.

4.1.2 Stimulus/Response Sequences

- 1) User 1 Call request send to the server.
- 2) Server sends request to user2.
- 3) A communication link is established between User1 and User2.
- 4) User 1 and user are connected.
- 5) Show connected status on the Voice Call window.
- 6) Prompt user to plug microphone and speaker.

4.1.3 Functional Requirements

Voice call to another user

4.1 System Feature 3

Video call to another user

4.1.1 Description and Priority

This use case makes a connection between two users(User1 and User2) so that they can communicate through video calling.

4.1.2 Stimulus/Response Sequences

- 1) User 1 Call request send to the server.
- 2) Server sends request to user2.
- 3) A communication link is established between User1 and User2.
- 4) User 1 and user are connected.
- 5) Show connected status on the Voice Call window.
- 6) Prompt user to plug microphone and speaker and video camera.

4.1.3 Functional Requirements

Video call to another user

5. Other Nonfunctional Requirements

5.1 Prominent Search Feature

The search feature should be prominent and easy to find for the user.

5.2 Response Time

The fastness of the search, if the internet connection is fast then the response time will be less

5.3 System Dependability

The fault tolerance of the system, If the system loses the connection to the Internet the system gets some strange input, the user should be informed.

5.4 Software Quality Attributes

Reliability:

The probability that this application fulfills a function that is defined in the above functional requirements.

5.5 Business Rules

Every user is able to perform all general functions that is searching, voice calling and video calling but one user cannot access another user.