## ALL IN ONE ONLINE MEDICAL SHOP

BY

Maraj Hasan ID: 161-15-7383

Abdur Rahman Bappy ID: 161-15-7420 AND

Amir Hossain Sojib ID: 161-15-7384

This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

Supervised By

# Moushumi Zaman Bonny

Senior Lecturer
Department of CSE
Daffodil International University

Co-Supervised By

## Mr. Ahmed Al Marouf

Lecturer

Department of CSE Daffodil International University



# DAFFODIL INTERNATIONAL UNIVERSITY DHAKA, BANGLADESH DECEMBER 2019

## APPROVAL

This Project/internship titled "All In One Online Medical Shop", submitted by Maraj Hasan, ID No: 161-15-7383 Amir Hossain Sojib, ID No:161-15-7384 And Abdur Rahman Bappy, ID No:161-15-7420 to the Department of Computer Science and Engineering. Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 7 December 2019.

# BOARD OF EXAMINERS

Dr. Syed Akhter Hossain Professor and Head

Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

Chairman

Md. Zahid Hasan Assistant Professor

20reter

Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

Internal Examiner

Sadekur Rahman Assistant Professor

Sadile

Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

Internal Examiner

Dr. Dewan Md. Farid Associate Professor

Department of Computer Science and Engineering

United International University

External Examiner

#### DECLARATION

We hereby declare that, this project has been done by us under the supervision of Moushumi Zaman Bonny, Designation, and Department of CSE Duffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

Supervised by:

Moushumi Zaman Bonny

Senior Lecturer

Department of CSE

Daffodil International University

Co-Supervised by:

Ahmed Al Marouf

Senior Lecturer

Department of CSE

Daffodil International University

Submitted by:

Marray haran

Maraj Hasan

ID:-161-15-7383

Department of CSE

Daffodil International University

Amin Harain

Amir Hossain Sojib

ID: -161-15-7384

Department of CSE

Daffodil International University

Abdur Rahman Bappy

ID: -161-15-7420

Department of CSE

1Sappy

Daffodil International University

Daffodil International University

iii

## ACKNOWLEDGEMENT

First we express our heartiest thanks and gratitude to almighty God for His divine blessing makes us possible to complete the final year project/internship successfully.

We really grateful and wish our profound our indebtedness to **Moushumi Jaman Bonni**, **Senior Lecturer**, Department of CSE Daffodil International University, Dhaka**And Co-Supervised By Ahmed Al Marouf**, **Senior Lecturer**, Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of "*Web Based*" to carry out this project. His endless patience ,scholarly guidance ,continual encouragement , constant and energetic supervision, constructive criticism , valuable advice ,reading many inferior draft and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to **Dr. Syed Akhter Hossain**, Professor, andHead, Department of CSE, for his kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of ourparent

#### **ABSTRACT**

Our project title is 'All In One Online Medical Shop'. Here we are discussing about medicine and medical products. Nowadays people get uncomfortable to go on a crowded place. In the present time, it's very difficult to buy medicine when you are sick and not able to go outside to buy medicine. It's an online-based application where you can buy medicine through online. In this website, patients can search all type medicine. This web applications developed based on the requirements of the client. People nowadays are used to buy products online. It saves time save time and human efforts, our web-based application can be helpful where we have some manual procedure. This web application provides a friendly interface to the customers. Actually this system is developed to reduce the complexity of human life. Anyone can order their product easily. It makes a person's life easier.

