# ONLINE MEDICAL SHOP MANAGEMENT SYSTEM

#### **A Project Report**

Submitted in partial fulfillment of the Requirements for the award of the Degree of

#### **BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)**

 $\mathbf{B}\mathbf{y}$ 

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(Affiliated to University of Mumbai) KHED, 415709 MAHARASHTRA 2019-2020

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DEPARTMENT OF INFORMATION TECHNOLOGY



### **CERTIFICATE**

This is to certify that the project entitled, "ONLINE MEDICAL SHOP MANAGEMENT SYSTEM", is bonafied work of MR.MASURKAR NAZAULLAH MAINUDDIN bearing Seat.No: (226) submitted in partial fulfillment of the requirements for the award of degree of BACHELOR OF SCIENCE in INFORMATION TECHNOLOGY from University of Mumbai.

Internal Guide		Coordinator
	External Examiner	
Date:		College Seal

# **ABSTRACT**

Medical Shop Management is a system that practically concentrates on the associative standards of the Medical diagnosis. The application increases in its size through the database, as the research activity increases within the organization.

The present application concentrates on the relative information that has been stored at the level of the organization while the system is under the process of execution. To keep the latency of the system at the lowest profile the system manages all the information in SQL Server database, to keep at least of the database standards that are exists at the industrial level. The application has been developed using the .NET technologies to keep pace with the present trends of the industrial requirements. The different standards of the .NET technology have been adapted to cater to the standards like intranet based standards and browser specific user interfaces the ASP.NET database connectivity has been exploited for the database interactive standards.

# **ACKNOWLEDGEMENT**

I am presenting this project report on "Online Medical Shop Management System" as part of the curriculum of Bachelor Science of in I.T. with immense pleasure. I started working on it with a zeal and enthusiasm but then quickly realized that for satisfactorily completing the project not only require conviction and perseverance, but without due help and guidance such a task becomes futile. I wish to thank all the people who gave me an unending support right from the idea was conceived. It gives me great pleasure, on the completion of this project, to acknowledge and appreciate all those who were there to help me.

I express my sincere and profound thanks to all our teachers. I wish to thank Prof. A.A.Jadhav (Project guide) for her students-like enthusiasm and his guidance from time to time. I heartily thank Prof.Sachin.S.Bhosale(HOD) for all help and valuable time. Her valuable advice has helped me bring this work to completion. I aslo wish to thank Prof.V.I.Pujari(Project Coordinator) besidea; I take this opportunity to express my sincere gratitude to the Principal Dr.G.B.Sarang (ICS, Khed) for providing a good environment and facilities to complete this project.

I would like thank our college ICS (Khed) for providing the resources for project stage I. I also acknowledge the research work done by all researchers in yield. And last but not least, all my friends, who have helped me directly or indirectly throughout the project.

Mr.Masurkar Nazaullah Mainuddin

# **DECLARATION**

I here by declare that the project entitled, "Online Medical Shop Management System" done at ICS College Khed, has not been in any case duplicated to submit to any other university for the award of any degree. To the best of my knowledge other than me, no one has submitted to any other university.

The project is done in partial fulfillment of the requirements for the award of degree of **BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)** to be submitted as final semester project as part of our curriculum.

Mr. Masurkar Nazaullah Mainuddin

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# Chapter 1 Introduction

In today's the world's of medical agency are trying to provide more reliable and accurate services in their field, offering services to the customers and employees with all the available choices in their interest. It may be a leading many different medical shops. Every Shop now a days is trying to computerized its activities to provide better services to its customers. The aim is to automate its existing manual system by the help of computerized equipment, and full-fill their requirements, so that their valuable data/information can be stored for a longer period with easy accessing and manipulation. This system enables to manage and record the activities of whole medical shop. It enables the other staff to provide their services in a more systematic and efficient manner, hence improving the good will of concerned institute. This helps the administrator to analyse upon the performance of institute. This system organized their daily activities like billing, tablets information, stock details and more. In medical present trend this application is used in every medical shop. This system will save time and increase work efficiency.

Medical Shop Management System is a web application project developed for medical shop. This system is a field concerned with purchasing and generating reminders sales invoices and generating reminders of expiry date about medicines. It requires more time and effort when all procedures are performed manually. To reduce time consumption and human effort the "Medical Shop Management System" web application can be applied in medicals. Where the manual procedure is exists. The purpose of this project is to reduce time consumption and human effort. This application provides user friendly interface.

The software to be produced is on "Medical Shop Management System". There are 2 users. First is the admin who enters all the different types of masters. He also can update or delete the information added by him. The admin has the highest authority than any other normal user.

Admin provides username and password to other unauthorized person. Unauthorized persons can log into the system using id and password given by the admin. The master details will not be available to the normal user. The total amount will be displayed in the form and the record will be saved in the database. A report will be printed for the manufacturers as to which product and how many products need to be manufactured..

The entire project has been developed keeping of the Distributed client server computing technology. The user interfaces are browser specific to give distributed access for the overall system. The internal database has been selected as My SQL Server. The My SQL Server was a choice as it provides the constructs of high level of reliability and security. The total front end dominated using HTML standards applied with the dynamism of ASP.NET. The client communicates using C#.NET designed. The database connectivity was planned using the ASP.NET Database Connectivity. The user level access has been restricted into two zones the administrative and the normal user zone.

