

**SEBAJANALA : THE DESIGN AND IMPLEMENTATION OF LOCATION BASED  
ONLINE MEDICINE SERVICE**

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**DHAKA, BANGLADESH**

**MAY 2018**

## **APPROVAL**

This Project titled “**Sebajanala: Design and Implementation of Location Based Online Medicine Service**”, submitted by Fahim Shahriar and Nishat Royhana 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 Bachelor of Science. in Computer Science and Engineering (BSc) and approved as to its style and contents. The presentation has been held on May 5, 2018

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## DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Muhammad Muhaiminul Islam, Lecturer, Department of CSE** Daffodil 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

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## ACKNOWLEDGEMENT

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

We really grateful and wish our profound our indebtedness to **Muhammad Muhaiminul Islam, Lecturer**, Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of “*Web Design and Development*” 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 and Head, 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 our parents.

## ABSTRACT

Now a days electronic commerce is an epoch making event in the heaven of world wide web. This project / e commerce site is working as a platform of location based pharmacy or medicine home delivery service. where customer and some pharmacy are registered under this site and customer can buy medicine from the nearest pharmacy from his / her locality.

Our goal is to serve sick people who is unable to go outside or there is no one to buy medicine him/her. For that we have some registered pharmacy retail shop as we told this before. A customer can purchase medicine by registration into this system. we have also used product details, shopping cart etc feature for user friendliness. This System is implemented using three tier architecture as a connector between client site and database..The whole system is controled by a admin panel where admin can edit, delete, upload medicine list and shopping details. For this, we used C#, ASP.NET, ADO.NET as back end language, a giant database using microsoft SQL server and HTML,CSS, Javascript, JQuery, bootstrap as front end language.

This document will discuss each of the underlying technologies to create and implement an e-commerce website.

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# CHAPTER 1

## Introduction

### 1.1 Introduction

The use of computers with internet connection in pharmacy has expanded rapidly over the last few years in our country. A little number of pharmacy provide online service individually. But a few number of pharmacy is not our concern, this system will work as a hub of pharmacies in a certain location.

Our system has a large database containing following data:

- 107,000 pharmacy (allopathic, ayurvedic, unani, homio & biocamic, herbal retail shop) list of bangladesh with name, full address, Pharmacist name, Proprietor name, license no, phone no, national id no and registration no .
- 28000 medicine list with generic name, strength, dose , applicable for etc.
- picture of medicine.

Users will be able to see medicine details with pictures. There is also shopping cart, in which user can add, delete medicine. The updated price will also have shown. Moreover, users can add products to wishlist and update this list according to their wish. Each user have account containing his/her shopping history and password recovery system. This system has some blogs for health awareness.

The system has an admin panel for medicine add, edit, delete view orders and public comments. pharmacists will get orders from the customers registered in his pharmacy's locality. Thus, the whole system will work.

### 1.2 Motivation

Bangladesh is increasing her economy for low labor cost, cost effective products and huge numbers of the population. And day by day online or e-Commerce business in Bangladesh is growing gigantically. If we go the sites of Bikroy.com or ekhanei.com or the ajkerdeal.com etc., the most successful e-Commerce business at present in Bangladesh then we can feel the scents of the e-Commerce booming. Thousands of products like foods, clothing, kitchenware,

jewelry and ornaments, toy an show-pieces and sold daily .But there is no particular e commerce site for selling medicine in Bangladesh.

A person need help most, when he/she is sick. An online pharmacy can serve him best in this situation. old persons need medicine daily, it will helpful for them if they get medicine at home within an interval of day.Sometimes girls face problems buying their necessary personal products

### **1.3 objective**

An online pharmacy, Internet pharmacy is a pharmacy that operate over the Internet and sends the orders to customers through the mail or shipping companies.The project named " location basedonline medicine service" is aclient or server based application as well as e-Commerce site. An interactiveapplication formanaginglocation wise pharmacy retail shop which helps in maintaining the records of medicine, the users and stores details and also reduce the work of going outside to buy medicine.

The main aim of this application is to apply technology in supporting ill patients, who is unable to go outside, females to get their personal products easily and the pharmacists as well as modernization the medicine merchantry system.

### **1.4 Expected outcome**

Expected outcomes from this project are given below:

1. People can easily buy medicine using this website.
2. Home delivery facility within shortest possible of time.
3. Bi-weekly or monthly delivery package for regular patient.Patient who needs medicine for long time, Delivery boy will serve home delivery to them after 15 or 30 days .
4. Easy service for women. They will get napkin and diapers easily at home.

Blogs for health tips and awaerness.

### **1.5 Methodology**

Several steps are taken to make this project successful. The real problems and necessary information are found by investing pharmacy retail shops, Drug Administrative office which were very helpful to make this project. We also shared the ideas with other students; teachers of our university like, what are the problems they are facing about getting results and what is the facility they want to get from university.

## CHAPTER 2

### BackGround

In this chapter Background we will have a discussion about the previous studies of this project. we will show some related works and compare those works with this project.

#### 2.1 Related works

This project is first website for selling medicine in Bangladesh. we can see this type of website in abroad like india, USA etc. Lets have a look:

1. Bookmeds.com: The pharmacy for digital india :BookMEDS is an Online Pharmacy Marketplace head-quartered in Hyderabad. using this system, a patient can get medicine by searching or uploading prescription. Patients can also buy medical gadgets from this site.<sup>[1]</sup>

2. HealthWarehouse.com (OTCQB: HEWA) is America's only Verified Internet Pharmacy Practice Sites (VIPPs) and mail-order pharmacy licensed and/or authorized in all 50 states, headquartered in the Cincinnati metropolitan area.<sup>[2]</sup>

3. ChemistDirect.co.uk: is the UK's number 1 online retailer of pharmacy medications, specialist skincare products, everyday essential toiletries, vitamins and supplements. they even stock an extensive range of carefully selected pet products.They provide a much larger range than average high street pharmacy, even fulfilling prescriptions via their team of Ph.C. registered pharmacists from the convenience of customer's own home.<sup>[3]</sup>

4. Alibaba.com: we all know about alibaba.com in china. They also delivery medicines as well as other products.<sup>[4]</sup>

More over there are some other countries like Canada, Pakistan have online pharmacy service also.

## 2.2 Comparative studies

As we see that, sebjanala is the first medicine website in Bangladesh. we are comparing our project with foreign websites.

In BookMEDS.com patients can upload prescription and buy medical gadgets. We don't have this module. Like Healthwarehouse.com we can provide service in all divisions of the whole country. The span of database is described in introduction section. ChemistDirect.co.uk and alibaba.com has own storage, from where they provide delivery. we don't have this type of system, we just create a connection between registered pharmacists and customers.

## 2.3 Feasibility Study

**Feasibility Study:** A feasibility study is an assessment of a proposed information system to determine whether the system effectively meets the specified business requirements of the organization and whether a business case exist for developing such a system. It means the possibility, the scope of the project.

**Objectives of Feasibility Study:**The Feasibility study sample is used assess the feasibility of any type of solution, within any type of business environment. Feasibility study can also be used to:

- For the depth knowledge of the organization.
- Take the interview of the organization employee from top to bottom.
- Identify the problem of the current system.
- Identify the benefit of the proposed system.
- Review of the present system and collecting document.
- Analysis of the cost and benefit.
- Specify the cost to develop the current system.
- Specify the cost of the proposed system.

Feasibility study can be divided into following parts:

- Technical Feasibility
- Operational Feasibility

# CHAPTER 3

## Requirement specification

### 3.1 Business Process Modeling

Figure 3.1 shows business process model notation.

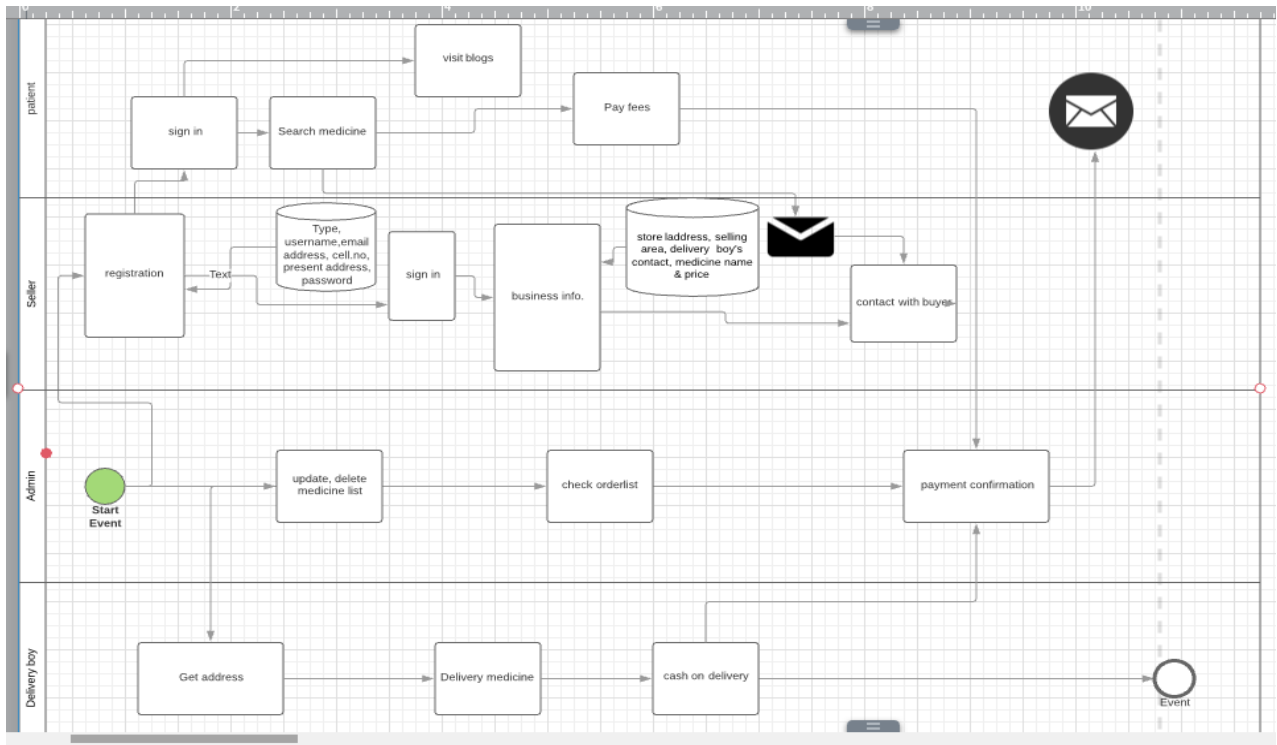


figure3.1: Business process modeling notation (BPMN)

The four kinds of users involved with this system are covering each pool of the BPMN. They are:

1. Patient: Patients can search medicines, read blogs by registration/sign in to the system. They order medicine by sending message to seller to the next pool.
2. Seller: Get registered to the system as well as customer by providing required information. They receive orders and sends medicine to the customer by delivery boy.
3. Admin: Controls the whole system by uploading drug to the list, edit list, check orders and confirmation payments.
4. Delivery boy: Delivery boy checks the prescription, handovers the medicine to the customer and they receives cash on delivery.



### 3.2 Requirement Analysis

Functional requirements: Functional requirement specifies that a system must be able to allow the user to perform some kind of function. The list of mandatory requirements are given below in table 3.2:

Table 3.2: The requirement list of the User:

No	Requirement Name	Requirement Description
01	Registration and login	This function will enable a user to log in to the system. admin will also have to log in to the system
02	password Recovery	This function will enable a user to recover his/her forgotten password.
03	update profile information	This function will enable a user to update his/her given information.
04	Search medicine	This function will enable a user to find out his necessary medicine. user can search by trade name.
05	Add to cart	This function will enable a user to add medicine to shopping cart.
06	Adjust quantity	By this function users will be able to increase or decrease the amount of medicine.
07	Check out	This function will enable a user to confirm order by checkout.
08	Logout	By this function users will be able to log out from the system.
09	Administration control	This function will enable the admin to control the whole system.
10	Insert/Delete Medicine	By this function admin will be able to insert into or delete a medicine from list.
11	Update medicine list	By this function admin will be able to update medicine information in the list

12	View orders	By this function Admin will be able to view orders, which are delivered or not
13	Receive order	By this function a pharmacist will get an order notification
14	Click "Confirm Order" button	by this function a pharmacist will confirm that he s delivering the medicine and this message will be send to admin panel

Non-Functional: The non-functional requirements of the system are described below.

### **Security:**

1. The system must have protection from unauthorized users.
2. To use the system, every user has to login by their own username and password.
3. If user want to hide his/her name in the transaction history, system will not allow it.
- 4.No one cannot make a transaction without make a login.

### **Performance**

1. The time system required to process and respond when a user key in the identification that is user name and password.
2. The system takes a little time to load the medicine list.
3. The system is supposed to respond in less than 15 seconds.

### **Availability**

The unregistered or registered user must be able to access their account 24 hours a day, seven days a week. In a word, the system will provide 24/7 service to the consumer and pharmacists.

### **Usability**

1. The system must be easy to use by all users such that they do not need to read an extensive number of manuals.
2. There are a few terms and conditions for security purpose only, which makes this system more secure and user friendly
3. The system must be quickly accessible by all users.