# TABLE OF CONTENTS

CONTENTS	PAGE
Board of examiners	II
Declaration	III
Acknowledgements	IV
Abstract	V
CHAPTER	
CHAPTER 1: INTRODUCTION	1-2
1.1 Introduction	1
1.2 Motivation	1
1.3 Objectives	1-2
1.4 Expected Outcome	2
1.5 Report Layout	2
CHAPTER 2: BACKGROUND	3-4
2.1 Introduction	3
2.2 Related Works	3
2.3 Experience Sharing	3
2.4 Scope of the Problem	4
2.5 Challenges	4
CHAPTER 3: Requirement Specification	5-10
3.1 Business Process Modeling Use case modeling and diagram	5
3.2 Requirement Collection and Analysis	6
3.3 Requirement Collection Process	6
3.3.1 Feasibility Study	6-7
3.3.2 Requirement Gathering	7

3.3.3 Software Requirement Validation	7
3.4 Use case Modeling and Description	7
3.4.1 Use case model of our project	7-8
3.4.2 Description of use case model	8-9
3.5 Class diagram of this model	9
3.5.1 Description Of class diagram	9-10
3.6 Entity Relationship Diagram	10
3.6.1 ER diagram Of Online medical shop	10
3.6.2 Description	10
CHAPTER 4: Design Specification	11-17
4.1 Introduction	11
4.2 Front-end Design	11
4.3 Design Parts	11
4.3.1 Home page design	12
4.3.2 Login Design	12
4.3.3 Admin Design	12-13
4.3.4 Medicine category design	13
4.3.5 Project Design	14
4.3.6 Product Details	14
4.3.7 Add to Cart	15
4.3.8 Register Design	15
4.4 Back-end Design	15
4.5 Implementation Requirement	16
CHAPTER 5: Implementation and Testing	17-19
5.1 Implementation of database	17
5.2 Implementation of Front -end Design ©Daffodil International University	17 VII

REFERENCES	22
6.2 Scope for Further Development	20-21
6.1 Discussion and Conclusion	20
CHAPTER 6: Conclusion and Future Scope	20-21
5.5 Hardware Requirement	19
5.4 Test result and report	18-19
5.3 Testing Implementation	17-18

## INTRODUCTION

#### 1.1 Introduction

The web based pharmacy system that is designed to improve accuracy and to enhance safety and efficiently pharmaceutical store. It helps to customer for time saving and less costing. It helps patients to manage drugs easily by using online order approach the system will contain an interactive user interface so that the user can easily access all the features of the system. The traditional pharmacy is take more time consuming and traditional paper based system. On this system the user always find the medicine which has manufacture date and expiry date correctly. Different pharmacies and recognized that most of them they recording their data manually like registered books. This type recording the take more time of consumer and very incorrect because it can be miss the name of medicine which one fined the customer.

#### 1.2 Motivation

Online pharmacy means that pharmacy which runs by using internet. It is both beneficial for customer and seller. It is a home delivery process where customers order their required medicine on the internet. This 24 hour service gives great relief for the people who need emergency medicine. All through it's mostly beneficial but it has some negative parts that it's illegal use. Some people use some medicine as a drug. This should be prevented. Children should not order medicine online it's should be age restricted. Successful render models should provide the correct spirit and avoid the wrong disincentives for community pharmacists and patients.

# 1.3 Objective

- 1.2 Now a day's online shopping is quite famous .Here are some objective that we are looking for.
- 1. Comprehensively low price than other manual shop and less time to find the medicine
- 2. Accurately dispense medications

- 3. Appropriately utilize pharmaceutical and pharmacokinetics mathematics to perform accurate medication calculations.
- 4. To identify health care-related factors associated with online pharmacy use by considering patients.

# 1.4 Expected Outcome:

Dur website will provide better service and it will also better for people because we have studied in a different country website or companies work system. So now this time our project is very effective Bangladesh perspectives to change and increase the activity of good knowledge own area.

Manual shop work is slow and costly. With the help of our project one can get medicine easily. Suppose someone is getting sick or he or she couldn't go out to buy medicine. By our website one can get their medicine easily.

# 1.5 Report Layout:

This part plays a vital role in project documentation. A key feature of reports is that they are formally structured in sections. The use of sections makes it easy for the reader to jump straight to the information they need. The report arranges as follows: In the chapter 1, we discussed about the introductory parts of the project. In the chapter 2, we specified about the background of our project. In the chapter 3, we declared about requirement specification. In the chapter 4, we specified about the design specification. In chapter 5, we discussed about implementation and testing.

