# SOFTWARE REQUIREMENTS SPECIFICATION

## for

## UMD WEBSITE

Version 1.0

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# 1 Introduction

## 1.1 Purpose

Wastage of unused medicine/drugs is one of the crucial problems big economies face in the world. The US alone wastes 5 billion Dollars on unused medicines. Also, Medications that are flushed or thrown out hurt the environment and are harmful for children and people with substance use disorders. The main purpose of the "UNUSED MEDICINE DONATION WEBSITE" is to serve as a solution to this. It serves as a platform for people to donate their unused medicine and for the needy people to receive the required medications. It is pretty tricky for people to first find out where to donate, what is in need, where to receive, etc. This is prevented by the website that provides users with all these options, saving their time.

## 1.2 Intended Audience and Reading Suggestions

The website is for people of age greater than 18. We expect the users to serve as responsible citizens by providing to the people in need. Further discussion will provide all the internal, external, functional, and non-functional information about the website.

## 1.3 Project Scope

"UNUSED MEDICINE DONATION WEBSITE" serves as a platform for people with unused medicine to donate them and for people with needs for them to collect them.
After registering by giving the necessary information, the user can login and use all the features of the website. The user who wants to donate medicines can fill a form giving all the details about the medicines that he/she has. The user also has the option of giving their address so that an official nearby can collect the medicines accordingly. The user profile will contain personal information and notifications. The transaction history of a user will also be shown.
The main task of admin is to appoint/remove active members. The transaction history of a user will also be visible to the admins. He has a higher level of authority than active members being able to perform their functions and also supervise them.
After submission of form by user, it will be given to "active members" to be verified. They will collect the medicines as well. The transaction history of a user will also be visible to the active members.

# 2 Overall Description

## 2.1 Product Perspective

Every year large amounts of medicines are wasted all over the world. One of the prominent reason for this is that many medicines remains unused until these expires. Most of the people tend to throw away the medicines/legal drugs that are no longer needed by them, or these medicines are never utilised. Our website aims to overcome this problem by giving people to the means to donate these unused medicines to NGO which can be further donated by the NGO to needy people.

## 2.2 User Classes and Characteristics

"Unused Medicine Donation Portal" has 3 types of users :

1. **Normal Users** - Normal users can donate/request for medicines through our websites.

2. **Active Users** - Active users can view the the database of donated medicines.

3. **Admin** - The admin monitors the active users. He/she can remove existing active members or can add new active members.

## 2.3 Product Functions

"Unused Medicine Donation Portal" helps the normal users to donate their unused medicines to NGO.
The normal users can also request medicines through our websites and the NGO can donate the medicines (subjected to availability) to these users.

- Normal users can donate medicines to NGO.

- Users can also request for medicines through our website.

- The NGO can donate the requested medicines to the normal users.

- The active users and admin can see the list of donated medicines.

- Basically the admin has all the powers that the active users have. Additionally, admin has the power to add/remove current active users.

- The users can donate money to our website which will be used for charity through monetary donation page.

- The users can provide feedback to the admin about the website through the feedback page.

## 2.4 Operating Environment

The website can operate in any operating environment. It can be accessed on any operating system - Windows, Mac OS, Linux through suitable web browsers.

## 2.5 Design

To use our website, users needs to follow these steps -

1. Register with our website by providing necessary details such as Name, Email Address, Phone Number, Address.

2. They need to create username and password which will be stored in our database and will be used to login to the website.

3. After registering, the users need to login to the website using their username and password.

4. After successfully logging into the site, the users can use the features of the website.

# 3 External Interface Requirements

## 3.1 User Interfaces

A user can interact with the website in five different ways:

**Viewers:** Many unknown or unauthenticated people might want to know about the website and causes for which the website is working for, those can collect information about such things.The Viewers generally become the users later.

**New User:** The viewers who visited the website or heard about the causes for which the website is working for, can visit the website and sign-up or register ,thus becoming a new user who will be provided a unique username and password.They can now use the functionalities of website i.e., can now donate medicines or request medicines with a valid medical evidence.

