

Software Requirement Specification
for
Online Pharmacy Management System

Version 1.0 approved

Prepared by Team 8

[24/12/20]

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Version History:

Name	Date	Reason for Changes	Version
Team 8	24/12/20	1 st Release	1.0

1. Introduction

This document serves as a preliminary software requirement specification for Online Pharmacy System project developed by Team 8 for Mini project on Software Engineering. It consists of an overview of Online pharmacy System in which there is a Management System which manages user work if User login as patient where Patient's appoint with Doctor assigned through Admin then whatever medicine Doctor prescribe to patient is booked as order for patient and Medicine Bill is generated. If User login as Doctor then user can manage the appointment with patient. If user login as Pharmacist then user can manage Medicine stock and Orders.

1.1 Purpose

This document presents the Software Requirement Specification (SRS) for Online Pharmacy System Project. This document specifies all the deliverable user requirements from a software system perspective. As for Online Pharmacy System Team 8 is aware of the relatively stringent development time and human resources, this document categorizes user requirements into 3 categories: User Specified (Patient, Doctor, Pharmacist), Doctor and Appointment, Pharmacy and Billing. Each category directly relates to certain priority in for Online Pharmacy System implementation. For analysis detail. The acceptance of this document by both the customer and development team serves as an informal agreement of deliverables between the customer and for Online Pharmacy System Team 8. It's realized that certain software requirements specified in this document are subjective to change during development stage.

1.2 Document Convention

Headings:

- Text: Bold
- Font-Size: 16
- Highlighting: Times New Roman

Sub Headings:

- Text: Bold
- Font-Size: 14
- Highlighting: Times New Roman

Header:

- Text: Simple
- Font-Size: 12

- Highlighting: Times New Roman

Footer:

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

1.3 Intended Audience and Reading Suggestions

The SRS Document is intended to be referred by 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.

Developer refers Software Interfaces, Communication, User Interfaces. Users refers Functional requirement. Tester refers Non-Functional requirements. Project Managers refers whole SRS. Documentation writers refers whole SRS.

1.4 Product Scope

The Project involves building a website for an Online Pharmacy System. Online Pharmacy System is a web-based online medicine store that allows for patients to order drugs to fill prescriptions, and offers basic ordering process security. Patient can consult Doctors and can order prescribed medicine. Pharmacist can manage the stock of medicine.

1.5 References

- <https://en.wikipedia.org/wiki/Wikipedia>
- <https://draw.io/>
- <https://app.creately.com/diagram/>

2. Overall Description

2.1 Product Perspective

Online Pharmacy Systems which provide us medicines and also, they provide online doctor appointment on check-up of patients by keeping those two in mind we designed such system where a patient not only can buy a medicine but can also take the doctor appointment for the medical condition and can buy medicines prescribed.

With the help of Online Pharmacy Management System, the pharmacist can also maintain the stock of medicines and drugs.

2.2 Product Functions

- Patient can able to Order Medicine from pre prescribed prescription.
- Patient can consult the doctor and order the medicine prescribed by doctor.
- Doctor can manage the Patient appointment.
- Pharmacist can Manage the Medicine and drugs stock.

2.3 User Classes and Characteristics

- **Patient:**
This User will able to access the Functions like medicine order and applying for doctor appointment.
- **Doctor:**
This User will able to access the functions like managing appointments with patients and can prescribe the medicine.
- **Pharmacist:**
This User will able to access the functions like receiving prescription order by Patient and acknowledge and place the orders. He can also Manage the medicine stock and will issue the Receipt to Patients for medicines purchased.

2.4 Operating Environment

- **Hardware Platform:**
 - Processor - Intel I5 10th gen Quad core with clock speed up to 3.9 GHz on high performance mode and 2.4 GHz base speed.
 - RAM – 8 GB
 - Hard Disk – 1 TB and SSD – 265 GB

- **Software Platform:**
 - Front-end: HTML, CSS, Bootstrap, Angular, Angular Material
 - Back-end: MySQL, Node JS, Express JS
- **Supported Tools:**
 - MySQL Workbench

2.5 Design and Implementation Constraints

One of the greatest challenge Online Pharmacy Systems Team 8 is facing is the rather stringent development time and resources. Due to this potential risk Online Pharmacy Systems Team 8 will categorize the customer requirements so that during the development cycle, basic requirements are completely fulfilled while bonus features are implemented as much as possible. In order to achieve this, Online Pharmacy Systems data model design should fulfil all the basic requirements while remain pretty scalable to incorporate add-in functionality.

2.6 User Documentation

User Documentation mainly comprises of Help menu or User Manual 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 the complete documentation of our project. It gives complete details about the project, its functionality, users, software used, hardware requirement, environment and so on.

2.7 Assumptions and Dependencies

- **Assumptions:**
 - There is an active internet connection with the system
 - The system has internet browser installed
 - Users know the English or Standard Regional language, as the user interface will be provided in English or Standard Regional Language (On special requirement of client).
- **Dependencies:**
 - There is a need of constant up-dation of Medicine and drugs after each Order Placed to patient.
 - Patient Appointments with doctor for consultation and Prescription provided by doctor.
 - Medicines available in stock or Available from agencies or companies with at least one from below two
 - i. Same content with existing prescription or
 - .
 - ii. Same Medicine.

3. External Interface Requirements

3.1 User Interfaces

The main element is web-pages using HTML, CSS, Angular Material. Multiple interfaces are there like log-in pages for doctor, customer and for pharmacist. This project consists of an overview of Online pharmacy System in which there is a Management System which manages user work if User login as patient where Patient's appoint with Doctor assigned through Admin then whatever medicine Doctor prescribe to patient is booked as order for patient and Medicine Bill is generated. If User login as Doctor then user can manage the appointment with patient. If user login as Pharmacist then user can manage Medicine stock and Orders.

3.2 Software Interfaces

In software interfaces, Operating system like Windows, Linux, Mac OS. The front-end technologies include HTML, CSS, JavaScript, Bootstrap, Angular, Angular Material which enabled web browsers like Mozilla Firefox (most suitable), Internet Explorer, Google Chrome, and Opera-mini.

3.3 Hardware Interfaces

In Hardware Interfaces, Intel I5 10th gen Quad core with clock speed up to 3.9 GHz on high performance mode and 2.4 GHz base speed. Hard disk capacity is 1 TB and SSD – 265 GB. In future enhancements, it can be made responsive to be able to work with mobile devices as well.

3.4 Communications Interfaces

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

4. System features

4.1. Description

The user interface is very easy to use. Users with very little knowledge on android phone can also use it.

This is a software which name is online pharmacy management system which will help user to take appointment of doctor online and also to order a medicine then will generate bill also.

This software will also help a doctor to see how many appointments is there today and likewise arrange time. This software help pharmacist to check medicine stock and add or delete medicine or also will update the medicine list

4.2. Functional Requirements

1. Doctors appointment
 - i. The system will allow patient to search doctor according to his or her illness and get appointment of respective doctor.
 - ii. The system will allow Doctor to ask the questions to patients also patient ask question to the doctor.
 - iii. This system generates medicine list according to patient.
2. Order medicine
 - i. Selecting Medicines from Different Supplier Companies
 - ii. User can select similar types of medicine from different suppliers. For example: if a user needs paracetamol, he can order (a) Napa or (b) Ace or (c) Ace plus or (d) Napa Extra. So, user has full control over the medicine he needs & can chose from many similar categories.
 - iii. User can order a medicine & also will have different payment methods. This allows the user to double check his orders & see if he is getting the right medicine or not.

5. Non-Functional Requirement

5.1 Safety Requirement:

All login ids and passwords of Customer, Pharmacist and Doctors especially admin should be protected for privacy using whatever constraints required in the database or the application. In case any admin (Customer, Pharmacist and Doctors) access account is hacked by any intruder, user id and passwords of all the admin personnel should be changed and new passwords should be issued to all users. Patients, Pharmacist and Doctors records are to be backed up securely across database servers. In case database is hacked by someone and data is deleted a backup server should be present for such purpose.

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 Patients, Pharmacist and Doctors records should be carried out properly. Only admin staff will have access rights to the patient data according to the need for E.g.: Prescription and doctor follow-up, passwords etc. 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 Attribute

1. Safety

All of our product is 100% safe. There is no chance to be fake. We ensure all of our customer with healthy products.

2 Security

Our security issue is very well. We don't keep any personal information's of our customers. As our payment system is like cash in delivery, so customer can pay us after checking their product. After getting their product if they feel that they don't need some of the products then we have 100% refund policy. So, anyone one can visit our website and buy whatever they like without any hesitation.

3. Usability

Our website is totally add-free, simple and very easy to use. It has wonderful guidance, so user don't need to worry about what to do next. Users will be very comfortable to use it.

4. Capacity

Our website capacity is pretty much high. About thousand people can access at a time.

5. Availability

This website will be available 24/7, day and night. Visitors won't get any error while visiting our website and there is no broken link so, visitor can freely browse without any 404 error. Anyone can order our product any-time. Our dedicated delivery stuffs are always ready to go.

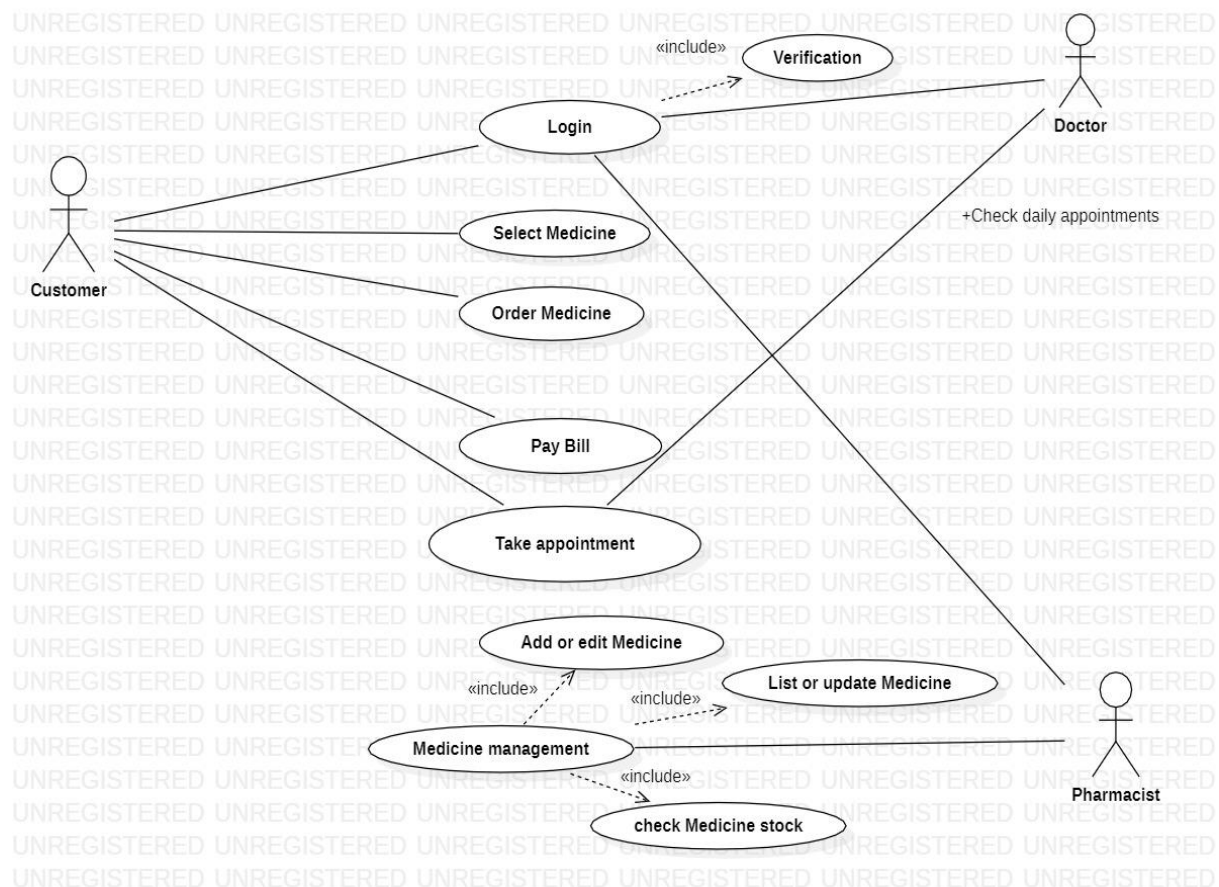
6. Other Requirements

6.1 Appendix A: Glossary

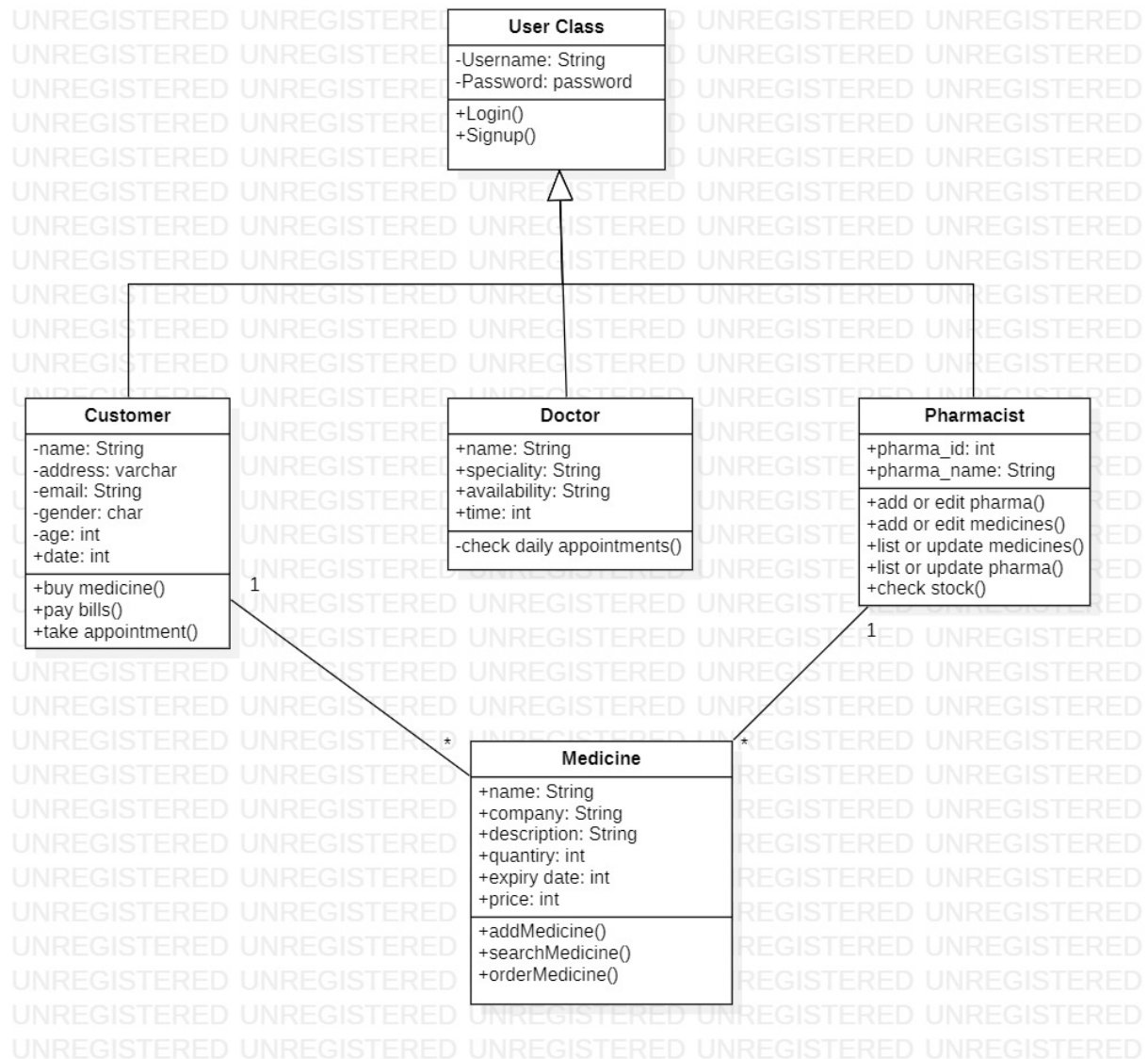
- SRS: Software Requirement Specification
- GH: Giga Hertz
- GB: Giga Byte
- SSD: Solid State Drive
- RAM: Random Access Memory
- HTML: Hypertext Markup Language
- CSS: Cascading Style Sheet

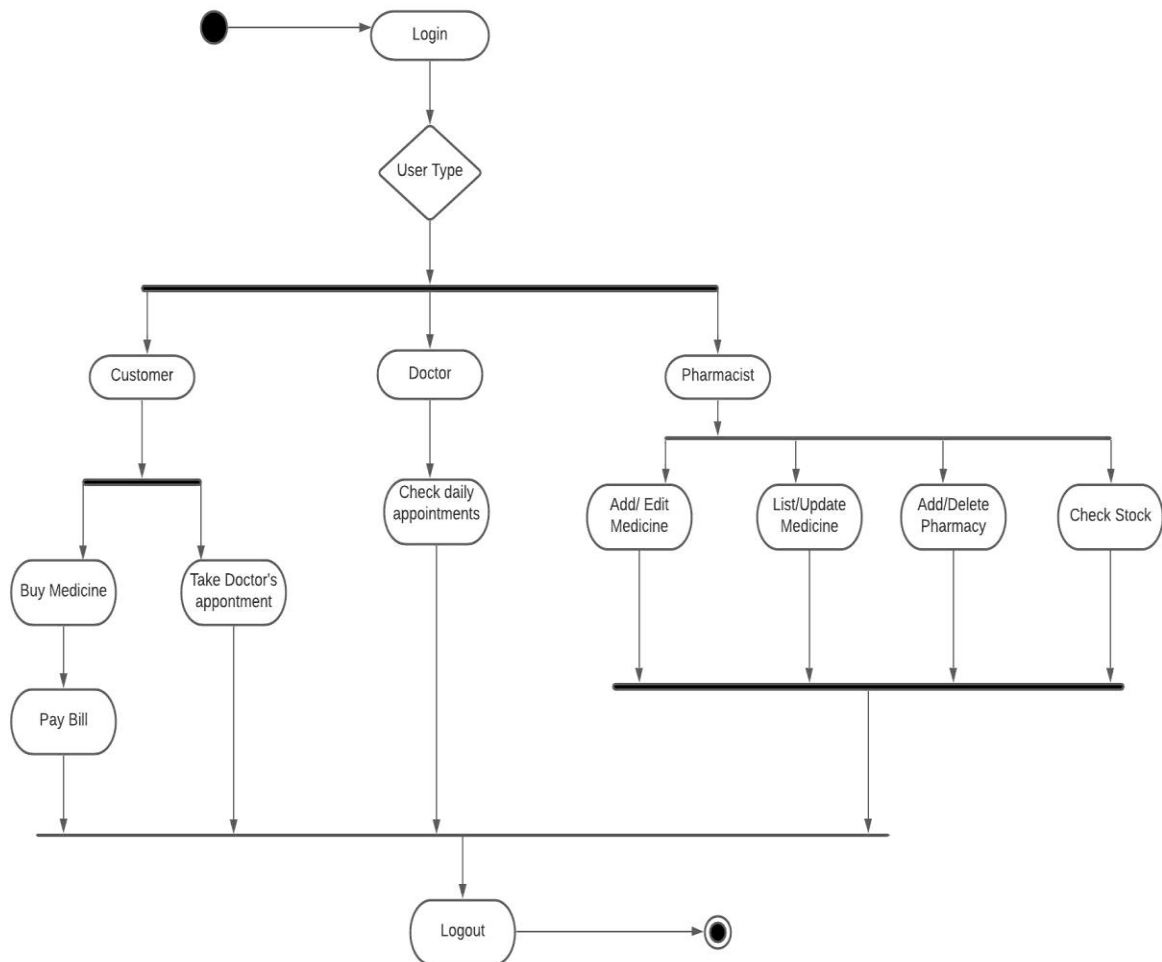
6.2 Appendix B: Analysis Models

6.2.1 Use Case Diagram:



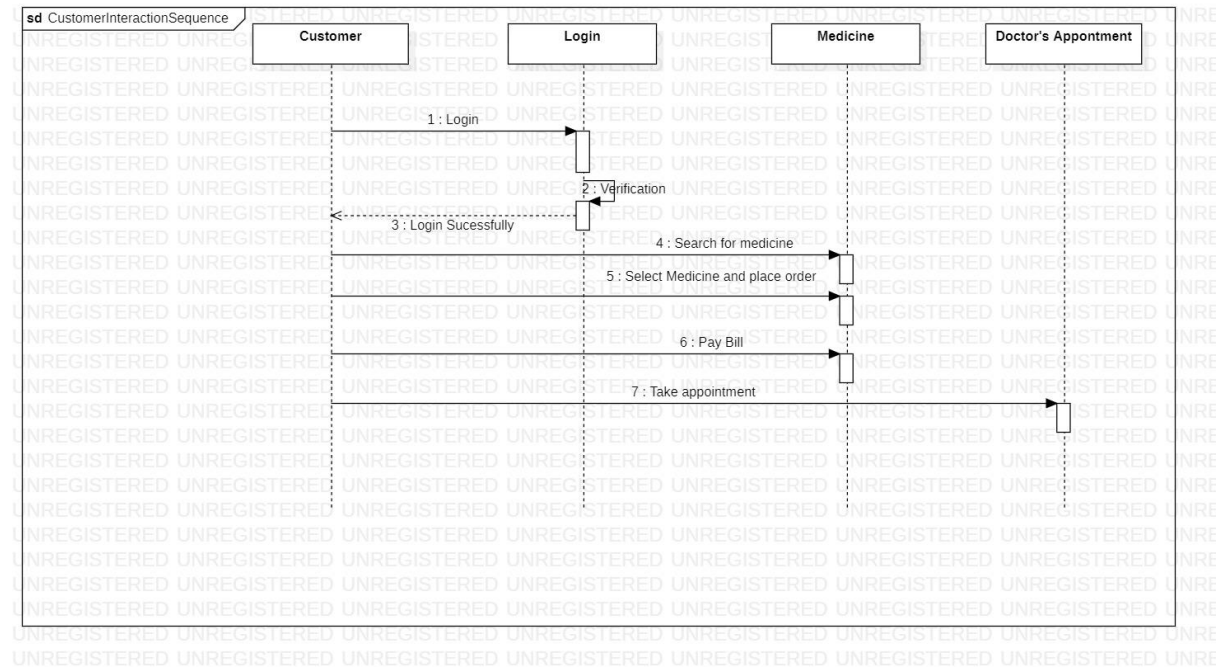
6.2.2 Class Diagram:



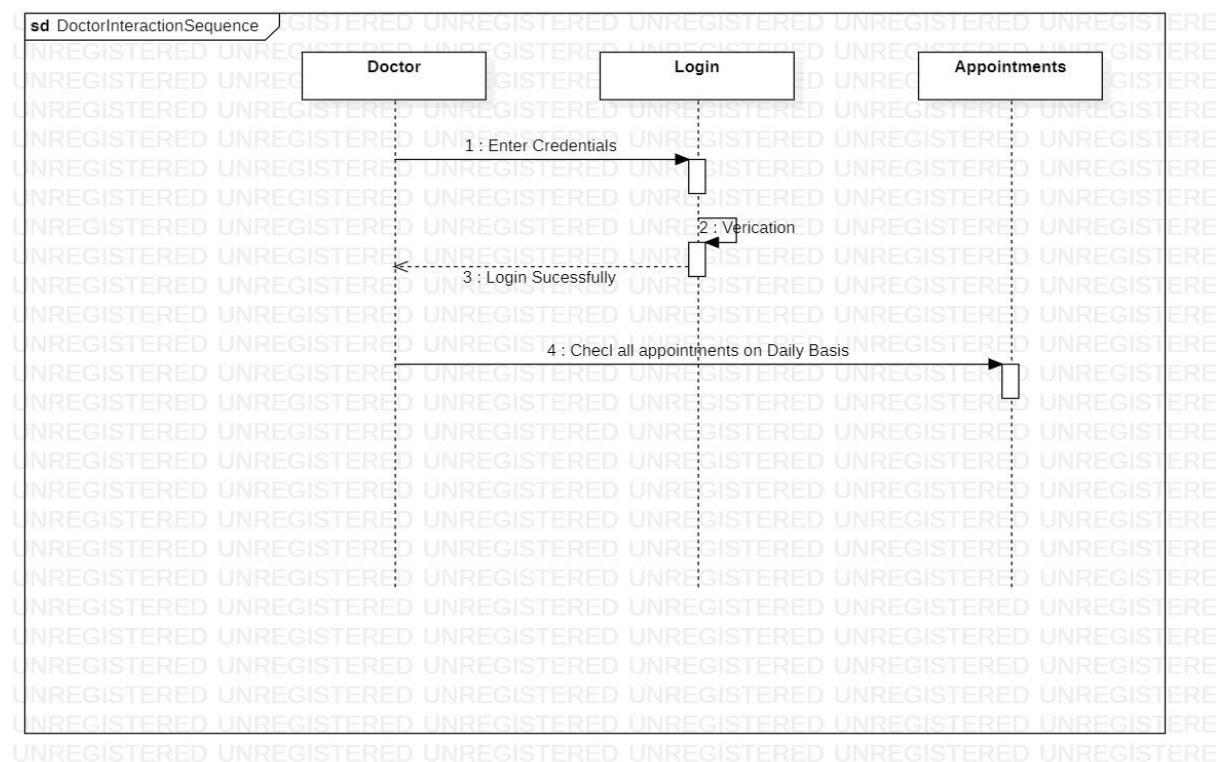
6.2.3 Activity Diagram:

6.2.4 Sequence Diagram:

a. Customer interaction sequence diagram



b. Doctor interaction sequence diagram



c. Pharmacist interaction sequence diagram:

