

SMART MSR (MEDICAL SALES REPRESENTATIVE) SYSTEM

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

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APPROVAL

This Project titled **SMART MSR (MEDICAL SALES REPRESENTATIVE) SYSTEM**, submitted by **Md.Atikur Rahman**, ID No:121-15-1817 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 07 oct 2020.

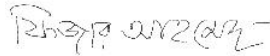
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I hereby declare that, this project has been done by me under the supervision of **Narayan Ranjan Chakraborty, Assistant Professor, Department of CSE** Daffodil International University. I also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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ABSTRACT

The Smart MSR (Medical Sales Representative) System is primarily responsible for establishing and maintaining relationships with medicine shopkeeper and medicine company. This system is an online platform where several medicine company and medicine shopkeeper all over the country can connect for their transactions. By using this system, complexity of making manual order will reduce and supplier of each company can get the orders which belongs his area. This often involves correspondence with medicine shopkeeper via this system to take orders, provide information about new products, keep records or complete progress reports.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Smart MSR (Medical sales representatives) are primarily responsible for establishing and maintaining relationships with Medicine Company and shopkeeper via online. That means Smart MSR is an online system for medicine shopkeepers that shopkeeper can order medicine via online for their pharmacy. This often involves corresponding with medicine shopkeeper via online to provide information about new products, keep records or complete progress reports.

1.2 Motivation

Currently all sector of Bangladesh like education, electricity, railway, banking is now going to virtual. That's why I decide to make medical sales process in online system. That means all process is now going to be virtual. Still no medicine company have their online selling system. All medical representatives go to medicine shop and take order then send the orders to another person then that person delivers the product. It's a long and complex process. Through this process all medicine companies' representative goes to medicine shop and do same work. For this reason, in front of shops noise and complexity creates. Sometimes Buyers also suffers for this.

1.3 Objectives

The main aims and objectives of this project:

Our application software is totally online based so anyone can access it at anywhere of Bangladesh. The main advantage of our application is, I have no installation process and every computer has browser. User just needs to browse this system via internet. It's a

process of online access and secures backup any confidential data. User also available this application at any time and any place of Bangladesh. download order or print order.

1.4 Expected Outcome

According to our project title everybody can realize that our system is developed for medical product sales. Actually, I want to decrease the complexity between medicine company and medicine shopkeeper. Everybody we know that medicine is our crying need for livelihoods. That's why our project will make the selling system easier. Medicine shopkeeper can get the medicine easily via online system. Shopkeeper just need to open this system and select medicine for make order. Using this system, all order and data will store in this system. Sales representatives are always making noise to create manual order. But if the system goes to online, then shopkeepers can order medicine in any time. This is the actual goal of our system.

1.5 Project Management and Finance

1.5.1 Methodology

Methodology means the theoretical analysis of a system. So, this section I will describe the method which I have used. Already it is clear that our system is the connection between Medicine Company and shopkeeper. That's why I have to use client-server architecture. That means we have three interface client view and registration, admin process and finally data store. So, our system is a clear definition of client server architecture.

1.5.2 Time Schedule

Time schedule is mostly needed to make a good project. Time schedule represent the overall working progress. So, it's very important to budget time when to start a new project.

Table 1.1: Time Schedule

Topic	Date	Days Required
Planning	June 05 2019-July 05 2019	30 days
Analysis	July 06 2019-Sep 06 2019	60 days
Design	Sep 07 2019-Oct 20 2019	43 days
Implementation	Oct 21 2019-Dec 09 2019	48 days
Testing	Dec 10 2019-Dec 20 2019	10 days

1.5.3 Summary

In this chapter I have described the total process of medical sales, current running process of Bangladesh, our goal and methodology. That means in our introduction part I have described our total project logically and theoretically.

CHAPTER 2

BACKGROUND

2.1 Introduction

This project contains the all process of creating a relationship between medicine shopkeeper and Medicine Company. In a country I can say this project will reduce the complexity of medicine sales. For that I try to make our system more user-friendly. To represent this system, I make the Data Flow Diagram (DFD), Use-case model, Entity relationship model (ERD) and Object model. In DFD I show the all process of user and admin work area. Use-case model also represent their allowed area. The object model is the total description and structure of our database, most important part of our system.

2.2 Scope of the Problem:

2.2.1 System Development Life Cycle

System development life cycle means the combination of all activities that can build an actual system or software. So that we can say SDLC is the process of planning, creating, testing or developing an information system. This process can be applied on hardware only or software only or both of them. Every step of this process are connected is other but with a distinct work phases. System development life cycle is given below with Figure 2.1[1].

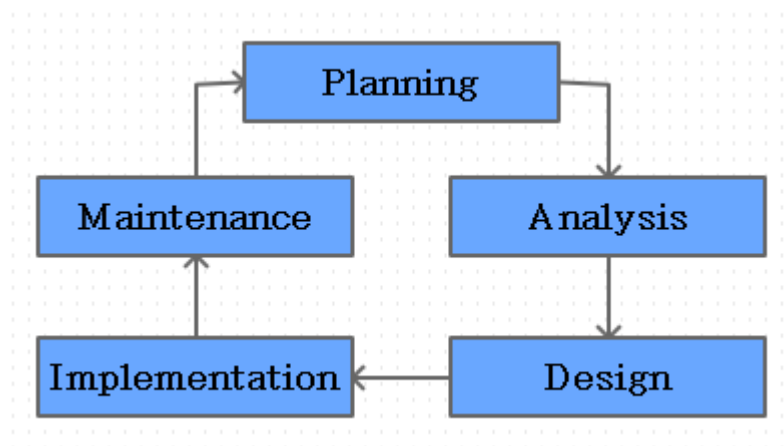


Figure 2.1: System development life cycle

2.2.2 Phases of System Development Life Cycle

Basically SDLC is divided into ten steps [1]

- a. System study
- b. System concept development
- c. Planning
- d. Requirement analysis
- e. System analysis
- f. System design
- g. Development
- h. Testing
- i. Implementation
- j. Disposition

2.2.3 System study

Before starting to develop a new system, it's essential to know how it will develop and how to solve the required problem. The solution is system study. That's means how to make the correct proposal of a software? What is the benefit of this system? Finally, it's an important task that is user satisfaction. In summary, I would say that system study phase passes through the following steps [2],

- a) Problem Identification
- b) Background Analysis
- c) Finding Solutions

2.2.4 System Concept Development

Basically, system concept development is the boundary of software or system. The main aim of system concept development is not to solve the problem but to achieve the scope. It also the analysis process of risk management plan and feasible study.

2.2.5 Planning

Planning is a common part of every system. Before I start our project at first, I want to realize which language and which platform I will choose and how I start our project, what is the dateline etc. All of things are in a word called planning.

2.2.6 System Analysis

System analysis is very important part to develop a good project. Because Analysis about a system can make the concept that all the needs and parts that are connected with that system. For that first I analyze the real-life situation and then convert this process into our developing project. When I highlight our project, I normally see some combination that means design part relational language and connection of database. Every part of the system is going to their rules but every part is connected in a same rule. That's why they are working in same field.

2.2.7 System Design

According to the user requirement and the rules of SDLC the new system must be designed before coding. Because without designing no can make strong system for user. On the other hand, I am building user-based system. That means user is the first priority. Now come to the point of design. The following points are the major's part of system design

- a) Use-case Model
- b) E-R Diagram
- c) User Landing page
- d) Object Model
- e) Data-flow Diagram

2.2.8 Development

Development means the implementation of a system. That means when our design part is complete that time need a programmer to implement this project. Without implementation a project is looking like without breathing. Programmer can choose any kinds of language

that is flexible for required project and most comfortable and easy to develop. For example, suppose I want to build offline software like game that time I can choose java as main language but when I build this game in online that time, I choose PHP as main language. So, in a word developing part is the writing code for required system.

2.2.9 Testing

Before implementing the new project into operation, I must have to test the system as a demo running for bug fixing. If any bug found that time programmer can fix this bug and make a strong system or software. The output of the test run should be matching the expected result.

2.2.10 Implementation

When users accept or receive new system that time implementation phase begins. In this part installation and user training is the most important part. Our system is online so there is no installation process but big problem in operating, that's why I have included our full using process in user main landing page.

2.2.11 Maintenance

Maintenance means the elimination of instant error when system is running. Not only error but also update process. That means sometimes user need modern technology according to current situation. So, update process is important, without update every application will useless after some period of time [2].

2.2.12 Summary

Above discussion is a clear indication of positive and useful area of SDLC. Also realizes that why need SDLC. But every system has advantage and disadvantage. That's why SDLC is not out of them.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

Actually, Business Process Modeling is the representation of architecture, component, interface, data, and modules before developing the system for fulfill the requirement. Actually, Business Process Modeling is not for user and admin; it's only for programmer or system developing related people. Our system is medicine sales, so before developing our system I have designed every part of our project like what can user do? What can supplier do? What is the role of admin? How database will work? Finally, how I will develop our required system. The following steps and figure will explain our whole design and documentation.

3.2 Requirement Collection and Analysis

Requirement analysis is the main part to visualize a system. A system developed based on the requirement. In the situation of Bangladesh our system will be new for users. That means in the present situation medicine shopkeepers are offer product order manually. So according to the rule of requirement analysis I just convert this process in online. So shopkeeper can chose company and submit their order in relax time via this application and the order will go to the supplier who belonging that area. And I hope that shopkeeper will accept this system as easy submitting process. If I want to build this system then I have to choose the online application. Because this is the process of create a connection between medicine shopkeeper and Medicine Company.

So, I choose,

- Language: HTML, CSS,BOOTSTRAP,JAVA SCRIPT,JQUERY,PHP
- Design: Photoshop, Pencil Software
- Database: MySQL
- Server: apache

3.3 Use Case Modeling and Description

Use case model is very powerful process for understanding and describing any software or management project. That means this model show that the user area and what can user do? At the same time, it also shows the limitation of user. So, in a word I can say it is created by developer for more understanding his/her project and build without error. It also fixes the critical bug also. According to the rule of use-case I also build 3 use-case models for shopkeeper, supplier and admin.

The symbol of use-case model is given by the Figure 3.1[3],



Figure 3.1: Use-case Symbol

Actor: Actor means the user of the system. Sometimes it could be admin. Actor must have the quality of taking decision but need not be human. An actor might be a company, a human, or a software. In our system I expect those kinds of actor. Because sale is a sensitive and important issue [4].

Use-Case: This symbol is the boundary of actor. Boundary means the work area or given power of actor. Suppose in our system shopkeeper can order, register, login etc. So, this is the work area of actor who will become shopkeeper in our system [4].

3.3.1 Use-case Model of Shopkeeper

Figure 3.2 describes the use-case model of shopkeeper,

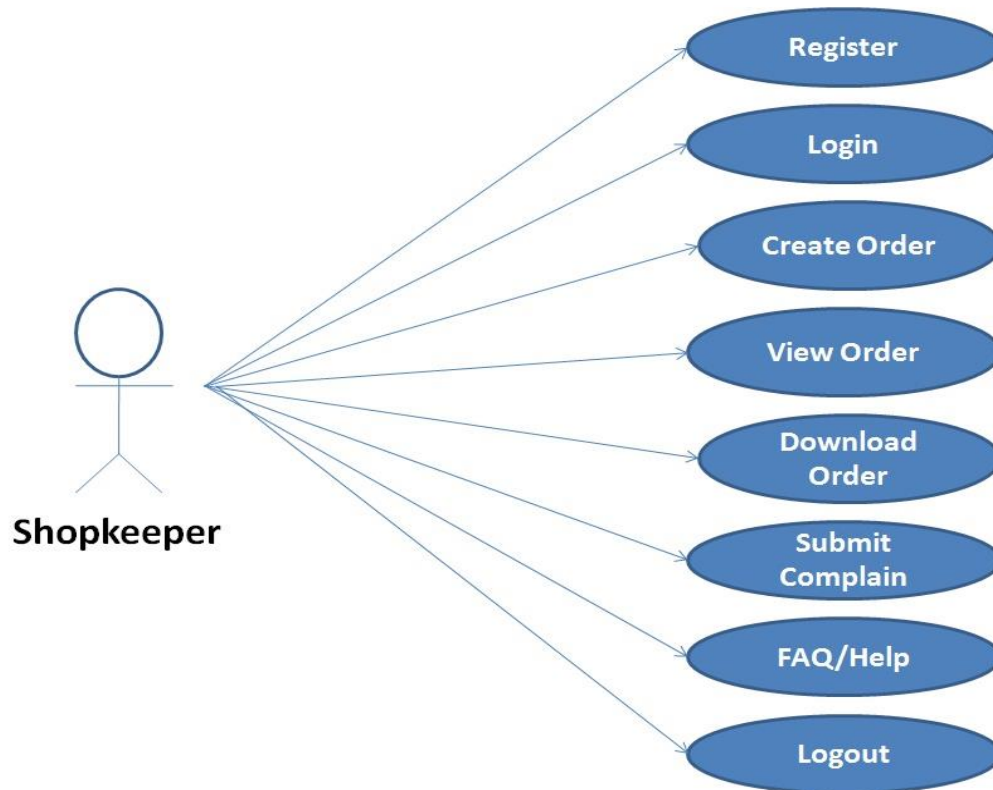


Figure 3.2: Use-case Model of Shopkeeper.

3.3.2 Description of Shopkeeper use-case

Shopkeeper is the most important part of our project. According the Figure 3.2, our first use-case contains ‘register shopkeeper’. That means when any user wants to order medicine of various company, He/she will be registered. After successfully registration he or she can login our system for further information. That means he/she can order medicine for his/her medicine shop. If any process is unknown for shopkeeper that time our FAQ will help them. Shopkeeper can view their ordered product. Shopkeeper can also submit complain for MSR related purpose. Finally, when shopkeeper wants to disclose, he/she can logout from the system.

3.3.3 Use-case Model of Supplier

Figure 3.3 describes the use-case model of supplier. That means the area which can access a supplier. In this system a supplier needs to login to enter the system. Then he/she can view orders for his/her area of service and can download orders as .pdf format.

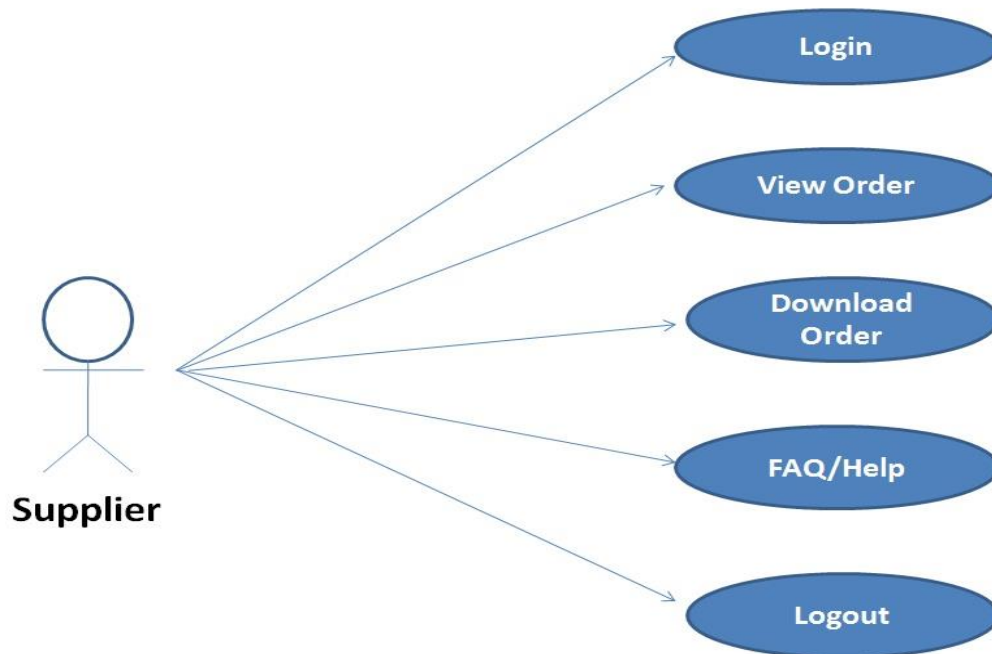


Figure 3.3: Use-case Model of Supplier.

3.3.4 Description of Supplier use-case

Supplier is an important actor of Smart MSR system. Supplier accounts will be created by admin because of security purpose of each order that are created by shopkeeper for different company. According to the Figure: 3.3, the first use-case shows that, supplier must need to login to enter database. Then he/she can view order as they are on the area of company. That means supplier can view the order which are in his/her area. After viewing order, he/she can download order as .pdf format. If any process is unknown for supplier that time our FAQ will help them. Finally, when shopkeeper wants to disclose, he/she can logout from the system.

3.3.5 Use-case Model of Admin

Figure 3.4 describes the use-case model of admin. In this system admin need to login first, then he/she can insert new product, delete product, update product, create supplier, view complains that are submitted by shopkeeper.

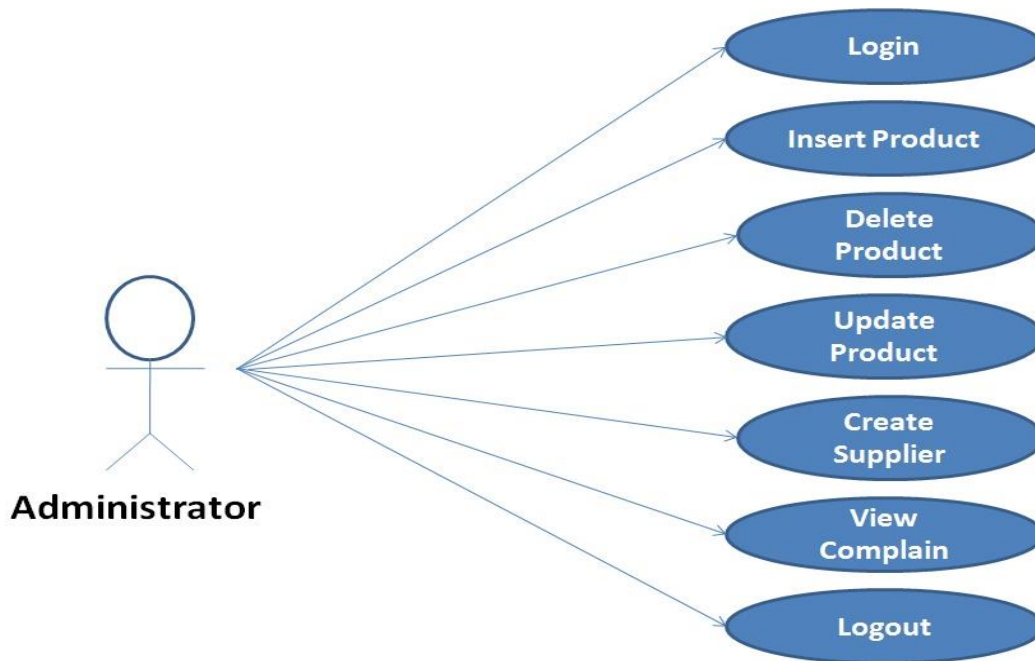


Figure 3.4: Use-case Model of Admin

3.3.6 Description of Admin use-case

Administrator is the system handler actor in our system in Figure 3.4. The reputation of our project depends on the activities of administrator. That's why I try to make our admin power and using process more flexible. The given use-case model is the whole activities of administrator. Administrator has no registration part because it will build in from database. Then admin can login into admin panel. The main work area of admin is to handle database. So, after login he will see the whole admin panel and he/she can work as he/she need. Admin can insert new product into database or can delete product if any need or can also update any product if need for each company. The supplier account for each area of

company can created from admin panel. Admin will receive complains from shopkeeper. That's why view complains use-case. This is the total process of administrator.

3.4 Logical Data Model

Activity diagram are the graphically representation of workflow of a system. It is a step by step working procedure. That means after complete one step of project what will come in next. It's also showed the overall control of flow in system. Basically, activity diagram has limited number of shapes [5].

Here I will show our used shape of activity diagram by the Figure 3.5,

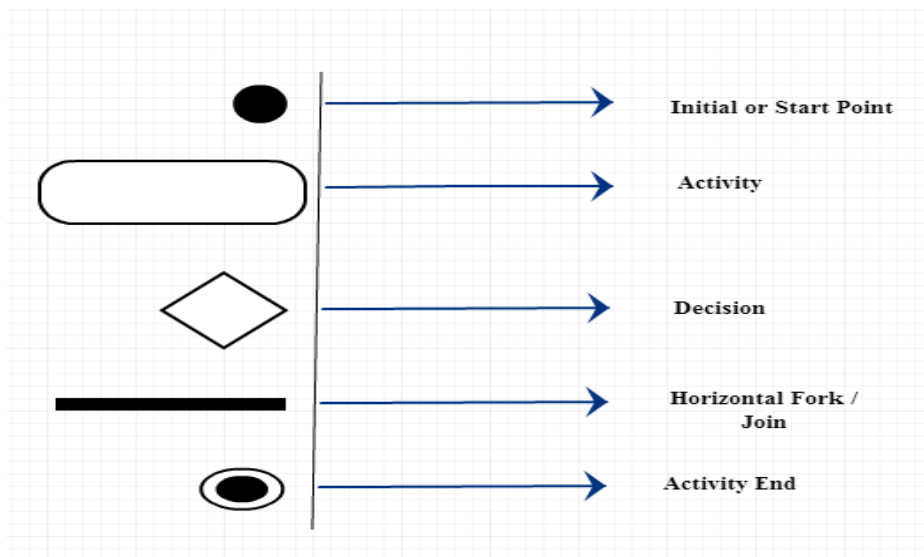


Figure 3.5: Shapes of activity Diagram.

3.4.1 Activity Diagram of Shopkeeper

By the Figure 3.6 I have described the activity of Shopkeeper on this system. That means in this system what can do a shopkeeper by login to enter the system. That's the actual activity of a shopkeeper.

