
Software Requirements Specification

for

MEDEASY

Version 2.0

Prepared by

Team MedEasy

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Revisions

| Version | Primary Author(s) | Description of Version | Date Completed |
|----------------|--------------------------|--|-----------------------|
| 2.0 | Team MedEasy | The final version of the SRS document has been drafted with all the requirements being incorporated into the | 07/09/22 |

TABLE:1

Introduction(PES2UG20CS441)

1.1 Document Purpose

The given SRS is for the document pertaining to the product- MedEasy.

The purpose of this document is to present a detailed description of the product, MedEasy . This document is intended to

- Explain the functionalities and features of MedEasy
- The constraints under which the product must operate
- How the product would respond to different users' requests.

The document's primary goal is to help the reader get a better understanding of the project. The document is intended for the developers of the software, the end users of the product who have been identified in the later sections, and to the professors who would review the project.

1.2 Product Scope

The software being developed is a one stop online medical platform that aims to make the process of delivering pharmaceutical products quick and smooth.

- The software would enable the user to purchase medicines based on their requirements.
- The users can also book virtual appointments with doctors via the website.

Through this software, we intend to make the delivery of pharmaceutical products a very smooth and hassle free process. The main focus is to enable a user friendly experience whilst keeping in mind the necessities in the healthcare industry.

1.3 Intended Audience and Document Overview

1.3.1 Intended Audience:

This document is primarily intended for the:

- Developers of this software
- Software engineers who would work on further development of the project
- The professors who would review the document and finally,
- Clients that include the website users.

1.3.2 Document Overview:

The first section of this document mainly revolves around introducing the reader to the product, MedEasy.

The second section is the Overall Description of the document which provides an overview of the overall functionality of the product. It describes the informal requirements.

The third section, Specific Requirements section, of SRS v2.0 document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

The fourth section of this document talks about the various non-functional requirements that are to be taken care of while designing a healthcare software.

1.4 Definitions, Acronyms and Abbreviations

The different terms used throughout the software are:-

1. User:- Customers who would be ordering medicines
2. Doctors:- They will be attending to patients virtually via an appointment tracker.

1.5 Document Conventions

Formatting Conventions:

- The font style for the headings of each section is Arial Bold and the font size is 18.
- The font style for the headings under each section is Arial Bold and the font size used is 14.
- For the remainder of the document, the font style is Arial and the font size is maintained at 11.
- Italics has been used to indicate comments.
- The text is single spaced and margins are maintained at 1" separation.

1.6 References and Acknowledgments

1.6.1 References:

- www.python.com

1.6.2 Acknowledgments:

We would like to thank our teacher, Prof. Sudeepa Roy Dey for guiding us throughout this project and helping us understand the various aspects to be taken care of while going about developing the software.

2. Overall Description(PES2UG20CS441)

2.1 Product Perspective

The software, MedEasy, is a new independent product. Our web application is a one stop online medical platform that aims to make the process of delivering pharmaceutical products

quick and smooth. MedEasy will provide customers with on demand, home delivered access to a wide range of prescription and other consumer healthcare products.

The software, MedEasy will implement the following functionalities :

- Uploading/Entering details of the medicine that is needed via image processing(upto the user).
- Booking virtual appointments with qualified doctors.
- Displaying availability of the medicines along with similar/suitable alternatives.
- This will include the billing platform followed by checkout as well as order tracking.

An important feature of MedEasy is that it can be operated on any operating system. It's working is completely independent from any other applications and it shall not modify the host system at any cost.

2.2 Product Functionality-

These are the major functionalities of the software, MedEasy will achieve:

- Uploading/Entering details of the medicine that is needed via image processing.
- Booking virtual appointments with qualified doctors.
- Displaying availability of the medicines along with cheaper alternatives.
- This will include the billing platform followed by checkout as well as order tracking.

2.3 Users and Characteristics

The system will support four types of user privileges:

- Patients
- Local pharmacy store visitors
- Doctors
- Billing Agency

The various users that we expect the software to be used by are:

| | | |
|----|----------|---|
| 1. | Patients | People who have a medical history such as chronic illnesses, regular body |
|----|----------|---|

| | | |
|----|-------------------------------|--|
| 2. | Local pharmacy store visitors | People who have to buy medicines on a periodic basis and want to switch to a home delivery system. |
| 3 | Doctors | Doctors will be attending to patients virtually and can keep a track of their |
| 4. | Billing Agency | They will be responsible for taking care of all the online payments via a safe and secure gateway. |
| | | |

TABLE:3

All the above mentioned users are assumed to have a minimal knowledge of the technical aspects of a software product.

2.4 Operating Environment

The software will be designed to work on any version of Windows, Linux (kernel 2.7 and above) and Mac platform. The software is completely web based and runs on popular web browsers namely firefox, chrome, internet explorer (IE8 and above). These web browsers are preferred since they support HTML.

2.5 Design and Implementation Constraints

The team has to take care of various aspects while designing the software such as the home page, proper management of inventory database, maintaining user details, creating user profiles keeping in mind a user friendly experience, smooth and untroubled software at the same time.

2.6 Assumptions and Dependencies

Assumptions

The user is familiar with internet and web based software like social networking sites.
The browsers which the user is using are either Google Chrome 10.0 and above or Mozilla Firefox 4.0 and above.

3. Specific Requirements(PES2UG20CS436)

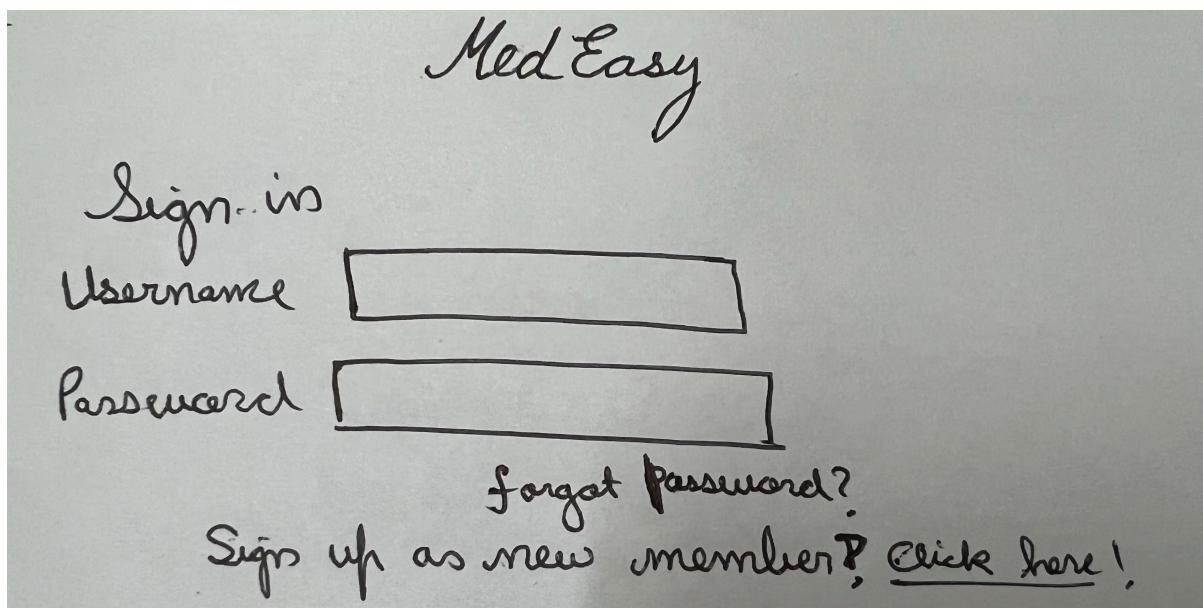
3.1. External Interface Requirements

3.1.1. User Interfaces

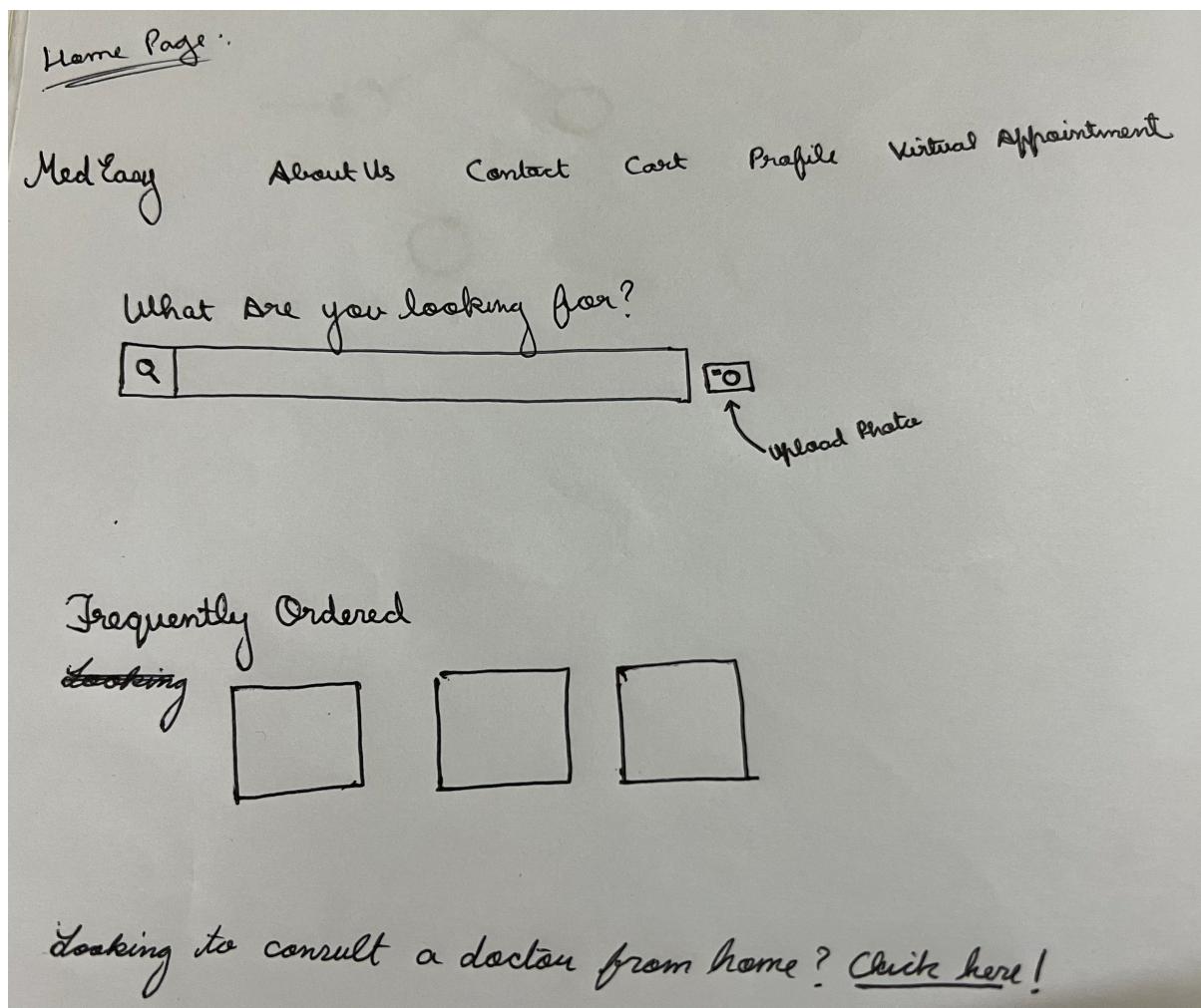
The user interface design is simple and clear. One can very easily view and search for a particular medicine he/she can name(briefly describe) the problem/disease and the website will suggest the medicine or the user can send prescriptions to the software and can have medicines added to his/her cart. In this software, users can create a profile, login and add products. Cart functionality to keep track of products which a user might want to buy and favorites to keep track of liked medicines with smooth, fast and secure checkout. The website will have an option of customer support for the user to address any issues

Sample Screenshots:

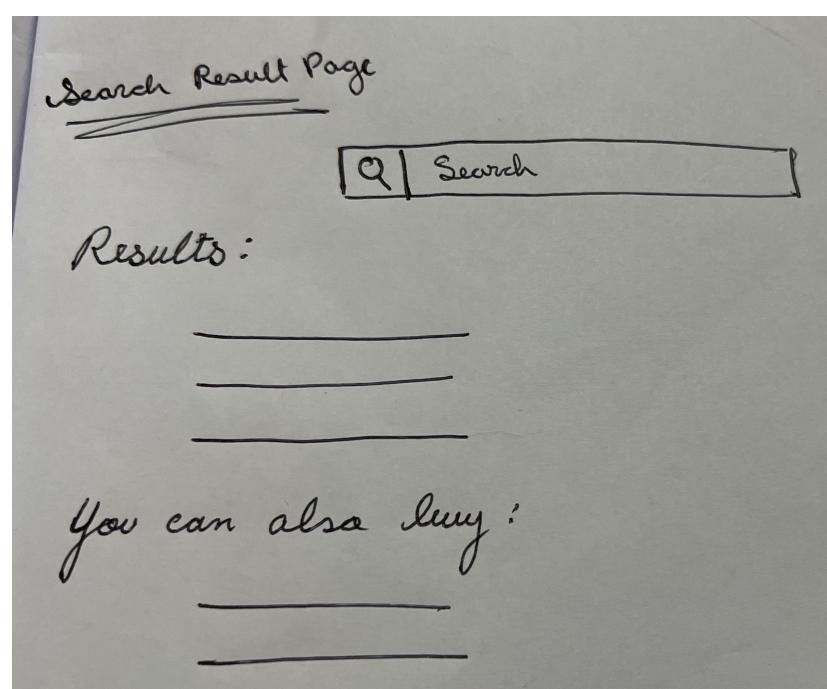
Sign Up/Sign In:



Home page:



Search/Result page:



3.1.2. Hardware Interfaces

Hardware requirement: None

Supported device type: The website will work on Windows and MacOS both 64-bit.

3.1.3. Software Interfaces

The software is operating system independent. It would run on Linux, Windows and Mac and it is a mobile friendly website which will work on iOS and Android both.

We are using django which allows us to make the web application completely functional. Due to the MVT(Model view template) structure, Django, the product is easily maintainable. One can avoid multiple changes throughout the entire code thus making the task of maintenance more effective and easy. The unit testing modules in python makes the task of testing better.

We are using sql for storing, manipulating and retrieving data from the database.

3.1.4. Communications Interfaces

A web browser is a basic necessity for the software to be deployed. Authentication is done by OpenID which uses HTTPS for security.

Message formatting: Audio, image or video.

3.2. Functional Requirements

Our web application is a one stop online medical platform that aims to make the process of delivering pharmaceutical products quick and smooth. The functionalities we used are as follows

- Image Processing

This functionality is going to include the part where the customer will enter details such as name of the medicine/illness or they can also upload a photograph of the medicine they are searching for. We plan on using Image processing for the above functionality.

- Virtual Appointment

Adding another feature to the home screen via which the customers will be able to book a virtual appointment with a doctor for consultation and prescription purposes.

- **Search Functionality**

On entering the name/ uploading a photo of the medicine in the search bar the name and the price of the following medicine will be displayed along with which cheaper/other alternatives of the medicine will be displayed.

- **Billing/Payment Functionality**

This will include the billing platform followed by checkout as well as order tracking. Once the order has been placed, if the user has any queries regarding order tracking, payment terms or quality of product, they can use the chat support for assistance.

3.3. Behaviour Requirements

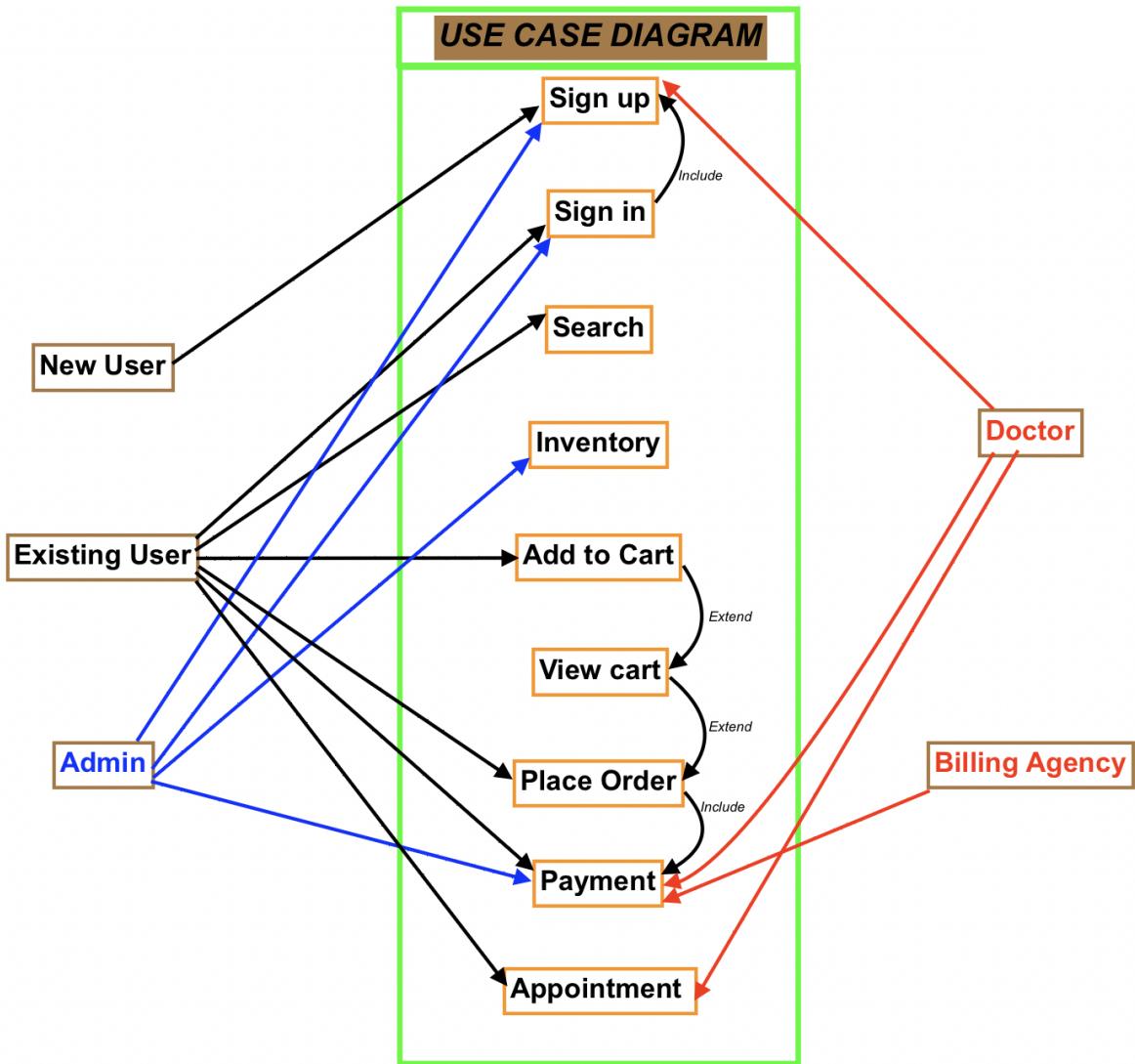
3.3.1 Use Case View

4 actors have been identified for the product, MedEasy , and each of them are shown with their own set of use cases.

The actors are depicted as stick figures in the use case diagram.

An overall system view of the software, MedEasy is depicted with all the actors and their corresponding use cases put together.

All the events would have to proceed with a Login. The other events are self-explanatory as shown in the use case diagram.



4. Other Non-functional Requirements

(PES2UG20CS420)

4.1. Performance Requirements

- Any transaction will have to take a minimal amount of time (approximately 10 seconds).
- The customer can search for the pharmaceutical product easily and quickly by typing the name of the product or searching for a similar product which has the same ingredients as the one they are searching for.
- Multiple users can make the transactions at the same time so it allows the website to work in a dynamic way.

4.2. Safety and Security Requirements

- The user has to login using the secure OpenID.
- The passwords of the customers who login to the website are protected
- The payments are made through a secure payment gateway.
- The details of the medicines or pharmaceutical products bought in the web application will be shown to the customer and the shop retailer..That is the information about the pharmaceutical products must be transparent in nature(everyone can see the information about the product),to ensure the safety of the customers from certain chemicals present in the product.
- For better crash recovery and security,a log file has to be maintained about the server activity .

4.3. Software Quality Attributes

- We are using django which allows us to make the web application completely functional.Due to the MVT(Model view template) structure, Django, the product is easily maintainable.One can avoid multiple changes throughout the entire code thus making the task of maintenance more effective and easy. The unit testing modules in python makes the task of testing better.
- Make a user-friendly interface which is attractive and easy to use.
- This helps us to attract the customers and also helps the customers for the easy browsing and purchasing of the pharmaceutical products.

5. Other Requirements(ALL TEAM MEMBERS)

5.1 Requirements Elicitation:

In a bid to discover the various requirements for our software website, we came across multiple on-demand home-delivery pharmaceutical websites and gathered information from their software models to decide the design and layout of our website.The websites we surfed through included:

1. Pharmeasy
2. Apollo online medical store
3. Practo Care

5.2 Technical Feasibility:

The current solution to the software was decided based on

- The complexity of the technical resources needed.
 - The manpower needed to implement the project.
 - Team member's prior experience with the technology.
 - Power of the product in the market is very high.
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