SOFTWARE REQUIREMENT SPECIFICATION
FOR
CARECLUB
[21-11-2020]
CDAC, MUMBAI

Revision History:

Version.	DATE	Authored By	Reviewed By	REASON FOR CHANGE
00	22-11-2020	Team-35		1st release

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1. Introduction

1.1 Purpose

Care Club is based on the NGO information stored in the centralized database by different region, NGO's will have the access to view the data, store the data of their organization in the different region in India, they can generate and post certain evaluation reports such as daily activities of what they do and for whom they do. It helps to convey the role of NGO so that potential members and partners can better understand their cause, which is especially important while seeking grants, tenders, or donations.

1.2 Document Convention

Headings:-

Text: -Bold
Font-Size: - 12
Highlighting: - Times New Roman

Sub Headings: -

Text: -Bold
Font-Size: - 12
Highlighting: - Times New Roman

Header: -

Text: - Simple
Font-Size: -10
Highlighting: - Times New Roman

Footer: -

Text: - Simple
Font-Size: -10
Highlighting: - Times New Roman

Intended Audience and Reading Suggestions

This document is intended for developers, users, testers and project managers for the purpose of understanding the design of system in terms of different perspectives. Further, this document contains functionalities and characteristics of system along with the working environment. It also includes other information related to system such as external interface requirements, features and other non - functional requirements.

1.2 Product Scope

This project aims to centralize the administration of a NGO. The Care Club software is designed as there are several aspects to this, including getting estimate of funds needed for the NGO to continue its operations for the next year, getting the list of students to help in case of limited funds, getting the list of donors to be contacted in case of shortage of funds and maintaining a record of all expenditure. There is
a web portal for the registration of new donors and blog of the NGO. Care Club would help increase productivity of the NGO by reducing the time required in the operations of the NGO. It will also increase the accuracy of the work done.

1.3 References

https://angular.io/
https://material.angularjs.org/
https://stackoverflow.com/
https://www.geeksforgeeks/
https://www.javatpoint.com/
https://spring.io/

2. Overall Description

2.1 Product Perspective

The origin of this problem is the need of automating and centralizing the operations of NGO. All the data including the information of donors, volunteers etc is stored in database. The user interface helps the management to extract information from the database. The software takes care of the communications between the database and the user interface. The software also automates various operations of the NGO. The web portal allows new donors to register and view the activities of the NGO all over the India. Since this is a data-centric product it will need somewhere to store the data, a
database will thus be used.

2.2 Product Functions

- The users will be able to view his performance and activity details of NGO
- The users will be able to track the nearby NGOs and all other NGOs in India.
- The users will be able to ask question to NGO on chatbox.

- The users would able to search nearby hospitals
- NGO manager will be able to post their daily activities.
- NGO manager can reply to the users query on chatBox.
- The Admin can remove the post and edit post.
- Admin will able to control profiles of users, NGOs and can delete the accounts.
- Admin can access NGOs performance.

User Classes and Characteristics Admin

Admin:

- This person will be able to access all the functions of the system. The Admin will able to control profiles of users, NGOs and can cancel the accounts.

Users:

- Users can view their own profile. He can ask query in chatBox, and would able to search nearby NGOs and do donations.

NGO Manager:

- The NGO manager will able to see own profile and can delete the profile. Manager can post daily activities and reply to queries in chatBox by users.

2.3 Operating Environment

- **Hardware platform:**
  - Processor – Above Pentium 4, with clock speed of 2.0GHz
  - RAM – 1 GB or above
  - Hard Disk – Free disk space of above 1GB
- **Software platform:**
  - Front-end: HTML, CSS, Bootstrap, Angular
  - Back-end: MySQL, Java, Spring boot
- **Supported tools:**
  - Visual Code Studio, MySQL Workbench, Eclipse IDE, STS.

2.4 Design and Implementation Constraints

Constraints:

- User interface is only in English. No other language option is available
- User can log-in only with his assigned user-name and password
- Limited to HTTP/HTTPS
- Aadhar Card is Mandatory for authentication
- NGO license id is Mandatory for authentication.

2.5 User Documentation

User documentation mainly comprises of Help menu of application. It will give all the minute details about the project, if any user has any query about any module or functionality, one can refer it and see how to operate the application. This report is then complete documentation of our project. It gives complete details about the project, its functionality, users, software used, hardware requirement, environment and soon.

2.6 Assumptions and Dependencies

- Assumptions
  - There is an active internet connection with the system
  - The system has internet browser installed
  - Users know the English language, as the user interface will be provided in English.

- Dependencies:
  - The NGO manager and users needs to be register on the system.
  - Active Participation of NGOs when query is posted by users.
  - Admin needs to monitor the system 24 * 7

3. External Interface Requirements

3.1 User Interfaces

Anyone opens the portal, can see a welcome page. There are options to log in. The main element is web-pages using HTML, Angular Material. Multiple interfaces are there like log-in pages, home pages of NGO Manager, Admin, User, Donor and also the Portal. Admin will update post for NGO and accordingly data will be persisted. Based on this post and the feedback provided by users, NGOs performance would be evaluated and displayed.

3.2 Hardware Interfaces

In the hardware interface, the system interacts with hardware given the processor is above P4 with clock speed of 2.0 GHz with 1 GB RAM and the Hard Disk with 1 GB free space in the memory. In future enhancements, it can be made responsive to be able to work with mobile devices as well.

3.3 Software Interfaces

In software interfaces, Java, Spring boot is the back-end technology used along with MySQL Database. The front-end technologies include HTML, CSS, Bootstrap, Angular JS. Data will be communicated between these interfaces accordingly.

3.4 Communications Interfaces

The main communication interface for interacting with the System will be the web Browser.

4. System Features

4.1 Description

This app is initiated for the NGO working of our society for better future without wastage of time and money with proper user and NGO relationship.

The key objective of this app is registering of NGOs, Users which can register as donor as well, after which they'll get a unique ID which can be used by both, from NGO side they can create profile post their daily activities and add their details regarding for what they work and for whom they work along with the payment details in case if any user wants to donation.

From users end, knowing the post and activities of the NGOs will make easy to donate money or requires items to the NGO and thus wastage of time is cleared here with proper and fast NGO management.

4.2 Functional Requirements

4.2.1 User

- The system will allow users to ask questions and put forth their doubts.
- The system will allow NGO Manager to answer the questions.
- The system will show who has posted the question and who has answered the question.
- The system will allow user to reach any NGO in India.

4.2.2 Donors History

- The system should maintain a log of the Donors profile.
- The system will thus help us automate the process of donation if user wish to.
- Thus, using this system, we will be able to save a lot of time and energy.

4.2.3 NGOs Authentication

- The system shall display NGOs with their certified details and license ID to authenticate.

4.2.4 NGO History

The system shall allow the Users to view the NGO history with there previously posted activities and services along with the all detailed information provided by NGO Manager.

5. Performance Requirements

The system should store all the database records of each users, NGOs and admin staff properly and the application should be available for use 24*7 through the server. Also, the application should be user friendly with a proper user interface which makes it easy for the user to understand. All the options should be present in properly accessible places for user convenience.

5.1 Safety Requirements

All login Ids and passwords of the user, manager and especially admin staff should be protected for privacy using whatever constraints required in the database or the application. In case any admin staff access account is hacked by any intruder, user id and passwords of all the admin staff personnel should be changed and new passwords should be issued to all users. Users and NGO Manager records are to be backed up securely across database servers. Incase database is hacked by someone and data is deleted a backup server should be present for such purpose. System uses the system memory and resources in a controlled manner So the software won't have any safety issues.

5.2 Security Requirements

All passwords of the administrators should be protected for privacy using whatever constraints required in the database or the application. Transactions regarding users and NGOs records should be carried out properly. Only admin will have access rights to the NGOs data according to the need for E.g.: - NGOs post in history. The database should be protected from attacks and unauthorized access. The interface should be protected from attacks. All passwords should be stored as a secure hash of the administrator password.

5.3 Software Quality Attributes

5.3.1 Availability

The system should run on a variety of operating systems that support the JavaScript language. The system should run on a variety of hardware.

5.3.2 Accessibility

The software will be accessible to admin, patient and doctors.

5.3.3 Compatibility

The software will be compatible with multiple platforms.

5.3.4 Durability

The software will be tested for working with multiple users.

5.3.5 Effectiveness

The software will be made to handle operations effectively.

5.3.6 Maintainability

The system should be easy to maintain. There should be a clear separation between the interface and the business logic code. There should be a clear separation between the data access objects that map the database and the business logic code.

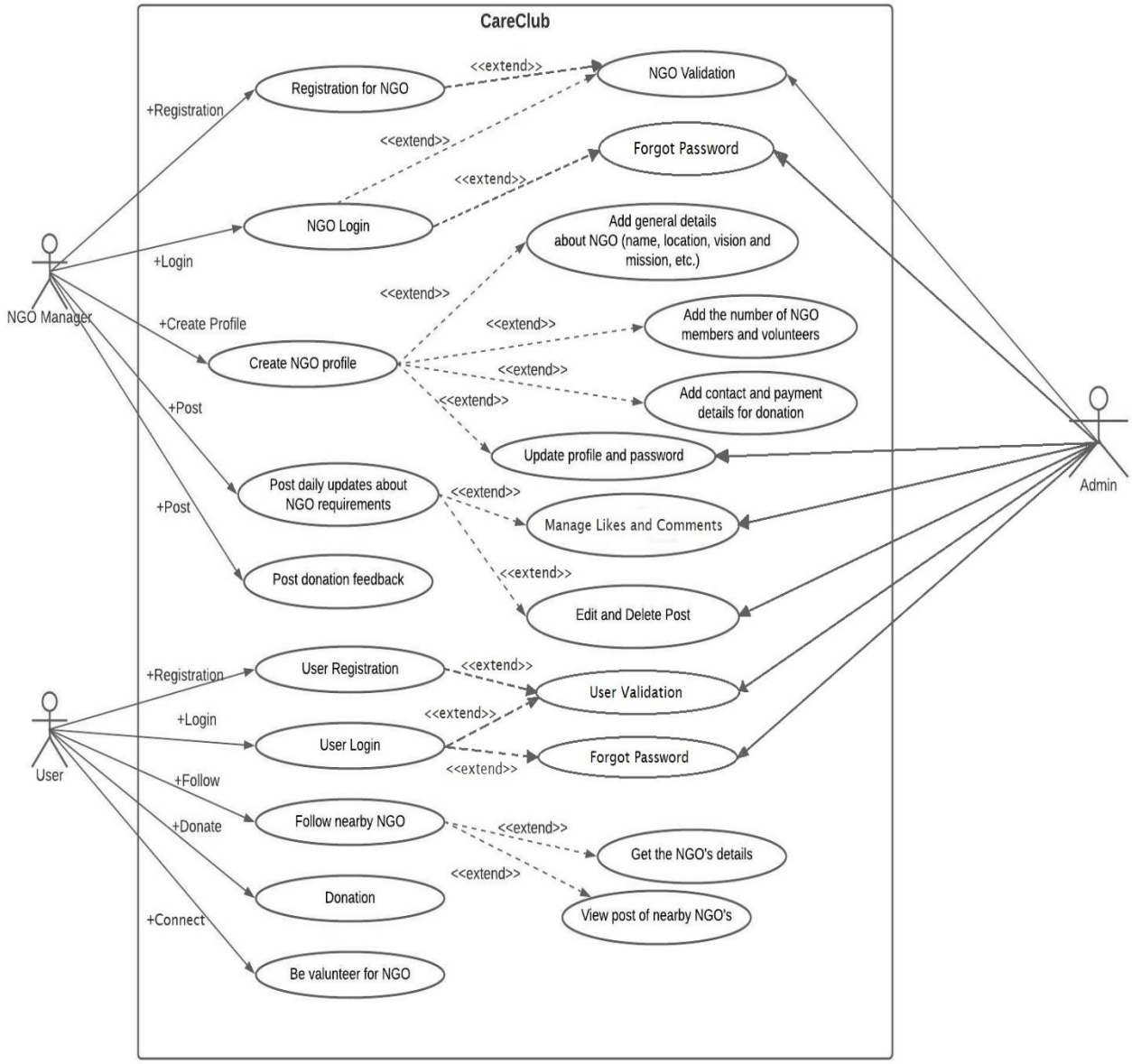
6. Other Requirements

➢ Appendix A: Glossary

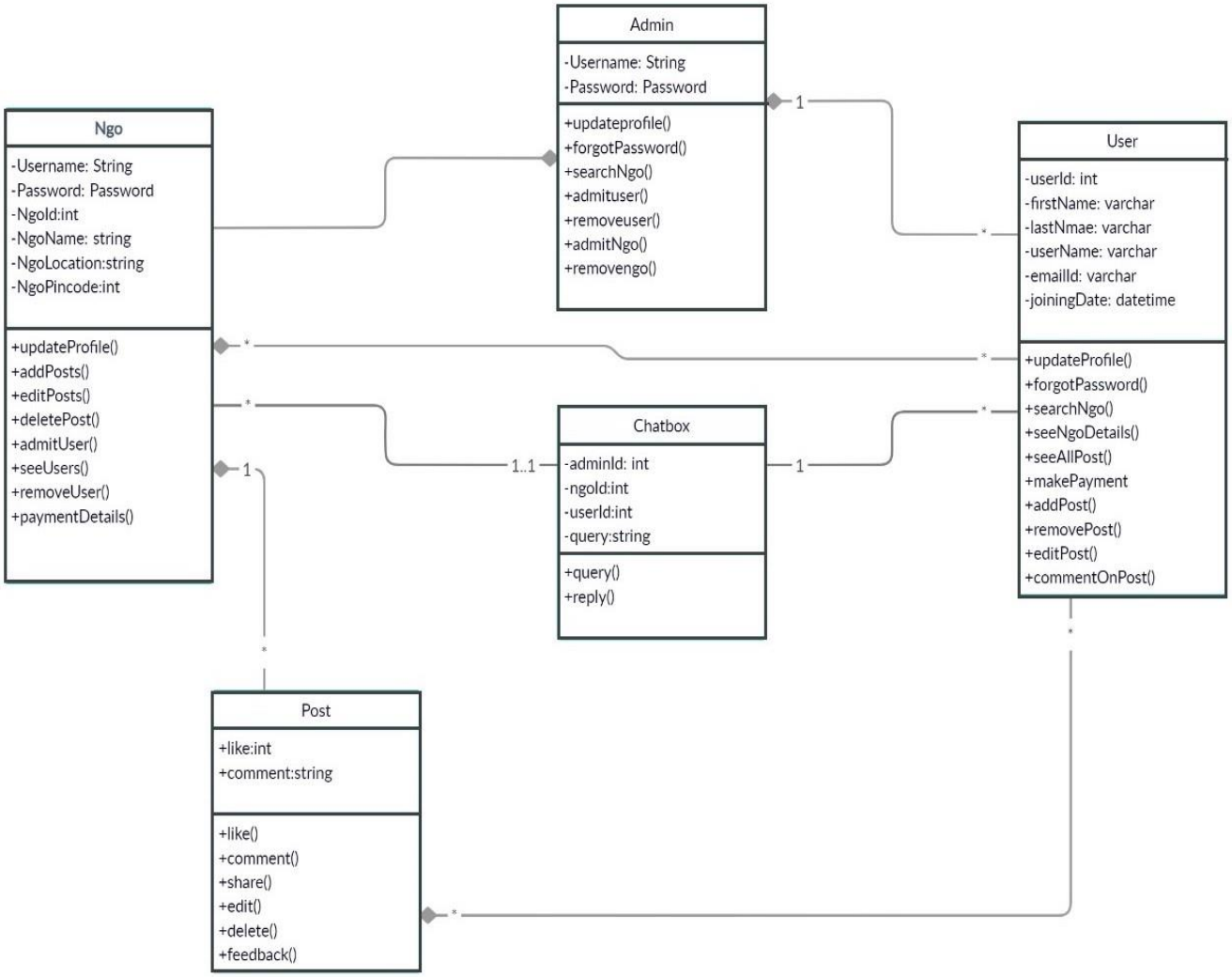
- **SRS:** Software Requirement Specification
- **GUI:** Graphical User Interface
- **P4:** Pentium4
- **SQL:** Structured Query Language
- **HTML:** Hyper Text Markup Language
- **CSS:** Cascading Style Sheet