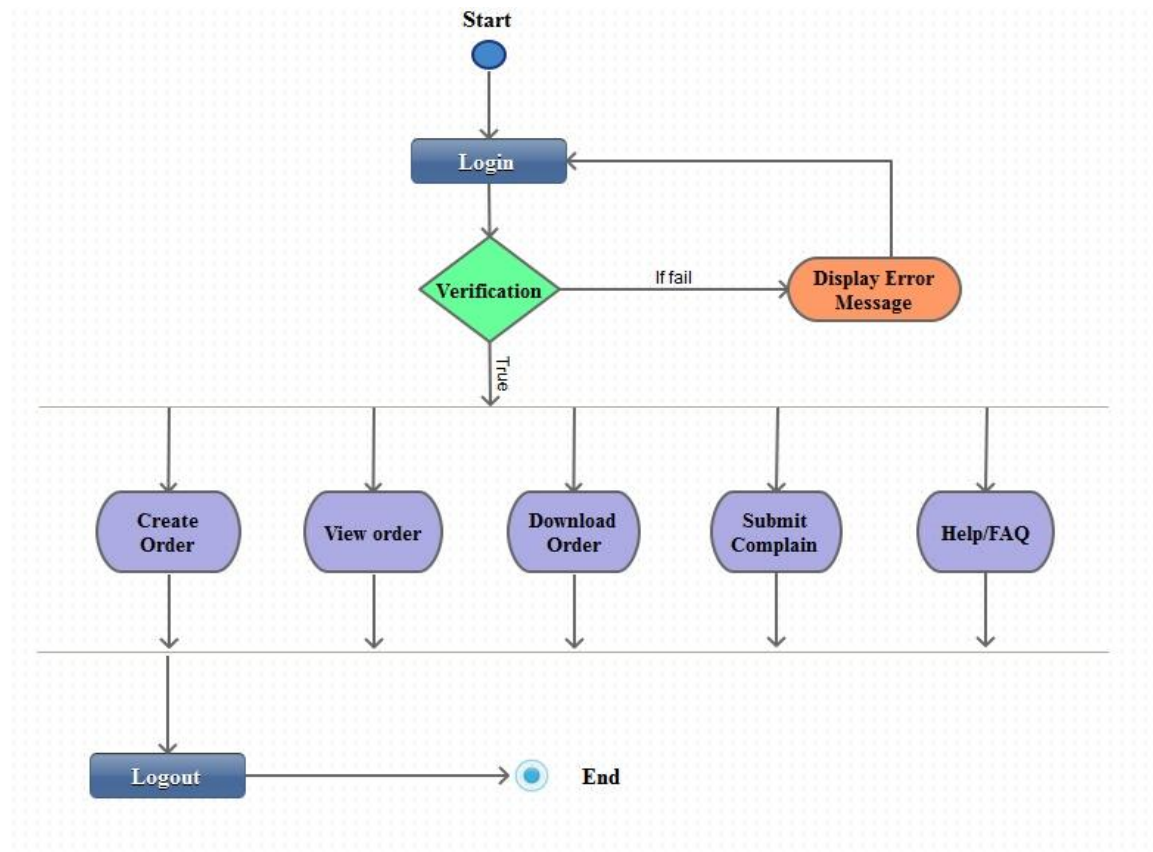


Figure 3.6: Activity Diagram of Shopkeeper

3.4.2 Description of Shopkeeper Activity Diagram

According to the definition of activity diagram I can say it is the workflow of a system. That's why I make our workflow by following the rule of activity diagram. The given workflow is the shopkeeper activities in our system. After login the system as shopkeeper what will see and what is the activity of him/her, this Figure 3.6 is the solution of those question.

3.4.3 Activity Diagram of Supplier

By the Figure 3.7 I have described the activity of Supplier in this system who can view order and download order after successful login. Supplier can only view and download orders which are in his/her supply area.

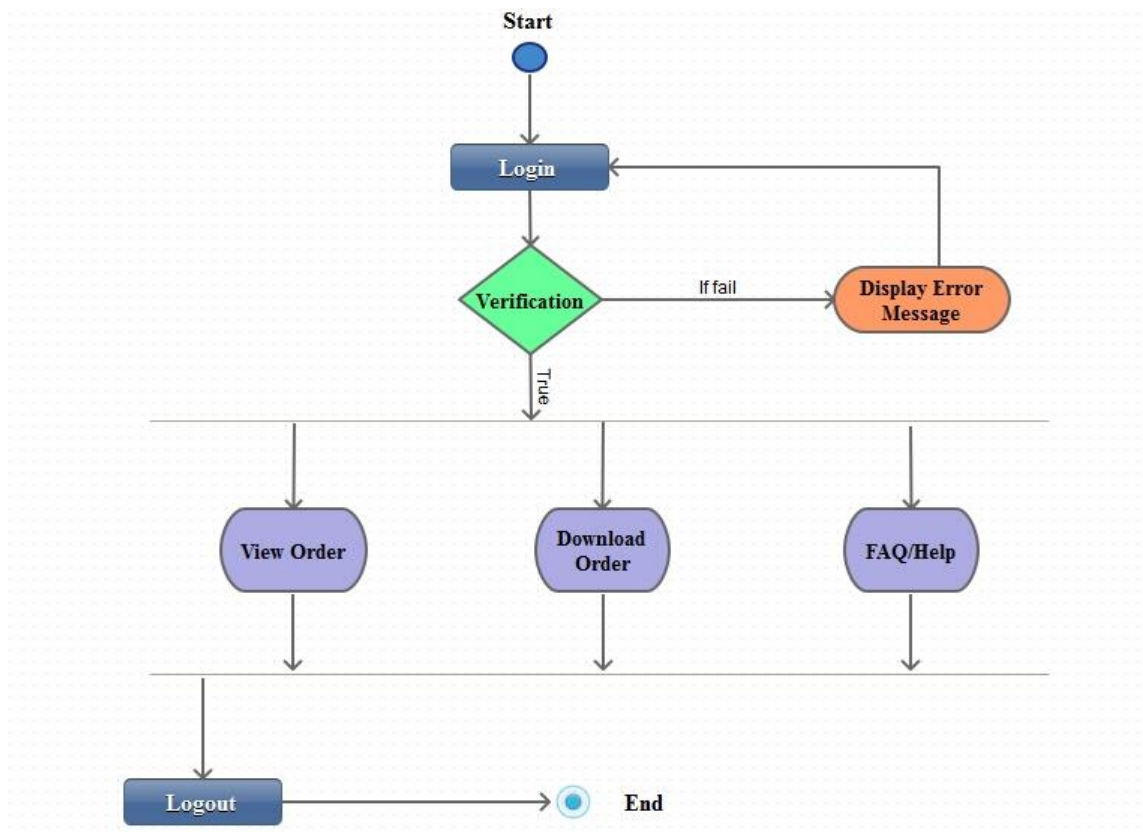


Figure 3.7: Activity Diagram of Supplier

3.4.4 Description of Supplier Activity Diagram

According to the definition of activity diagram I can say it is the workflow of a system. That's why I make our workflow by following the rule of activity diagram. The given workflow is the supplier activities in our system. After login the system as supplier what will see and what is the activity of supplier, this Figure 3.7 is the solution of those question.

3.4.5 Activity Diagram of Admin

By the Figure 3.8 I have described the activity of Admin in this system. That means admin can do the following work after successful login. Admin activity is large in this system because of admin power and need.

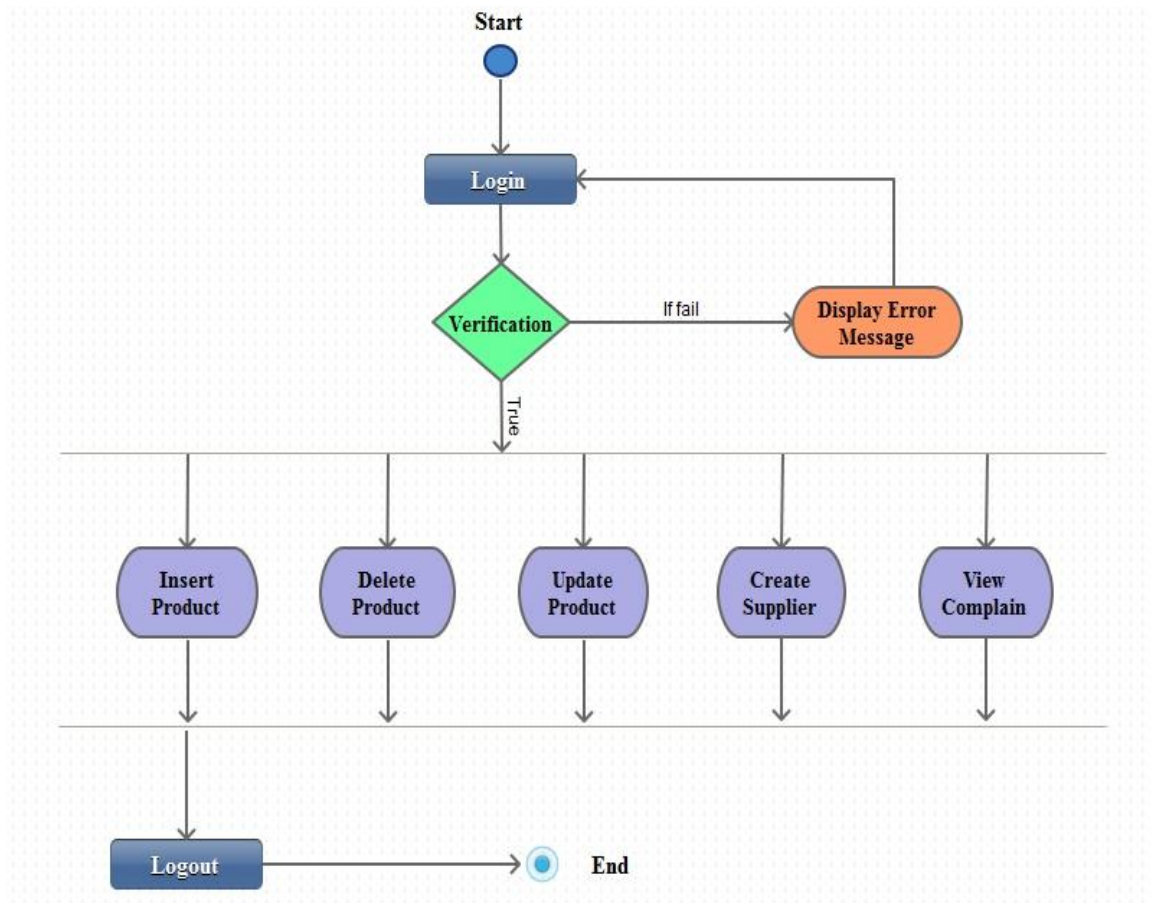


Figure 3.8: Activity Diagram of Admin.

3.4.6 Description of Admin Activity Diagram

Admin has the all in all power of this system. Admin has large number of activities. Admin will maintain the overall database of this system. Admin can insert, update, and delete data from database. And can also create supplier. Supplier creation form in admin area because of each company has many suppliers and each supplier has a specific supply area. Admin can also view complains from shopkeeper.

3.4.7 Data Flow Diagram

Data flow diagram means how data is flow within a system where input and output presses occur. Actually, it is the preliminary step to create a powerful system. It tells the viewer how the process will handle by system. According to this flow the model of database will create. It also shows the data moving process. That means after input any data where the data will store how store it, who observe it, who give solution etc. Actually, DFD has many shapes or symbol to express the flow of a system but I described those shapes by the Figure 3.9 which I have used,

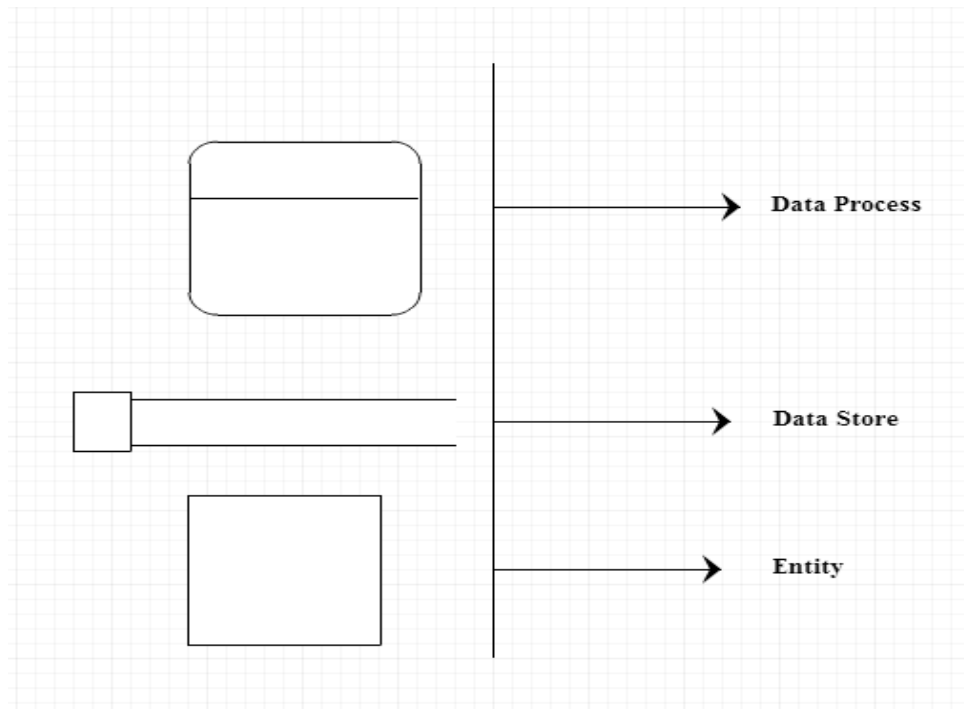


Figure 3.9 Shapes of Data Flow Diagram.

3.4.8 Data Flow Diagram of Smart MSR System

By the Figure 3.10 I have described the DFD of the Smart MSR system. The following figure described all the procedures of this system. That means the following figure represent how to be flow across the system.

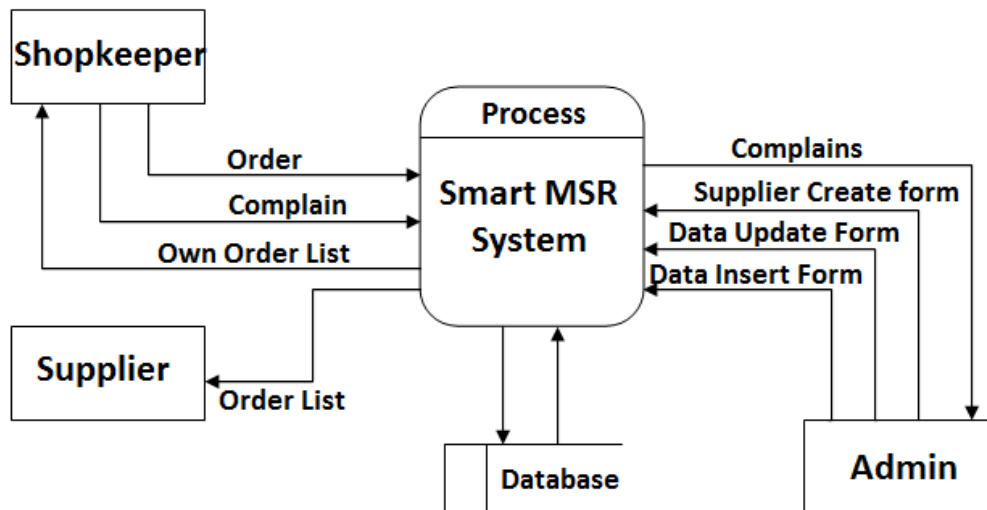


Figure 3.10: DFD of Smart MSR system

3.4.9 Description of Smart MSR DFD

Data flow diagram is the diagram which explains the activity of how the system works by a user. Data flow diagram is very important to know the flow of work within a system. In our Smart MSR system I have three entities within the system who is the main user of the system. Shopkeeper can order product through the Smart MSR system and can complain for service-related purpose. Shopkeeper can also view their ordered product under the date. Shopkeeper can make order of medicine product which retrieves from the database. In Smart MSR system supplier will get the orders which are in their area. In Smart MSR system admin is the powerful user who can insert, delete, update medicine product for sale. Admin also get complains that are created from shopkeeper. Only admin can create supplier account for an area. Every data from the system will store in a database.

3.5 Design Requirement:

3.5.1 Entity Relationship Diagram

Entity relationship diagram means the graphical representation of entities and their relationship between each other. The important part of E-R diagram is to organize data within database. Actually, it's explaining the all structure of every entity. Entity means every table of database. In the previous I describe our system individually. But entity relation will describe the system with their actual relation and structure of database. In a word I can say entity relationship is the process how the data is shared within entities [7]. Figure 3.11 is showing those symbols which I have used from E-R Diagram,

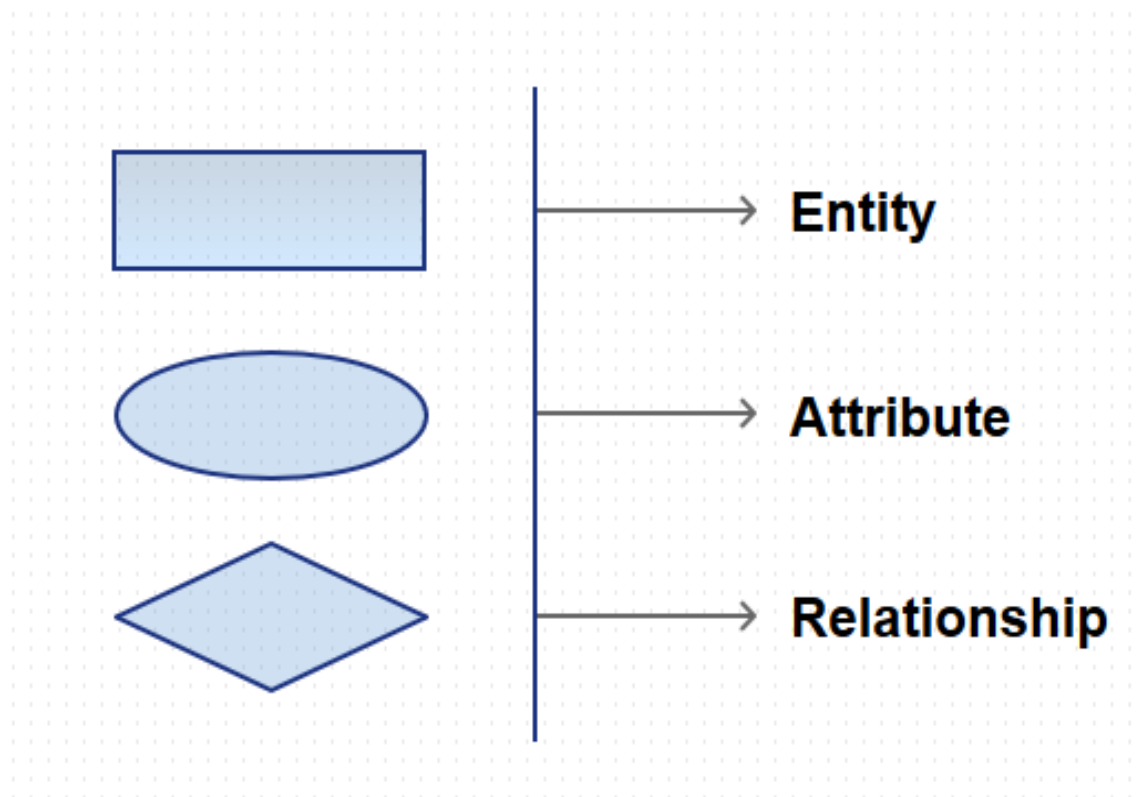


Figure 3.11: Shapes of ER Diagram.

3.5.2 ER Diagram of Smart MSR

By the Figure 3.12 I have described the ER diagram of the Smart MSR system. ER diagram describe the overall process of a system. In this Smart MSR system I have many entity, attribute and relations that are shown below.

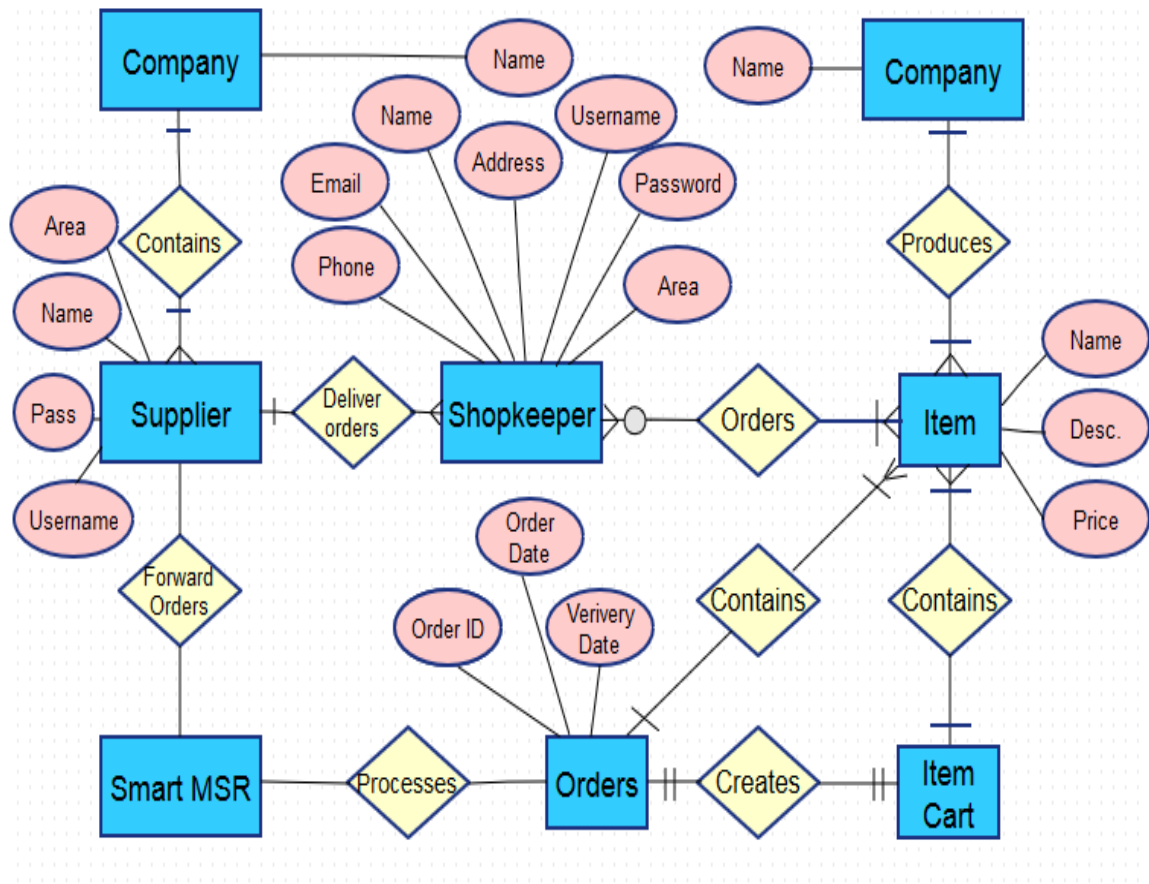


Figure 3.12: ER Diagram of Smart MSR.

