



Contacts Management Application

Software Requirement Specification (SRS) Document

Sprint 2 Implementation

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1. Introduction:

The introduction of the software requirement specification provides an overview of the entire software. The entire SRS with overview description purpose, scope, tools used and basic description. The aim of this document is to gather, analyze and give an in-depth insight into the complete contacts management application by defining the problem statement in detail. The detailed requirements of the contacts management application is provided in this document.

1.1 Purpose: The purpose of this document is to show the requirements for the contacts management application, in which the users will be managing their contacts based on the options listed in the menu.

1.2 Intended Audience: This document is intended to be read by the client.

1.3 Intended Use:

- Development Team
- Maintenance Team
- Clients

Since this a general-purpose software any one can access it.

1.4 Scope: This project aims to create a contacts management application which takes the personal and business contacts information of multiple users such as first name, last name, mobile number, email-id in common for both type of contacts and for personal contacts, additional information like address, WhatsApp mobile number, birthdate, emergency contact and for business contacts, information like company name, designation and company website as inputs and manages the information like updating and deleting the contacts of the respective users and as well as listing the personal and business contacts information separately. The application will have an admin who has the option to add users along with the default passwords which can be changed if required by the users, such that they can login and manage their contacts later.

2. Overall Description:

It is a contacts management application which takes the personal and business contacts information of multiple users. It also has a default admin who has the ability to add more users to the system such that the users can store their contacts. The application assigns contact id for each of the contacts of the users which will be further used by the user for

updating and deleting a particular contact in the list. The application will also check for the invalid contacts of every user and displays an error message on the console in case of invalidity contact.

2.1 Assumptions and Dependency:

- System should have Ubuntu Linux installed
- System should have either 4GB or more RAM
- The service is used preferably on a desktop or laptop

3. System Features and Requirements:

3.1 Functions:

3.1.1 CM04 → addUser() : This function is used to add new users to the contacts management application with a default password “Changeme”, such that, they can process (update and delete) their own set of contacts later. The function is accessible only to the admin not to other users

3.1.1 CM04 → updateUser() : This function is used to update only the usernames of the users added already to the application, if they are entered wrongly during adding and it is accessible only to the admin not to other users

3.1.1 CM04 → deleteUser() : This function is used to delete existing users from the application such that, they cannot login to the application anymore and perform the management operations on their contacts and it is accessible only to the admin not to other users

3.1.1 CM04 → listUsers() : This function is used to list the existing users in the application and it is accessible only to the admin not to other users

3.1.2 CM05 → addPersonalcontact() : This function is used to add personal contacts to the database from the console of a user logged into the application and it gets stored into the database and at-last while the user logout, the new contact added will be written to the “Contacts.txt” file of that user. The function is accessible only to the user who logged in with correct credentials

3.1.2 CM05 → addBusinesscontact() : This function is used to add business contacts to the database from the console of a user logged into the application and it gets stored into the database and at-last while the user logout, the new contact added will be written to the “Contacts.txt” file of that user. The function is accessible only to the user who logged in with correct credentials

3.1.2 CM05 → updateContact() : This function is used to update both personal and business contacts of a user logged into the application and at-last while the user logout, the updated details will be overwritten into the “Contacts.txt” file of that user. The function is accessible only to the user who logged in with correct credentials

3.1.2 CM05 → deleteContact() : This function is used to delete both personal and business contacts of a user logged into the application and the function is accessible only to the user who logged in with correct credentials

3.1.2 CM05 → listPersonalcontacts() : This function is used to display the personal contacts of a user logged into the application on the console according to the contact-id assigned to each contact and the function is accessible only to the user who logged in with correct credentials

3.1.2 CM05 → listBusinesscontacts() : This function is used to display the business contacts of a user logged into the application on the console according to the contact-id assigned to each contact and the function is accessible only to the user who logged in with correct credentials

3.1.3 CM06 → loadUserdatabase() : This function is used to load the contacts of the particular user logged into the application. Both personal and business contacts are loaded into their respective maps to perform other operations like updating and deleting the contacts in the database and listing all type of contacts in the console. The function is accessible only to the user who logged in with correct credentials

3.1.4 CM07 → checkContact() : This function is used to check the validity of contacts of a particular user logged into the application, such that, the valid contacts, both personal and business contacts are loaded into the database for further operations, whereas, the invalid entries are redirected to “InvalidContacts.txt” file. The function is accessible only to the user who logged in with correct credentials

3.1.4 CM07 → checkDate() : This function is used to check the validity of birth date of all contacts of a particular user logged into the application, such that, the valid date contacts, both personal and business contacts are loaded into the database for further operations, whereas, the entries with invalid dates are redirected to “InvalidContacts.txt” file. The function is accessible only to the user who logged in with correct credentials

3.2 System Requirements:

3.2.1 Tools to be used:

- System Programming
- CPP Programming
- CPP File Handling
- valgrind
- Make
- CPPunit

3.3 System Features:

- Supportability: The system is easy to use
- Design Constraints: The system is built using only CPP language.
- Usability: The contacts management application can be used to manage contacts information of users based on then options listed in the menu. The application lists the personal and business contacts of a user separately
- Reliability & Availability: The system is available 24/7 that is whenever the user would like to use the system, they can use it up to its functionalities
- Performance: The system will work on the user's terminal