### 1.1 Background

Various health care provider and actors are uncertain of which rules that shall apply when it comes to information systems that are used in health care. The Medical Products Agency often gets questions about whether various software, intended to be used in health care organisations, should be defined as medical devices. An increasing number of incidents have been noted with the involvement of computerized information systems.

Many systems are without any doubt, to considered as medical devices according to the medical device directives.

It is necessary to clarify that software in its own right when specifically intended by the manufacturer to be used for one or more of the medical purposes set out in the definition of a medical device.

### 1.2 Objective

- To assist the medical shop keeper and wholesalers in capturing the effort spent on their respective working areas.
- To utilize human resource of the institution in an efficient manner by increasing their productivity through automation.
- Being provided on the intranet the administrators can monitor the medical shop's activity right from their own desktop. This will let them 4.take managerial decisions.
- The system generates a number of types of reports that can be then used for various managerial and administrative purposes. It also gives a brief picture of the institution's progress.

 Helps in keeping track of all the activities of the medical agency like login/logout time, security related activities, etc. and thus helps 8. In finding out the performance level of the center.

#### 1.3 PURPOSE & SCOPE

#### **1.3.1 Purpose:**

The objective of Medical Shop Management System providing the medicines to the customers according to their request which contains the type of the medicine and the quality. The manufactures and manufacture the medicine requested and the same will be sent to the dealers. All the records will be saved systematically and not manually through paper work to solve further confusions and to make life easy. Database is cleared yearly or depending on certain span of time. It is an error free system and user friendly. It reduces paper work.

#### **1.3.2 Scope:**

The system is helpful in keeping the records of the product requested by the dealer, the number of products manufactures, the no of product sent to the dealer.

# **Chapter 2**

# **Survey of Technologies**

#### 2.1 EXISTING SYSTEM

The Existing system of the medical shop records just goes through maintaining the files according to the medicine companies. Like the records of the particular company, product etc. then the records of that each company schemes. The sections are created on the basis of a company are maintained on separate page, that of shops on the section of shops.

It becomes very tedious job to maintain medicine stock manually.

In the existing system, all the basic information was gathered from manually in spreadsheet format using files.

#### 2.1.1 Problem Analysis

- To develop the computerized management system of medical shop from the manual system implemented at present.
- To maintain the record of the shop.
- To maintain the information of items being purchased.
- To maintain the records of customers billing and stock.

#### **2.1.2** Limitations of existing system

- It requires a lot of human time and thus is time consuming.
- The job of maintaining the records manually is very tedious.
- Voluminous data cannot be handled accurately.
- We cannot find a record of particular product, company or bill.
- Outstanding bills cannot be provided at proper time manually because it requires a lot of time.
- In existing system, accuracy is low because of computational errors and inability to
  process some transactions or errors committed due to fatigue in repetitive clerical tasks.
   To avoid all such problems an existing system requires computerized system.

### 2.2 Proposed System:

The proposed system can overcome all the limitations of the existing system. The system provides proper security and reduces the manual work. The proposed system tries to eliminate or reduce these difficulties up to some extent. The Minimize manual data entry

- > Better services
- > User friendliness and interactive

Minimum time required proposed system will help the user to reduce the workload and mental conflict. The proposed system helps the user to work user to work user friendly and he can easily do his jobs without time lagging. It has got following features.

- Ensure data accuracy
- > Secure data accuracy
- Proper control of the higher officials
- ➤ Minimum time needed for the various processing

#### 2.3 FEASIBILITY STUDY

Feasibility study is a survey of possibility of computerization based on the next management of objectives related to an analysis of the existing facilities within the company.

The information collection that occurs during preliminary investigation examines system feasibility and the like hood that the system will be beneficial to the organization. In this system the test, which were carried out for feasibility study were technical feasibility and economic feasibility.

- 1. Economic Feasibility.
- 2. Behavioural Feasibility.
- 3. Technical Feasibility.
- 4. Operational Feasibility.

#### 1. Economic Feasibility:

Cost\_benefit analysis is used for this feasibility. Also we have to consider about recurring cost. It includes-

- i. Rental purchase of equipment.
- ii. Salary of person (who operate this system)
- iii. Equipment maintenance.

Thus this system when compare on economical grounds proves to be more cost but acceptable. Hence we say that it economically feasibile system.

#### 2. Technical Feasibility:

The proposed system requires hardware and software for its implementation. The computer system with printer is available in the mentioned construction organization. The computerized system follows all technical parts affected to technical views. The computerized system does not require any specific type of hardware. No additional hardware is required by the system. So we say that system is technically feasible.

#### 3. Behavioural Feasibility:

This is dependent upon determining human resources of project. All workers, who are employed not, dismissed. We suggest that the eligible supervisors will be employed in the firm as computer operator, after training them. Rest of them will be given job to other section of department whether the helpers are required.

#### 4. Operational Feasibility:

This study deals with the following issues:

Is there sufficient for the project for the medical shop management and user has been in planning and development of project. When the proposed system was tested for above mentioned issues. It was found that result tending towards being positive and leading the system to make operationally feasible.

# **Chapter 3**

# **REQUIREMENT ANALYSIS**

#### 3.1 Problem Definition:

Drawbacks of System

- 1. Time consuming...
- 2. More expensive...
- 3. Searching problem...
- 4. Maintains problem of all registers...
- 5. Less accuracy...
- 6. Problem for marking of not normal value...
- 7. More stationary...
- 8. Display multiple reports...

### 3.2 System Requirement & Specification:

System analysis is a process of gathering and interpreting facts, diagnosis problems and the information about the Medical Shop Management System to recommend improvements on the system. It is a problem solving activity that requires intensive communication between the system users and system developers. System analysis or study is an important phase of any system development process. The system is viewed as a whole and traced to the various processes. Such system analysis is concerned with becoming aware of the problem, identifying the relevant and decisional variables.

Advantages of computerized system

- 1. Time saving...
- 2. Less expensive...
- 3. Powerful searching...
- 4. Solve the problem of maintains register...
- 5. More accuracy...

- 6. Easy generate report...
- 7. Not display multiple reports...

# **3.2 HARDWARE REQUIREMENTS**

• **Processor:** Intel dual core or above

• **Processor Speed:** 0GHZ or above

■ **RAM:** 1GB RAM or above

• **Hard Disk:** 20GB hard disk or above

# 3.3 SOFTWARE REQUIREMENT

• Language: Asp.NET with C#

• Database: SQL Server

• Operating System: Windows XP

# 3.4 Planning & Scheduling

### **Gantt Chart:**

Names of the Phase	Expected Date of Completion	Actual Date of Completion	Signature of Guide
Project search			
Finalization & Allocation			
Investigation of system Requirement			
System Design			
Program Design			
Program Coding & Unit Testing			
System Integration			
Project Reviews By guide			
System Implementation			
Acceptance testing			
Feedback for improving correcting Modifying the project			

### 3.5 Justification of platform

- All the fields such as Medical shop, Stocks, Inventory are justify and does not take invalid values.
- Avoiding errors in data.
- Controlling amount of input.
- Integration of all the modules/ forms in the system.
- Preparation of test cases.
- Preparation of the possible test data with all validation checks.
- Actual testing code manually.
- Modifications done for the errors found during testing.
- Prepared the test result scripts after rectification of the errors.
- Validates for the user inputs.
- Checking of the Coding standards to be maintained during coding.
- Front end is ASP.NET with C#
- Back end is SQL

# **Chapter 4**

### SYSTEM DESIGN

#### 4.1 Module of the software

- **Login**: Admin can choose his own username and password. After logging into the system, he can provide username and password to other unauthorized users.
- Master: Product master contain the name of the product and the rate for each product.
   Product rate differs for dealer and adhoc sales. Employee master contains the complete details of the employee working in the factory. Dealers master contains the information of the daily dealers.
- Order: The order from the dealer is taken through phone and the products, quality is entered by an employee. It will be saved in the database and a crystal report will generated for billing purpose.
- Manufacturing: At the end of the today, total number of products to be manufactured report will be sent to the manufacturing department.
- **Stock**: After manufacturing, the products will be sent to the stock. Here we can get the total number of products available.
- Sales: This is a type of sale where the dealer or the customer can visit and buy the products normally.
- Distribution: Through transportation the products will be distributed to the dealer according to their request.
- **Reports**: Stock reports, shop inventory reports, dealer reports, manufacturer reports, products returned reports, refunded amount, paid amount reports can be generated.

# **4.2 Data Dictionary**

### **Customer Information**

Field Name	Data Type	Description
Cust_id	Auto Number	Hold's Cust_id
Name	Varchar	Hold's Cust_Name
Address	Varchar	Hold's Add
City	Varchar	Hold's City
Phone No	Varchar	Hold's Phone No
Email	Nvarchar	Hold's Email

### **Medicine Information**

Field Name	Data Type	Description
Medicine_id	Auto Number	Hold's Mdcn_id
Name	Varchar	Hold's Mdcn_Name
Comp_Name	Varchar	Hold's Comp_Name
Mfg_Date	Date	Hold's Mfg_Date
Exp_Date	Date	Hold's Mfg_Date
Price	Varchar	Hold's Price

# **Medical Information**

Field Name	Data Type	Description

Medical_Reg_No	Number	Hold's Mdcl_Reg_No
Medical_Name	Text	Hold's Mdcl_Name
Address	Text	Hold's Add
Medical_Owner	Text	Hold's Owner
Phone_No	Number	Hold's Phone_No
Email	Text	Hold's Email
Fax	Number	Hold's Fax

### **Place Order**

Field Name	Data Type	Description
Order_No	Number	Hold's Order_No
Order_Date	Date/Time	Hold's Order_Date
Mfg_Lic_No	Text	Hold's Mfg_Lic_No
Medicine_Name	Text	Hold's Mdcn_Name

### Stock

Field Name	Data Type	Description
Medicine_Name	Text	Hold's Mdcn_Name
Qty	Number	Hold's Qty

# **Bill Payment**

Field Name	Data Type	Description
Sales Bill_No	Number	Hold's Sales Bill_No
Medicine_Name	Text	Hold's Mdcn_Name
Order_Bill	Number	Hold's Order_Bill

Paid_Amt	Number	Hold's Paid_Amt
Pending_Amt	Number	Hold's Pending_Amt

#### 4.3 ENTITY RELATIONSHIP DIAGRAM

#### **Entity Relationship Diagram**

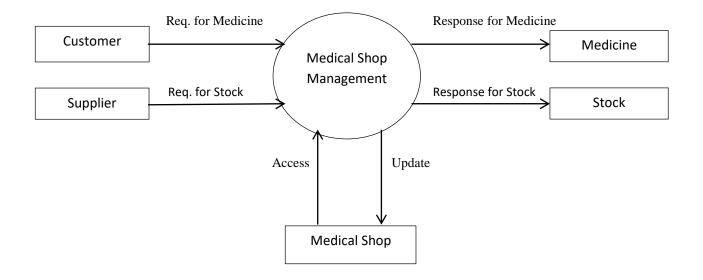
ER-Diagram is designed tool. It is graphical representation of database system & entity described by its various attributes. Two entity related with one another. If there is some association present between them this relationship is shown with help of diagram.

*Shape Of Entity Relationship Diagram*		
	This Represent Entity Set	

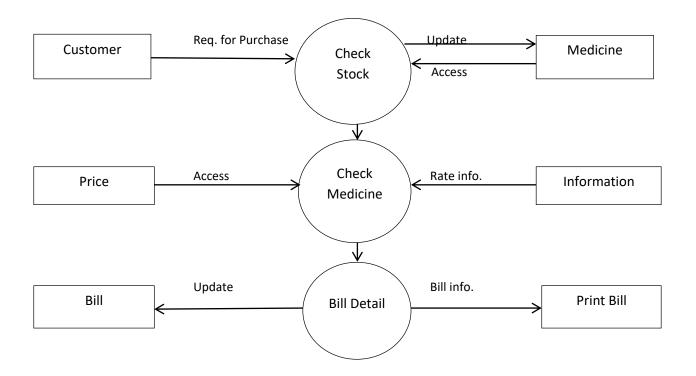
# ER Diagram of Medical Shop Management System: Mdcn\_name Cst\_add Mdcn\_id Mdcn\_cost Cust\_name Cst\_id Medicine Request Customer Cst\_email $Mdcn\_com$ Ms\_email Sal es Mdcn\_type Cst\_mobile $Ms_id$ Check $Ms\_add$ Medical Shop Pay $Stk\_id$ **Stocks** Ms\_name Stk\_no Bill\_no Stk\_items Stk\_type Comp\_name Generate Order Bill Cst\_name $Odr_id$ Send\_date Amount Cst\_name Ord\_mdcn Ord\_type Mdcn\_name \_name I.C.S.COLLEGE ART'S, COMMERCE AND SCIENCE KHED Page 25

### 4.4 Data Flow Diagram

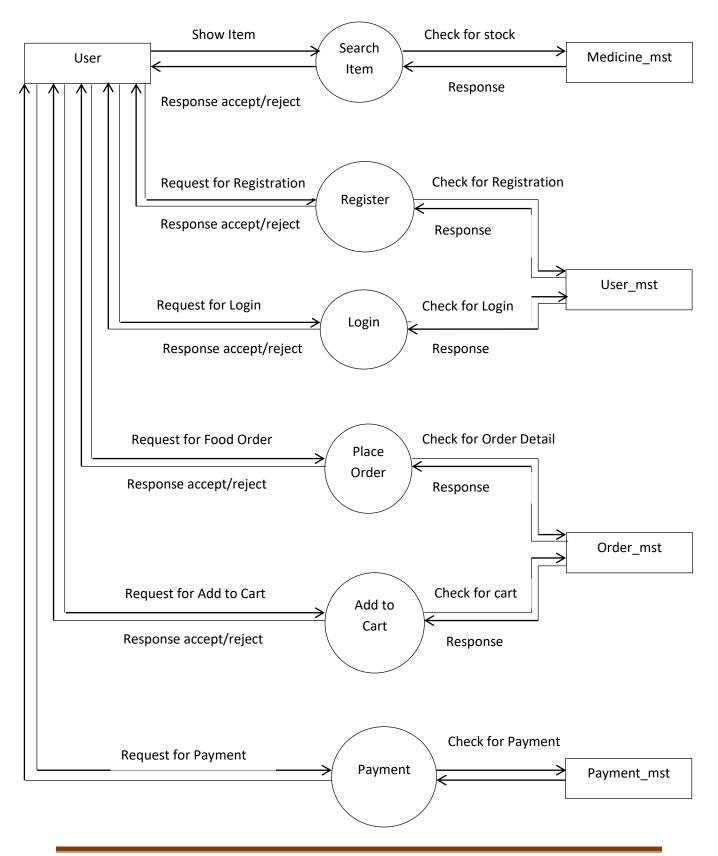
# 1) Zero Level DFD:



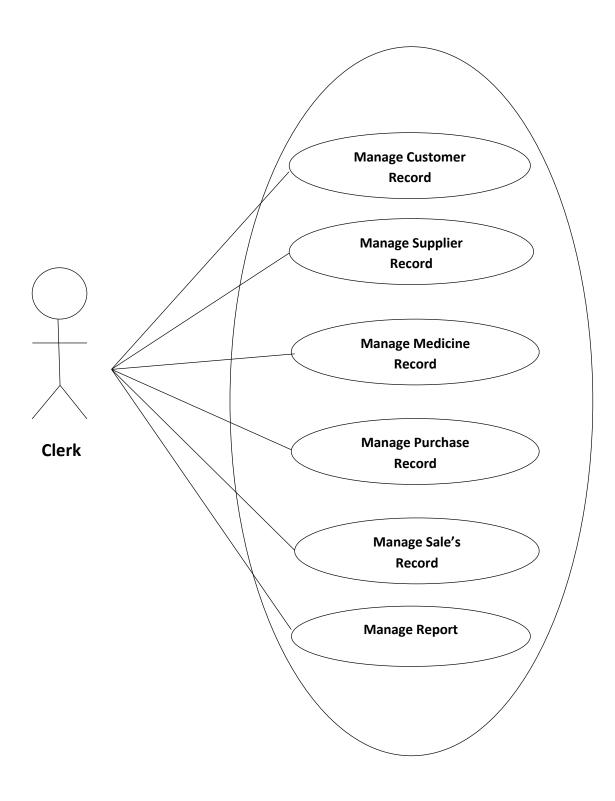
# 2) First Level DFD:



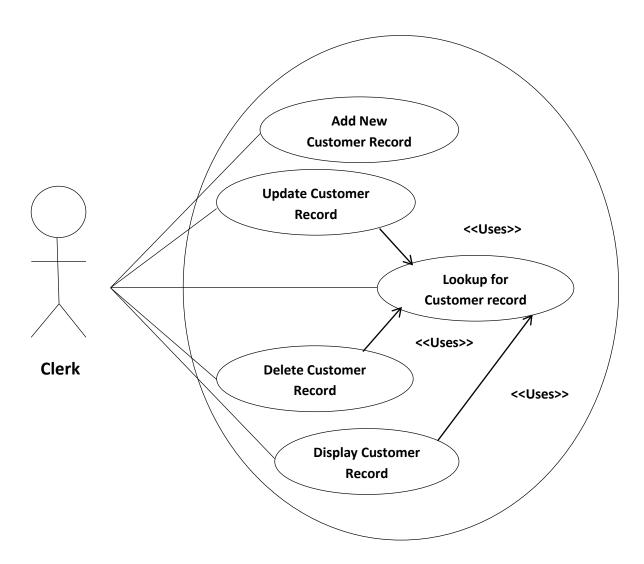
### 3) Second Level DFD:



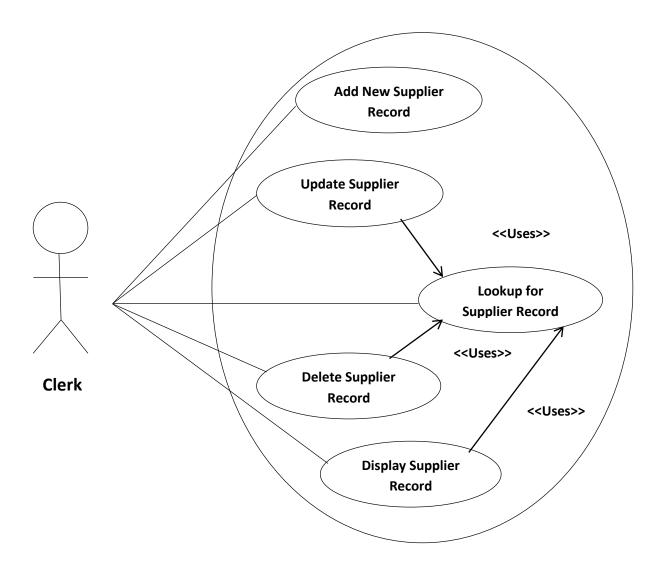
# **Use Case Diagram for Medicine Distributors System:**



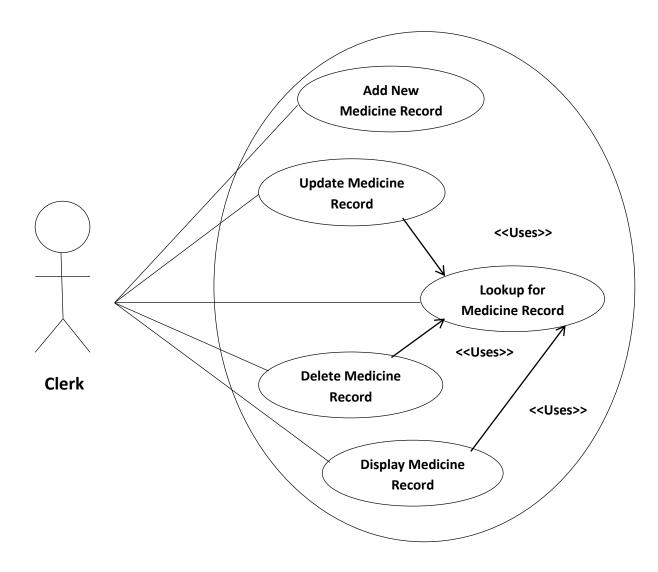
# **Use Case Diagram for Customer Subsystem:**



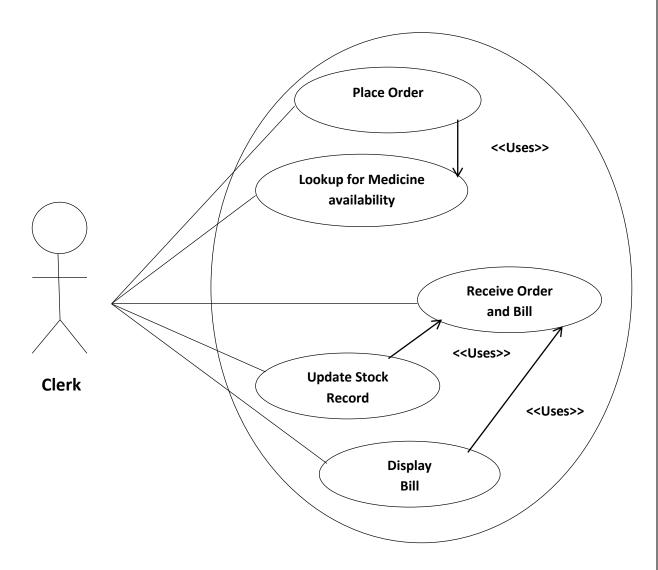
# **Use Case Diagram for Supplier Subsystem:**



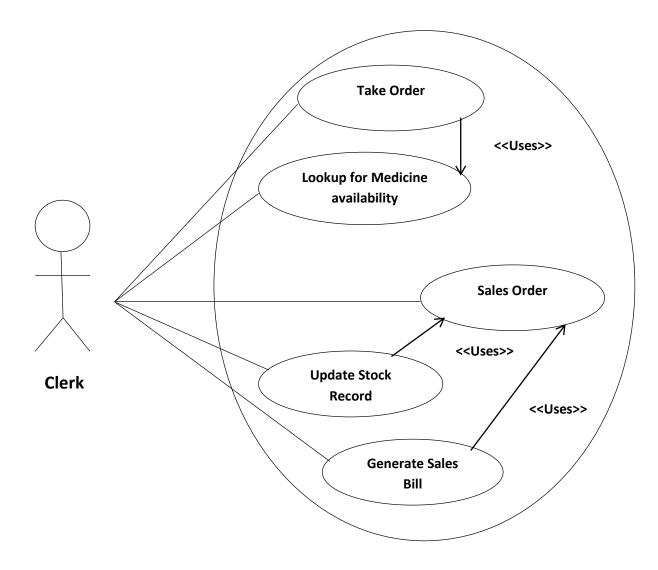
# **Use Case Diagram for Medicine Subsystem:**



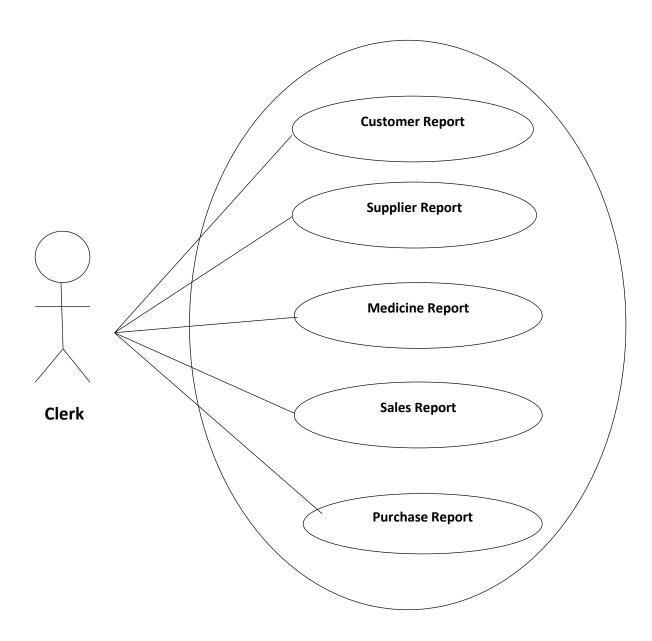
# **Use Case Diagram for Purchase Order Subsystem:**



# **Use Case Diagram for Sales Order Subsystem:**



# **Use Case Diagram for Medicine Report Subsystem:**



### **Class Diagram:**

The UML activity diagram supplements the user case by providing a graphical representation of the flow of interaction within a specific scenario similar to the flowchart, an activity diagram uses rounded rectangles to imply a specific system function, arrow to represent flow through the system, Decision diamonds to depict a branching decision & solid horizontal lines to indicate that parallel activities occurs.

Indicator	Meaning
1) 01	Zero to one.
2)	One only.
3) 0*	Zero or more.
4) 1*	One or more.

#### • Symbols used in Class Diagram:

Attributes

Methods

#### Person

Name

Address

Contact no.

Age

Get Name()

Get Address()

Get Contact no()

Get age

### Service

Product Name:

Date

Edit()

Display()

### Medicine

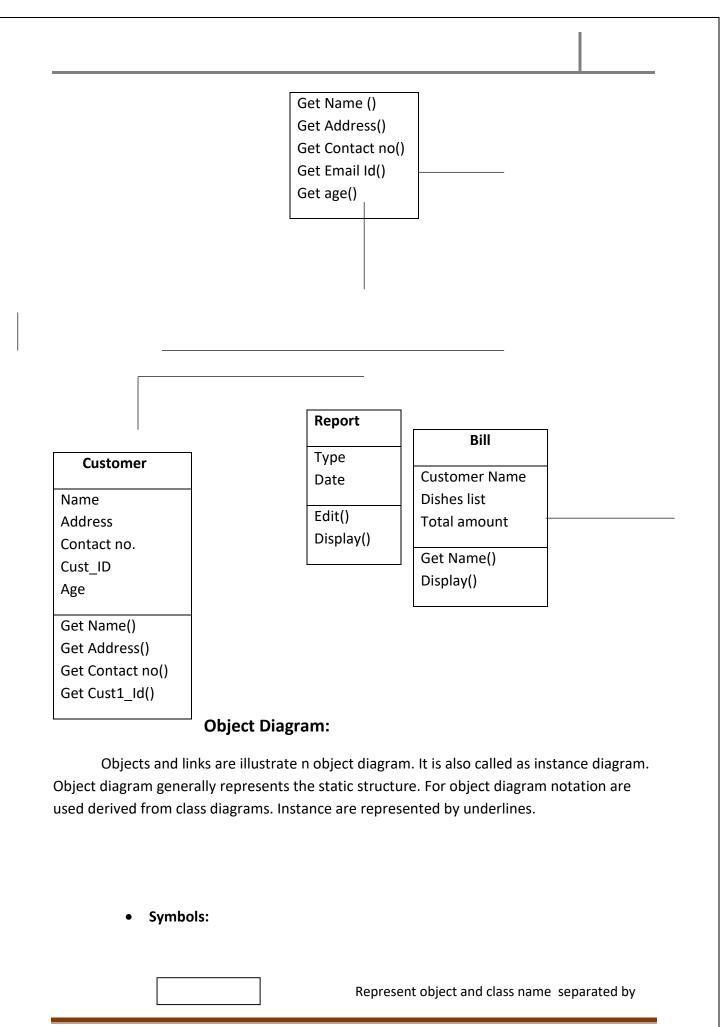
Name

Address

Contact no.

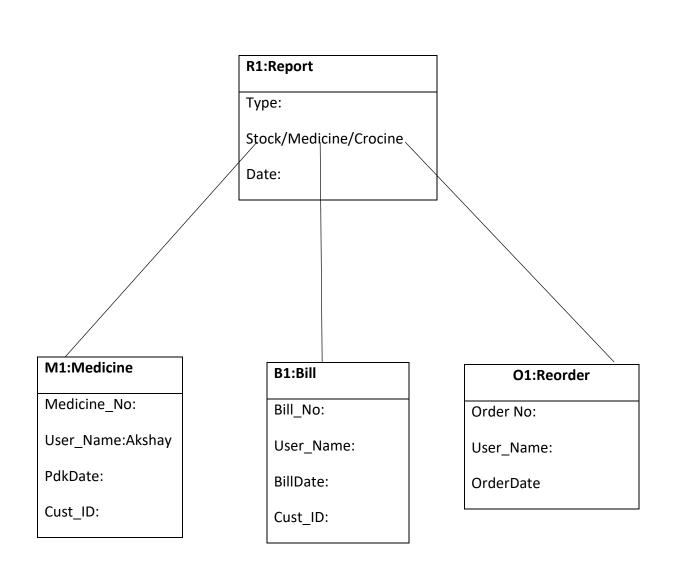
E-mail ID

Age



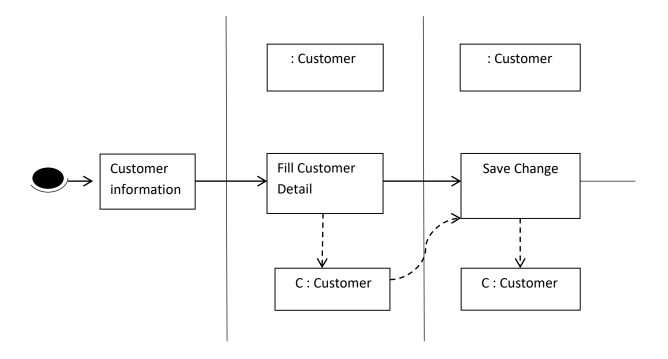
	Links by objects are connected	

### Object Diagram: C2:Customer C1:Customer XYZ1:Medicine Name: Name: Product Id: Gender: Gender: Name: DOB: DOB: Price: Add: Add: Tal: Tal: Dist: Dist: Contact No: Contact No: B1:Booking **B2:Booking B2:Booking** Product Id: Name: Name: Add: Add: Name: Samsung Tal: Tal: Price:50000 Dist: Dist: Date: Date: Contact No: Contact No: Time: Time:

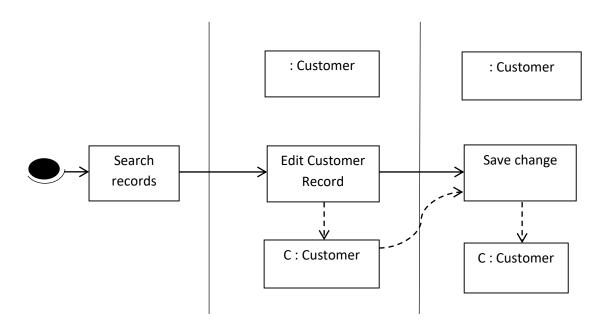


Activity Diagram:			
Activity Diagram System			
Activity	Manager		Decision
	Starting Activity	Yes No	
Decision	Transition arrow	No Yes	Another
Pre	pare Report Activity		
Er	nding Activity		

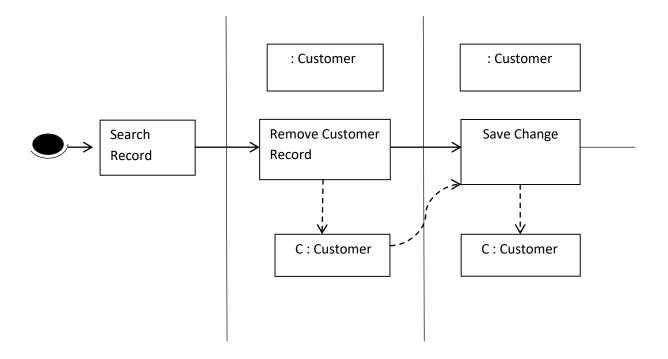
### **Create Customer Record:**



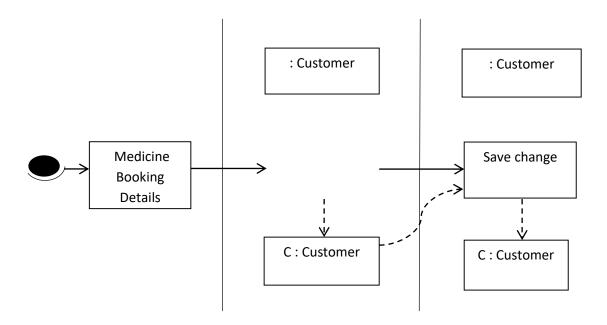
# Update Customer Record:



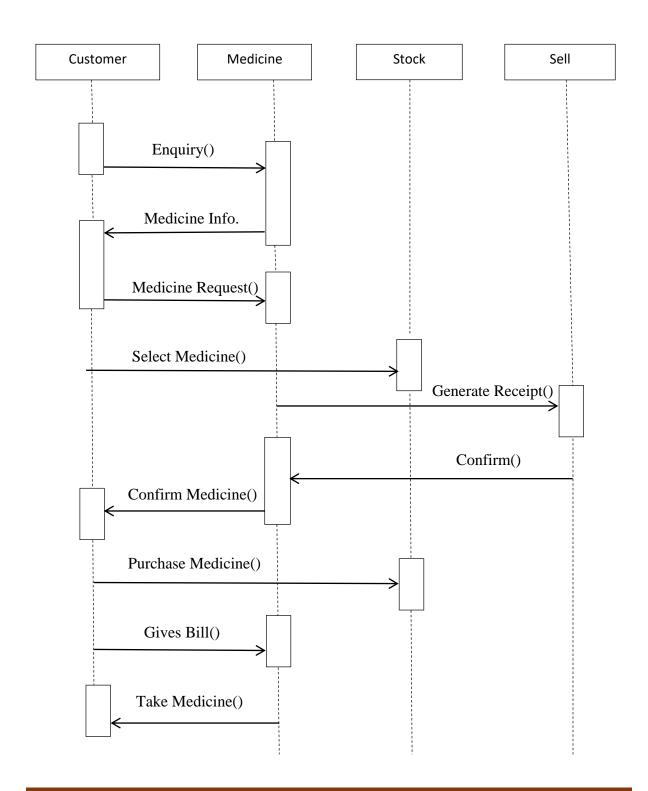
### **Delete Customer Record:**



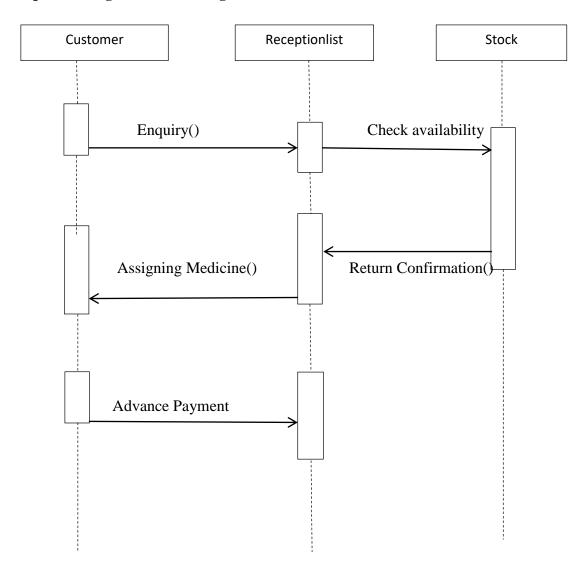
## Create Booking Report:



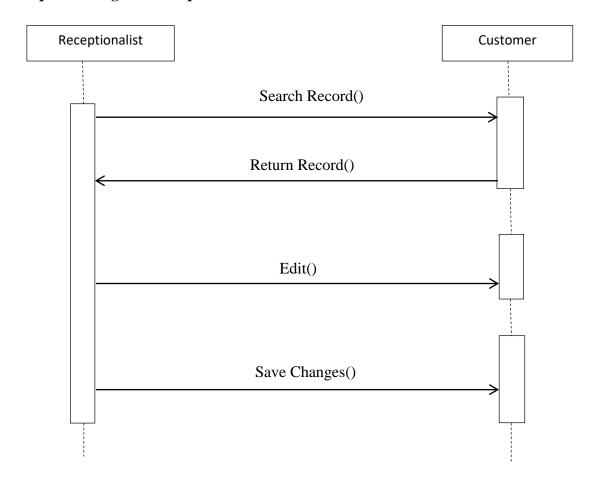
# **Sequence Diagram:**



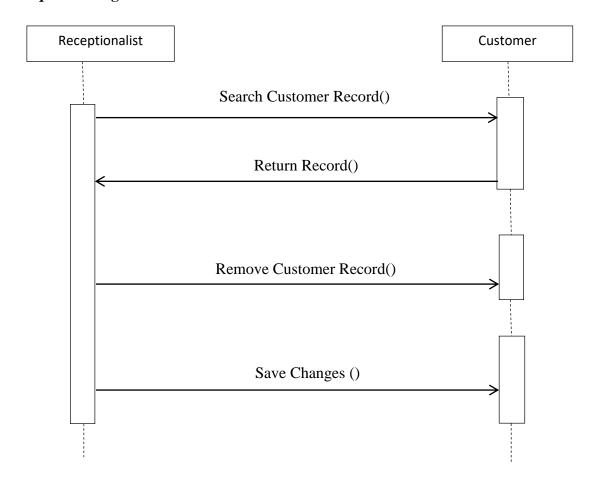
## **Sequence Diagram for Booking:**



## **Sequence Diagram for Update Customer Record:**



## **Sequence Diagram for Delete Customer Record:**



## **Report for Service:**