3.5.3 Description of Smart MSR ERD

The basic syntax I have already described in section 3.5. But the Figure 3.12 is the actual entity relationship diagram of our system. In this system shopkeeper can make many orders for different company. Shopkeeper is the main entity here. Orders go to supplier who belongs to an area for each company. Each order has an order id, order date, delivery date etc. Smart MSR system filters all orders and assign to supplier who belongs that area.

3.5.4 Class Diagram

Class diagram is the combination of objects and classes of system. So, the definition of class diagram can be said, it's an overview of a required system by narrating the objects and classes of this system and also provide the relationship between them. On other hand it is the basic building of object-oriented modeling. Also, can be used in data modeling. Class diagram contains some certain rules. Suppose some data of every system must be private. Private means only verified user can access those data. On the other hand, some data must be public. Public means everyone can see that. And also have some protected data, it's usually used in admin panel. If the data is private that time input (-) minus sign before member of this object. In the same way if it is public then use (+) plus sign and # for protected data [8,10].

3.5.5 Class Diagram of Smart MSR

By the Figure 3.13 I have described the Class diagram of the Smart MSR system. Class diagram shows the visibility of a system. From the bellow diagram, I have described the each and every class and subclass of Smart MSR system.

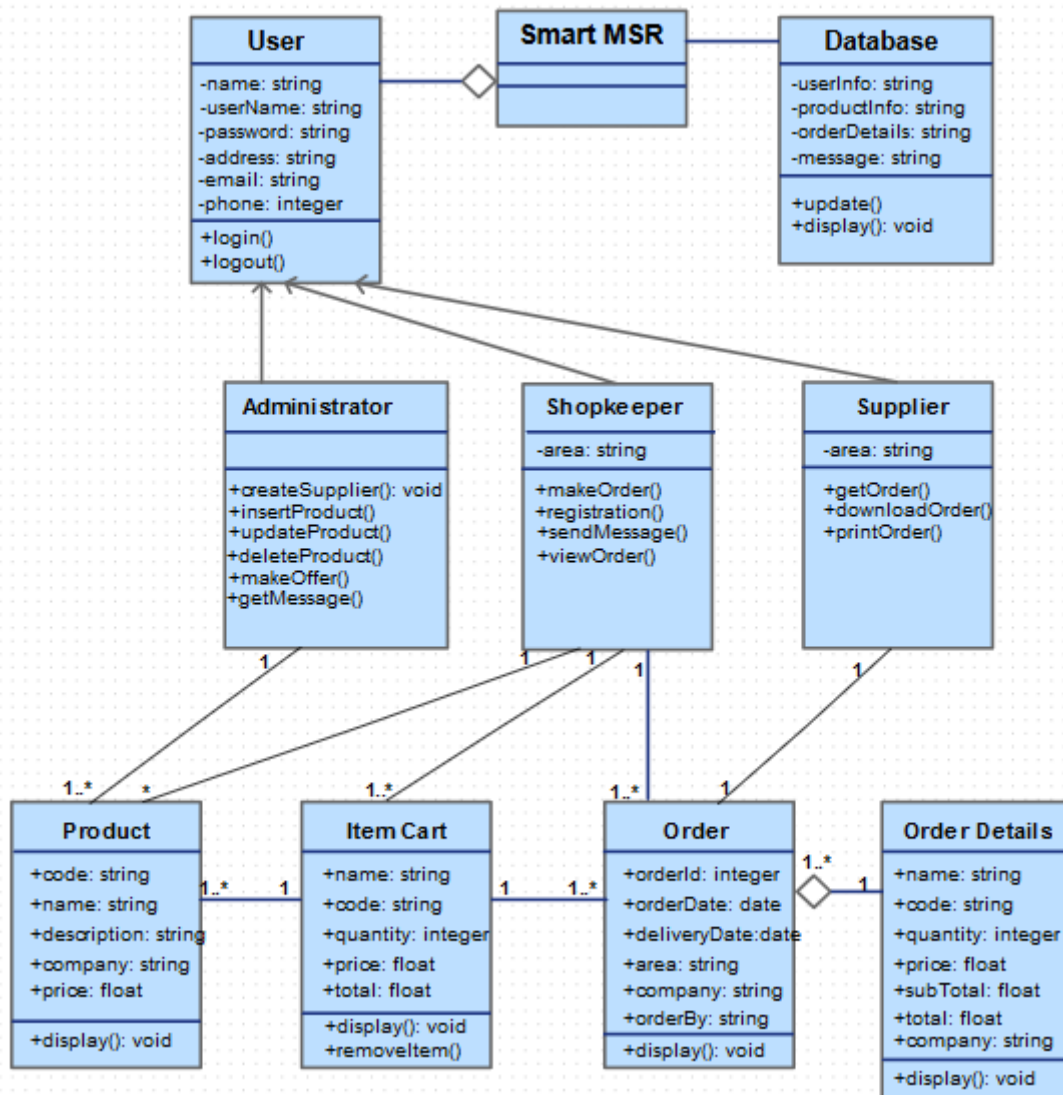


Figure 3.13: Class Diagram of Smart MSR.

3.5.6 Description of Smart MSR Class Diagram

I have already discussed about each part of class diagram and class diagram indicate the visibility. Actually, class diagram shows the static visibility and working of a system. In

Smart MSR system have some classes and sub classes. User is the main class of our system. There are three types of user, shopkeeper, supplier and administrator. Each and every class has some properties and behaviors. All properties and behaviors have a visibility condition by private, public and protected condition. From the above class diagram, I see, product class has a relationship with shopkeeper and administrator. Shopkeeper can make order with product that is firstly saved in an item cart. Order has order details. So, class diagram is a diagram which shows the visibility and static working process of a system.

3.5.7 System Security

Every web application is a store of information or data that can be personal or a company. So, it is the part of information security. Information security means the protection of unauthorized access in an application and recovery process. Recovery is a big issue in web application security. Without unauthorized access data or information may be lost by natural disaster or instant human excursion. According to the modern security method off-site data backup must be ensure. On the other hand, our application is more sensitive and it will contain secret issue. So, I have used modern process to secure complainer data. In the next point I will describe [11,12].

3.5.8 Security Process

Every system has some weak point for hacking but I have also many processes to maintain of those weak point for prevent hacking. That's why today's world is running on web and every time most secure and confidential data are also passing and storing through web.

3.5.9 Session Fixation

Session fixation is part of phishing. In this section hacker make a session just like user login page and provide that link to the user for login. Sometimes user doesn't locate the

URL and logged in through this link. So, it's an easy process to find the user session id and password. To protect this bug in our application I regenerate our session id as soon as user login and destroy the old session. But if some hacker already gets the session id from user that time, they get only the session id from cookies not from get or post method [13].

3.5.10 Password Encryption

In every system, hacker always targets user id and password to attack. That's why to protect user password I use encryption method for password. That means when user completes registration, password will encrypt using md5 method. Md5 method converts password length to 32-bit hexadecimal format. That's why it is very hard to retrieve password from database.

3.5.11 Summary

In this chapter, I discussed about the system design and system security. I have described about use-case diagram, activity diagram, class diagram, ER diagram, and system security and encryption method to make a better understand about the system. All designs are necessary to make good system. That's why before implementation, I make a blueprint of design for the system.

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end Design:

4.1.1 Home Page

By the Figure 4.1 I have described the Home Page of the Smart MSR system. This is the actual figure of home page of this system. From the following figure I can get overall purpose of the system. The home page designed part by part.

