Software Requirements Specification

For **EasyMed**

(A smart pharmacy app)

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Revision History

Revision	Date	Author(s)	Description
1.0			
2.0			
3.0			
4.0			

Chapter 1

Introduction

1.1 Purpose

The purpose of this report is to give detailed description of the application for online medicine purchasing and ordering named EasyMed. It will clarify the main motive and functionalities of the proposed application, the interfaces of the system, what this application will do, etc. This document will also show the constrains of the app and how to overcome those obliges.

1.2 Intended Audience

This project is about online medicine ordering and purchasing. The intended audience is the honorable faculty member of Software Engineering course and the supervisor of this project Md. Musfique Anwar and the project managers & developers.

1.3 Intended Use

This project is intended to make buying medicine easy for everyone. By using this app anyone can buy medicine and deliver it to them without having to go to a pharmacy. Furthermore, anyone can see the description and side effects without confronting anyone.

1.4 Product Scope

The primary purpose of EasyMed is to purchase medicine by just a single click and to reduce the time consumption. This system will allow user to purchase the medicines and healthcare products through an app and get delivery at home 24/7. The user can also get symptoms-based suggestion and expert advice. This system will save a lot of time of the user. This app-based system will also serve patients in case of emergency,

1.5 Risk Definition

- **Risk Identification:** The primary risk of the system is existing similar apps in the market which provide more or less same features. Wrong or ambiguous requirements is also considered a risk. Specially if user tends to change requirements on a constant basis. Database erasing while data recovery of the system is a major risk too. Also get confirmation email instantly is a huge concern.
- **Risk Mitigation**: We are providing different features in one app related to healthcare which other existing products hasn't. We try to follow Agile process to reduce requirements noting related risk. So that change in requirements can be done in a flexible way. To reduce the risk of database erasing while functioning administrative function we are using Firebase & set the database read & write policy enable for System Admin only. Firebase is a Realtime database which also help to get emails instantly.

Chapter 2

Overall Description

2.1 User Classes and Characteristics

2.1.1 User Classes

There are three user levels in our project (EasyMed)

- Customer
- **❖** Admin

2.1.2 Characteristics of User Classes

Customer: -

There are two types of customer in the project- General Customer & Registered Customer. General Customer should be able to search medicine of their choices sorting by medicine name, medicine company name, disease name. General Customer also should be able to select medicines from the list created from the search results in order to read description, side effects, price & other related information of a medicine. They also should be able to get the location of nearby medicine stores or pharmacies. Including these features Registered Customer should be able to get a feature of suggesting drugs based on symptoms they select. Registered Customer should also be able select medicines & add to cart from the list created based on search results in order to purchase medicines. Registered Customer can view cart before placing order. Registered Customer can get the pay on delivery service or can complete payment through bkash. Beside these, Registered Customer will able to track the placed order to get the latest status. Cancel order & refund will be available after purchasing items for Registered Customer. Registered Customer will also able to take appointment of an expert for counselling.

Admin: -

Admin has privilege of monitoring and authorization of all tasks handle by the system. An admin has the access of every function performed by the system. Admin will be able to verify payment. Admin will be able to add, delete medicines in admin section which will be added to system database & get retrieved into the main app. Admin will be able to take all kinds of reports available in the system. Admin has the right to set prices of medicines as well. Admin also has the sole right of deleting a customer.

2.2 User Needs

Customer: -

- Search all medicines based on customer preference. It can be medicine name, medicine company name or disease name.
- Get a brief description, side effects & other related information of a medicine they search
- Get suggestions of medicines based on symptoms they select
- Buy medicines through pay on delivery or through Bkash
- Get confirmation email after placing orders successfully
- Can track order
- Can get the location of nearby medicine stores or pharmacies
- Can take appointment of a medicine expert

Admin: -

- Can add, delete medicine into the system
- Can verify payment
- Can send email to user
- Can set or adjust the prices of medicines
- Can verify login & sign up information
- Can update or remove user information
- Has the right to remove user permanently

2.3 Operating Environment

The operating environment is divided into two segments, those are Hardware and Software.

Hardware Environment:

- 1. This application is for mobile device with minimum of 512MB of RAM and CPU of more than 1 GHz clock speed.
- 2. Storage should be the UFS (Unix File System) formatted with minimum 50MB of free space
- 3. Android Operating System running device support this application.

Software Environment:

1. This project is about online application is designed for running in Android 6.0 (Android Marshmallow) and above.

2.4 Constraints

• 2.4.1 Design and Implementation Constraints

✓ Operating System

The development environment shall be Windows 10 or Mac OS X which supports Android Studio Ide

✓ Design

The development of the system shall use Material Design methodologies in order to provide a good graphical interface for the user.

✓ Database

The system shall use Firebase which is a Realtime NoSQL database

✓ Internet-Based

The system shall be an online based application

• 2.4.2 Time Constraints:

To finish this project on scheduled time, including the deadlines for each phase of the project and the final submission

• **2.4.3 Data Management:** As it is database project, to add the name of medicine and all of their description and side effects as it is related to healthcare.

2.5 Assumptions

- 1. Anyone who wants to use this app would have a smart device and knowledge of how to use it.
- 2. The data provided by the companies will be accurate.
- 3. The user will be able to make the right decision when it comes down to buying the medicine.
- 4. When buying through Bkash the user will have access to a Bkash account.

Chapter 3 Requirements

3.1 Functional Requirements

Our system features include:

- **Search Medicine:** The system must have an option for search medicines of customer's preference from medicine name, medicine company and disease name.
- **Medicines by condition:** The system must have the option for suggesting drugs based on disease symptoms. The feature has an interface where customer selects symptoms or present conditions of health & get a list of suggested drugs prescribed by experts.
- Quick View: The system must have the option where general customer (unregistered user) can view the descriptions of medicines which includes side effects, taking rules & other relatable information about medicines.
- Add to Cart: There must be an option for adding medicines into the cart in order to purchase.
- **View Cart:** There must be a checkout option to view the selected items including total pricing (including tax/vat) information. Quantities can be increased of an item here.
- Place Order: The system must have a payment option which includes pay on delivery & pay
 through Bkash services. The option must also send a confirmation email after a successful
 purchase.
- **Track Order:** The system must have a option for tracking placed order in order to get the latest status of an order.
- Cancel Order: There must be an option for cancelling order after purchasing in between a timeframe. Refund policies must be applied here based on timeframe.
- Expert Counseling: There must be an expert counseling option to look forward to get correct medicine in case of doubt
- **Nearby Pharmacy:** The system must have a nearby pharmacy option so that user can look for closest pharmacy to get the desire medicine quickly

3.2 Non-Functional Requirements

3.2.1 Performance

- The system will give response in <1 second.
- The system will be able to give response to at least 500 people at a time.
- Responses to user interface will be less than 5 seconds.
- People can zoom in or out of any products that one's desire to see

3.2.2 Security

- Any user who will use the system will have a login id and password.
- Any system modification cannot be done by a user who is not administrator.
- The system won't store username and password of the user in user's device.
- There should be a helpline number that people can easily come to the medicines which they want badly

3.2.3 Reliability

• The system will backup and synchronize its data all the time to maintain reliability.

3.2.4 Safety

- The system will not suggest anything harmful for the user.
- Prescription will be manually verified for safe usage of medicine.

3.2.5 Availability

 The system will be available all the time. The system will show a message in case of maintenance work

Appendices

Appendix A

Glossary