**Existing User:** The users who are signed up already are existing users.Each user have their own account and authorized login access.The Existing user can login online to their account perform the operation like request medicines,donation of medicine,Ask for availability of medicine and urgent request for medicines.

**Active Members:** The users who maintain the database and have special authorisations to edit the database are active members.The website contains a different interface for active members and normal users.

**Administrator** Admin is a super user of the website, admin can add or remove active members and grant permissions to users and can monitor the changes in database which contains all information about users and also monitor the databases containing information about medicines and its storage.

## 3.2 Hardware Interfaces

**Client Side:**

- User on Internet : Web Browser

- Network : Internet

- The machine should be able to run Internet Explorer 6.0 or equivalent or higher versions.

**Server Side:**

- Processor : Pentium IV or higher.

- RAM : 1 GB or more.

- Disk Space : More than 10 GB.

## 3.3  Software Interfaces

- User on Internet : Web Browser

- Network : Internet

- Development Tools : Python,HTML,CSS,JavaScript,Bootstrap and Django

## 3.4  Communications Interfaces

¡WebsiteName¿ website i.e., www.¡WebsiteName¿.com offers facilities to donate and request medicines and aims to provide the medicines for needy without any expenses.

- Client on Internet will be using HTTP/HTTPS protocol.

- Client on Intranet will be using TCP/IP protocol.

- A Web Browser such as Internet Explorer 6.0 or equivalent

# 4 System Features

"UMD WEBSITE" is a result processing web software. So the main art of this product is to enter data of results and publish.

## 4.1 Description and Priority

"Unused Medicine Donation" has the following main features.

1. Review/feedback: The goal of the website is to help people by providing them with a good user interface to interact with the NGO.

2. Result Re-view : This is done by director.

3. Result Publish : It is basically notice. This is mainly done by director or sometimes by staffs commanded by director.

4. Admin: The main work of the admin is to supervise the staff.

5. Staff: The work of staff is to take manage the request received from the users.

6. User: User can send them a request to the server which can be accessed by the admin/staff.

## 4.2 Functional Requirements

The "Unused Medicine distribution" website is being build in django ,HTML,CSS,javascript,sqlite3.
Back-End - Django.
Font-End - CSS,HTML,javascript.
Database - Sqlite3.

# 5 Other Nonfunctional Requirements

## 5.1 Performance Requirements :

1. The information refreshed depending upon whether some updates have occured in the application or not. The system shall respond to the user in not more than 2 seconds of the request submittal.

2. System shall be allowed to take more time when doing large processing jobs. Response to view information (regarding available medicines , view registered user information etc) shall take no longer than 5 seconds to appear on the screen.

## 5.2 Safety Requirements:

1. The database may get crashed at any certain time due to virus or operating system failure.Therefore, it is required to take the database backup so that the database is not lost.