## **BACKGROUND**

## 2.1 Introduction:

Online medical shop is a web application for people to the simplest and fastest way to buy medicine and home delivery.ePharma.com.bd is another web application in Bangladesh that provided healthcare and medicine to all kinds of people around the Bangladesh. In this chapter, we are basically describing the similar works like our web application and the challenges we have faced during making it the problem we have faced at the beginning.

## 2.2 Related Works:

At present most of the countries are the analysis of sharing experienced to improve all .In this new era world is getting like a small village. People don't want to go outside to buy a small pen. Medicine is badly need for us. Our day to day life it's important knew no bounds. Our project helps to those kind of people who remain busy all day.

## 2.3 Experience Sharing:

When we started our project we tried to learn about the manual pharmacy system which very slow and costly.

Manual pharmacy workers are very lazy to work, and also they all are not in good manner. They don't behave properly with customers. Our web based pharmacy gave all kinds of medicine in one shop. Web based system it works:

- 1. Only prescribed user can access the system.
- 2. For buying drugs user must upload prescription which prescribed by authorized doctor.
- 3. The system eases the process of stock replenishment.

# 2.4. Scope of the Problem:

The scope of Problem is given:

>Ourproject is fully internet-based. When systems check the card balance it required to check from the database. But if somehow internet connections get lost system can't submit your profiles.

Electricity another important thing. In our country still lack electricity. Our system required all-time electricity. If electricity lost entire system gets closed.

➤This system knows that internet browsing well known.

➤ Must be the necessary digital device for using the internet. Such as Android phone, computer, laptop, etc.

## 2.5 Challenge:

Every system, especially which is new, have many problems to buying medicine. But challenges are part of a system. If we can make necessary step to make defend then we will be successful. So, we have to make user friendly system because our current, medicine shop system is not too much friendly with this kind of system. Using expert trainer and user- friendly system we can defend any challenge. The main challenging fact was deciding the basis of the web application. Because we wanted to make something which is helpful for people. There are many sites that provide paid courses, articles and live communication system, so we had to do something new, like a platform where learn and discuss problem- solving by skilled and experienced persons. As we are designing and developing a website so we had to have an idea about web design and development. We are making the design with HTML, CSS, BOOTSTRAP, JQUERY, and JAVASCRIPT. Here we are also using MySQL for database and django and python in our web application. Several components should be addressed for implementation of this project. The most important challenges are given below:

- > Web-based project means a connection between human to human by using the internet.

  There many devices for connection but their capability different.
- > Data integrity, unique identification, and encryption are the main challenges.

## REQUIREMENT SPECIFICATION

## 3.1 Business Process Model

According to the definition of our diagram we can say graphical presentation of specifying the business process, here we first receive an order from the patient and then we customer gives his all information such as places order, upload make payment and then we receive the order and check all the information, is it authentic or not and if the order is authentic then we will check our database and provide the medicine with payment of customer, if the payment is clear we giving him the delivery of medicine.

Business process diagram also shows us that actually how to run a business process

On this model our business will be easier to understand. This model shows us how to deal with patient and delivered order safely.

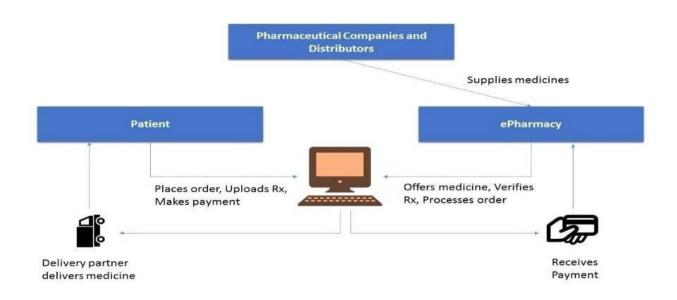


Figure 3.1 Business Mode

## 3.2 Requirement Collection and

## **Analysis**

Requirements are will be depend on the user from software product. The requirements can be hidden or obvious, known or unknown expected from the clients view. The process gathers the requirements of clients point of view. Our main goal will be to specify the correct medicine and location. Provide safely the medicine, from shop to patient. There are function done by the system such as store the necessary information of drugs.prepare bill for medicine, give weak reports, easily searching of medicine. Take all the medicine with behavior of the medicine and easily can find when needed. The primary language will be English, so user can use easily used the website.

