Software Requirements Specification

for

Online Medicine Repository

Version 1.0 approved

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Revision History

Name	Date		Version
Online Medicine Repository	**21/07/2020**		**Beta 1.0**
Online Medicine Repository	**27/07/2020**		**Beta2 1.0**
Online Medicine Repository	**02/08/2020**		**Beta3 1.0**
Online Medicine Repository	**09/08/2020**		**Beta4 1.1**
Online Medicine Repository	**14/08/2020**		**1.2**
Online Medicine Repository	**22/08/2020**		**1.3**
Online Medicine Repository	**29/08/2020**		**Beta 1.4**
Online Medicine Repository	**8/09/2020**		**1.5**
Online Medicine Repository	**26/09/2020**		**1.6**

1. Introduction

1.1 Purpose

The purpose of this document is to present a detailed description of the open-source software Online Medicine Repository. It will explain the purpose and features of the software, the interfaces of the software, what the software will do and the constraints under which it must operate. This document is intended for users of the software and also potential developers.

1.2 Document Conventions

This Document was created based on the IEEE template for System Requirement Specification Documents.

1.3 Intended Audience and Reading Suggestions

- Typical Users, such as patient, who want to get medicine by using online platform.
- In such pandemic situation those are in lockdown area. They can easily get 24/7 delivery.
- Sometimes some medicines are out of stock or rare, user can order those type of medicine from our system.

1.3 Product Scope

Online Medicine Repository is a software that people can use to order medicine in online. Users can use it to searching drugs and order. They can easily find drugs and order the drugs in online and get them in hand by time

1.4 References

Online Medicine Repository website:

https://onlinemedicinerepository.org/

Online Medicine Repository GitHub page:

https://github.com/medicinerepositoryi

IEEE Template for System Requirement Specification Documents:

https://google/nsUFwy

GNU General Public License version 3:
http://www.gnu.org/licenses/gpl.html

CDDL Common Development and Distribution License: https://opensource.org/licenses/CDDL-1.0

2. Overall Description

2.1 Product Perspective

Online medicine repository is a system developed for the people to order necessary drugs in their need. People can easily use the system to fulfill their necessity of medicines. It provides with all the possible measures to do the best for the people.

It is an open source project and it has a very active developer team to support it and provide feedback to users. It was developed to run on Windows, Mac, Linux and Android.

Product Functions

For Customer Interface:

Sign Up: User can register here for create a buyer account.

Sign In: Registered buyer can sign in here.

Search: Buyer can search his/her medicine here.

Selection: User can select multiple product.

Add to cart: Using this function user add selective item in cart.

Buy: This function use to buy product.

Set location: User set his/her location to get delivery.

Add Voucher: User can add voucher for getting discount.

Payment method: This function is used to select payment method.

Set reminder: User can set reminder for take medicine in proper time.

Live Chat: User can make live chat with seller for any query.

Live Chat Customer care: User also can make live chat with Customer care.

For Seller Interface

Sign Up: Seller can register account here.

Sign In: Seller can sign in his/her registered account.

Add Medicine: This function is using for add medicine in shop.

Edit About/Price: Seller can edit medicine about and price.

Seller Dashboard: Seller get analyzing data of business.

Live Chat: Seller can make live chat with buyer for any query.

Live Chat Customer care: Seller also can make live chat with Customer care.

Add Voucher: Seller can add voucher for buyer.

Help:

Check for Updates: Displays the plugins that can be updated to newer versions

About: Displays the logo of Online Medicine Repository, which licenses are being used, the product version and other info.

Main Pages:

Overview: Displays the Overview page, which by default includes the tabs: Search bar, Sign in, Cart, Buy,scanner.

Preview: Displays the Preview page, which by default includes the tabs: Preview settings.

2.2 User Classes and Characteristics

1. For all types of users, such as normal people workers, officers even house-holders, who wants to use the system for analyze medicine market and order.

2. Users, such as engineers or researchers, who want to use online medicine repository for management system analysis.

2.3 Operating Environment

1. Windows XP
2. Windows 7
3. Windows 8
4. Windows 10
5. Mac
6. Linux
7. Android & IOS

2.4 Design and Implementation Constraints

Online medicine Repository had been developed in jQuery, HTML, CSS, PHP, MySQL, it uses Cloud9 for its visualization engine and has been built on top of the NetBeans Platform. It uses a specific design where every feature is wrapped into a separate module and the modules depend on each other through well-written APIs. There are several APIs available to make plugin development easy.

2.5 User Documentation

There is a quick start guide available on the website of Online Medicine Repository:
https://OnlineMedicineRepository.org/users/quick-start/

There are two other official tutorials, one for visualization:

https://OnlineMedicineRepository.org/users/tutorial-visualization/

And one for layouts:

https://OnlineMedicineRepository.org/users/tutorial-layouts/

In this page: https://OnlineMedicineRepository.org/users/ users can find every available tutorial including tutorials made by the community, video tutorials, the official tutorials mentioned above, non-English tutorials etc.

Additional help and information can be found at Online Medicine Repository's wiki:
https://github.com/OnlineMedicineRepository /wiki

3. External Interface Requirements

This section provides details of all inputs and outputs including hardware, software, communication and mockup prototype

3.1 User Interfaces

1. Sign in/Sign Up

Online medicine repository application should contain following user interfaces,

- Login page for authenticating registered users. This screen should accept user id, password and authenticate against corporate authentication system. It also provides features for "New user registration" and “Forgot password” and "Forgot user id".

- Front-end development: jQuery, HTML, CSS, PHP.
- Back-end development: PHP, MySQL.

2. FRONT PREVIEW

Online medicine repository application should contain following user interfaces,

- Product search page where registered user can search product based on product attributes. User can search by product name, brief description, and product category and product id. Search should support intuitive features such as type-ahead, synonym support, categorized results grouping and spell correction.
- Search results page displays the results of search operation. The results should be paginated with configurable page size. It should allow the user to add the medicine to the shopping cart.
- Shopping cart page displays the existing items in the shopping cart along with total amount and allows the user to check out.
- Checkout page allows the user to purchase the products using credit/debit card or using PayPal account. It should be integrated with payment gateway and display the order details after successful payment. A confirmation email should be sent to registered email after successful completion

3.2 Hardware Interfaces

There is no direct hardware interface specifically for online medicine repository application. The web application runs on an application server hosted in-house on enterprise hardware

3.3 Software Interfaces

Software requirements of the system are very nominal and no other special requirement is there hence it is economically feasible. Also, Java is open source and thus easily available free of cost.

Medicine repository application should integrate with the following interfaces,

- Product database to get product details. JDBC APIs are the most preferred way of integration.
- Pricing System to get the product pricing, in real-time for the selected products. Integration should be done using web services.
- Inventory ERP to get the product availability information. Integration should be done using web services

3.4 Communications Interfaces

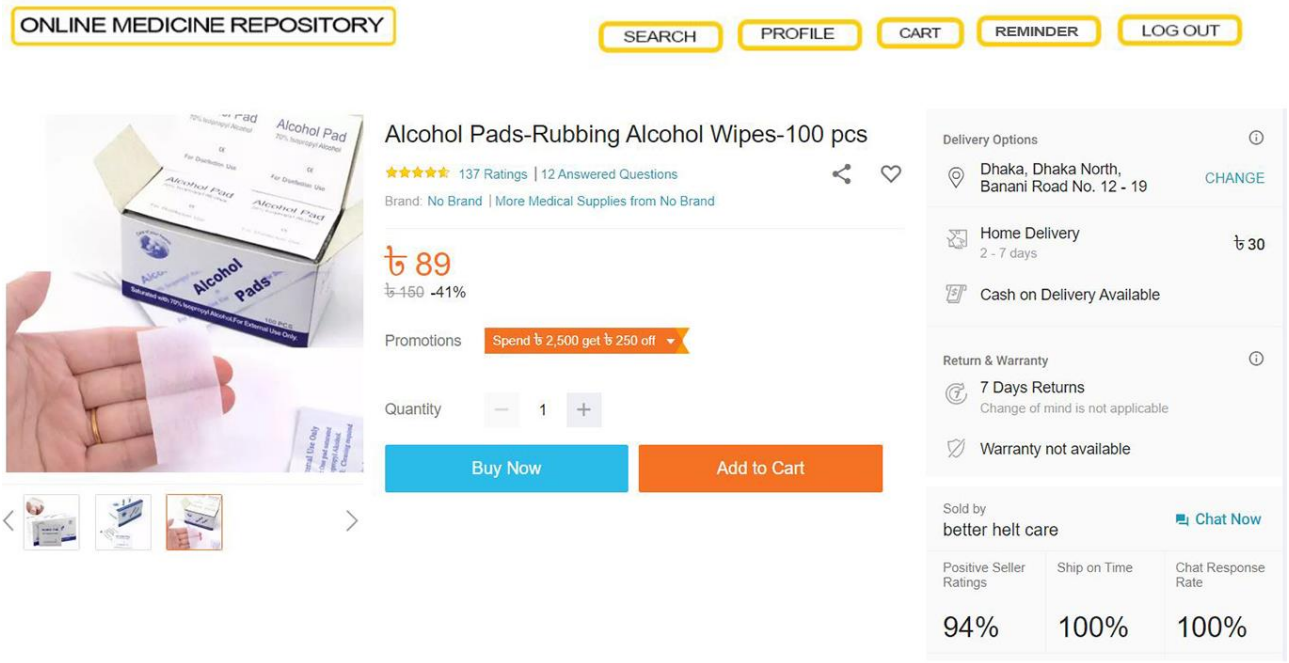
There are no Medicine repository application specific communication interface requirements. Existing OS and network infrastructure will be leveraged for communication.

4. System Features

This section will reflect the features and explains how they can be used and the results they will give back to the user.

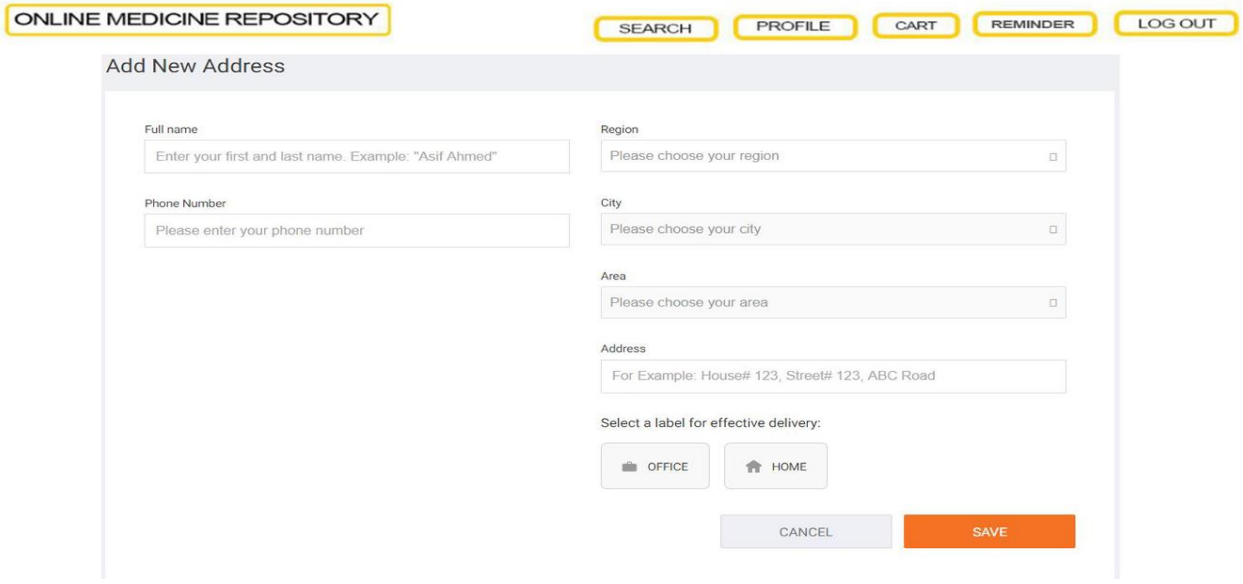
4.1 Easy way to get medicine

User can easily find out the medicine by searching in the search box. Usually same types of medicine are produced by different company so if user search the name of a medicine if that company medicine isn't available it can suggest the same medicine from different company. As well as user can also scan their prescription.



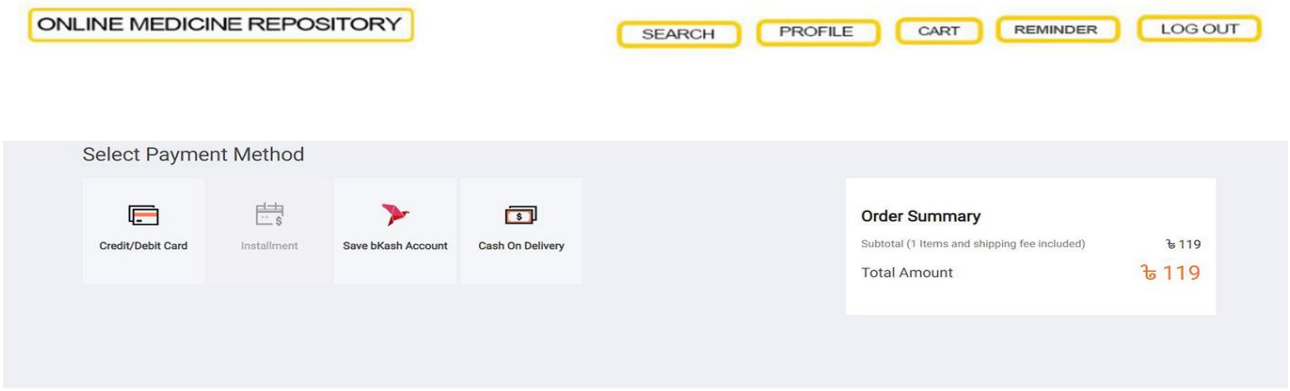
4.1 Delivery system

User gets home delivery easily. When user order their medicine they add their address and contact number so, they can easily gets the medicine delivery at home.
If the address isn't clear they can also share the location from the Google map.



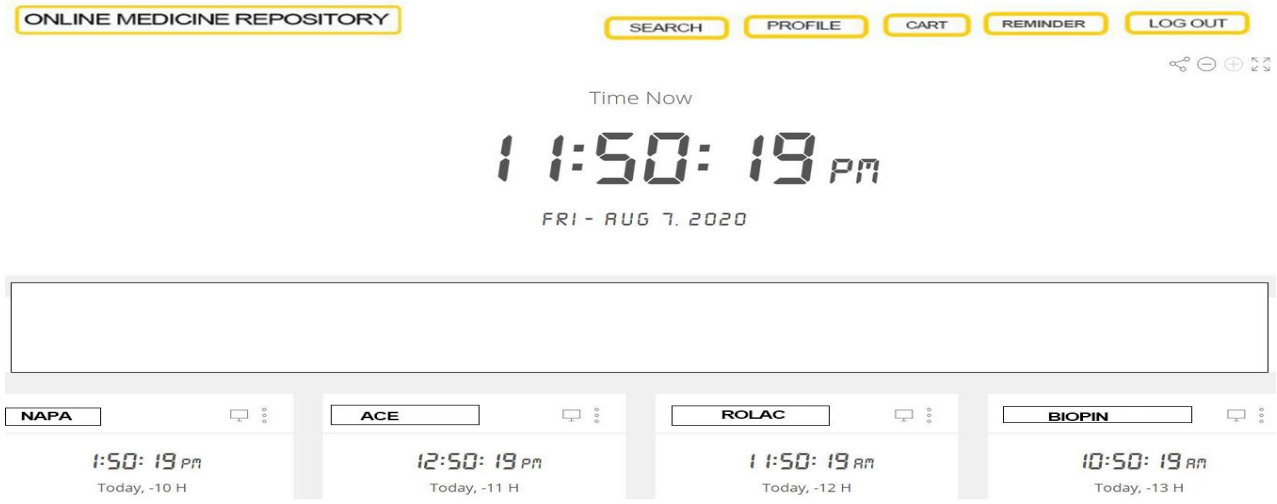
4.2 Payment method

There will be 4 kind of payment methods. Bkash, Credit card, Debit card and Cash on delivery.
If the user chose online payment option then they will enjoy some discounts too.



4.3 Medicine reminder

Because of busy life we usually forgot about taking medicine so it this system there will be a reminder option.
User will set their medicine times and time to time the system will remind him/her to take medicine.



4.4 Online consultation with Doctor

Sometimes user got sick but they can't go to see the doctor. So, from this system user can easily get connected by any doctor any time they need.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The following are the key performance requirements,

- All pages should load within 2 seconds throughout the region.
- Search results should be displayed within 1 second.
- Checkout should happen within 5 seconds after providing payment information.

5.2 Safety Requirements

Existing product database will be leveraged and no changes to database is planned for Online Medicine Repository application. To ensure that no one of Online Medicine Repository users loses any data while using Online Medicine Repository (due to a crash or a bug of some kind) the developer team updates Online Medicine Repository regularly. There is a bug tracker available where users can report any bugs, they have encountered so that
the developers can fix it in the next release.

5.3 Security Requirements

Following security standards should be followed,

- Login operation should be performed using transport layer security (HTTPS)
- All user id and password information should be encrypted using one-way hash algorithms in the database.
- Registration process should use CAPTCHA to prevent machine / robot brute force attacks.
- All input fields should be validated for SQL injection scenarios and HTML reserved words scenarios. Input should be sanitized before sending them to the upstream systems.
- There should be well-defined password policy covering password change frequency, invalid attempts allowed, etc.
-

5.4 Software Quality Attributes

Reliability

Online medicine repository should provide reliable and relevant search results 100% of times. The checkout operation should end reliably within 5 seconds.

Availability

Online medicine repository should be available 99.999% of times throughout region. All software upgrades, patches and fixes should be done without shutting down the application. There should be disaster recovery environment to handle natural disasters.

Maintainability

The following maintainability features should be supported,

- Online medicine repository should adopt standards-based integration for extensibility and scalability.
- All code artifacts should have proper documentation.
- All code components should be thoroughly tested and the test coverage should be more than 95%.

6. Other Requirements

References: https://en.wikipedia.org/wiki/Main_Page

Appendix A: Glossary

Home page: A web page that gives the whole information about the maintenance system of online medicine repository. Overall description to the system, how to explore, how to full-fill necessary activities of users.

Sign-up: A formality to get membership to the system. So that the user gets maximum support and help from the system. And for the specific users specific maintenance systems.

Selection: A process to select the necessary products to buy.

Add-to-cart: Process to complete bill for the user on the basis of order. And user can easily remove or add extra products in the cart.

Payment: Bill transaction in the system for the purchased products.

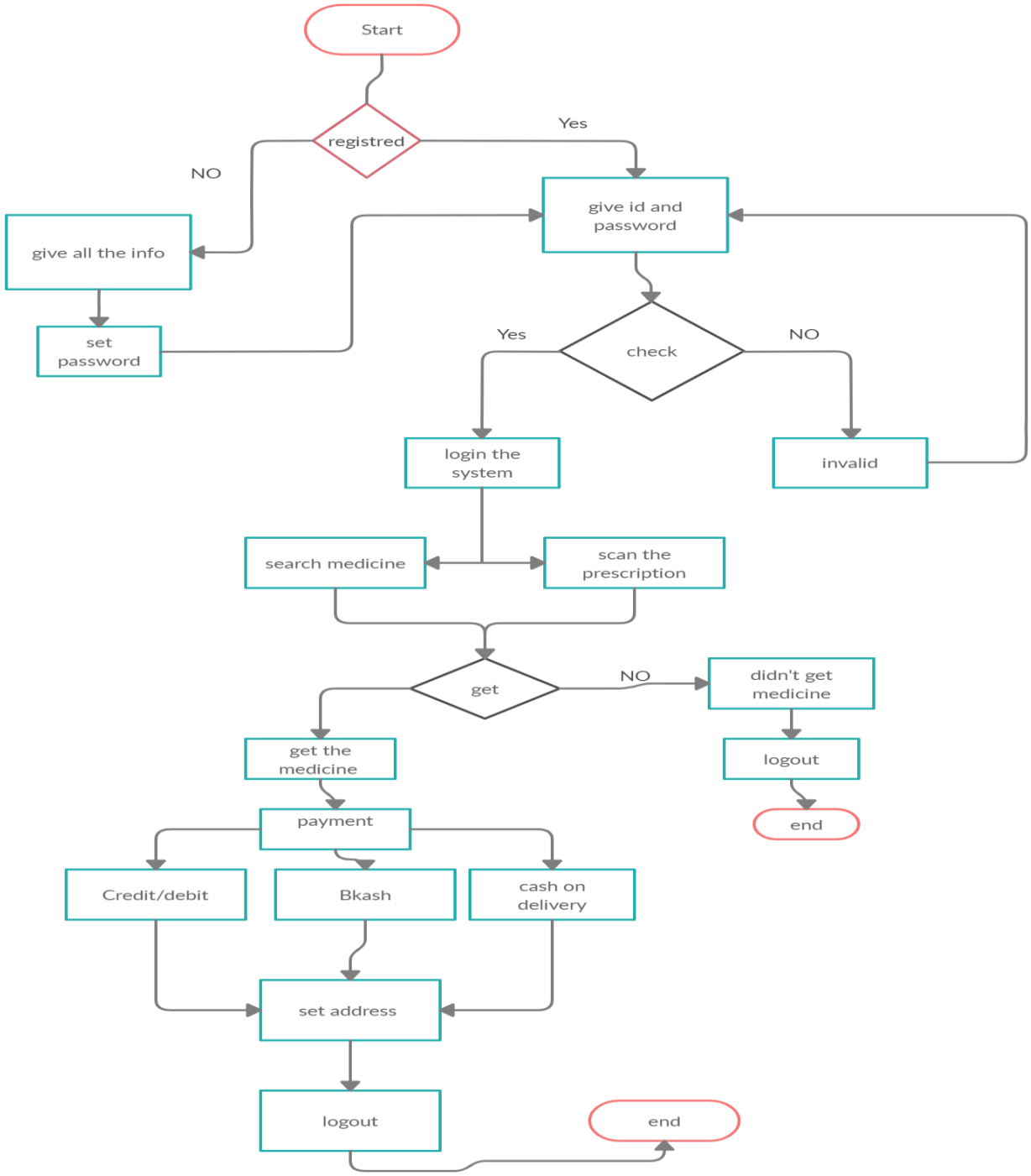
Overview: A complete description about the user system. Details about the products and the procedures, functionalities of the system.

Customer-care: A service maintenance for the users of the system. A 24/7 help-line support system for the users and customers.

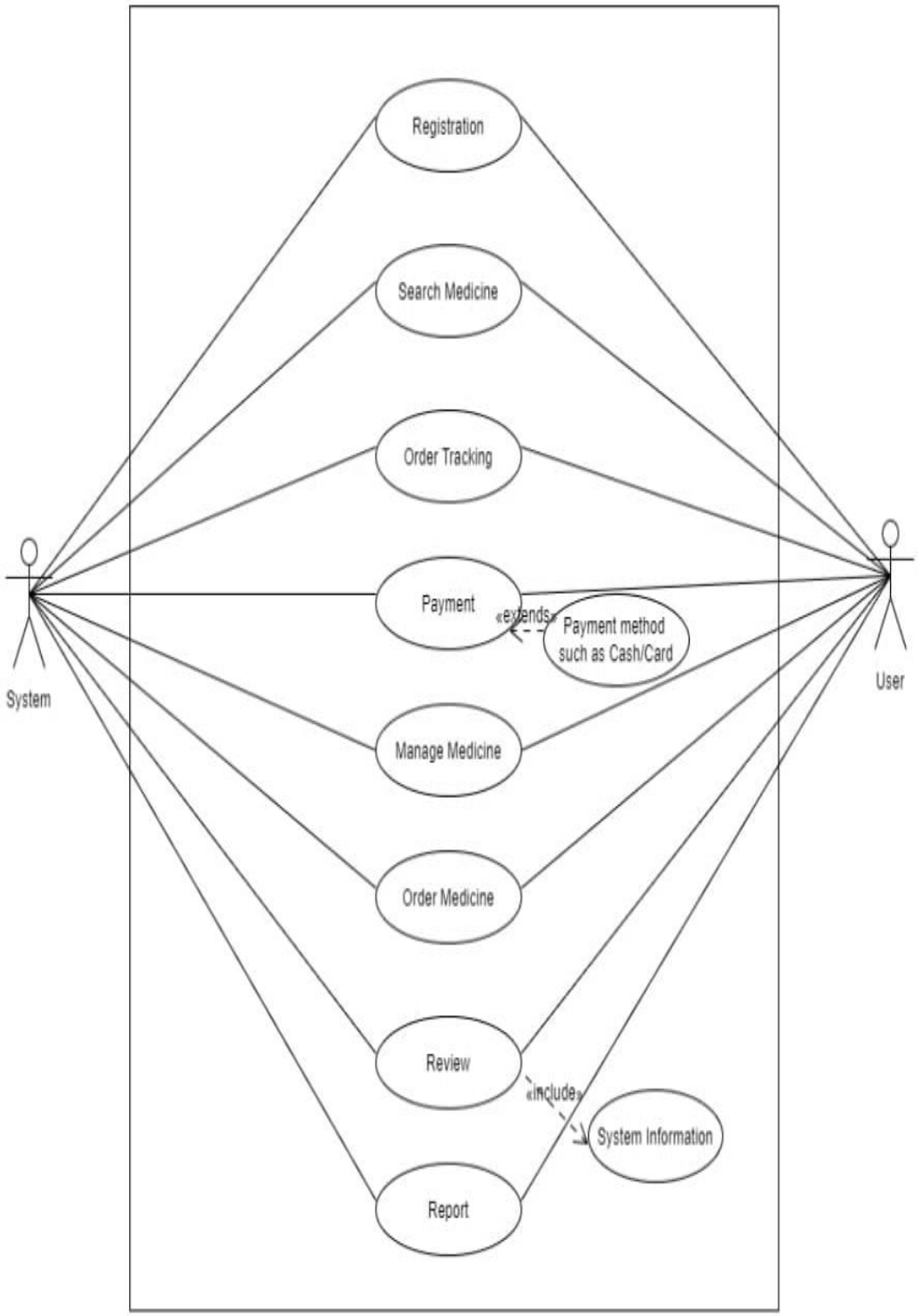
Appendix B: Analysis Models

Here some analysis models of our online medicine repository, such as data flow diagrams, class diagrams, state-transition diagrams, or entity-relationship diagrams

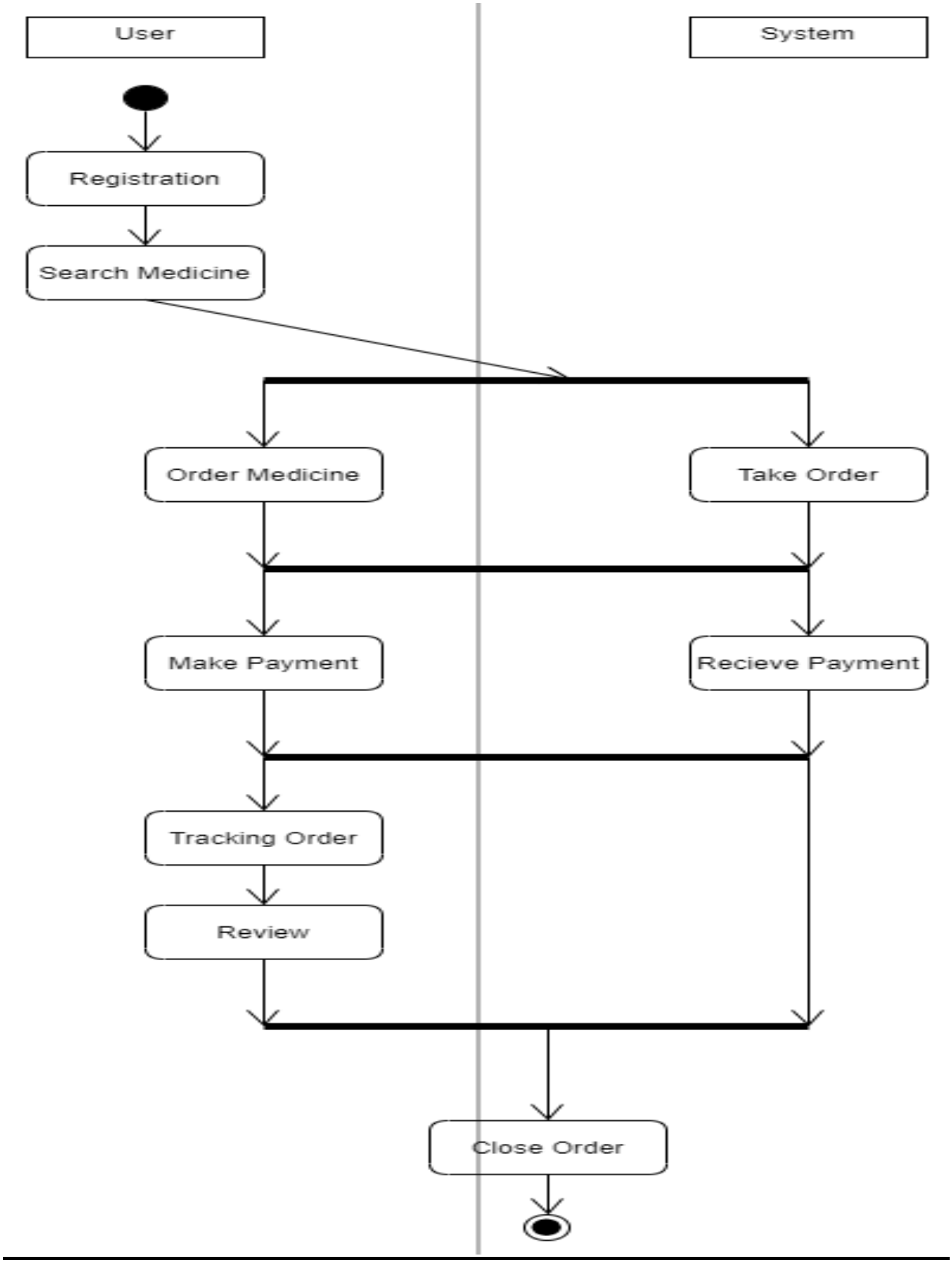
FLOWCHART OF OMR:



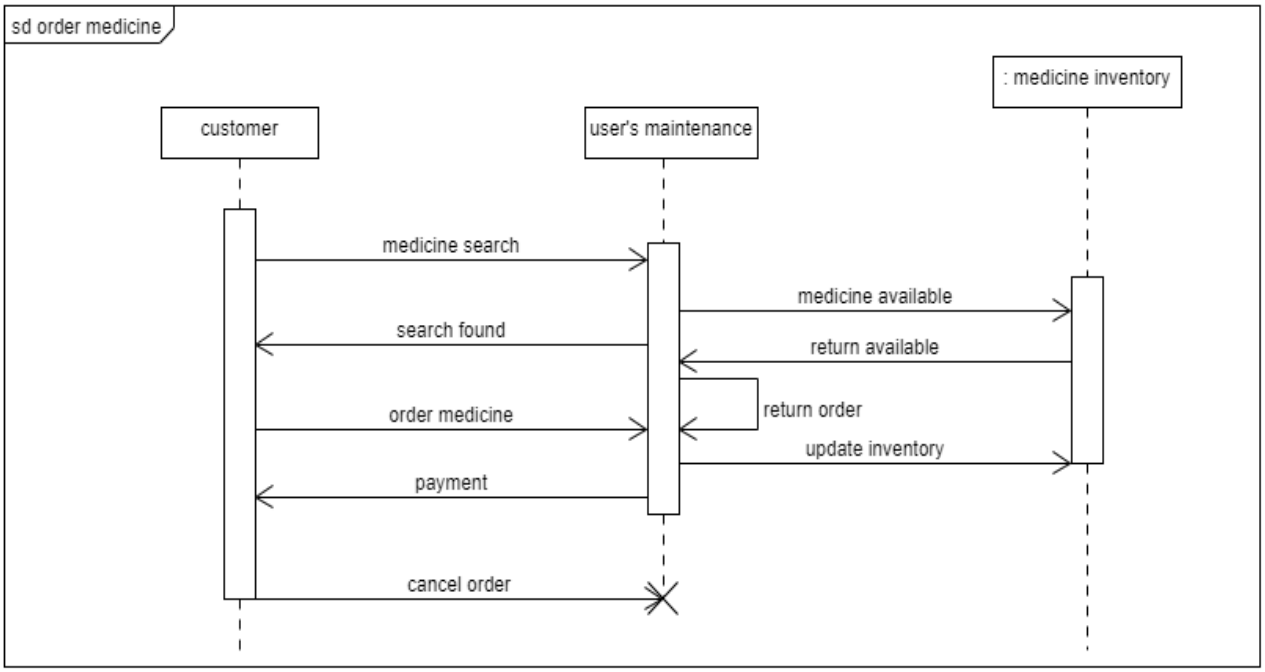
USE CASE OF OMR



Activity of OMR:



Sequence Diagram of Order Medicine in OMR:



Sequence Diagram of Medicine Delivery in OMR: