

SOFTWARE REQUIREMENTS SPECIFICATION

FOR

SOCIAL NETWORKING PLATFORM

VERSION 1.0 Approved

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Revision History

Name	Date	Reason For Changes	Version

1. INTRODUCTION

In recent years, the Internet and especially the Web has enabled a communication revolution: the ability to send and retrieve information everywhere has changed the way we work and live. Internet based access to information and internet Communication means have become very popular.

1.1 Purpose

This software Requirement Specification (SRS) documents key specification, functional & nonfunctional requirements of social network service. Social networking sites tend to share some conventional features. Most often, individual users are encouraged to create profiles containing various information about themselves. Users can often upload pictures of themselves to their profiles, post blog entries for others to read, search for other users with similar interests, and compile and share lists of contacts. In addition, user profiles often have a section dedicated to comments from friends and other users. To protect user privacy, social networks usually have controls that allow users to choose who can view their profile, contact them, add them to their list of contacts, and so on.

1.2 Project Convention

The document has used underlined words to highlight the user requirements. It also uses capital lettered words and bold fonts to highlight key words. The document has tried to maintain a priority of requirements. The priority has been determined by the judgment of the author and may subject to change. Priority of higher-level requirements is inherited by detailed requirements. The document has used short forms for some commonly abbreviated terms.

1.3 Intended Audience and Reading Suggestions

The document is intended to be a guide for developers, users and testers. The goal of this document is to identify the requirements of application social networking. A developer may directly want to know the requirements by reading the section of USER REQUIREMENTS and skipping other sections if required.

1.4 Project Scope

● Benefits

- ❖ Social sites are just a fun way to kick back and relax. You can write on your web page or post pictures on your wall.
- ❖ College Authorities could post on social sites about the events occurring in the campus or the upcoming events and people would get these information easily and hence circulation of information is becomes easy.

- ❖ Stay in touch with contacts, reach out to new people.

2. OVERALL DESCRIPTION

2.1 Product perspective

Social networking platforms makes people more social and help them communicate with others. Social networking platforms are places where young people can maintain and nurse their existing (offline) friendships and create new (online) friendships. Social networking platforms are places where young people learn the crucial importance of being able to network which they can benefit from in their future professional life.

2.2 Product Features

- ❖ Maintenance of detail of various users.
- ❖ Online update the information.
- ❖ Status of all users and community details easily available.
- ❖ User can create his profile.
- ❖ User can search for his friends and will be shown appropriate results if matching profiles are found.
- ❖ Any user can post status which will be visible to his friends.

2.3 User Classes and Characteristics

Standard user may belong to specific university including any gender,nationality that can use Computer's browser.This platform requires its user to be above 17 years of age.User interface is in English language so users should have a basic English reading knowledge.

2.4 Operating Environment

- ❖ Intel i3 (Processor).
- ❖ 2 GB or more RAM.
- ❖ 512 KB Cache Memory.
- ❖ Hard disk 10 GB or more.
- ❖ High speed and stable internet connection.

2.5 Design and Implementation Constraint

- **Hardware and Software Constraints**

Since the project has been developed entirely using JAVA and object oriented methodology, it is largely independent. The project can be run on any platform. However, it still needs a JAVA framework to run (Net Beans).

● End User Constraints

As mentioned above the major constraints for the end user is having a Java framework on his computer. Also he should be familiar with the operation with the system to a certain extent , although a help document will be provided to oriented users.

2.6 User Documentation

User manual and CD will be made available for troubleshooting and help. The user manual will contain detailed information about the usage of the product from a layman perspective to an expert network / system administrator. The manual shall also be made available online.

2.7 Assumptions and Dependencies

- ❖ There will be availability of Internet via 3G,4G,5G or Wi-Fi.
- ❖ User of platform is well acquainted with English Language.
- ❖ User should have valid roll number,email address in order to register into the platform.
- ❖ Central Server of platform must be able to handle all incoming requests simultaneously.

3. SYSTEM FEATURES

This social networking platform is for students,faculties to get connected,there is also features for them to add photos and videos as well as post some important notices.This platform gives a lot of features at one place.

3.1 Registration

- 3.1.1 User will create an account if there is no existing account associated with user,email-id,roll-number or faculty-id.
- 3.1.2 User should enter account details such as name,email-id,contact number,birth date,apt. and password.
- 3.1.3 User is registered after this information is validated and user agrees with the terms and conditions.
- 3.1.4 User must be 17 years old or more,contact number should be a 10 digit numeric field.

First and last name should not exceed 20 characters each, password should be at least 8 characters long, at most 15 characters including at least one capital and small letter and special character and a number.

3.1.5 **Functionality:**

User input: All the necessary credentials required like name, address, email Id, phone no, etc.

Processing: The data is then validated to make sure there is not an existing user with those credentials. If there is an existing user then the user is asked to enter a new username. If there is no conflict with the credentials then the user is registered. The user's credentials will be added to the login database.

Output: The user will get a verification mail to their registered email id to verify.

3.2 Login

3.2.1 User must be registered in order to login. Input will be the email id and password, contact number for login.

3.2.2 If three attempts of password are wrong then a captcha should appear. If more than 5 attempts go wrong, then the account will be locked and an e-mail will be sent to the user notifying about the wrong password attempts. An OTP (One time password) will also be sent to the registered contact number.

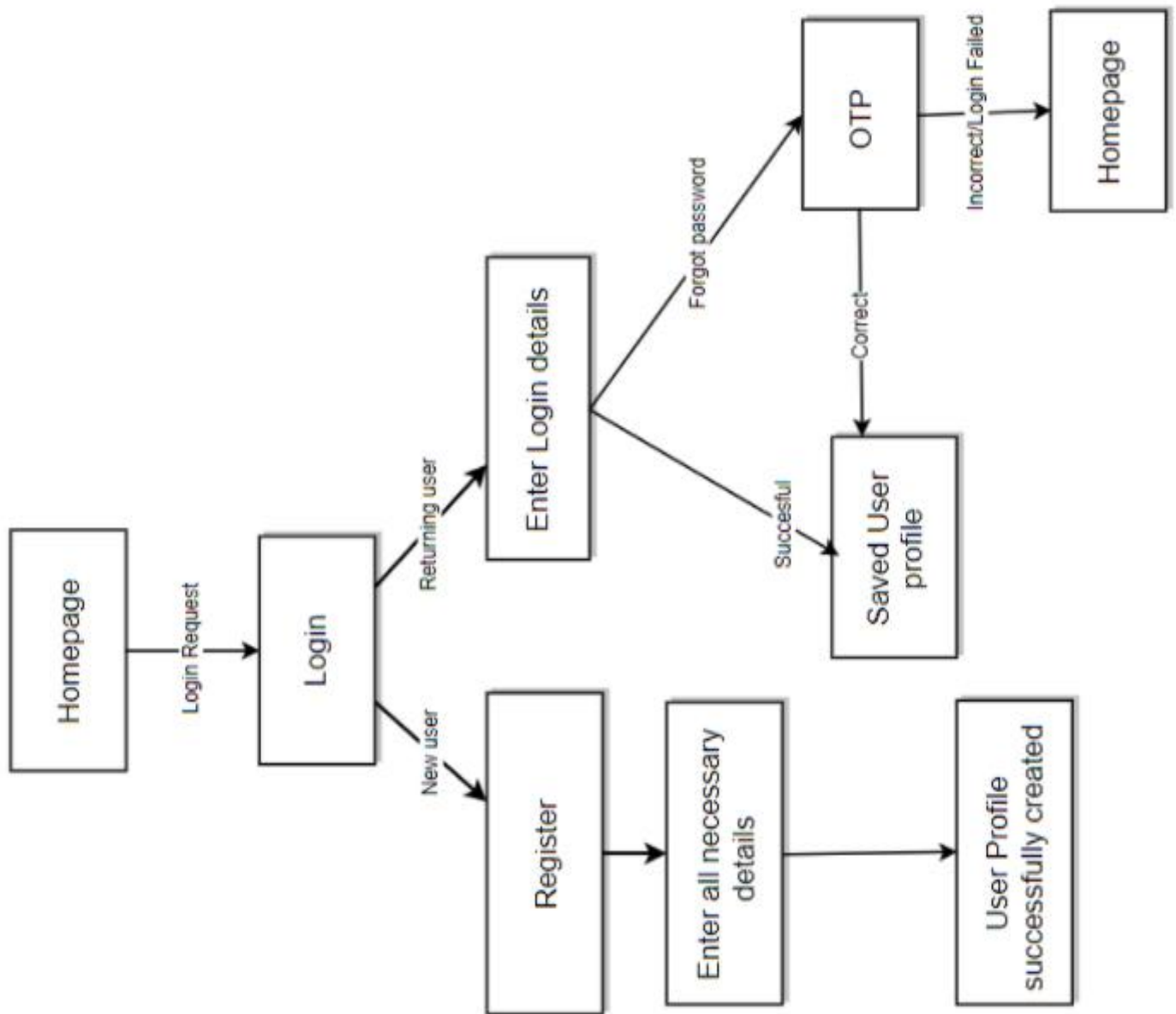
3.2.3 To unlock the account, user must click on the unlock link sent to him in the email. If user clicks on forgot password then reset password link should be emailed to the user.