2. Proper UPS/inverter facility should be there in case of power supply failure.

## 5.3 Security Requirements :

1. The system will use secured database.

2. Normal user can just read information but they cannot edit or modify personal or some other information.

3. The system will have different types of users and every user will have access constraints.

4. Proper user authentication should be provided.

5. There should be seperate account for admin and and active members so that only admin is able to modify the database and no one else.
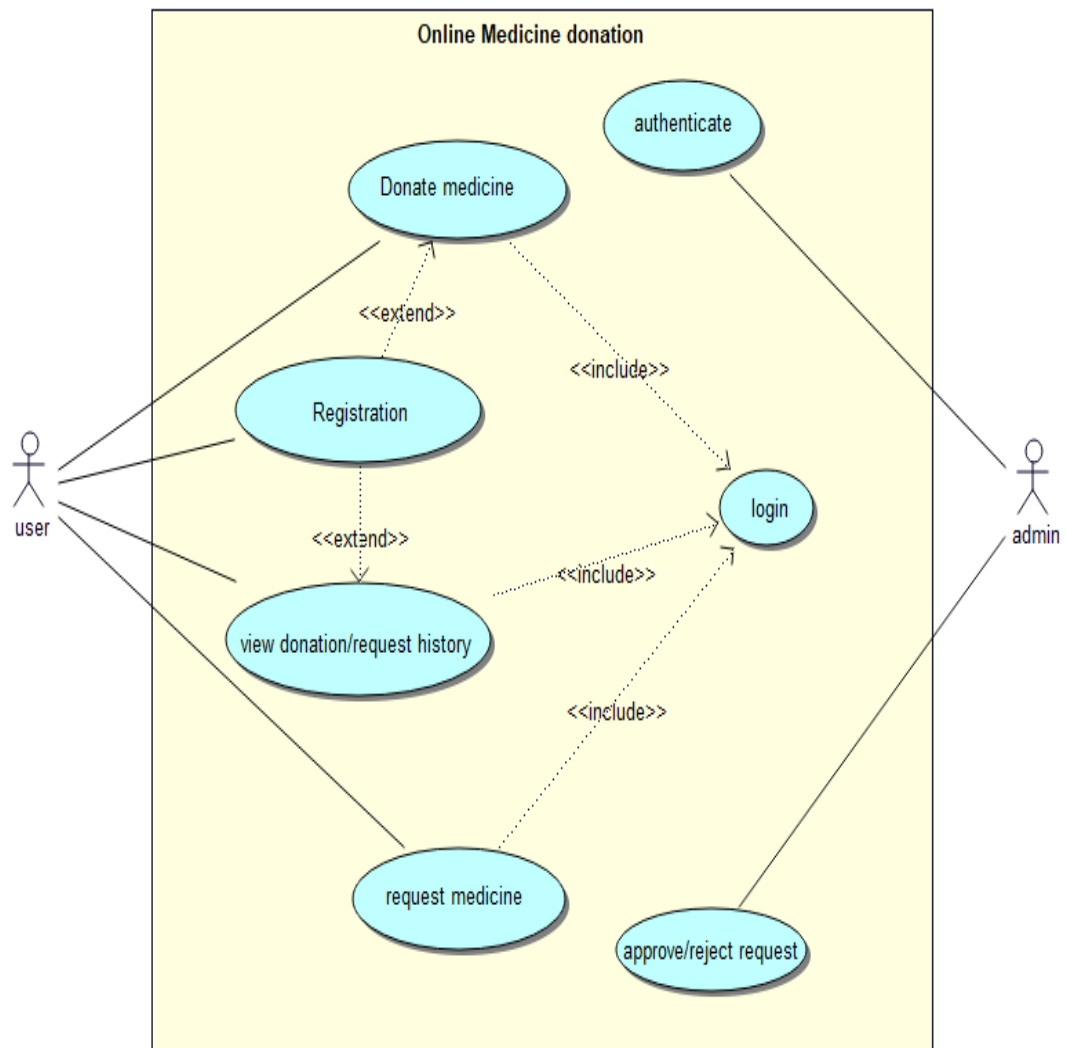
## 5.4 Software Quality Attributes :

1. **Usability :** The software application should be easy to use and user friendly. The user should be able to utilise the system effectively and should be able to learn to control or operate the system easily.

2. **Reliability :** The system should be able to operate efficiently over time.

3. **Testability :** The system should be testable. This means The system should faciliate test to determine whether the predefined test criteria have been met.

4. **Flexibility :** The system should be flexible. This means it should be able to adapt to changing scenario.

5. **Maintainability :** The system should be maintainable. This means it should be easy to maintain the software application cost effectively.

6. **Performance :** The system should be able to repond to user request within minimum time.

7. **Security :** The system should be able to resist or block malicious or unauthorized attempts that destroy the system and at the same time provide access to legitimate users.