4. The system must be simple in the way it displays all relevant data and relationships.
5. The menus of the system must be easily navigable by the users with buttons that are easy to understand.
6. The system is providing blog facility to user Written by specilists that will create health awareness among people.

### 3.3 Use case modeling

In figure 3.3 use case model shows relation among actors and functions.

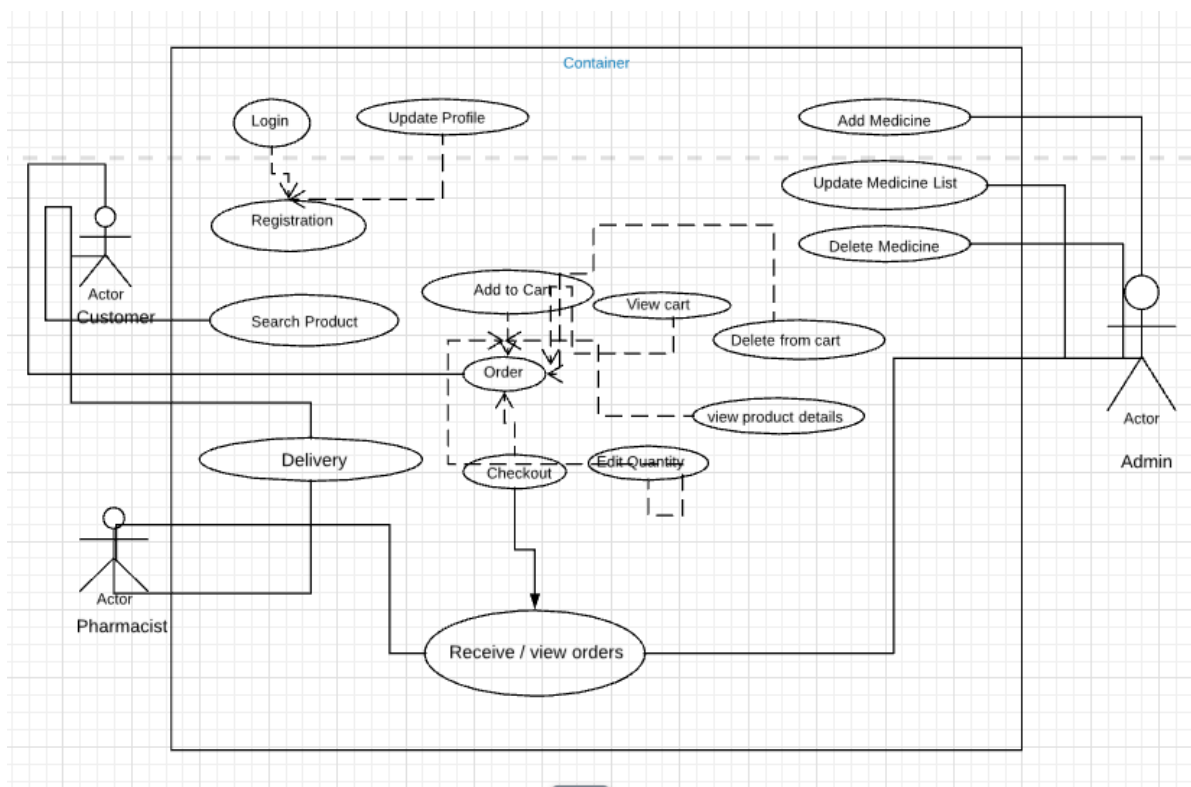


Figure3.3: use case model.

Description of use case model is given below in table 3.3 :

Table 3.3: Description of use case diagram

Use Case	Use Case ID	Actor	Primary Path	Precondition	Result
1. Registration	U001	Patient/ Pharmacist	Necessary Data provocation	N/A	Register into the system
2. Admin or pharmacists login	U002	Pharmacist And admin	Username and password	Registration For pharmacist	Get access to the system
3. patient login	U003	Patient	Username and password	Registration	Enable to checkout
4. Search Product	U004	Patient or Customer	Click search button	N/A	Get required medicine
5. Add to cart	U005	Patient or Customer	Click add to cart button	Search	Medicine will have added to cart
6. Edit quantity	U005	Patient or Customer	Input quantity	Add to cart	Edit quantity of medicine
7. Checkout	U006	Patient or Customer	Click checkout button	login	Order confirmation

### 3.4 Logical Data Model

figure 3.4 shows the logical data model of the system

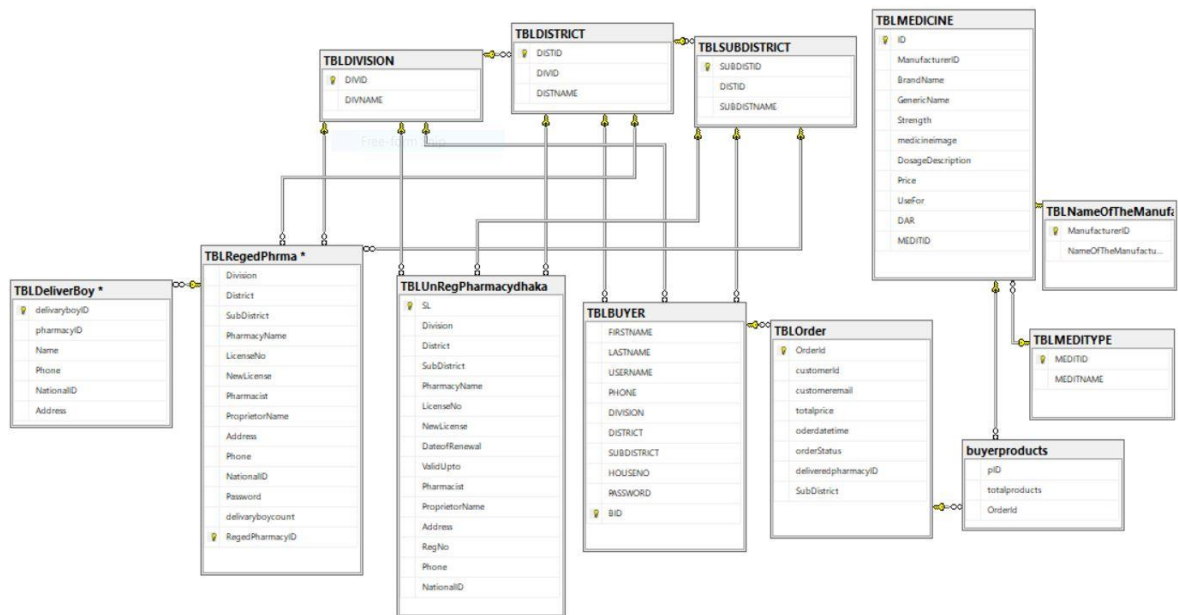


Figure3.4: logical data model

### 3.5 Design Requirements

An ecommerce platform can mean the difference between flourishing or faltering online sales. Customers expect a fully-featured web store that delivers an exemplary shopping experience – they want to know exactly what they’re buying, and from whom. Here is a list of ecommerce website design requirements that will set a online sales channel up for success

- Responsive Web Design
- Attractive, Easy-to-Navigate Web Store Design
- Speedy Page Loading
- Product Details
- Search and Filter
- Customer Reviews
- Shopping Cart

- Simple Checkout
- Visible Contact Info
- Return/Exchange Info

Our project fulfils all these requirements. The details of design specification, implementation and used technologies will be described next.<sup>[5]</sup>

## CHAPTER 4

### Design Specification

A design specification is a document prepared by the client that details the specific requirements of the project. It is based on geotechnical information, piping requirements and permissible methods and means for the execution of the work. In previous chapter, we described about the functional and non functional requirements of SEBAJANALA project. In this part, technologies and tools are used in design and development of the project will briefly discussed.

List of front-end web forms/pages with function are given below in table 4 :

Table 4: List of web pages.

Sl no	Name	Function
01	Home.aspx	Works as welcome page for buyer or any user.
02	Registration.aspx	Works as registration form for buyer or patients.
03	Login.aspx	Provider login to registered user.
04	Forgotten.aspx	Password recovery feature for user.
05	Product-category.aspx	Main product list, products are shown in grid view with trade name, price and picture. .
06	Product-details.aspx	Details view of a product.
07	Cart.aspx	Adding products to shopping cart, adjusting amount and show total payable
08	Checkout.aspx	Order confirmation of a product
09	Checkout-success.aspx	Show successful checkout message
10	Blog.aspx	contain writings about eye, skin, hair care etc.
11	Blog-details.aspx	Shows the details writing
12	Contact.aspx	provides address of head office and contact facility to user.
13	SEBAJANALA.Master	holds and establishes connections among all web pages.
14	Login Admin.aspx	Admin can log into the system using this page.
15	Home.aspx	Works as main admin dashboard.

16	Add-product.aspx	Admin adds product to the list.
17	Edit medicine.aspx	Admin edits any information of medicine.
18	pharmacy registration.aspx	Pharmacy will select their pharmacy from unregistered pharmacy list and register from here
19	Pharmacy Login.aspx	Only registered pharmacy will register here.
20	Pending order.aspx	Shows pending order within that subdistrict. Here pharmacy can view order details then confirm order if they want.
21	Delivered orders.aspx	Shows delivered orders only by that pharmacy.
22	Member.aspx	listof registered pharmacists.

#### 4.1 Front-end Design

User interface or that part of a software or a website that a user sees on the screen and acts on to enter commands or to access other parts of the software or website is known as front-end. It is also called presentation layer.

We use some client-side language, which make the front-end / outlook of our project. We tried to use latest technology. Such as,

**HTML:**The full form of HTML is Hypertext Markup Language. The language makes the main front end structure of a web page. It has many tags and attributes like head tag <h> ... </h>, image tag <img> ... </img> etc. These tags make the Skeleton of a web page and other languages like CSS,JavaScript,jQuery increases the beauty and user friendliness of the page. its first version releseid in november 24,1995 and the latest version HTML-5 released on october 28, 2014.

**CSS:** CSS stands for cascading style sheet which is used for presentation of a web page or document written in HTML. It is one of the core languages used for design a web application like use navigation,hover of a button or menu etc . It has many attribute property and a designer adjusts the value of the property. It has a facility that one can write the CSS code embedded



with HTML document or attach a separate CSS file that defines the styling attribute. Initial release of CSS was in December 17, 1996.

JavaScript: JavaScript is a high-level, interpreted, dynamic, weakly typed, multi-paradigm and prototype based language for client side scripting. Its first version was released in December 4, 1995. Like other high level language, JavaScript also has datatype, scope, array, loop, class, function etc. It is used to make a web page more interactive and function. It is one of the core languages of web engineering.

## **4.2 Back-End Development**

Back end Development refers to the server side of development where you are primarily focused on how the site works. Making updates and changes in addition to monitoring functionality of the site will our primary responsibility. This type of web development usually consists of three parts: a server, an application, and a database. We used C# and ASP.NET as the backend language.

ASP.NET: Microsoft developed ASP.NET technology for web development and produce dynamic web pages. It was first released in January 5 2002. It is an open source server-side web application framework. It has many features for creating websites, web applications and web services.

ADO.NET: ADO stands for ActiveX Data Objects. ADO.NET is known as the next evolution of ADO. It is a programming interface to access and modify database. It is automatically installed with Microsoft IIS. ADO was connection-based, ADO.NET relies on short, XML message-based interactions with data sources. This makes ADO.NET much more efficient for Internet-based applications.

C Sharp: A Microsoft technology C Sharp (C#) is an object-oriented, strongly typed, multi - paradigm programming language. Its first version was released in July 2000. Anders Hejlsberg was the leader of developing team. The latest version 7.2 of C sharp was released in November 15, 2017.

Internet Information Service: In ASP.NET framework IIS works as web server. The main work of a server is to accept incoming HTTP request from client and to return the requested resource to the client.

Three Tier Architecture: Three tier architecture means dividing the project into three layers. It is an important security feature in web Engineering. It helps to divide the interaction between user interface and database into three layers, Presentation layer, Business layer and data access layer.

Presentation Layer: It is the top most layer of three tier architecture. It represents the user interface of a system.

Business Layer: This is the second part of the architecture. It passes data or user input to database through store procedure.

Data Access Layer: This is the last layer that contains the method of connecting with database and passes the data to database table finally.

Database: In this project, MSSQL is used as the backend database. Microsoft SQL Server is a relational database management system developed by Microsoft. We used SQL server 2017 in our project released in 2017.<sup>[6]</sup>

The design of database has given in logical data model section

### **4.3 Requirement Specification**

To implement this project, we used the tools given below:

1. visual studio 2017.
2. Microsoft SQL server.
3. MozillaFirefox browser.

## CHAPTER 5

### Implementation and Testing

In this section, we will show the implementation of project sebjanala. Snapshots of database and user interface will be shown. Test data and expected results will also shown below.

#### 5.1 Implementation of Database

5.1.1: The following figure shows Connection string:

```
<connectionStrings>
  <add name="sebjanalaNewConnectionString"
    connectionString="Data Source=DESKTOP-LEQV609\FAHIMSHAHRIAR;
    Initial Catalog=sebjanalaNew;Integrated Security=True"
    providerName="System.Data.SqlClient"/>
</connectionStrings>
```

Figure: 5.1.1: Connection string.

5.1.2: The following figure shows Manufacturer company table:

	ManufacturerID	NameOfTheManufacturer
▶	1	ACI Limited
	2	Acme Laboratories Ltd.
	3	Acme Specialized Pharmaceuticals Ltd.
	4	Acmunio International Ltd.
	5	Active Fine Chemicals Ltd.
	6	Ad-din Pharmaceuticals Ltd.
	7	Advent Pharma Ltd.
	8	Albion Laboratories Ltd.
	9	Alco Pharma Limited
	10	Alkad Laboratories

Figure: 5.1.2: Manufacturer company table.

5.1.3: The following figure shows medicine details with brand and generic name, price, strength, use etc.

ID	ManufacturerID	BrandName	GenericName	Strength	medicineimage	DosageDescrip...	Price	UseFor	DAR	MEDITID
1	1	Celofen	Aceclofenac	100 mg	admin/images/...	Tablet	4.01	Human	005-0420-64	1
2	1	Soritec 25 mg	Acitretin	25 mg	admin/images/...	Capsule	85.26	Human	005-0776-71	1
3	1	Soritec 10 mg	Acitretin	10 mg	admin/images/...	Capsule	45.14	Human	005-0800-71	1
4	1	Adgar 0.3%	Adapalene	3 mg/gm	admin/images/...	Gel	80.24	Human	005-0857-71	1
5	1	Adgar 0.1%	Adapalene	100 mg/100 gm	admin/images/...	Gel	60.18	Human	005-0856-71	1
6	1	Cytonic	Adenosine + C...	200 mg + 50 m...	admin/images/...	Eye Drops	120.36	Human	005-0806-52	1
7	1	Xylone-A	Adrenaline + Li...	5 mcg + 20 mg...	admin/images/...	Injection	3.75	Human	005-0696-5	1
8	1	Sintel 200	Albendazole	200 mg	admin/images/...	Tablet	NULL	Human	005-0134-008	1
9	1	Sintel 400	Albendazole	400 mg	admin/images/...	Tablet	5.02	Human	005-0207-008	1
10	1	Sintel	Albendazole	200 mg/5 ml	admin/images/...	Suspension	20.06	Human	005-0510-008	1

Figure: 5.1.3 Medicine details.

5.1.4: The following figure shows medicine type list:

	MEDITID	MEDITNAME
▶	-1	--SELECT MEDI...
	1	Allopathic
	2	ayurvedic
	3	Herbal
	4	Homeopathic a...
	5	unani
*	NULL	NULL

Figure:5.1.4: medicine type list.

5.1.5: The following figure shows division list:

	DIVID	DIVNAME
▶	1	Dhaka
	2	Barisal
	3	Chittagong
	4	Khulna
	5	Mymensingh
	6	Rajshahi
	7	Rangpur
	8	Sylhet

Figure:5.1.5: division list:

5.1.6: The following figure shows division

	DISTID	DIVID	DISTNAME
1	1	1	Dhaka
2	2	1	Gazipur
3	3	1	Kishoregonj
4	4	1	Manikganj
5	5	1	Munshiganj
6	6	1	Narayanganj
7	7	1	Narsingdi
8	8	1	Tangail
9	9	2	Bansal
10	10	2	Barguna

Figure:5.1.6:division list.

5.1.7: The following figure shows sub district

SUBDISTID	DISTID	SUBDISTNAME
1	1	Adabar
2	1	Asulia
3	1	Badda
4	1	Banani
5	1	Bangshal
6	1	Biman Bandar
7	1	Cantonment
8	1	Dakshinkhan
9	1	Darus Salam
10	1	Demra

Figure:5.1.7: Sub district

5.1.8.: The following figure shows unregistered pharmacy:

Division	District	SubDistrict	PharmacyName	LicenseNo	NewLicense	DateofRenewal	ValidUpto	Pharmacist	ProprietorName	Address	ReqNo	Phone	NationalID
1	1	1	adabor Medicin...	DHA-13150-A/B	DHA-000029	2014-05-02 00:0...	2016-04-02 00:0...	Md Mojibur Ra...	Abdul Kadir.	34/A,uttar Ada...	B-23426		
1	1	1	Al Safa Pharmacy	DHA-13164-A/B	DHA-000043	2014-05-02 00:0...	2016-04-02 00:0...	Zitondro Borm...	Md Minhajul Is...	Bari no 54,Roa...	C-46971		
1	1	1	Al SHefa Pharm...	DHA-09451-A/B	DHA-000274	NULL	NULL	Md Abul Kala...	A B K M Anwar...	Plot no-2,Bloc...	C-38265		
1	1	1	Amena Pharma	DHA-13171-A/B	DHA-000049	2014-05-02 00:0...	2016-04-02 00:0...	Md. Mehedi H...	Abu Khalek Ra...	885,Road no 13...	C-62121		
1	1	1	ASHik Medical ...	DHA-13177-A/B	DHA-000055	2014-05-02 00:0...	2016-04-02 00:0...	Md Kobir Hoss...	Md Abdur Raji...	23,Uttar Adaba...	C-58673		
1	1	1	Chand Medical	DHA-9672-A/B	DHA-000403	2011-12-03 00:0...	2013-11-03 00:0...	Nondo gopal B...	Md REjaul Kari...	House No-14,R...	B-30789		
1	1	1	Doctor And Me...	DHA-13172-A/B	DHA-000050	2014-05-02 00:0...	2016-04-02 00:0...	Md Nurul Islam.	A S M Alamgir.	House no -10,...	A-00213		

Figure: 5.1.8.: Unregistered pharmacy.

5.1.9.: The following figure shows pharmacy after registration:

Division	District	SubDistrict	PharmacyName	LicenseNo	NewLicense	Pharmacist	ProprietorName	Address	Phone	NationalID	Password	delivaryboyco...	ReqedPharma...
1	1	12	M/S Lazz Pharma	DHA-02038-A/B	DHA-002111	Syeda Mahmu...	Mijanur Rahm...	65,Lake Circus,...	1234	1234	1234	NULL	2
1	1	1	Gaji Medical Hall	DHA-6773-A/B	DHA-000435	Md Nurun Nobi.	Md Belal Hoss...	House No-23,R...	123456	1234	1234	NULL	3
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Figure: 5.1.9.: Pharmacy after registration.

5.1.10: The following figure shows delivery boy table:

delivaryboyID	pharmacyID	Name	Phone	NationalID	Address
2	2	asdf	12121	12121	sadfa

Figure: 5.1.10: Delivery boy table.

5.1.11: The following figure shows user registration:

FIRSTNAME	LASTNAME	USERNAME	PHONE	DIVISION	DISTRICT	SUBDISTRICT	HOUSENO	PASSWORD	BID
vaaa	v	o	122	1	1	2	vss	ummm	100005
			12	1	1	1		00	100006
nishat	royhana	NR	1111	1	1	1	dfa	1234	100007
			31231	1	1	2		1234	100008
asdf	fasd	vaaa	12312	1	1	12	sdfasd	1234	101008
fahim	shahriar	FS	1234	1	1	12	vaaa	1234	101009

Figure: 5.1.11: User registration.

5.1.12.: The following figure shows order table:

Orderid	customerid	customeremail	totalprice	oderdatetime	orderStatus	deliveredphar...	SubDistrict
100012	100007	NR	10.41	2018-03-27 12:4...	NULL	NULL	NULL
1521542831	100007	NR	4.33	2018-03-27 12:4...	NULL	NULL	NULL
1521923574	100007	NR	4.33	2018-03-27 12:4...	2	NULL	NULL
1521970655	101009	FS	4.33	2018-03-27 12:4...	2	2	12
1522128783	100007	NR	85	2018-03-27 12:4...	2	3	1
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Figure: 5.1.12.: Order table.

5.1.13.: The following figure shows Received order by pharmacist table

	pID	totalproducts	OrderId
1	1983	1	1521542831
2	2181	1	1521542831
3	1983	1	1521970655
4	2181	1	1521970655
5	1983	1	1521923574
6	2181	1	1521923574
7	1779	10	1522128783
8	1845	1	1522128783

Figure: 5.1.13.: Received order by pharmacist table

## 5.2 Implementation of Front-end Design

Front-end or user interface of the system is divided into three parts. They are User interface, Admin panel and Pharmacy panel. First part "User Interface" is given below:

### 5.2.1 User interface

5.2.1.: The following figure showshomepage of the site:

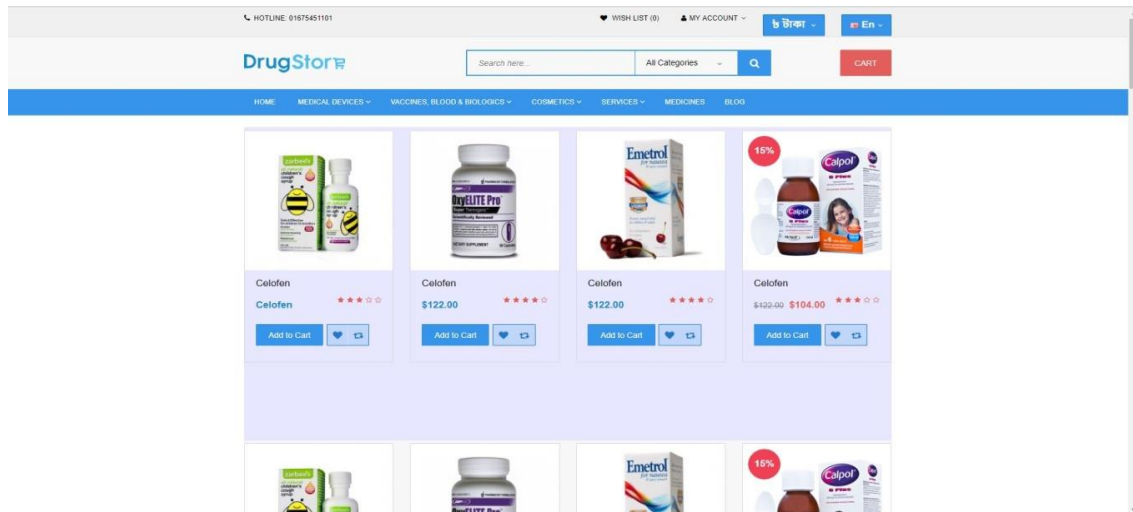


Figure 5.2.1: homepage.

5.2.2. : The following figure shows manufacturer company list:



Figure:5.2.2. : manufacturer company list.

5.2.3.: The following figure shows product list:

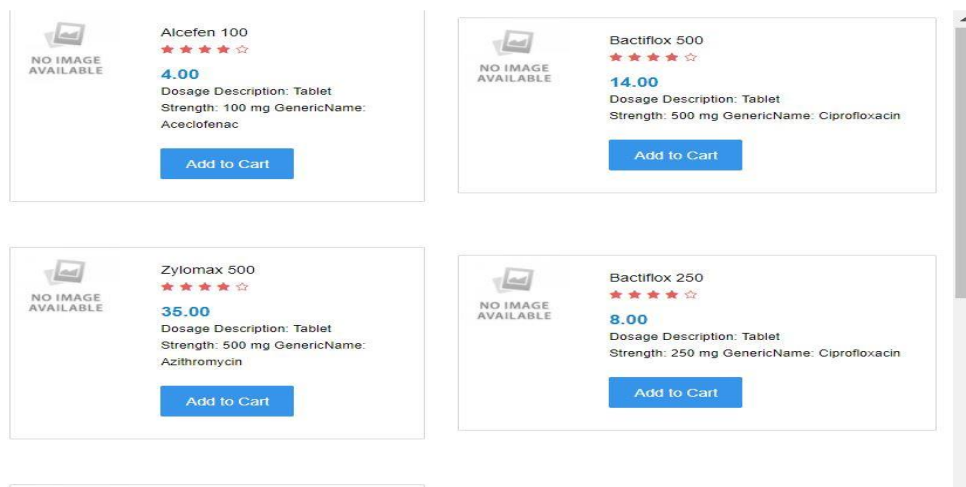


Figure:5.2.3.: product list:



5.2.4.: The following figure shows adding medicine to cart:

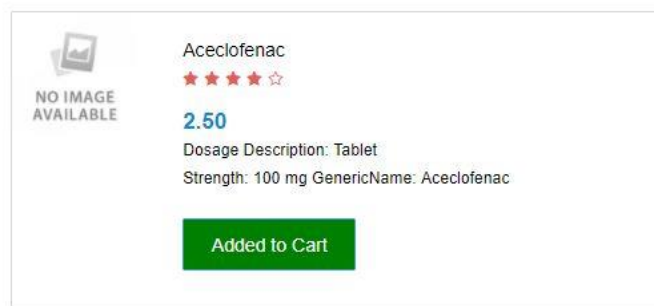


Figure:5.2.4.:adding medicine to cart.

5.2.5.: The following figure shows medicine in the cart:

### Shopping Cart

PRODUCT NAME	DOSAGE DESCRIPTION	STRENGTH	GENERICNAME	UNIT PRICE	QUANTITY	TOTAL	
 Aceclofenac	Tablet	100 mg	Aceclofenac	2.50	- 1 +	2.50	

Figure:5.2.5.:medicine in the cart.

5.2.6.: The following figure shows checkout/order confirmation:

### Checkout

#### STEP 1: CHECKOUT OPTIONS

##### NEW CUSTOMER

##### Register Account

By creating an account you will be able to shop faster, be up to date on an order's status, and keep track of the orders you have previously made.

Continue

##### RETURNING CUSTOMER

##### I am a returning customer

Username

User Name

Password

Password

Login

[Forgotten Password](#)

#### STEP 2: CONFIRM ORDER



5.2.7. : The following figure shows registration:

The registration form consists of several sections:

- Personal Information:** Fields for First Name, Last Name, Username, and phone (Contact No.).
- Your Address:** A dropdown menu for DIVISION (Dhaka), followed by dropdowns for District (Dhaka) and SubDistrict (Adabar), and a text field for House No. (5/3 sobhanbag road).
- Your Password:** Fields for Password and Password Confirm, with a checkbox for "I have read and agree to the Privacy Policy".
- Submit:** A blue button labeled "Submit".

Figure: 5.2.7. : registration

5.2.8. : The following figure shows checkout:

The checkout page displays the following information:

- Checkout** header.
- Progress indicators for **STEP 1: CHECKOUT OPTIONS** and **STEP 2: CONFIRM ORDER**.
- A table with the following data:

PRODUCT NAME	DOSAGE DESCRIPTION	STRENGTH	GENERICNAME	UNIT PRICE	QUANTITY	
 No image available	Acetofenac	Tablet	100 mg	Acetofenac	2.50	1

A blue button labeled "Confirm Order" is located at the bottom right of the page.

Figure: Checkout.

5.2.9. : The following figure shows order confirmation:

The order confirmation message includes the following elements:

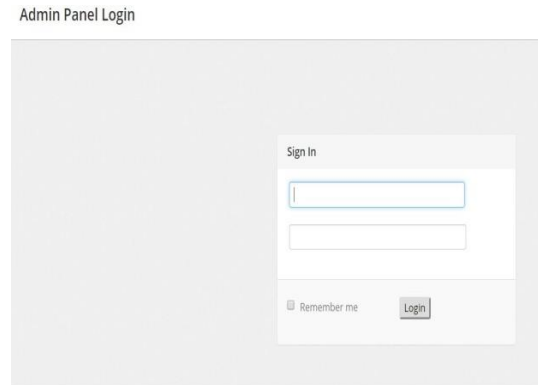
- Navigation path: Home / SHOPPING CART / CHECKOUT / SUCCESS
- Your Order Has Been Placed!** (Large heading)
- Message: "Your order has been successfully processed!"
- Instructions: "You can view your order history by going to the my account page and by clicking on history." and "If your purchase has an associated download, you can go to the account downloads page to view them."
- Request: "Please direct any questions you have to the store owner."
- Thank you: "Thanks for shopping with us online!"
- Continue** button.

Figure: Confirmation message.

## 5.2.2 Admin panel

5.2.2.1.: The following figure shows admin login

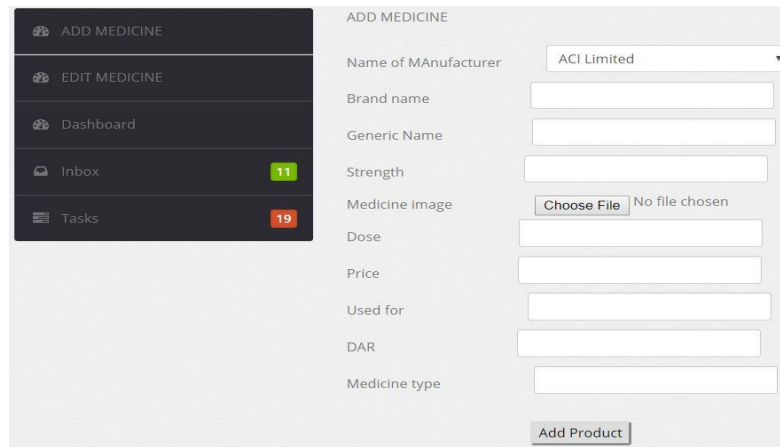
Admin Panel Login



The image shows a web form titled "Admin Panel Login". It features a "Sign In" section with two input fields for username and password. Below the fields are a "Remember me" checkbox and a "Login" button.

Figure:5.2.2.1. : admin login.

5.2.2.2.: The following figure shows add medicine:



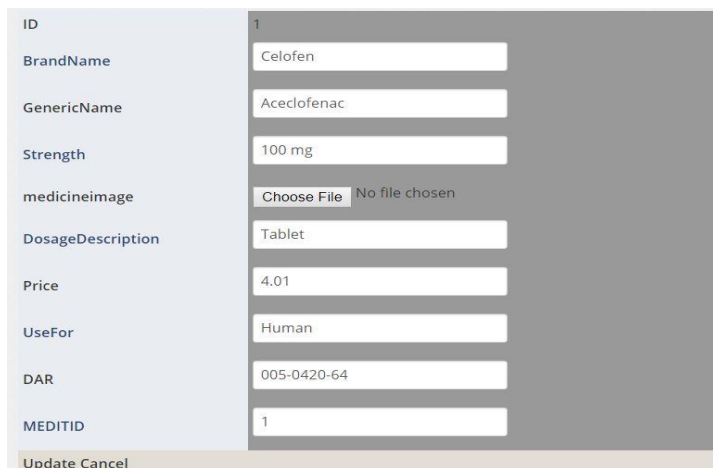
The image shows a web form titled "ADD MEDICINE". On the left is a dark sidebar with navigation options: "ADD MEDICINE", "EDIT MEDICINE", "Dashboard", "Inbox" (with a green badge showing "11"), and "Tasks" (with a red badge showing "19"). The main form area contains the following fields:

- Name of Manufacturer: ACI Limited (dropdown menu)
- Brand name: [text input]
- Generic Name: [text input]
- Strength: [text input]
- Medicine image: Choose File | No file chosen
- Dose: [text input]
- Price: [text input]
- Used for: [text input]
- DAR: [text input]
- Medicine type: [text input]

An "Add Product" button is located at the bottom right of the form.

Figure:5.2.2.2.:add medicine.

5.2.2.3. : The following figure shows edit medicine:



The image shows a web form titled "Edit Medicine". It displays the following fields with their current values:

- ID: 1
- BrandName: Celofen
- GenericName: Aceclofenac
- Strength: 100 mg
- medicineimage: Choose File | No file chosen
- DosageDescription: Tablet
- Price: 4.01
- UseFor: Human
- DAR: 005-0420-64
- MEDITID: 1

At the bottom of the form are "Update" and "Cancel" buttons.

.Figure: 5.2.2.3. :Edit medicine

## 5.2.3 Pharmacy panel

5.2.3.1.: The following figure shows pharmacy Login

Figure:5.2.3.1. : pharmacy Login

5.2.3.2.: The following figure shows pending orders

Label	OrderId	customeremail	FIRSTNAME	LASTNAME	HOUSENO	PHONE	totalprice	oderdatetime	orderStatus	SubDistrict
Confirm Order Show Order	1522128783	NR	nishat	royhana	dfa	1111	85	4/6/2018 6:39:58 PM	1	1
Confirm Order Show Order	1522134606	NR	nishat	royhana	dfa	1111	4.33	4/6/2018 6:39:58 PM	1	1

Figure:5.2.3.2. : shows pending orders

5.2.3.3.: The following figure shows order by clicking "show order" button

Label	OrderId	customeremail	FIRSTNAME	LASTNAME	HOUSENO	PHONE	totalprice	oderdatetime	orderStatus	SubDistrict
Confirm Order Show Order	1522128783	NR	nishat	royhana	dfa	1111	85	4/6/2018 6:40:40 PM	1	1
Confirm Order Show Order	1522134606	NR	nishat	royhana	dfa	1111	4.33	4/6/2018 6:40:40 PM	1	1

OrderId	totalproducts	BrandName	GenericName	Strength	Price
1522134606	1	Aceclofenac	Aceclofenac	100 mg	2.50
1522134606	1	Altapan 10	Hyoscine Butyl Bromide	10 mg	1.83

Figure:5.2.3.3. : Order by clicking "show order" button

5.2.3.4.: The following figure shows confirmation of order. Then user details will be shown

	Orderid	customeremail	FIRSTNAME	LASTNAME	HOUSENO	PHONE	totalprice	oderdatetime	orderStatus	SubDistrict
Confirm Order Show Order	1522128783	NR	nishat	royhana	dfa	1111	85	4/6/2018 6:41:31 PM	1	1
Confirm Order Show Order	1522134606	NR	nishat	royhana	dfa	1111	4.33	4/6/2018 6:41:31 PM	1	1

Orderid	totalproducts	BrandName	GenericName	Strength	Price
1522128783	1	Erythromycin A	Erythromycin	250 mg/5 ml	60.00
1522128783	10	Fleco	Aceclofenac	100 mg	2.50

Orderid	100012
customeremail	NR
FIRSTNAME	nishat
LASTNAME	royhana
HOUSENO	dfa
PHONE	1111
totalprice	10.41
oderdatetime	4/6/2018 6:41:38 PM

Figure:5.2.3.4. : confirmation of order. Then user details will be shown

5.2.3.5. : The following figure shows delivered order

Orderid	customeremail	FIRSTNAME	LASTNAME	HOUSENO	PHONE	totalprice	oderdatetime	orderStatus	SubDistrict	RegedPharmacyID
1522128783	NR	nishat	royhana	dfa	1111	85	4/6/2018 6:43:19 PM	2	1	3

Figure: 5.2.3.5. : delivered order

## 5.3 Interaction Design and UX

5.3.1: Page Loading:



Figure:5.3.1: Page Loading.

5.3.2: Adding medicine to cart:

NO IMAGE AVAILABLE

Aceclofenac

★★★★☆

**2.50**

Dosage Description: Tablet

Strength: 100 mg GenericName: Aceclofenac

Added to Cart

Figure:5.3.2: Adding medicine to cart

### 5.3.3: Medicine in the cart:

#### Shopping Cart

PRODUCT NAME	DOSAGE DESCRIPTION	STRENGTH	GENERICNAME	UNIT PRICE	QUANTITY	TOTAL	
 Aceclofenac	Tablet	100 mg	Aceclofenac	2.50	- 1 +	2.50	 Remove

Figure:5.3.3: Medicine in the cart:

## 5.4 Test results and reports

### 5.4.1 System Test

We used some test cases to test the system is fully functional or not. We input some test data to check the obtained results. Results of test case is given below:

Table 5.4.1 System test.

Test case	Test input	Expected Outcome	Obtained outcome	Result
1. User login	Login from various devices by various user.	Successfully login	Successfully log in to the system.	Passed
2. Add medicine to cart	User clicks "Add to cart" button to add the medicine to cart.	Get "Added to cart" name or title in the button.	Button name became "Added to cart" from "Add to cart".	Passed
3. Order confirmation	User hits "confirm order " button after checkout.	New page will load and confirmation message will be shown.	New page loaded and "Your order has been placed" message were seen by user	Passed
4. Admin login	Admin login from various devices to admin panel.	Successfully login and admin home will be shown.	Successfully log in and admin accessed to the panel.	Passed
5. Add medicine from admin panel	Admin provides all information of a medicine and hits "Add Product" button.	Medicine will be added to the list and customer will able to view it.	Medicine added to the list under the particular manufacturer company.	Passed
6. Edit medicine From admin panel	Admin clicks "Update" button to edit a particular	Admin will enable to edit that medicine information.	Admin edited that medicine info successfully by clicking	Passed

	medicine info.		"Update" button	
7. Confirm order by a pharmacy	Pharmacy admin clicks “confirm order” to confirm that order	Order will be saved in database which is delivered by that pharmacy	That order shows in delivered order section of that pharmacy admin panel	Passed

**5.4.2 Browser test:** We used several Browser to run the project. Results are given below in table 5.4.2:

Table 5.4.2: Browser test.

Browser Name	Status
Google chrome	Yes
Mozilla Firefox	Yes
Internet explorer	Yes
Opera mini	unknown

## CHAPTER 6

### Conclusion

#### 6.1 Conclusion

During our project work, we have gone through with immense learning of website planning, Coding, Designing web page, website testing and many more. While collecting data, we talked to many pharmacists and learned a lot about drugs companies in Bangladesh. In addition, we learnt how to run through a server. So, we have successfully achieved the concluding result of our project.

Today is the age of modern science and Information technology, which is critical to the development of more effective operational and management process. To serve users well, companies need to be proficient in many areas, reduce cycle times, faster development of new technologies strategies improved user's services, and increase knowledge sharing and learning. IT is a critical but most powerful resource for accomplishing all the goals. Right now, we are initiating this organization as web based. In near future, we aim to make it as a wide platform in medical sector which will provide much easier service and facility to people our country.

#### 6.2 Scope for Further Developments:

In future we will try to update all features of our project and try to solve current problem of our project. Some future plans are given below:

1. Make an android application for this website which will become much easier for people to respond quickly on the spot.
2. Add perscription uploading feature as patients can easly collect their medicine.
3. In future more, categories will be added in this web application.
4. Make a doctor dashboard and provide vedio calling facility with patient

.

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## PLAGIARISM