3.2.4 **Functionality:**

User input: The user will give their email id/mobile number and their password.

Processing: The credentials will be stored in the database of the system if they are correct.

Output: The user will be logged in and will be taken to his personalized account from there they can go to the homepage.



3.3 Add Details

3.3.1 A part of user building user profile. User should be able to add the personal as well as educational details. Some fields can remain empty. User must be logged in and his account must be marked verified to be able to add details.

3.4 Edit details

- 3.4.1** A part of building user profile. User should be able to edit the account details like name,birth date,email-id,phone number and address. Name,birth date and email-id cannot be empty while the other two can remain empty.

3.5 Upload Profile Picture

- 3.5.1** User should be able to upload the profile picture. The size of profile picture should be at least 160px *160px.User may leave this field empty. Profile image should be visible to all.

3.6 Add/Remove friends

- 3.6.1** User should be able to add new friends.User may search other users using either Username or roll number and possible results should be displayed to the user.
- 3.6.2** User should be able to remove a friend.User may select the username or roll number of the friend which he want to remove.

3.7 Messaging system

3.7.1 Private Messaging

User should be able to select the person with whom he wants to have the conversation,he needs to choose the username or roll number of required person from a friends list which would appear in front of him.

3.7.2 Groups with Discussion Board

User should be able to create or join a group,so that he remain connected to his faculties as well as classmates so that he would get all necessary information as well as essential study materials.Here the user can also put his doubts if any,and faculty can answer the doubts.

3.8 Uploading Photos/Videos

- 3.8.1** User should be able to upload and share photographs,User can also add videos form YouTube and share with people.

3.9 Deleting Account

- 3.9.1** User if he wishes to delete the account,the admin is informed and with the permission of the desired user account is deleted from the system's database.

3.10 Add/Ignore Friend Request

- 3.10.1** If a user gets a friend request from another user, then the user receiving the request should have an option to accept or ignore the friend request. If the user selects to accept the friend request, the requester is added to the friend of the acceptor. If the user selected to ignore the request, the sender continues to see the status of the request as “request sent” and the request is removed from the queue of the request receiver.

4. EXTERNAL INTERFACE REQUIREMENT

4.1 User Interfaces

Standard users will use the web browser to use the website. Hence, it shall have a login page for users to login into the site. For those who are first time users, they will have to fill up registration details. After logging into the system, the user will be shown his profile and the wall containing the posts shared by user's friends. User is given options to log out, search people and change any of his personal settings on his home page.

4.2 Hardware Interfaces

The solution extensive use of several hardware devices. These devices include:

- ❖ Internet Modem
- ❖ LAN
- ❖ Switches

4.3 Software Interfaces

❖ E-mail Interface

This interface uses the SMTP/POP services provided by third party to send emails to the required user. This service will notify users with required actions through a conventional medium.

❖ Captcha Service Interface

Captcha services will be used for human identification.

4.4 Communications Interfaces

As the application is social networking web site it requires high speed internet modem for the use of this application. For the suitable use there must be a correct internet connection among the users.

5. OTHER NON FUNCTIONAL REQUIREMENTS

5.1 Performance Requirements

- ❖ **Scalability:** System should be able to handle a number of user at same time.
For eg: Handling hundreds of users at the same time.
- ❖ **Usability:** Simple user interfaces that a layman can understand.
- ❖ **Speed:** Speed of system should be responsive i.e response to a particular action should be available in short period of time.It should not slow down with increase in number of users.

5.2 Security Requirements

- ❖ During user registration,the given email address in validated.
- ❖ The password should be atleast 8 characters,containing atleast a small character,one capital,a number and a special character.
- ❖ Password is stored as hash value in database.\
- ❖ OTP service is used at the time of login.
- ❖ Re-captcha service is used during registration for human identification.

5.3 Software Quality Attributes

- ❖ **Usability:** Simple user interfaces that a layman can understand.
- ❖ **Availability:** System should be available at all times.It should be ensured that system is reliable,it should yield correct results if user performs searches for a person.
- ❖ **Testability:** System should be testable.A separate test environment should be setup where testers and quality assurance engineers can test the system for bugs and/or Incomplete or missed requirements.