Appendix B: Analysis Models

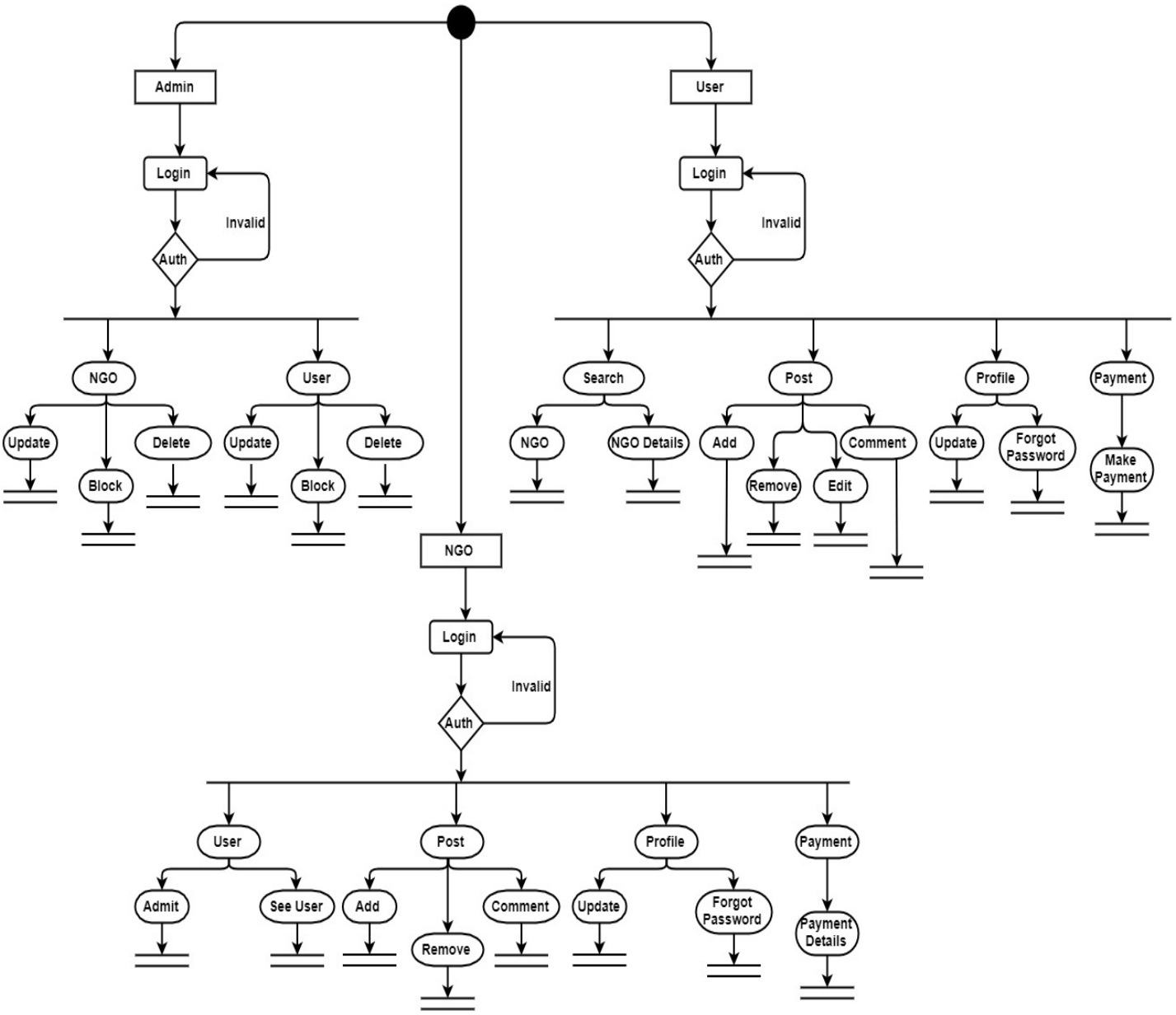
a) Use Case Diagram:



b) **Class Diagram:**

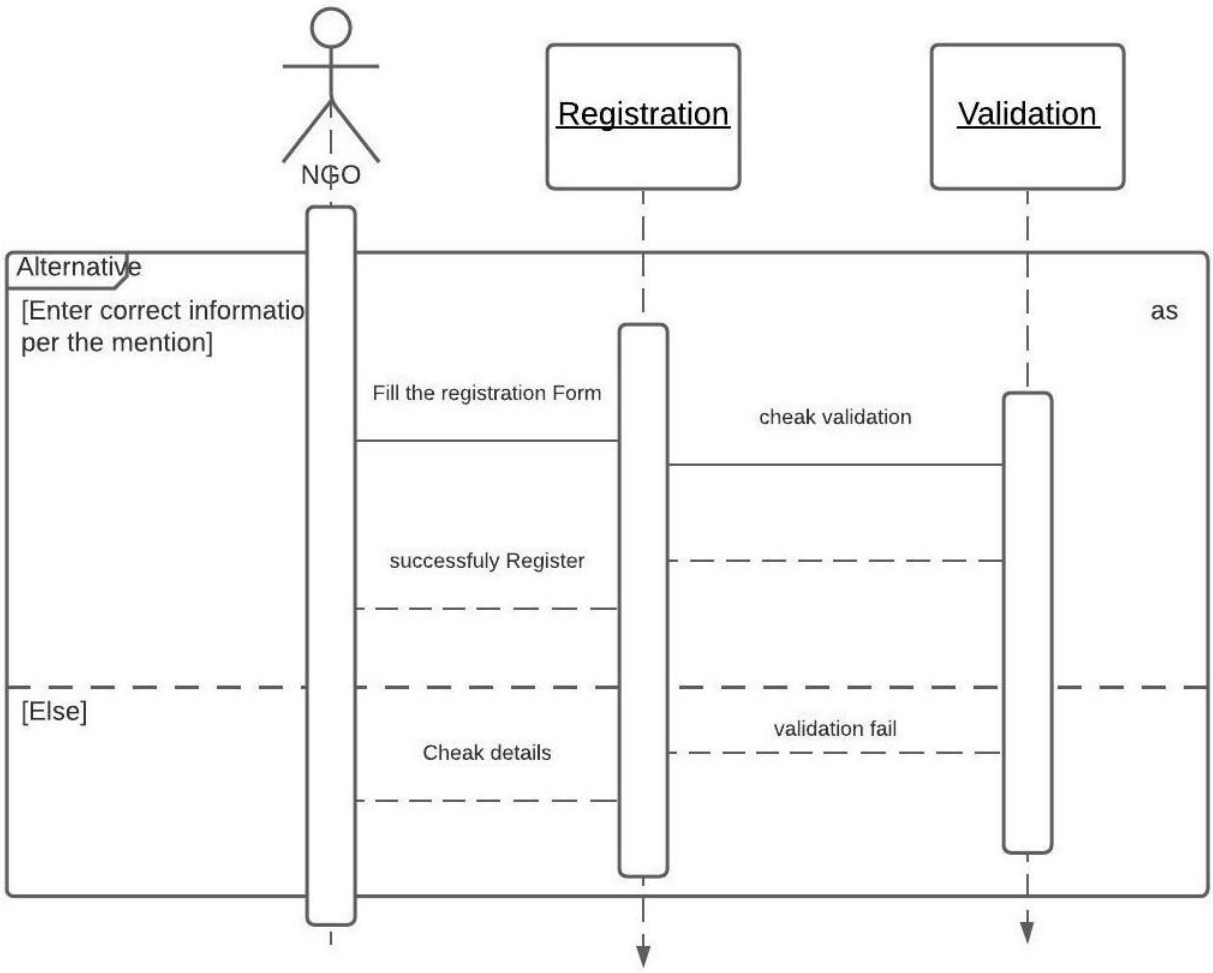


c) Activity Diagram:



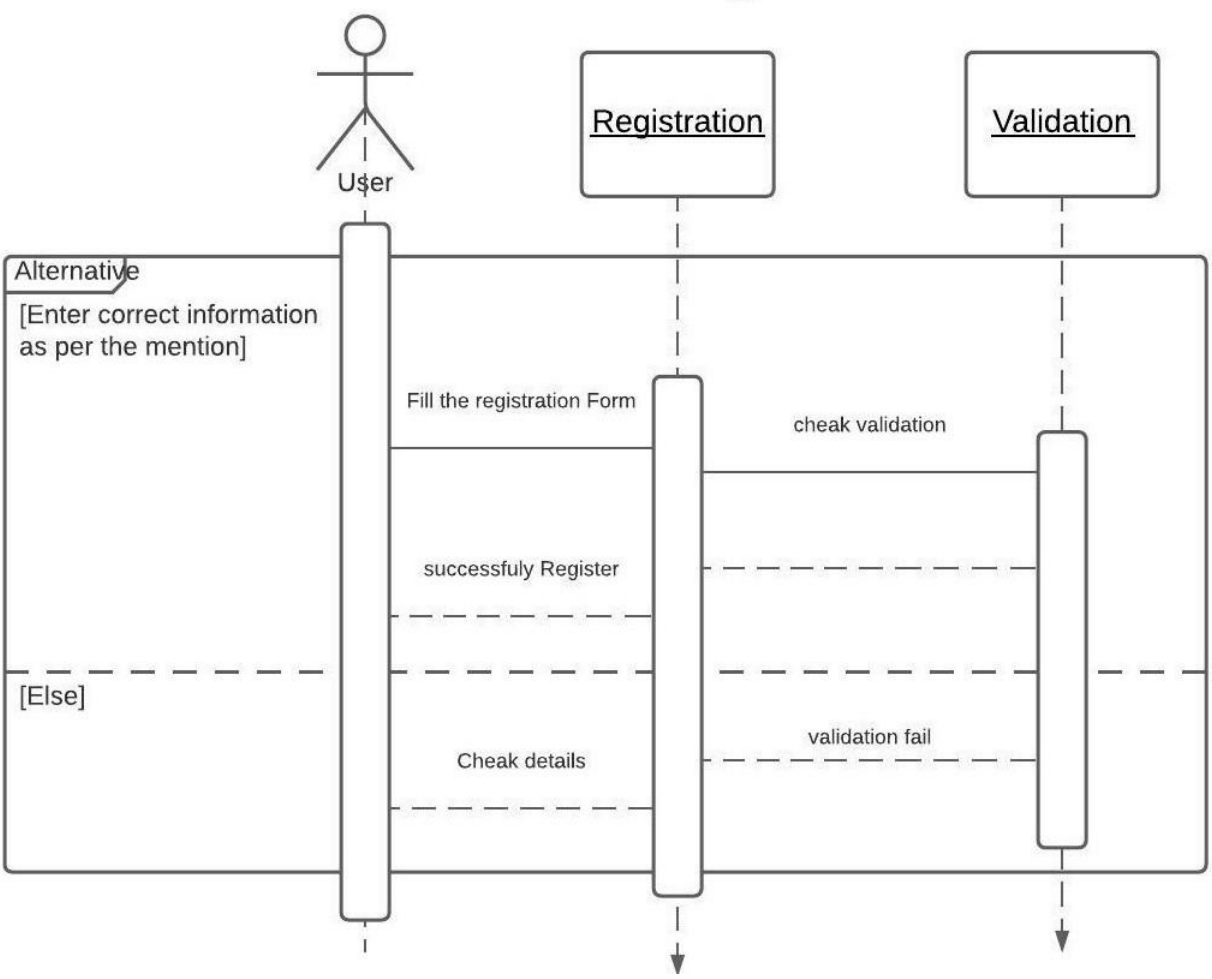
d) Sequence Diagram1.1:

NGO Registration Sequence Diagram:



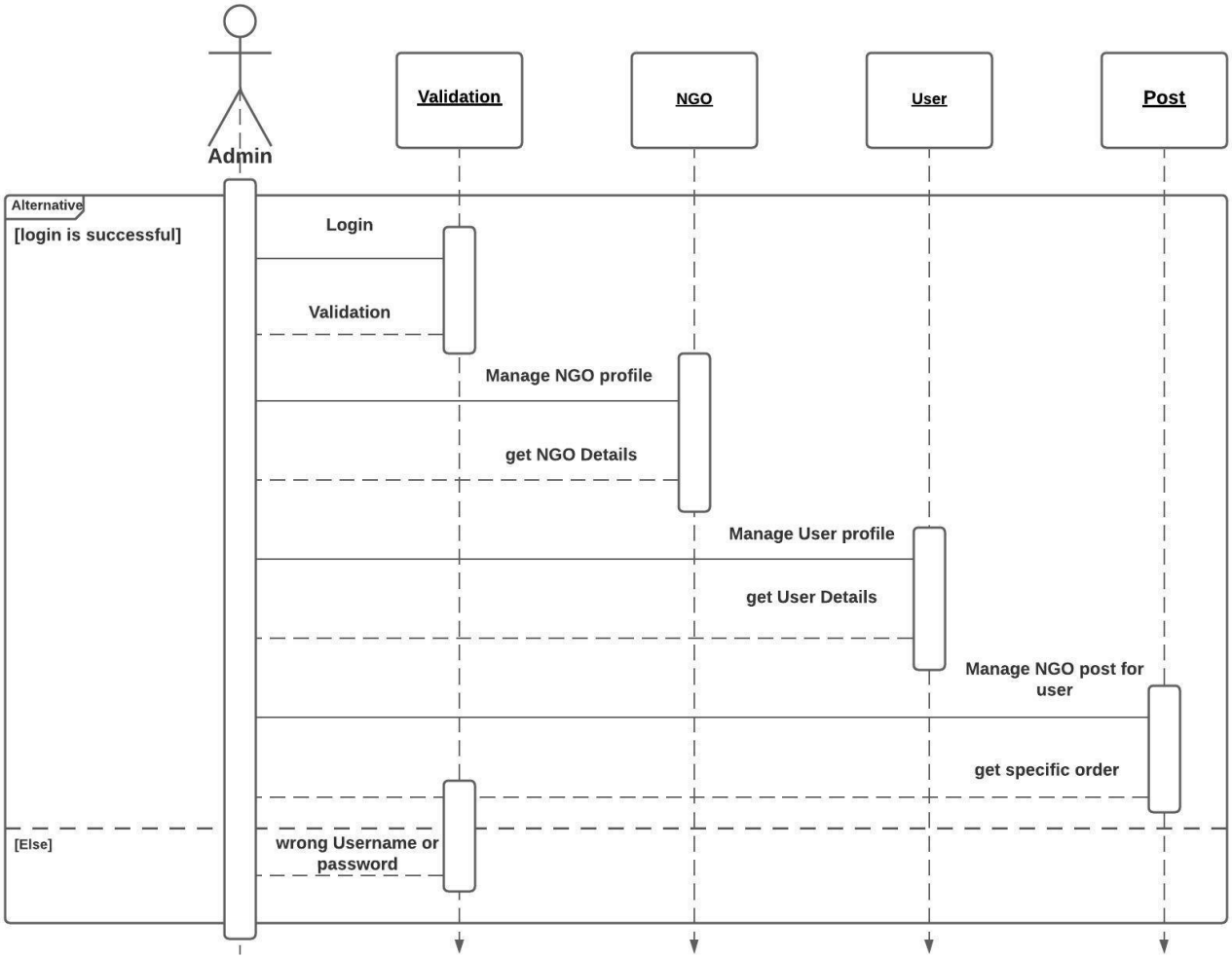
Sequence Diagram 1.2:

User Registration Sequence Diagram:



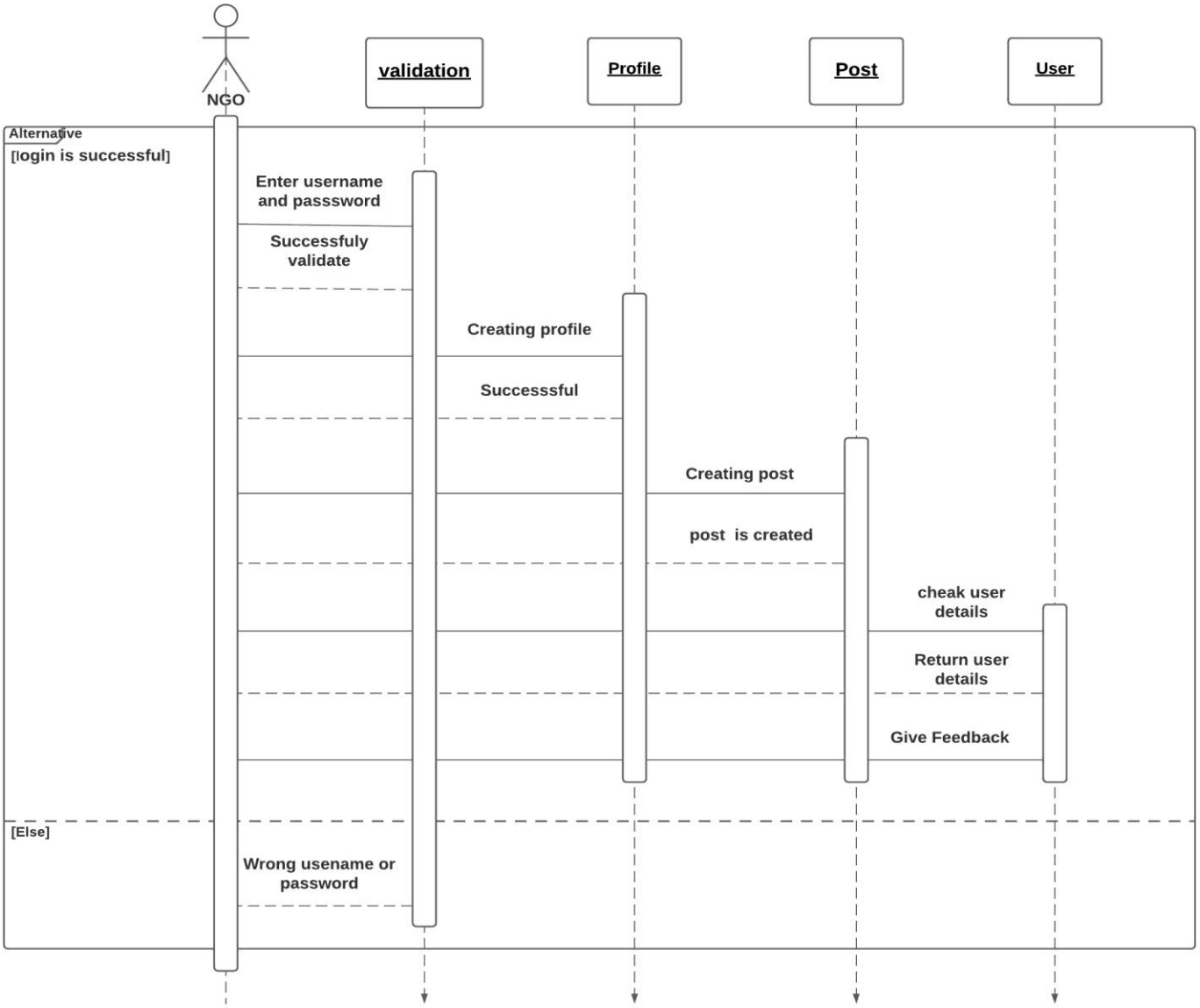
Sequence Diagram 1.3:

Admin Sequence Diagram:



Sequence Diagram 1.4:

NGO Sequence Diagram:



Sequence Diagram 1.4:

User Sequence Diagram: