

KHULNA UNIVERSITY

Course Title : Information System Design Sessional
Course No : CSE 2212

Project : Online Medicine Management System



Submitted by:

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2nd Year, 2nd Term

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Lecturer

Computer Science and
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Submission Date: 20- 12-2022

ONLINE MEDICINE MANAGEMENT SYSTEM

CONTENTS

1. System Service Request (SSR)
2. Interview scripts.
3. Project Scope Statement (PSS) or Statement of Works (SOW) which includes –
 - Project features with clear points.
 - Use-case diagram.
 - Data Flow Diagram
 - Entity Relationship (ER) Diagram
 - Form and Report
4. Feasibility Studies which must include –
 - Economic feasibility analysis with year-wise cost-profit breakdown (preliminary budget), risks and tangible and intangible benefits
 - Break-even analysis
 - Break-even point on a 2D graph.
5. Management Procedure with team correspondence
6. Project Charter
7. Project Schedule with activity list
8. Gantt chart
9. Network diagram with highlighting critical path(s)
10. Business Documents.

SSR

Adrita Medical Hall

System Service Request

REQUESTED BY: Md Hasanuzzan

Date: August 2021

Department: Purchasing Support

LOCATION: College para, Magura

TYPE OF REQUEST

☒ New System Online

☐ System Enhancement System

☐ Error Correction

URGENCY

☐ Immediate – Operations are impaired, or opportunity lost

☐ Problems exist, but can be worked around

☒ Business losses can tolerate until new system installed

PROBLEM STATEMENT

For some months, I face many calls from the customer. They live in the urbane area. They come city to show doctors and take medicine. They have to come from rural to the city to buy the rest dose of the medicine. It's a time-consuming process, and non-economical. They ask, is there any online system or shipping system in your shop?

SERVICE REQUEST

I request a thorough analysis of our current operations with the intent to design and build a completely new information system. This system should handle all purchasing transactions, support the display and reporting of critical purchasing data, and assist purchasing agents in commodity buying. . By this system, we can ship our medicine urbane area, can give emergency support, and increase our sales.

TO BE COMPLETED BY THE SYSTEMS PRIORITY BOARD

☐ Request approved

Assigned to:

Start Date:

☐ Recommend revision

☐ Suggest User Development

☐ Reject for reason

Interview Outline	
Interviewee: Mollick Humayoun Kobir Contact no: 01740707180	Interviewer: Prosanto Mojumdar & S M Musfikur Rahman
Location/medium: Adrita Medical Hall, Old Gallamari Road , Sonadanga , Khulna.	Appointment Date: 15 October 2022 Starting time: 4:15 pm Ending time: 4:45 pm
Objectives: Online medicine management system is a system which solves our daily problem. By this system one can know/check his/her medicine in his nearest medicine shop in one click. The Pharmacists update their online pharmacy shops and they upload their medicines which is available. So, it is a essential product for both the general people and the pharmacist.	
Agenda: Introduction Background on project Overview of interview Summary of major points Question from interviewee Closing	Approximate time: 3 minutes 7 minutes 5 minutes 5 minutes 7 minutes 3 minutes
General observation: The Pharmacist is quite happy and also appreciate the project. It will help to increase his selling. It will help to manage his daily product nicely. He is eager to use such that a product.	
Interviewee: Mallik Humaun Kabir	Date:14 September 2022
Questions:	Notes:
Question: 1 Do you have smart phone or laptop?	Answer: Yes. I have a laptop.
Question: 2 Have you used any information system?	Answer: No. Observation: We have to train him for properly using of the application
Question: 3 What's your opinion about the system?	Answer: It saves my time and increase my profit. It will be also very helpful for management. So, I like the system.

Project Scope Statement (PSS) or Statement of Works (SOW)

Introduction :

This “Online medicine management system” project aims to create a platform for the pharmacy to serve the people.

The purpose of an online medicine management system is to improve accuracy and enhance safety, communication and efficiency in the pharmaceutical store by automating the existing manual system through the implementation of computerized equipment, and full-fledged computer software, fulfilling all requirements, in the process of data management and maintenance of records related to stock, liquid flows, staffs, customers and suppliers. Also, make sure the availability of medicine to all in emergency conditions and urbane areas people.

Besides, Customers and business owners also get benefits. Some customers hesitate to buy some medicine, they can maintain privacy. Many times, a patient finds it difficult to get some medicine at a local store and has to spend a lot of time & effort to find it at other stores. With an on-demand medicine app, there's no such hassle and with the option of home delivery. It helps to Build a Loyal Customer Bas. It can do better inventory management.

This system is an integration of an aspect of Information and Communication Technology (ICT). Information technology has done and still doing a lot to help solve and improve organization and management problems or challenges. It has been helpful in the area of empowerment, maintenance etc. to so many sectors such as business, finance, education, law, health, communication etc. Automated data storage, data security, data integrity and easy manipulation of stored data can only be possible and suitable by its use.

The program can be used in a pharmaceutical shop that has computerized systems which are not web-based. The software can generate reports, as per user's requirements, and prints invoices, bills, receipts etc. It can also maintain the record of supplies sent in by the supplier and ensure effective communication between a customer and the pharmacy.

System Description :

This system creates an online version of offline pharmacy to override the problems prevailing in the practising manual system. This new information system will be constructed that will collect all customer purchasing activity, support the display and reporting of sales information, aggregate data and show trends to assist marketing personnel in understanding the dynamic market condition.

It would be an online pharmacy through which you can order and receive requisite medicines anywhere and anytime, without having to physically visit a drugstore. Because of the convenience it provides, the increasing prevalence of internet of things worldwide and the growing use of smartphones and tablets, these apps are becoming extremely popular among end users.

This software is supported to eliminate and, in some cases, reduce the hardships faced by this existing system. Moreover, this system is designed for the particular need of the company to carry out operations smoothly and effectively.

The application is reduced as much as possible to avoid errors while entering the data. It also provides an error message while entering invalid data. No formal knowledge is needed for the user to use this system. Thus, this all proves it is user-friendly. Pharmacy Management System, as described above, can lead to an error-free, secure, reliable, and fast management system. It can assist the user to concentrate on their other activities rather than concentrate on record keeping. Thus, it will help the organization in better utilization of resources.

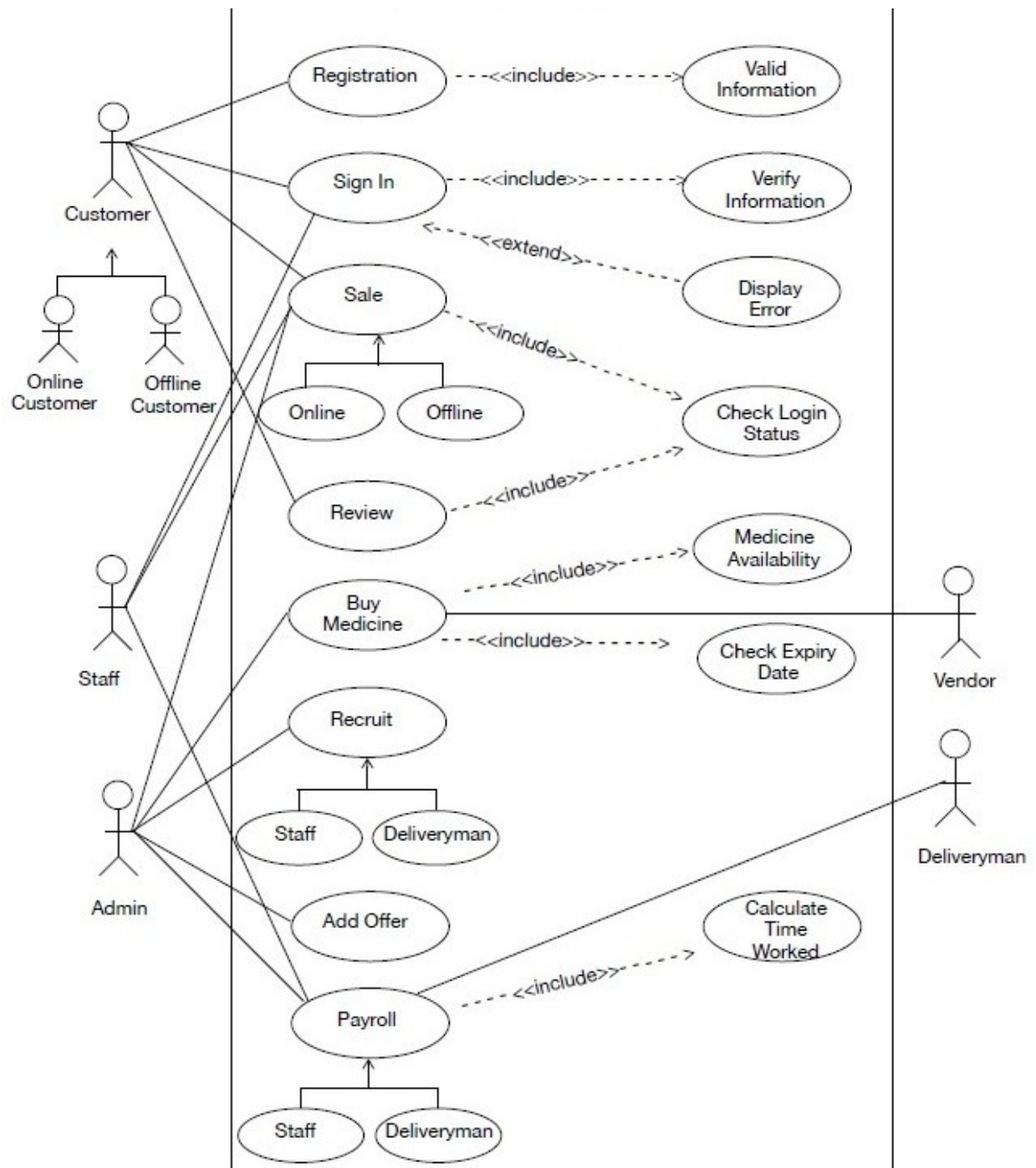
Every organization, whether big or small, has challenges to overcome and manage the information of Medicines, pharmacies, companies, Sells, and Inventory. Every Pharmacy Management System has different Pharmacy needs, therefore we design exclusive employee management systems that are adapted to your managerial requirements. This is designed to assist in strategic planning and will help you ensure that your organization is equipped with the right level of information and details for your future goals.

Also, for those busy executives who are always on the go, our systems come with remote access features, which will allow you to manage your workforce anytime, at all times. These systems will ultimately allow you to better manage resources.

Project Features :

- Order and receive requisite medicines.
- Anywhere and Anytime shipping
- Coverage area for location tracking
- Payment Gateway
- Remote shopping
- Emergency shipping

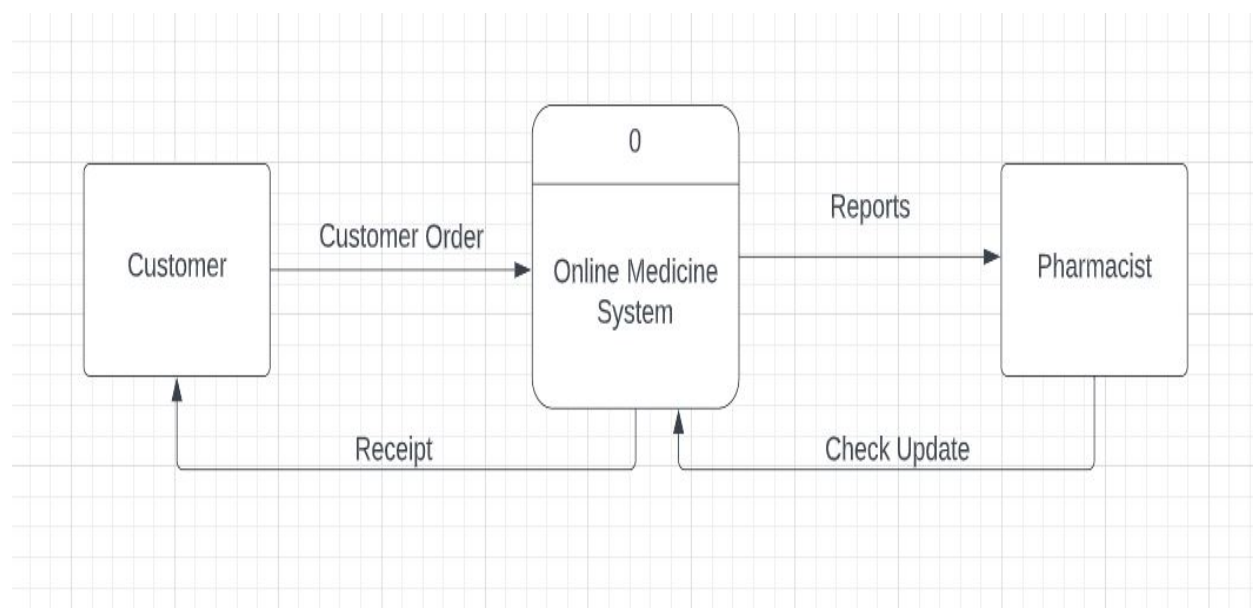
Use-case diagram :



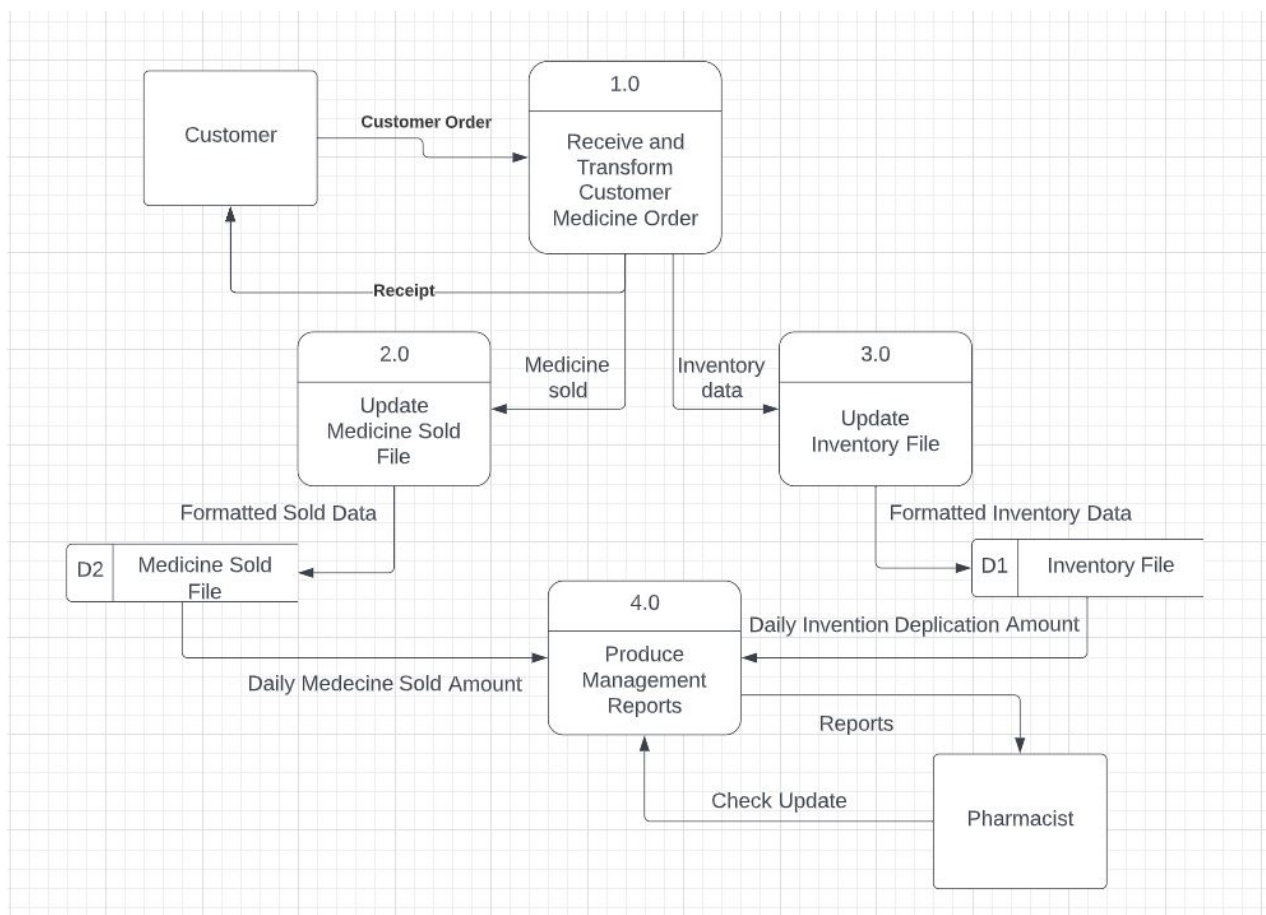
Data Flow Diagram :

DFD: DFDs are versatile diagramming tools. With only four symbols, you can use DFDs to represent both physical and logical information systems. DFDs do not share this problem of premature physical design because they do not rely on any symbols to represent specific physical computing equipment. They are also easier to use than flowcharts because they involve only four different symbols. There are two different standard sets of DFD symbols; each set consists of four symbols that represent the same things: data flows, data stores, processes, and sources/sinks (or external entities).

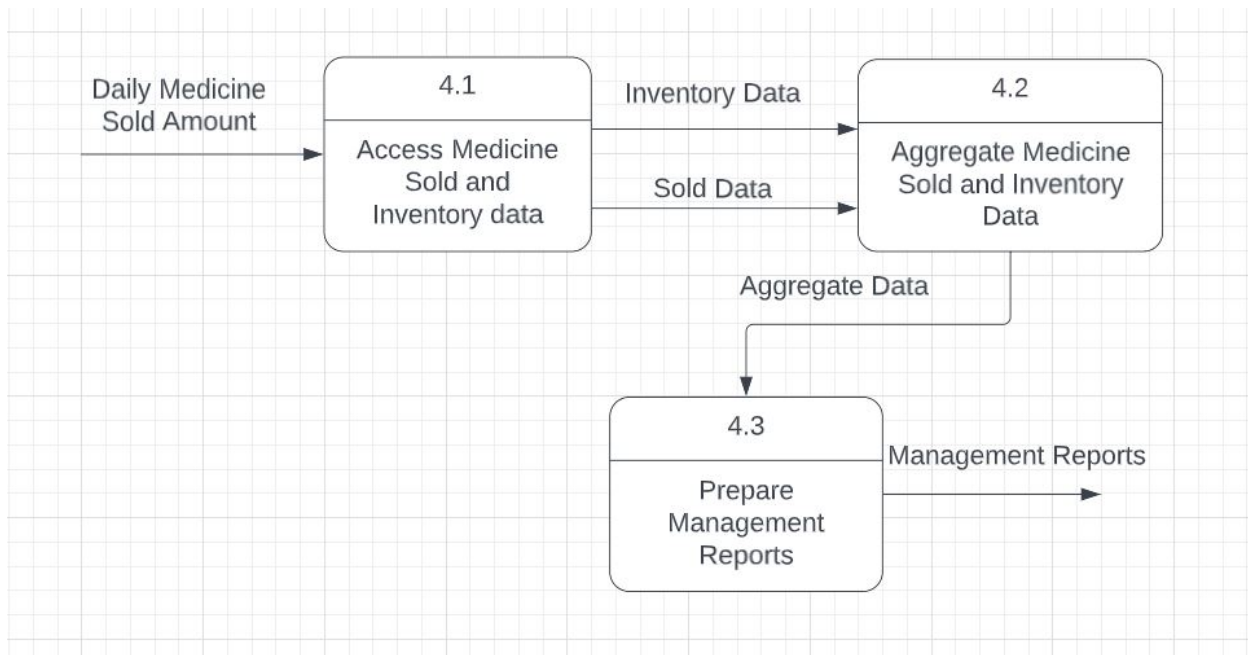
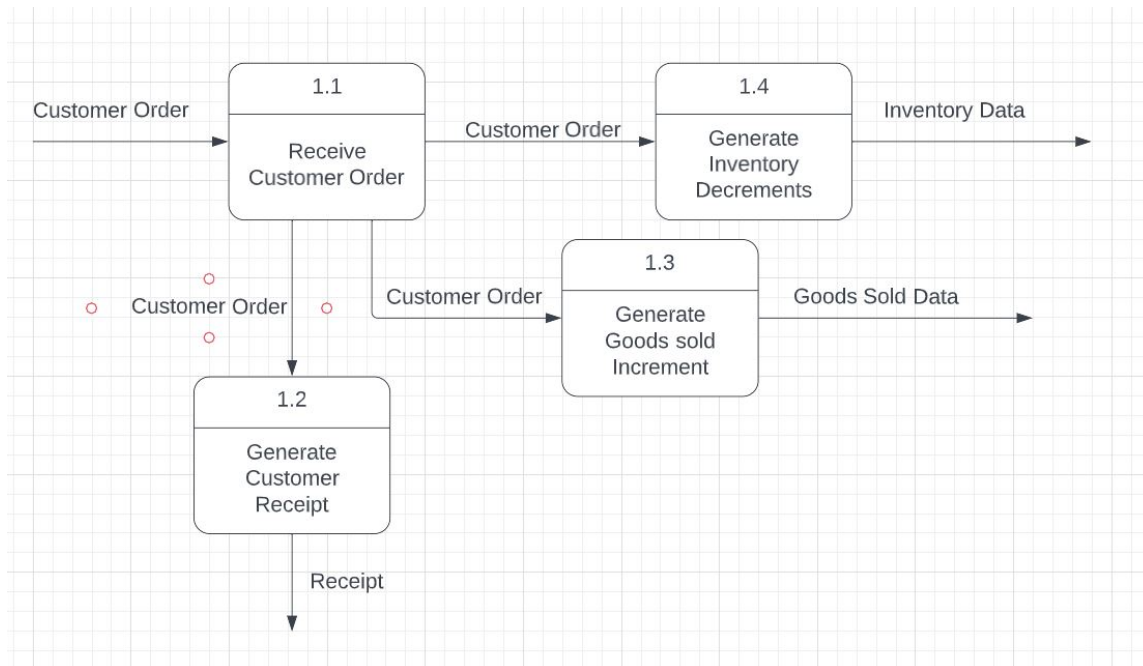
Context Diagram: The highest-level view of this system, shown in the figure, is called a context diagram. The context diagram contains only one process, no data stores, four data flows, and three sources/sinks. The single process, labeled 0, represents the entire system; all context diagrams have only one process, labeled 0. The sources/sinks represent the environmental boundaries of the system. Because the data stores of the system are conceptually inside one process, data stores do not appear on a context diagram. Here Customer order for medicine and they get the receipt. Also the pharmacist got the reports that which Medicine is sold and what is need to the customer. And also he checks the updates and update the available medicine list.



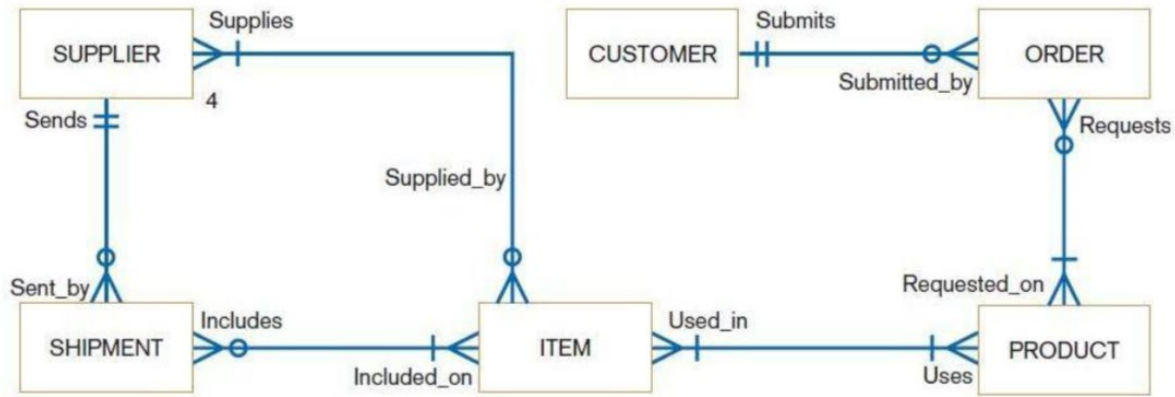
0 level DFD: The sources/sinks are the same in the context diagram and in this diagram: the customer, the kitchen, and the restaurant's manager. This diagram is called a level-0 diagram because it represents the primary individual processes in the system at the highest possible level. Each process has a number that ends in .0 . Here when One Customer order medicine the medicine system receive the order and transform it then it update the medicine sold file and also the inventory file. It gives a overview reports to the Pharmacist and he updates the reports, The reports provides the daily medicine sold amount also it gives the receipts to the customer and make a easy control to all sector.



Decomposition of DFD:



Entity Relationship (ER) Diagram :



ER Diagram: This entity relationship diagram shows the relationship between the Entities. Here the customer submits their order and their relation is one to optional many. Because one customer can order many medicine or may not any medicine. Again the order to customer relationship is many to one and it is mandatory relationship. Which means every order must submitted by a customer. Product to order the relationship is many to optional many i.e product may requested on order and order must requests the product. Again Supplier may supplies the item. But Item must supplied by the supplier its relationship is many to many and it is mandatory relationship. Again supplier may sends shipment (one to optional many). Shipment must be sent by a supplier. Shipment must includes item (mandatory many to many)and item may included on shipment(optional many to many)

Form and Report :



Today:

30 October 2022

Customer Information:

Customer Number:

1135



Name:

Pranto mojumdar

Address:

122/7 Gollamari, Khulna

District:

Khulna

Division:

Khulna

Zip:

2410

Save

Help

Exit

Customer Account Status
Customer Information

Page: 1 of 2

Today: 30 October 2022

Customer Number: 1135

Name: Pranto mojumdar

Address: 122/7 Gollamari,Khulna

City: Khulna

Division: Khulna

Zip: 2410

Help

Account Detail

New Account

Account Information

YTD-Purchases: 47285.00

YTD-Payments: 42656.65

Credit Limit: 10,000.00

Discount Percentage: 5.0

Outstanding Balance: 4628.35

Status: Active

Print

Prior Screen

Next Screen

Exit

Adrita Medical Hall

Page: 2 of 2

Detail Customer Account Information

Today: 30 October 2022

Customer Number: 1234

Name: Pranto mojumdar

DATE	PURCHASE	PAYMENT	CURRENT BALANCE
01-Jan-22			0.0
21-Jan-22	22,000.00		22,000.00
21-Jan-22		13,000.00	9,000.00
03-Mar-22	16000.00		25,000.00
03-Mar-22		15,500.00	9,500.00
23-May-22		5,000.00	4,500.00
12-Jul-22	9,285.00		13,785.00
12-Jul-22		3,785.00	10,000.00
22-Sep-22		5,371.65	4,628.35
YTD SUMMARY	47,285.00	42,656.65	4,628.35

Help

Prior Screen

Exit

Feasibility Studies :

We know,

PV_n = present value of Y dollars n years from now based on a discount rate of i.

NPV = sum of PVs across years.

Calculates time value of money

$$PV_n = Y \times \frac{1}{(1 + i)^n}$$

Break-even analysis: A type of cost-benefit analysis to identify at what point (if ever) benefits equal costs

Here, we calculate our value in Excel form and we get our Break even point will be after in 3 years. And after 3 years the benefit will much than cost.

Projects risks: The project team size is small and its duration is not big. Also the project is well structured and it is similar to the existing system so it is less risker. It also satisfy familiarity with IS development process ,application area, use of similar systems. So we can say It is less risker.

Tangible cost: A cost associated with an information system that can be measured in dollars and with certainty

Tangible costs of the project include:

- ❖ Hardware costs,
- ❖ Labor costs, or
- ❖ Operational costs including employee training
- ❖ Building renovations.

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General

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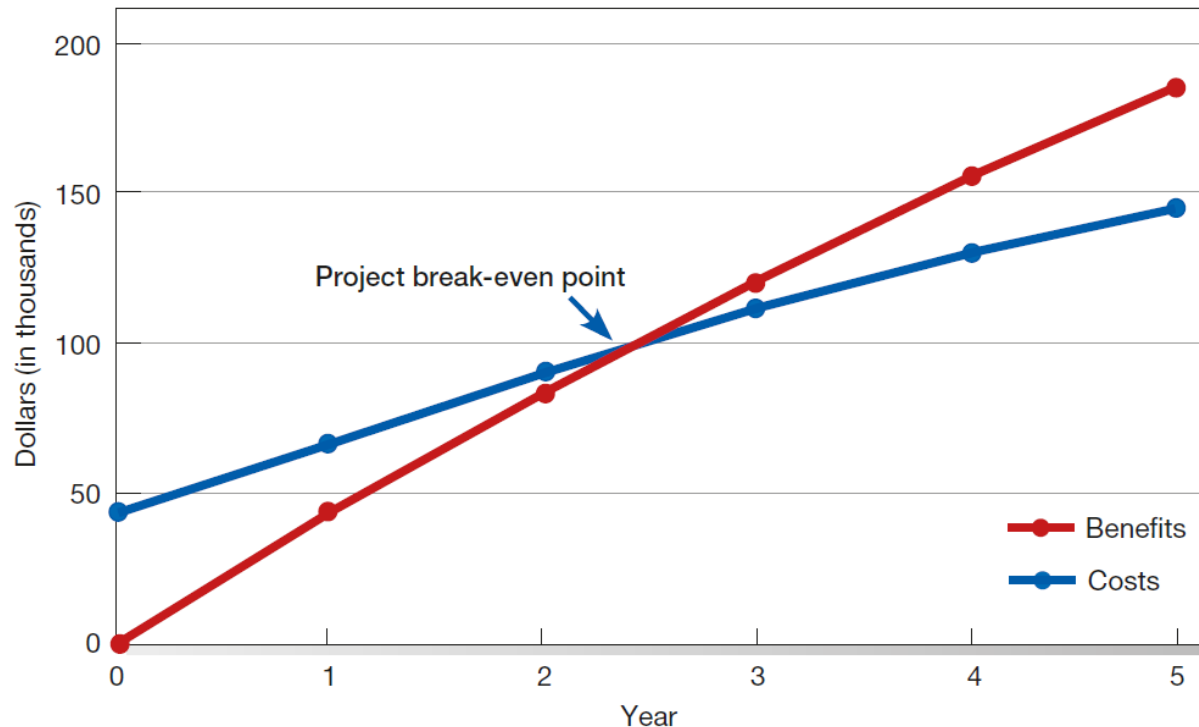
Conditional Formatting

Formulas

Online Medicine Management System

	A	B	C	D	E	F	G	H	I
4									
5	Online Medicine Management System								
6									
7		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Totals	
8		0	50000	50000	50000	50000	50000		
9	Discount Rate (12%)	1.0000	0.8929	0.7972	0.7118	0.6355	0.5674		
10		£0.00	£44,642.86	£39,859.69	£35,589.01	£31,775.90	£28,371.34		
11									
12	NPV of all benefits	£0.00	£44,642.86	£84,502.55	£120,091.56	£151,867.47	£180,238.81	£180,238.81	
13									
14	One-Time COSTS	-£42,500.00							
15									
16	Recurring Costs	0	-28500	-28500	-28500	-28500	-28500		
17	Discount Rate (12%)	1.0000	0.8929	0.7972	0.7118	0.6355	0.5674		
18		£0.00	-£25,446.43	-£22,720.03	-£20,285.74	-£18,112.27	-£16,171.67		
19									
20	NPV of all COSTS	-£42,500.00	-£67,946.43	-£90,666.45	#####	#####	#####	-£145,236.12	
21									
22									
23	Overall NPV							£35,002.69	
24									
25	Overall ROI - (Overall NPV/NPV of all COSTS)								
26	Yearly NPV Cash Flow	-£42,500.00	£19,196.43	£17,139.67	£15,303.28	£13,663.64	£12,199.68		
27	Overall NPV Cash Flow	-£42,500.00	-£23,303.57	-£90,666.45	£9,139.37	#####	£35,002.69		
28									
29	Break-Even Ratio	0.40278326	2.41669953						

Break-even point :



Management Procedure with team correspondence

Team Configuration

- There are two people S M Musfikur Rahan and Prosanto Mojumdar working on this project. Below the chart shows, who will be responsible for which tasks and how work will be supervised and reviewed.

Communications Plan

- There is a chart below, where I explain how the user will be kept informed about project progress (such as periodic review meetings or even a newsletter) and what mechanisms will be used to foster sharing of ideas among team members, such as some form of the computer-based conference facility.

- Task Responsibility Matrix

Project: Online Medicine Management System		Prepared by : S M Musfikur Rahman		Legend: P = Primary S = Support	
Manager : S M Musfikur Rahman		Page: 1 of 1 Responsibility Matrix			
Task ID	Task	Musfik		Prosanto	
A	Collect Requirements	P		S	
B	Develop Data Model	S		P	
C	Develop Program Interface	P		S	
D	Build Database	S		P	
E	Design Test Scenarios	P		S	
F	Run Test Scenarios	S		P	
G	Create User Documentation	P		S	
H	Install System	P		S	
I	Develop Customer Support	S		P	

- Communication Matrix

Stakeholder	Document	Format	Team Contact	Date Due
Team Members	Project Status Report	Project Intranet	Musfik and Prosanto	Second week of August
Management Supervisor	Project Status Report	Hard Copy	Musfik and Prosanto	---
User Group	Project Status Report	Hard Copy	Musfik and Prosanto	---
Internal IT Staff	Project Status Report	E-Mail	Musfik and Prosanto	---

IT Manager	Project Status Report	Hard Copy	Musfik and Prosanto	---
Contract Programmers	Software Specifications	E-Mail/Project Intranet	Musfik and Prosanto	---
Training Subcontractor	Implementation and Training Plan	Hard Copy	Musfik and Prosanto	---

Project Charter :

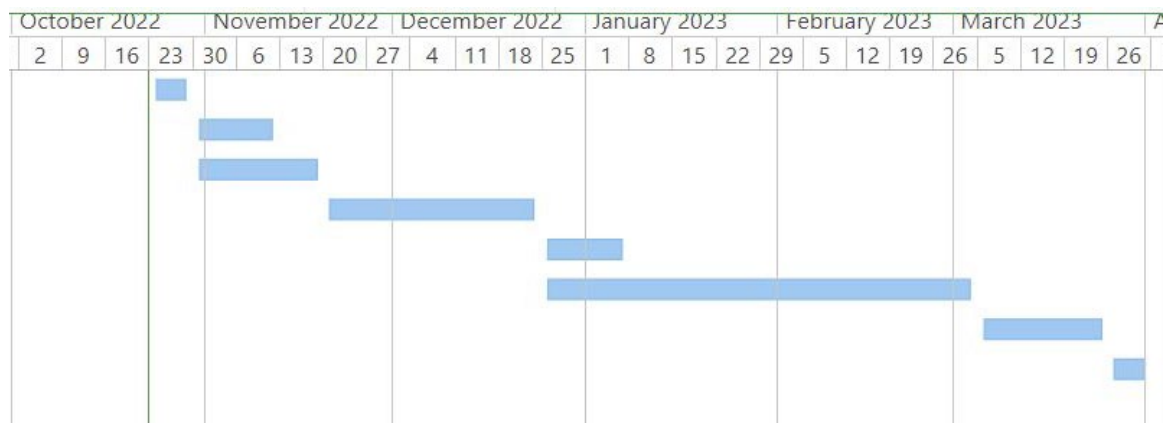
Medicine Management		Prepared: October 23, 2022	
Project Charter			
Project Name:	Online Medicine Management System		
Project Manager:	Prosanto Mojumdar SM Musfikur Rahman		
Customer:	Pharmacy		
Project Sponsor:	PMD Limited		
Project Start/End:	24/10/2022 – 31/03/2023		
Project Overview: This “Online medicine management system” project aims to create a platform for the pharmacy to serve the people. The purpose of an online medicine management system is to improve accuracy and enhance safety, communication and efficiency in the pharmaceutical store by automating the existing manual system through the implementation of computerized equipment, and full-fledged computer software, fulfilling all requirements, in the process of data management and maintenance of records related to stock, liquid flows, staffs, customers and suppliers. Also, make sure the availability of medicine to all in emergency conditions.			
Objectives: <ul style="list-style-type: none">• Minimize data entry error• Provide more timely actual information• Decrease the sufferings of the people• Also help the pharmacist to maintain his works easily			
Key Assumption: <ul style="list-style-type: none">• System will be built in house• Interface will be a web browser• Customer can access the database of the pharmacy for finding a medicine nearby.			
Stakeholders and Responsibilities:			
Stakeholders	Role	Responsibilities	Signatures
Mollick Humayoun Kobir Kabir	Pharmacist	Project vision, Resources Monitoring	Humaun
Prosanto mojumdar	Project manager	Planning, Monitoring, Executing project	Prosanto
S M Musfikur Rahman	Project manager	Planning, Monitoring, Executing project	Musfik

Project Schedule with activity list










Activity List:

Activity	Preceding Activity
1. Requirements collection	-
2. Screen Design	1
3. Report Design	1
4. Database Design	2,3
5. User Documentation	4
6. Programming	4
7. Testing	6
8. Installation	5,7

Gantt chart :



Working table:

	ID ↑	Mode	Task Name	Duration	Start	Finish
	1		Requirement Analysis	1d	10/24/2022	10/24/2022
	2		Screen Design	2d	10/25/2022	10/26/2022
	3		Report Design	3d	10/25/2022	10/27/2022
	4		Database Design	5d	10/28/2022	11/3/2022
	5		User Documentation	2d	11/4/2022	11/7/2022
	6		Programming	10d	11/4/2022	11/17/2022
	7		Testing	3d	11/18/2022	11/22/2022
	8		Installation	1d	11/23/2022	11/23/2022

Network diagram with highlighting critical path(s) :

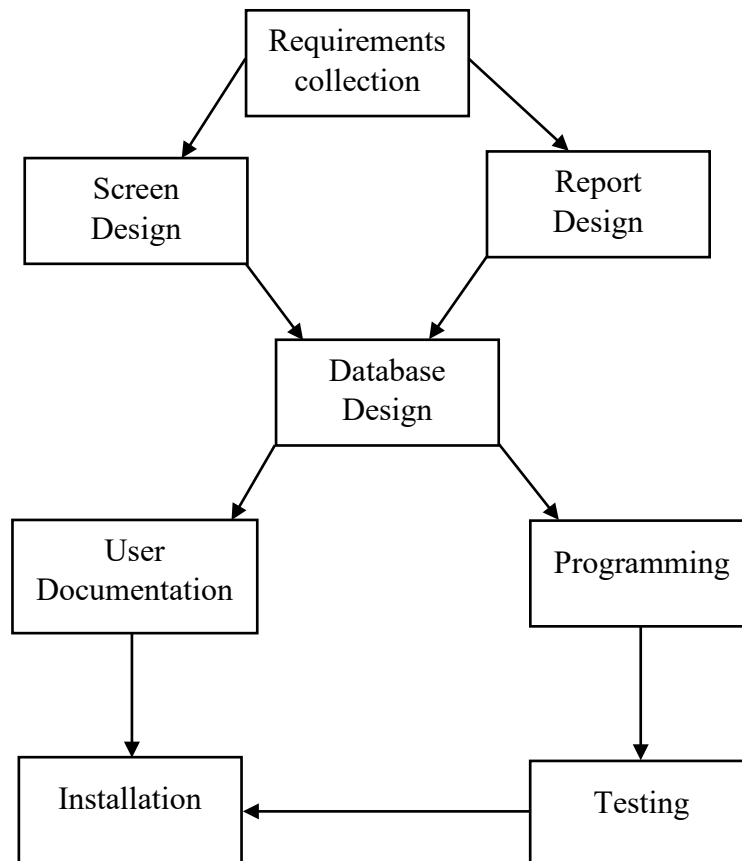
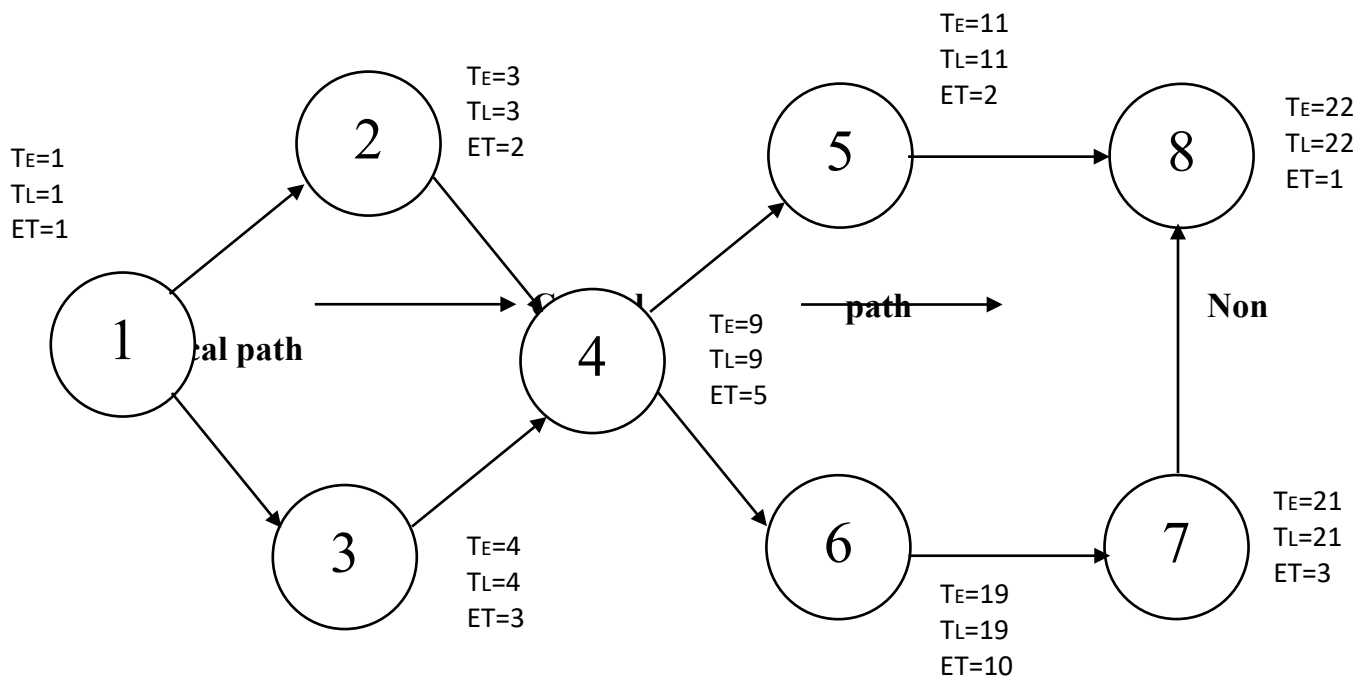


Fig: Network Diagram



Business Documents :



आजादी का अमृत महोत्सव
 75th Anniversary
 1947-2022

आजादी का अमृत महोत्सव

75th Anniversary
 1947-2022

कक्षा (Class): _____
 विषय (Subject): _____
 तारीख (Date): _____

क्र.सं. (Sl. No.)	विषय (Subject)	अंक (Marks)	कुल अंक (Total Marks)
1	प्रश्न सं. 1	35	198
2	प्रश्न सं. 2	55	78
3	प्रश्न सं. 3	55	110
4	प्रश्न सं. 4	45	30
5	प्रश्न सं. 5	12	120
6	प्रश्न सं. 6	15	185
7	प्रश्न सं. 7	15	193
8	प्रश्न सं. 8	27	165
9	प्रश्न सं. 9	3	165
10	प्रश्न सं. 10	48	48
11	प्रश्न सं. 11	17	38
12	प्रश्न सं. 12	17	38

कुल अंक (Total Marks): _____
 अंक (Marks): _____


ACI Consumer Brands

সোকাবনের নামঃ **দোয়া এন্টারপ্রাইজ**
সোকাবনের কোডঃ **FY000650**
সোকাবনের ঠিকানাঃ **নিয়াদা ১নং আবাসিক**
বিল্টের নামঃ **নিয়াদা**

ক্যাশ মেমো

মূলক নিবন্ধন নংঃ **১৮০৭১০২২৩৪০**
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ক্রম নং	বিবরণ	পরিমাণ			দর (টাকা)	মোট (টাকা)	নগদ ছাড়
		বিক্রয়	ফ্রী	মোট			
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MS Uttara Enterprise

মোট (টাকা) : **১১১**
মোট নগদ ছাড় : **০**
মোট নেট (টাকা) : **১১১**

ডিস্ট্রিবিউটর :
টেরিটোরি :
জোন :

ক্রমিক নং :
তারিখ :
স্বাক্ষর :
মোবাইল :
ইমেইল :

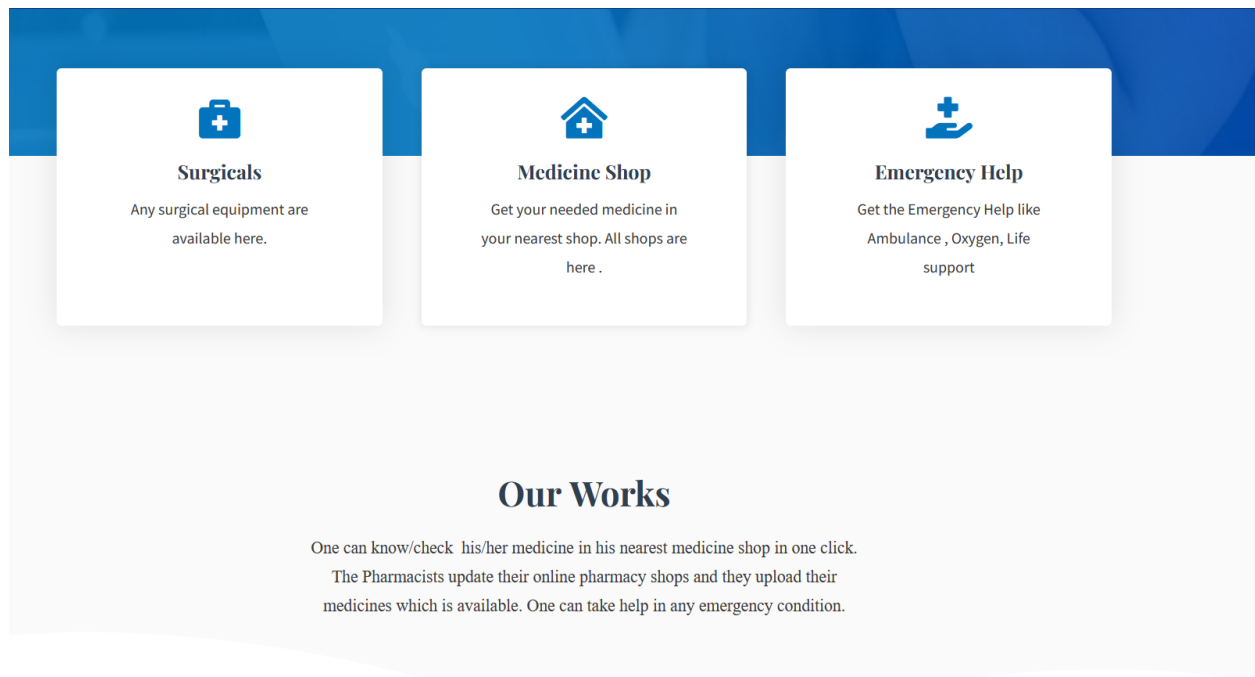
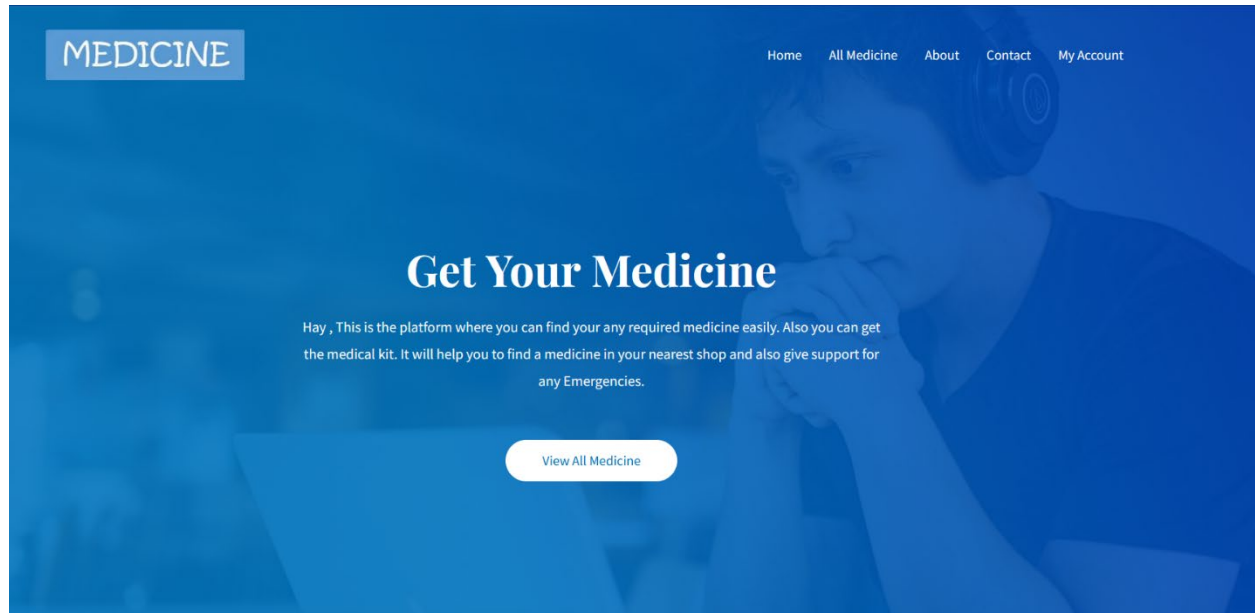
শ্রীযুক্ত মেডিকেল হল
Home of Surgical Scientific Pathological
Laboratory Glass Ware Chemical Etc.
কো. ডি. ঘোষ রোড, বোরজ মার্কেট, খুলনা।
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২০০ Guidor (A.R.) = ২০০
১০০ Baby Needle = ২০০
১০০ u-300 mi = ৩০০
১০০ ৫০০ mm G/y = ১৪০
১২০ gm u = ১৫০
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Lind

Implementation :

<http://getmedicine.liveblog365.com>



Message from a Successful Client

It's a very useful platform. The system is great. It saves my time and increases my profit. Also it does a great work for management. I can handle customer easily by it. I am happy with the platform.



▼ Register

Click edit button to change this text. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut elit tellus, luctus nec ullamcorper mattis, pulvinar dapibus leo.

► login

► Talk with the Professionals

What Our Clients Have to Say

The system is great. It saves my time and increases my profit. Also it does a great work for management.



Mollick Humayoun Kobir
From Gollamari, Khulna

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Zasha Swan
From Khulna

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Frank Jones
From Khulna

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Jack Brownn
From Khulna