# **3.3 Requirement Collection Process**

It is a four steps process, which are.

•Feasibility

study

•Requirement

Gathering

Software

Requirement Specification

Software

Requirement Validation

## **3.3.1** Feasibility Study :

This study will focus on the customers what a customer wants from the website. When a customer wants to buy their desire things that people have to go through some steps. This study will focus on the steps how that will help someone get their desire things at ease. The analysts go through all information that is provided by the software. The analysis either this

information is good or not to further development. This feasibility study is

focused on the goal of the organization. It shows all the information of the patient admin and what is available for the consumers.

# 3.3.2 Requirement Gathering:

If the feasibility report is positive then the analysis and the software engineers discuss on what the project can provide or what else needed to improve the project.

If any features have to added the analysis and engineers should take steps to improve the project.

# 3.3.3 Software Requirement Validation:

After requirement specifications are this will verify whether it is valid or what. Analysis may interpret the requirements incorrectly.

- Either this project can be implemented or not.
- If this is valid shows the entire requirement.
- Either this is completed or not.
- If they can be developed in the future.

# **3.4Use Case Mode And Specification:**

Use case model defines the whole project in short. This model shows what a users and admin can do. It also shows the relations between the users and admin and give the limitation of the admin and users. It was created by developers to understand the whole project without any error.

# 3.4.1 Use-case Model of our project

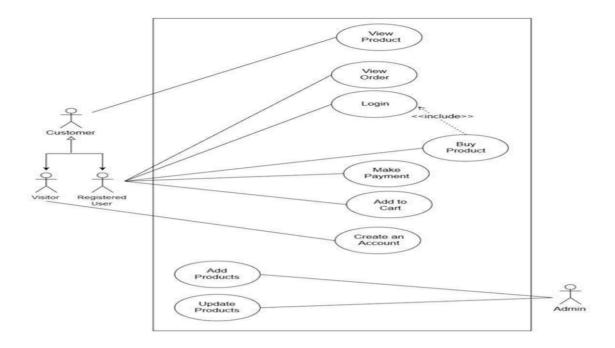


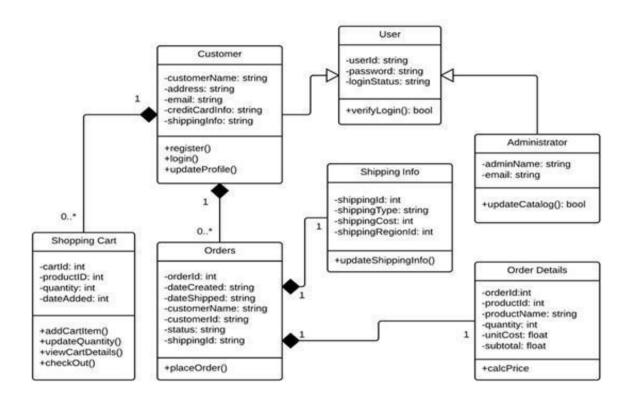
Figure 3.4.1: Use Case Model

# 3.4.2 Description of Use Case Model:

In this system there are three types of users. One is admin customers and another is redistricted customers and another is normal customers who can see all the product but could not buy it. Admin can handle all the system and all the things handled by the administration. In this project there is a registration page

where customers can register himself. Admin can create as an admin and customers page of his own. To get into the website admin has to use his email address and his password. There are two types of customers one can visit and another can buy product. To buy product the person have to login in the website.

## 3.5.1 Class diagram of this project



3.5.1 : Class Diagram

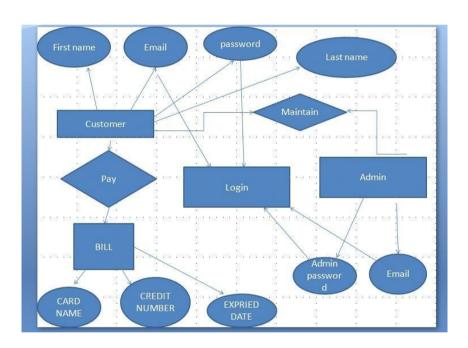
# 3.5.2 Description of class diagram

In my system, if a person wants to buy some product then she or he should have a user id .So there is a one to one relation between customer and user. An admin should also have some user password and login password. To give an order there is an order list by where there is an order number id cost and all the information given.

## 3.6 Entity Relationship Diagram:

It shows the graphical representation of entities and relationships between the customer's admin and other also. It shows the whole structure of every data. By relationship between entities it shows the whole system. That represent the actual relationship between the individually. It also shows the structure of the database .In other words it shows the data shared with the entities and relationships between them.

# 3.6.1 ER diagram Of Online medical shop:



3.6.1 : ER Diagram

## 3.6.2 Description of ER Diagram

The picture shows the actual relationship between entities. It also shows the diagram of our system. Customers have to get registration to buy product and there is another kind of users who can watch all the medicine but without registration they can't buy it. Admin has to get registered to make a deal with the customers and contract with them.

## **DESIGN SPECIFICATION**

## 4.1 Introduction:

Our system is totally private. That means only authorized people can access in application. Those are the admin, register customers. Here is a great challenge to make it user friendly because the aim is to make this project to remove manual complexity.

## 4.2 Front End Design:

Web design showed the website how it represents to the users. Front-end web development, called a user end design. It included HTML CSS JS. You can't added any picture without those. If you want to design your website front end design is needed. To make colorful or added any animation you have to use those tags.

We have use java script because it is easy to learn and much other library function is added to it. Overall .if someone wants to make their website attractive all those are needed.

# 4.3.1 Design part

In our system it carried out the user friendly interface. So at first it will build category of medicine project design register design



Figure 4.3.1: Home Page

# 4.3.2 Login:

By this page one can login to our website

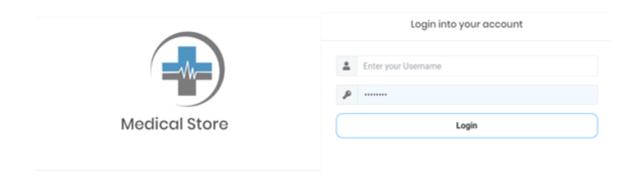


Figure 4.3.2: Login

# 4.3.3 Admin Design

Anyone can contract admin through that

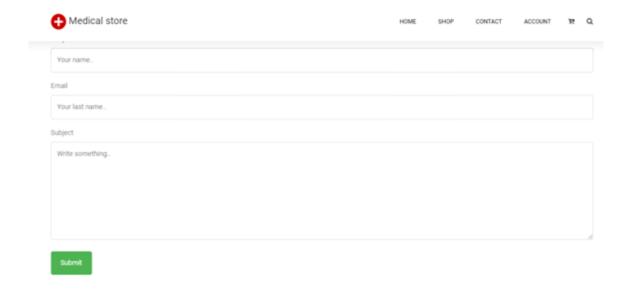


Figure 4.3.3: Admin Design

# 4.3.4 Medicine Category design:

In our website category is the most important section. Because this is where people will easily get the disease name and they will be able to search the products by category.

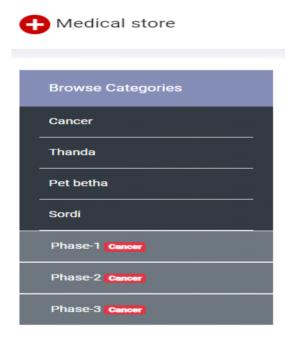


Figure: 4.3.4: Medicine Category

# 4.3.5 Product Design:

After finding a specific category. Customer will be able to get the product that belongs to that category.

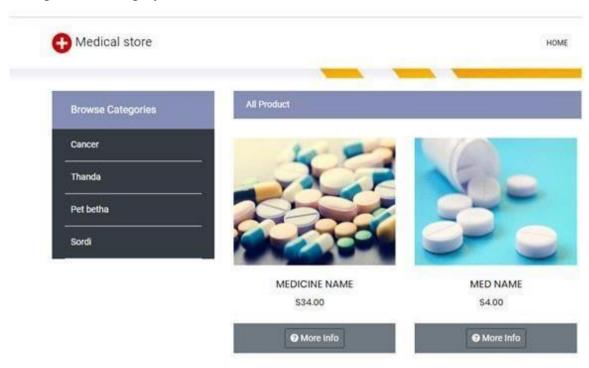


Figure: 4.3.5: Product Design

## **4.3.6 Product Details:**

When customers look for medicine. It's important to know the details. So we also added details.



Figure: 4.3.5: Product Design

## **4.3.7** Add to cart:

To buy a item. Customer needs to click on the Add to cart button.

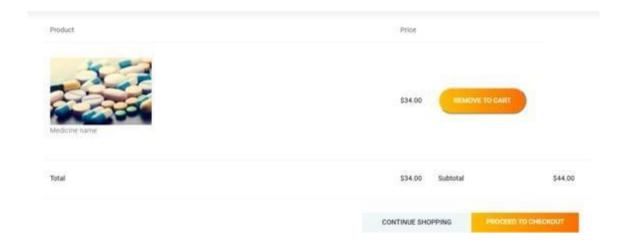


Figure 4.3.7Add to cart

# 4.3.8 Register Design

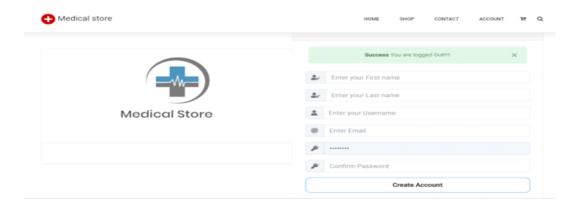


Figure 4.3.8: Register Design

# 4.4 Back –end Design

In back end design we had to put real work. The consumers or the user only see the front end design. We have to take all the registration information and apply it on the database we have used my Sql to database and django and python for backend design.

# 4.5 Implantation Design

For completing a project everyone needs some tools, so does we. Here are some of the implementation tools we have used to make our web application: For completing this project we have used some application like Django, my SQL, HTML, CSS ,JS.

## IMPLEMENTATION AND TESTING

## **5.1 Implementation of Database:**

We have used DJANGO, MYSQL, PYTHON..My SQL is the model controller of the database..In our project user can input data for checking out whether there are any things that they are looking for. All data retrieved and related validation can be controlled by SQL.

## 5.2 Implementation of front end design:

.Now-a-days all people all over the world use internet through mobile or computers. We have used HTML, CSS, and JavaScript, etc. Some features of implementing the front-end design are as follows:

- There can be three types of customers. User, registered user and the admin.
- To get registered all users have to fill up the requirements that are given to their registration form.
- To get login the user should have correct email and password.
- To get secure purpose the user should have unique password.

# 5.3. Testing Implementation

Testing implementation is a process by which the upcoming implementation can be tasted whether it is constructed or not. Software's can perform integration testing by this process.. In the time of integrating, there can arise a lot of problems.

**TABLE 5.1: TEST CASE EVALUATION** 

Test case	Test Input	Expected Outcome	Obtained Outcome	pass/Fail
		Guideline	Gaissinis	
Registration	First name  Last name	show to fill all Field	Field must be filled by proper	Pass
	email		Info	
	Pass			
Login	User name	Successfully	Successfully	Pass
	Password	Login	login	
Password	incorrect pass	incorrect pass	show warning	Pass

# 5.4. Test Results and Reports

The test report record data obtained from the above experiment. It record data and other information in a systematic way. It defines whether this report ready for implementation or not. We have gone through various types of testing. Testing types are: Functionality,

Regression, Security, Performance, Scalability, System interoperability, Disaster

recovery, Usability, Localization, and Installation. If all the testing type is passed by

this project then this project will be applicable. . The system will be easier and more

comfortable for users.

**5.5 Hardware Requirements:** 

For developing the web application, we needed some hardware also

1. A computer with Intel Core i5 processor

2. RAM: minimum of 4 GB

3. Hard-drive

©Daffodil International University

19

## **6.1 Discussion and Conclusion:**

In conclusion, online pharmacies are a case where major conflicts occur between the concept of individuals being able to decide their purchases in their own interests on the one hand, and on the other the demand that the state must prevent people from harming themselves and must use public resources fairly and efficiently, as well as the value of social solidarity. In order to enhance the benefits and minimize the risks of online pharmacies, a 2-level approach could be adopted. The first level should focus on policy, with laws regulating the phenomenon at an international level, filling the existing legislative vacuum, although, as stated above, this would be very difficult, costly, and only partially effective. The second level needs to focus on the individual. This approach should aim to increase health literacy, which is the foundation of critical thinking, a skill required for making appropriate health choices, recognizing risks, and making the most of the multitude of opportunities offered by the world of medicine. Wasting our valuable time. This platform is totally free so it is helpful for all people who need quick and fastest way to medic help. In this website people will be able to get help and search for medicine or browse according to the category. Finally, we can say this platform will help all interested people. It will help people to make the more comfortable. And the people are not able to move freely they will also be helpful by this system. Medical-store is the web-based platform where we can get any medicine without prescription.

# **6.2 Scope for Further Development:**

In the future, our main target is to make mobile application for our system. Today's Smartphone users are increasing day by day. Most of the employees use apps to customize their work without browsing websites. So it is necessary to make a mobile application for our system. Now it works well. But we have a plan to add more features. in the future, we will develop android and IOS apps. We know in this time the huge number of people using. With the

development of specific and potent synthetic drugs, which are good for the body and bad for the body. Giving them scientifically knowledge in the proper use of modern medicine and the protections and danger in their use. Pharmacies are employed in regulatory control and drug management, community pharmacy, hospital pharmacy, the pharmaceutical industry. In all these fields, their aim to ensure optimum drug therapy both by contributing the preparation supply and control of medicine.

## REFERENCES

- [1] "User experience design, "[Online]. Available at <<a href="https://en.wikipedia.org/wiki/User\_experience\_design">https://en.wikipedia.org/wiki/User\_experience\_design</a>>
- [2] "w3schools," [Online]. Available at<<https://www.w3schools.com/>>.
- [3] "Bootstrap," [Online]. Available at<<https://getbootstrap.com/>>.
- [4] "My-Sql," [Online]. Available at <<https://www.mysql.com/
- "https://www.mysql.com/%20HYPERLINK%20%22https://www.mysql.com/%22." HYPERLINK
- "https://www.mysql.com/%20HYPERLINK%20%22https://www.mysql.com/%22." HYPERLINK
- "https://www.mysql.com/%20HYPERLINK%20%22https://www.mysql.com/%22." HYPERLINK "https://www.mysql.com/" HYPERLINK "https://www.mysql.com/%20HYPERLINK%20%22https://www.mysql.com/%22." HYPERLINK
- "https://www.mysql.com/%20HYPERLINK%20%22https://www.mysql.com/%22." HYPERLINK
- "https://www.mysql.com/%20HYPERLINK%20%22https://www.mysql.com/%22.".>>
- [5] I.PMBOK® Guide (Sixth Edition), "Project Planning" in *Software Engineering*
- [6] Murach's MySQL in Database.
- [7]] M. R. Lyu, "Exception Handling," in *Software Fault Tolerance*.
- [8] U. J. Gelinas, "Business Process and Information Technology," in *System Design*.
- [9] William Vincent,"DJANGO for Beginners", in Django basic idea.
- [10] "The book of CSS3", A developer guide to future web design, 2nd edition.