## 5.5  Business Rules

1. There is no upper limit on medicine donation.

2. The donor must provide some identity proof while donating.

3. The system will have different types of users and every user will have access constraints.

4. The users requesting medicines must provide proper medical evidence.

Use case diagram for the portal

Register

Login

not registered

registered

Verify phone no.
through OTP

View profile

Registered

Donate
medicines

Request
medicines

View
records

Feedback
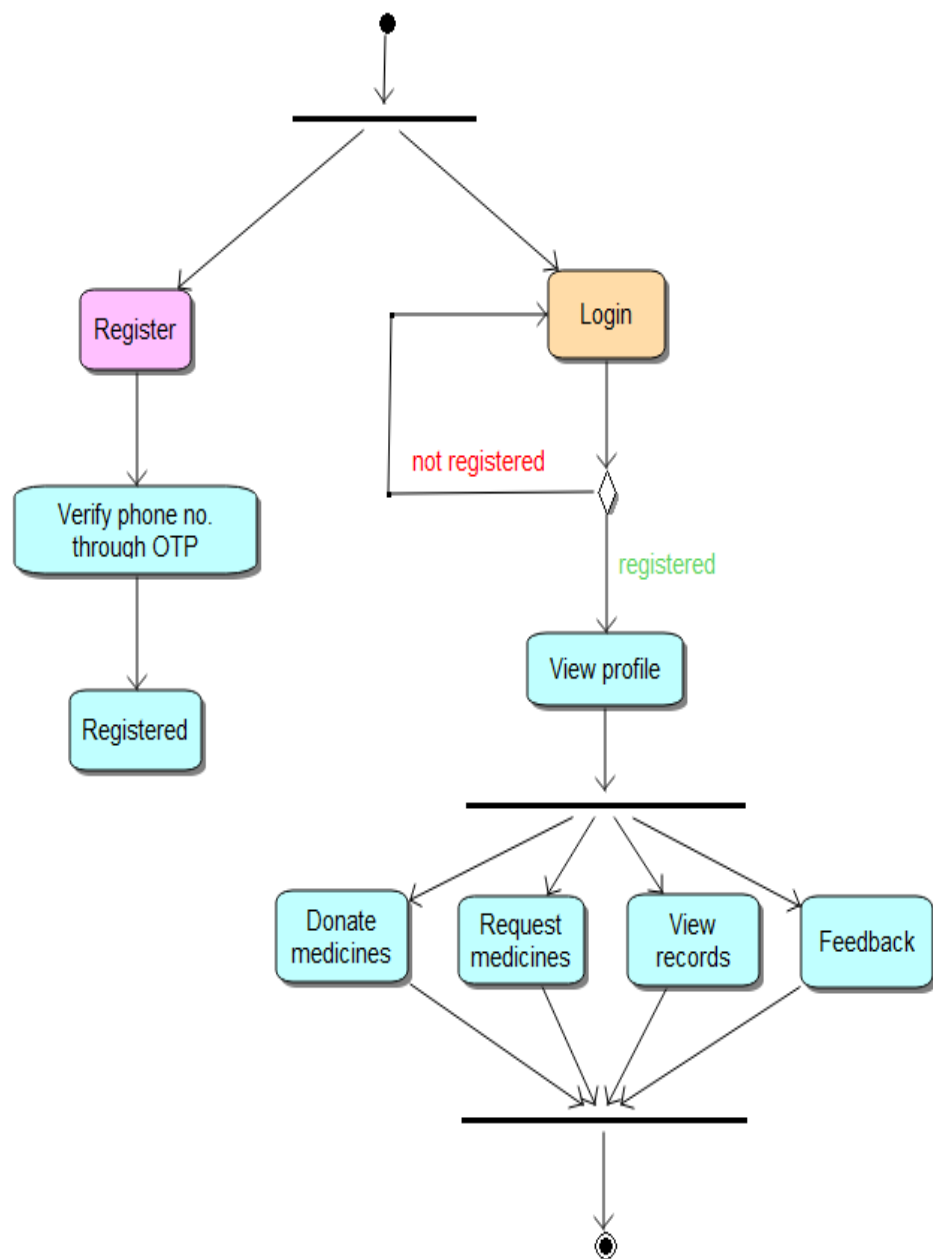
**Activity Diagram from user's perspective**
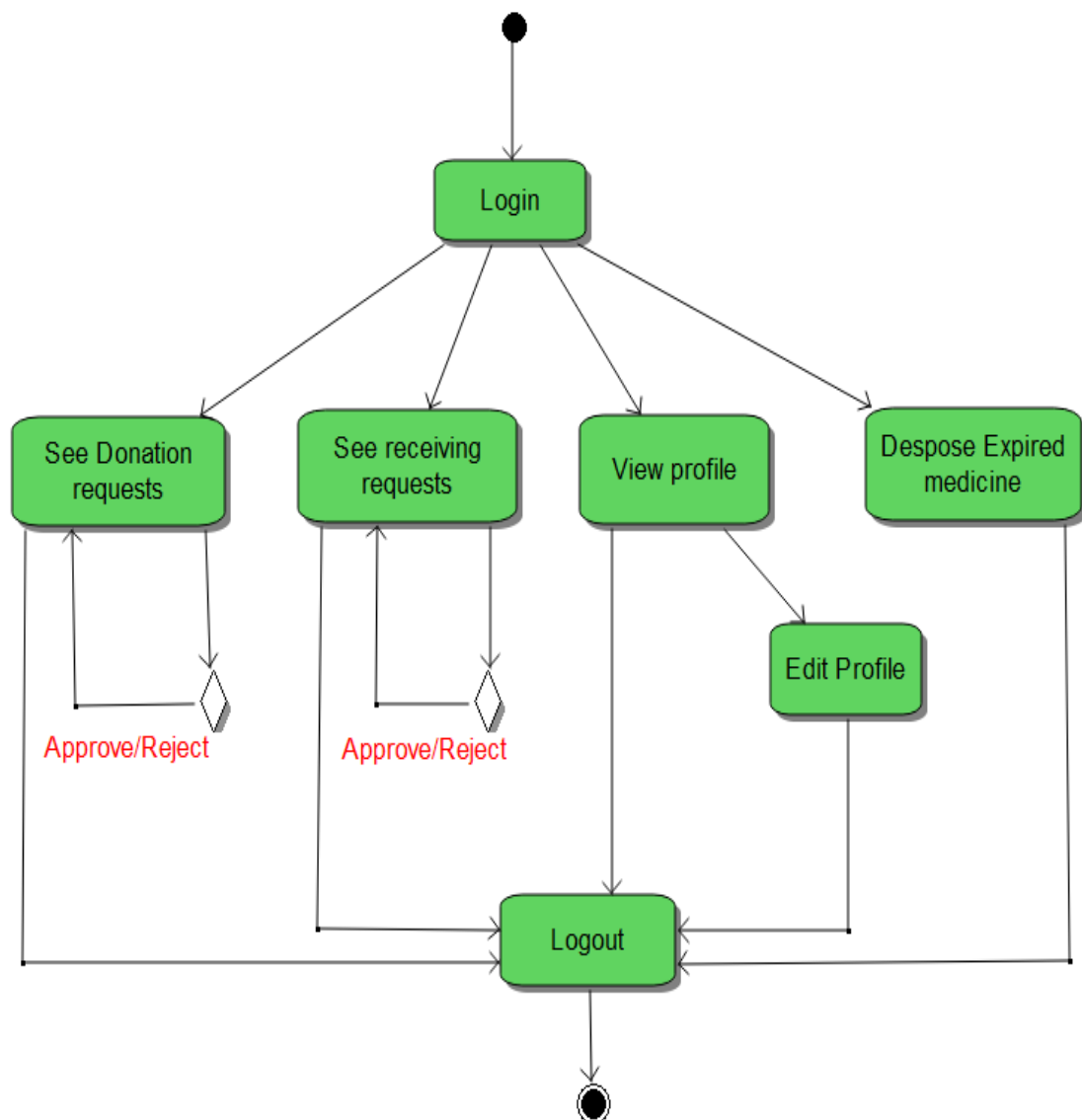
Activity diagram from the admin's perspective
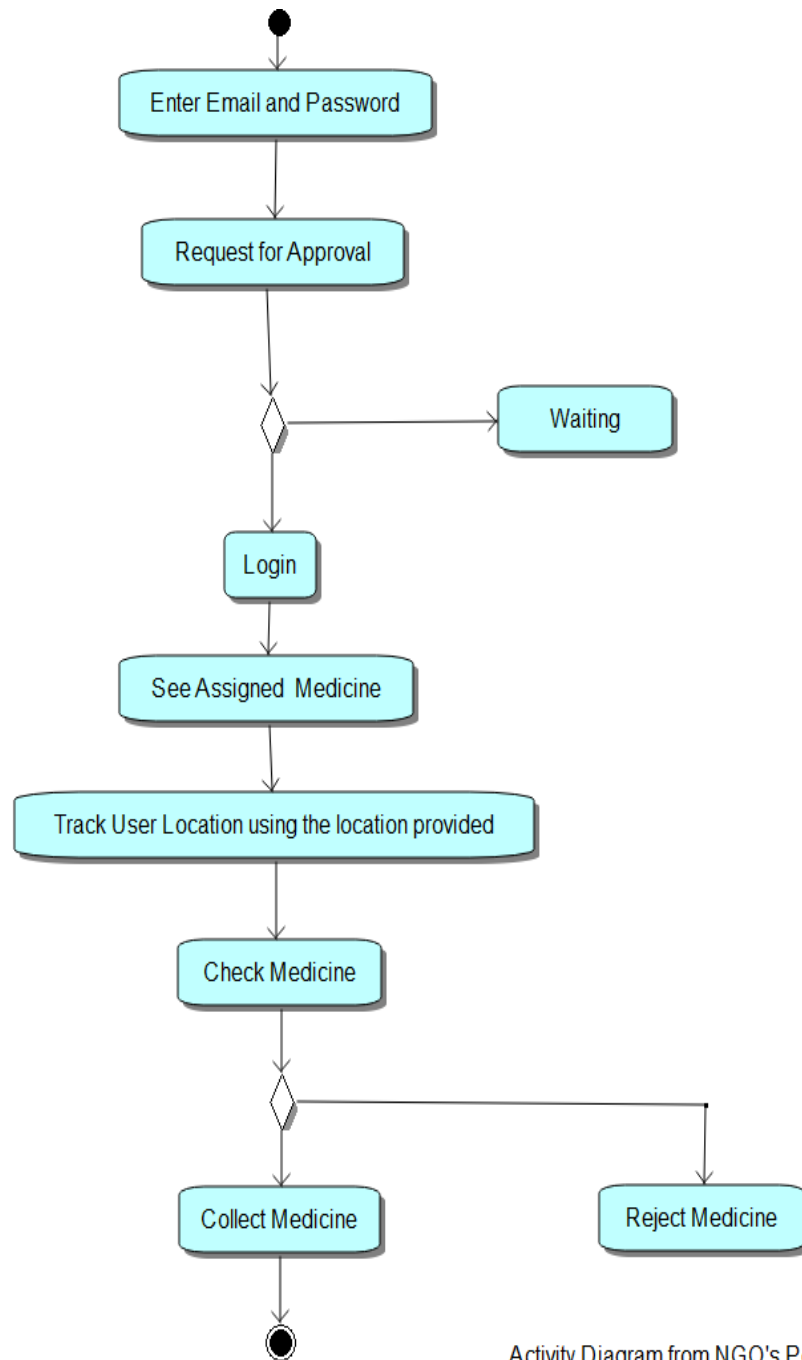
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                        ●
                        │
                        ▼
            ┌───────────────────────────┐
            │  Enter Email and Password  │
            └───────────────────────────┘
                        │
                        ▼
            ┌───────────────────────────┐
            │     Request for Approval   │
            └───────────────────────────┘
                        │
                        ▼
                        ◇──────────────────►  ┌──────────────┐
                        │                      │   Waiting    │
                        ▼                      └──────────────┘
                   ┌─────────┐
                   │  Login  │
                   └─────────┘
                        │
                        ▼
            ┌───────────────────────────┐
            │   See Assigned  Medicine   │
            └───────────────────────────┘
                        │
                        ▼
        ┌──────────────────────────────────────────┐
        │ Track User Location using the location provided │
        └──────────────────────────────────────────┘
                        │
                        ▼
            ┌───────────────────────────┐
            │       Check Medicine       │
            └───────────────────────────┘
                        │
                        ▼
                        ◇──────────────────────────┐
                        │                           │
                        ▼                           ▼
            ┌───────────────────┐          ┌───────────────────┐
            │  Collect Medicine │          │  Reject Medicine  │
            └───────────────────┘          └───────────────────┘
                        │
                        ▼
                        ◉          Activity Diagram from NGO's Perspective
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