SOFTWARE REQUIREMENTS SPECIFICATION

for

Online Pharmacy

Version 1.0 approved

Team no. CS01

IIIT VADODARA

October 9, 2017

Contents

Revision History

Name	Date	Reason For Changes	Version
21	22	23	24
31	32	33	34

1 Introduction

1.1 Purpose

The purpose of this document is to give a detailed description of the requirements for the "Online-pharmacy" platform. It will illustrate the purpose and complete declaration for the development of system. It will also explain system constraints, interface and interactions with other external applications. This document is primarily intended as general non-technical description of the system.

1.2 Document Conventions

¡—TODO :To convert this document into proper latex pdf format—¿

1.3 Intended Audience and Reading Suggestions

This document is intended for Developers, Unit testers, Client, Project Maintners and future developers.

The remainder of this document includes four sections. The first one provides an overview of the system functionality and system interaction with other systems. This section also introduces different types of stakeholders and their interaction with the system. Further, the chapter also mentions the system constraints and assumptions about the product.

The second section provides the external requirements in detailed terms and a description of the different system interfaces.

The third section deals with various functional requirements. Different specification techniques are used in order to specify the requirements more precisely for different audiences.

The fourth section deals with various non-functional requirements. It includes both security and performance related requirements along with specifying the attributes which ensure quality of the software.

1.4 Project Scope

This is a very wide-scoped project mainly because there are very few constraints. Any Pharmacy seller who has internet access, can register on our website and use it. Similarly any Consumer who wants to purchase a product can buy it through this.

But we do have some area limitations as we have designed our project based on the legal rules of Government of India. So, this project can be extended to different countries based on their legal rules and regulation.

1.5 References

$<>$

2 Overall Description

2.1 Product Perspective

The product which is being developed is stand-alone, self-contained product. It is based on the idea of the client. The software in itself is unique in several of its features. Although existing similar solution do exist but none of them implement several key features of this project.

2.2 Product Functions

The major functions are stated below:

1. Interface for Consumer

2. Interface for Pharmacy Seller

3. Interface for Administration

4. Searching of OTC products by Consumer

5. Offline and Online Ordering by Consumer

6. Purchase of medicines through Prescription for the consumer

7. Review System

8. Inventory management for the Pharmacy Seller

9. Profile Management for Consumer

2.3 User Classes and Characteristics

There are three types of users that interact with this system the buyers, sellers (Pharmacists),and the administrator . Each of these three types of users has different use of the system so each of them has their own requirements.

The buyers can use our system to buy two type of products OTC and NON-OTC .

The OTC products can be normally searched through our system and our system would give user 5-6 pharmacy options (based on the distance of pharmacy's location

from the buyer) to choose from.

The user will be given options to buy online and can also go to the store offline by taking a look at the address mentioned.

The NON-OTC products can not be bought without prescription so the user will be given an option to upload his/her prescription and hence forth this prescription would be sent as a request to the nearby pharmacies in the range set by user and whichever accepts the request first would be given the order to handle.

The second class of users include the pharmacists who want to use our platform/system to sell their products. The pharmacist has to maintain an inventory for the OTC products for the consumer to look at the information and buy them. The pharmacists have to keep record of the products , order history and also be in contact with the user in both cases of products .

The third class of user is the administrator would have the task to authenticate and monitor the working of Pharmacies on our platform.

2.4 Operating Environment

The software can be operated on any device with an internet connection and an internet browser. The software doesn't require any specific hardware constraints . It does require the web browser to be able to process CSS3, HTML5 and Javacript(All the modern browser satisy this condition).

2.5 Design and Implementation Constraints

Inability to find a suitable Databse/API of Government verified Medicines.

Being Restricted to government policies regarding the pharmacies.

2.6 User Documentation

There will be FAQ section in the site but there will not be any user manuals and on-line helps as in such. The FAQ section will cover most of the detailing a user/seller will need. We plan to integrate UI/UX into our project so that user doesn't really need any sort of help. We plan to make a solution where the user's intiution takes him/her to all the right places.

On the other hand we'll have an Usage Manuals for Admins, where we would have described all usages in details.

2.7 Assumptions and Dependencies

- We will be able to gather database of Government Verified Database.

- Pharmacy Sellers will have Computer/Mobile i.e a way to access the Internet and will have required skills to access the Platform.

- Pharmacy Sellers will be willing put effort in online inventory management.

- Pharmacy Sellers/Consumers will be able to understand written English.

- Pharmacy Sellers will manage the delivery of product.

- Restrictions of government policies regarding the pharmacies.

- It's possible to make an efficient solutions on the technology we are using.

- Usage of libraries does not conflict with our design.

3 External Interface Requirements

3.1 User Interfaces

Following requirements have been gathered regarding the interface level design:

1. The app should be user friendly. It should not be overpopulated with unnecessary icons and information.

2. The interface should guide the user to respective screens so that the user does not feel lost in the middle of using the app.

3. If an event occurs, the user should be guided with a message dialog box displaying either the event is successful or an error has occurred.

4. The user shall be able to categorize the notifications he receives and should be able to manage those specifically

5. The user should be able to open all the related files in the app itself and the application itself should provide the view and function to edit the same.

6. Every interface should guide the user either to the home page or it should provide help option to filter out his/her query or problems.

3.2 Hardware Interfaces

<>

3.3 Software Interfaces

Our product is a website so it would be using mainly two other software components

1. Server

2. Database

The server is the place where your application would be running and our users (customers and pharmacist) would be able to interact with each other.
The database queries would be called at respective times when data regarding any detail, order or any other functionality would be needed which the user has stored in the past.

3.4 Communications Interfaces

The communication functions required by our product are:

1. e-mail

2. a well supported web browser

3. a network server using HTTP protocol

4. A notification management system

4 System Features

This section includes the requirements that specify all the fundamental actions of the software system.

4.1 Functional Requirements

The functional requirements are:

ID: FR0
TITLE: Home Page
Desc: Our site basically has provision for two types of users which include buyers (general public) and sellers (Pharmacists). This basically is a platform which leads the various types of users to their respective interfaces and for this there should be an option given to select which type of user is the person accessing the website.

4.1.1 User Class 1 – The User

ID: FR1
TITLE: User Registration
Priority:H
Desc: A user should be able to register to our site and buy the products he/she wishes to. After completing the registration a verification mail would be sent to the email id registered , hence after completing the verification , the registration would be complete.

ID: FR2
TITLE: User LogIn
Priority: H
Desc: After successfully registering , the user would be able to log in to the site and access the further functionalities. This task would require saving of the username , email id and password of the user for future reference.

ID: FR2
TITLE: My Profile
Priority: H
Desc: Once a user registers at our site , his/her account is formed which means it is allocated a section in the database where it would contain information like name, username , email id, contact number, address, etc.

The user under this functionality can review his/her account details.

ID: FR3
TITLE: Edit Profile
Priority: H
Desc: After the user has signed in , the user can go to my profile and will get an option to change any of the details he has entered earlier and when he chooses to save the changes , the database also gets modified accordingly.

ID: FR4
TITLE: Retrieve Password
Priority: H
Desc: The user has the option to retrieve his password if he/she forgets . By clicking on the forget password option a link to change password would be sent. This change would also be made in the database.

ID: FR5
TITLE: Search for OTC
Priority: H
Desc: The user can search for the products he wishes to but his search would be successful if its an OTC product because according to government laws NON-OTC products cannot be sold without prescription.
After the user searches for an OTC product he would get a list view of all the related items.

ID: FR6
TITLE: List View of the items related to the product searched
Priority: H
Desc: These items in the list would be links which when clicked would lead to a page where there would be another list view containing the nearby pharmacies selling that particular product.

ID: FR7
TITLE : List View of the pharmacies selling the product user selected
Priority: H
Desc :This list gives user a choice to select from the various nearby pharmacies according to their convenience and when they select a particular pharmacy , first option is they can create an order and an entry would be made in both the order log of user as well as pharmacist or they can add the particular item sold by the particular pharmacy to their cart.

ID: FR8
TITLE: Upload Prescription
Priority:H
Desc: The user is given this functionality in order to buy NON-OTC products wherein

the user uploads an image of the prescription and gets a list of options hence forth , first either he/she has to buy all the medicines or he/she wants the pharmacy to contact them . After this they get an option to select whether they want to buy generic medicines or not.After selecting all these the request is send to nearby pharmacies whichever pharmacy responds first gets the order.

ID:FR9
TITLE: Add to Cart
Priority:H
Desc: While browsing for the items a user gets an option to add a particular item he/she likes to the cart from where he can buy the product in future as when he feels comfortable.

ID :FR10
TITLE: Check Cart
Priority:H
Desc : The user would be provided with an option to check the cart whether there is a product he/she has selected earlier and now he/she gets an option to buy by clicking on the buy now option.

ID: FR11
TTILE: Buy Now
Priority:H
Desc : The user would get this option twice first while searching and second while going through the cart. In both these cases if the user selects this option an order gets placed and an an entry is made accordingly in both the user as well as seller's account.

ID:FR12
TITLE: Check Order Log
Priority:H
Desc: The user is given a reference to all his previous orders if he wants to access any of the details of any previous order and through this can also review any of the previous uploaded prescriptions.

ID: FR13
TITLE: Cancel Order
Priority:H
Desc: The user gets an option to cancel any order two days prior to the due delivery date by clicking on the cancel order option in the order log corresponding to the respective order.

ID:FR14
TITLE: Review
Priority:H
Desc: The user gets an option to review a pharmacy after his/her order is successfully

placed where he gives review by two ways one is the star rating and other is comment. This review gets stored and is used by the administrator to review the performance of the pharmacy

ID:FR15
TITLE: Complaint against a pharmacy
Priority:H
Desc: the user can complaint against a pharmacy for a misconduct by sending a request to the administrator.

4.1.2 User Class 2 – The Seller (Pharmacist)

ID: FR16
TITLE: Registration
Priority:H
Desc: When a pharmacist visits our platform for the first time he/she has to register by submitting two documents which include drug licence and VAT registration and once approved his/her details gets stored in the database and these details include pharmacy name, owner name , address , contact number ,id ,password,etc.

ID: FR17
TITLE: LogIn
Priority:H
Desc : The pharmacist which have been approved by the administrator get this option where in using their id and password which would be stored in a database , they are led to their respective dashboard.

ID: FR18
TITLE: Product Inventory Formation
Priority:H
Desc: This feature requires the pharmacist to select all the products which he/she wants to sell on our platform from the database provided and enter few specification like stock of the product he has and the price.

ID: FR19
TITLE : Adding a new Item to the database
Priority:H
Desc: This feature basically is provided in case the pharmacist wants to sell an item which is not present in the database, he/she can add that to the database with the help of admin.

ID: FR20
TITLE: Reviewing order log
Priority:H

Desc: The pharmacist gets to review all his previous orders and know what items were sold when, to whom and how much sale was made.

ID:FR21
TITLE: My Profile
Priority: H
Desc: Once a pharmacist registers at our site , his/her account is formed which means it is allocated a section in the database where it would contain information like name, username , email id, contact number, address, products he/she has ,etc. The user under this functionality can review his/her account details.

ID: FR22
TITLE: Edit Profile
Priority: H
Desc: After the user has signed in , the user can go to my profile and will get an option to change any of the details he has entered earlier and when he chooses to save the changes , the database also gets modified accordingly.

ID:FR23
TITLE: Notification Management
Priority:H
Desc: The user can receive notifications of three kinds:

1. The request for delivery of an order pertained in a prescription

2. The request for an OTC product searched

3. The alerts from the admin regarding the performance

ID:FR24
TITLE: Review Comments
Priority:H
Desc : The user (pharmacist) gets to see the reviews of his/her consumers.

4.1.3 User Class 3 – The Administrator

ID:FR25
TITLE: Pharmacy Verification
Priority:H
Desc: The administrator does the task of reviewing the documents submitted by a particular pharmacy who wants to use our platform and gives a green signal if the pharmacy seems fine.

ID:FR26
TITLE: Complaint Management

Priority:H
Desc: The administrator needs to give an alert to the pharmacy against which a complaint has been received after checking if the complaint is fake or not.

ID:FR27
TITLE: Review Management
Priority:H
Desc: The administrator has access to the reviews in order to track the performance of the various pharmacies registered at our platform and also the power to remove a very poorly rated pharmacy.

4.2 System Feature 2 (and so on)

5 Other Nonfunctional Requirements

5.1 Performance Requirements

User Satisfaction
This application has a benchmark which should be satisfied. The benchmark is "The product should stand up to the user's expectations". Application should always be active.

Response Time
The time taken to respond to the user operations should be minute and response should be accurate and precise.

Error Handling
Any error or any undesired situation should be taken care of in the testing phase. Exceptions should also be handled in the coding phase and reviewed in the testing phase. When all the errors and exceptions would be taken care of it would ensure that our Application works without any uncertainty.

User Friendliness
The application should be such that it is easy to understand its working and to operate the application. The UI design has been made such that it is attractive and user-friendly. A Naïve user can also use without any difficulties.

5.2 Safety Requirements

$< >$

5.3 Security Requirements

As such.There are no safety requirements which are to be satisfied on our part as developers apart from those which are to be followed while using the system.

5.4 Software Quality Attributes

Usability
Prioritize the important functions and features of the system based on the usage patterns. Frequently used functions should be tested for usability. Most important and used functions like login page, registration template should be tested for usability. The same goes with complex and critical functions. Be sure to create a requirement for this.

Supportability
The system needs to be cost effective to maintain things will be easy to manage if the system is cost effective. Maintainability requirements may cover various levels of documentation such as system documentation and documentation related to testing and test cases.

Reliability
Users have to trust the system, believe in the application and the developer even after using it for a long time. Create a requirement that makes sure that data stored in the system will be retained for a number of years without the data being changed by the system.

5.5 Business Rules

6 Other Requirements

6.1 Appendix A: Glossary