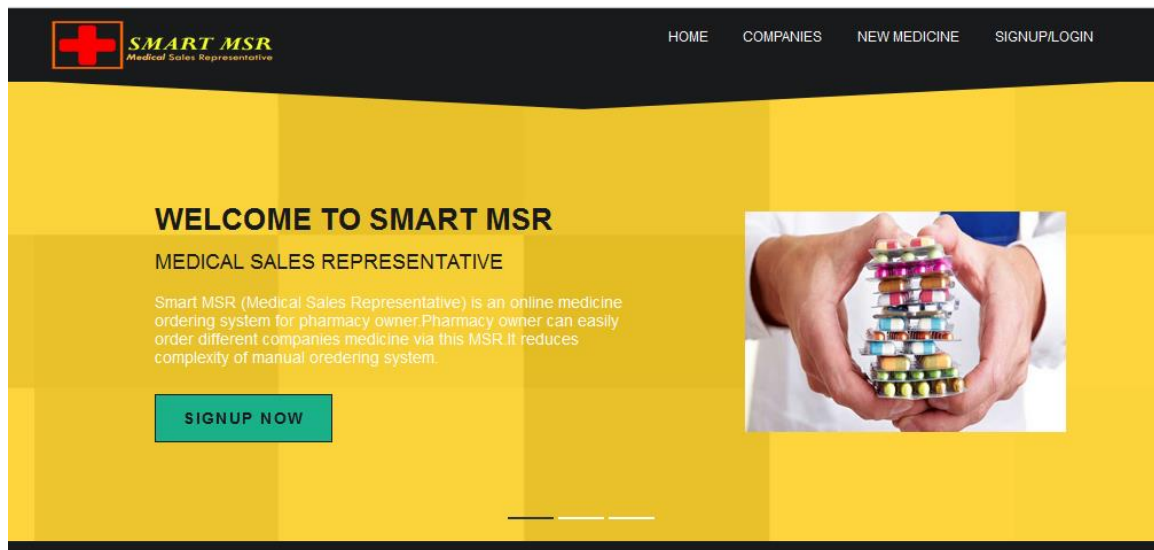


Figure 4.1: Home page of Smart MSR System.

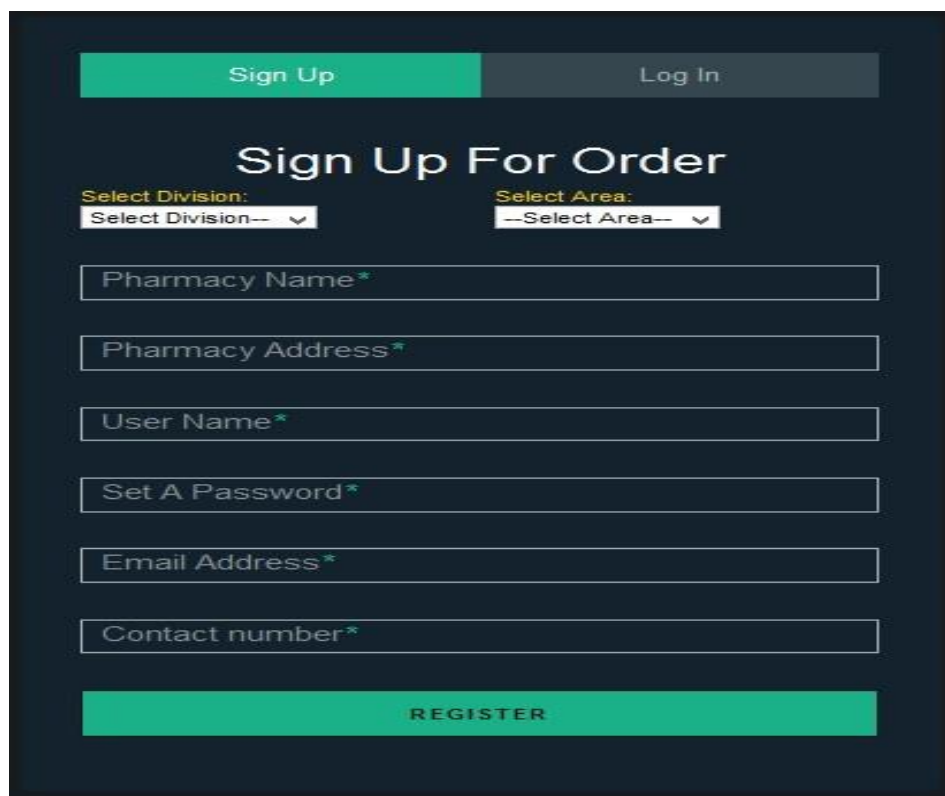
4.1.2 Description of Home Page

Home page is the combination of all function of a web application in Figure. In our system any kind of user must need to visit the home page first. User need to enter into database from home page. General users can see new medicine products manufactured by different companies. Visitors will get overall knowledge of how to use this Smart MSR? through home page. I have an option 'COMPANIES' that means which companies are linked with the Smart MSR system. I have used jQuery and Bootstrap for creating an attractive home

page. By the registration form user can create shopkeeper account. I have used a login form for all users of the system. That means shopkeeper, supplier and admin must need to use this login form to enter the MSR system. Home page is responsive to attract users.

4.1.3 Shopkeeper Registration Form

By the Figure 4.2 I have described the registration form of shopkeeper. Using this registration form new shopkeepers can register their pharmacy names to order product.



The image shows a registration form titled "Sign Up For Order" on a dark background. At the top, there are two buttons: "Sign Up" (highlighted in green) and "Log In" (grey). Below the title, there are two dropdown menus: "Select Division:" and "Select Area:". The form contains several text input fields, each with an asterisk indicating it is required: "Pharmacy Name*", "Pharmacy Address*", "User Name*", "Set A Password*", "Email Address*", and "Contact number*". At the bottom of the form is a large green button labeled "REGISTER".

Figure 4.2: Shopkeeper Registration Form.

4.1.4 Description of Shopkeeper Registration Form

All registration form needs to be attractive. Because users first look at the interface then enter a system. That's why I have used HTML, CSS, Bootstrap and jQuery to create an

attractive registration form. I have used JavaScript for select option in registration form and PHP for connect with MySQL database.

4.1.5 Shopkeeper Home Page

By the Figure 4.3 I have described the home page of shopkeeper that is shown after successful login. On shopkeeper home page I can see many options that are performed by shopkeeper.



Figure 4.3: Shopkeeper Home Page.

4.1.6 Description of Shopkeeper Home Page

Shopkeeper is the main actor of this system. Actually, this system is for the shopkeepers. That means only shopkeeper can make order and making order is the main purpose of this system. After logged in as shopkeeper, shopkeeper home page will show. Shopkeeper home page contains several options, such as create order, view order, submit complain etc. Shopkeeper can also submit any complain about Smart MSR system related purpose.

Shopkeeper can read the FAQ page to understand the system properly. Shopkeeper can choose several medicines from list under each company and can make order for purchase.

4.1.7 Order Creation Page

By the Figure 4.4 I have described the order creation procedure of the system. That means the following figure shows how to create order.

Smart MSR (Medical Sales Representative)
Dhaka Pharmacy
Dhaka Area

Dashboard | Order Now | View Order | Submit Complain | FAQ

Beximco Pharmaceuticals Ltd

#	Products	Quantity	Price(N)	Old(P)	Select
1	Acifix	1	250.00		Add
2	Bexipred Eye Drop	1	115.00		Add
3	Cardopril	1	1800.00		Add
4	Deflux	1	90.00		Add
5	Ezeta	1	80.00		Add
6	Frelax	1	95.00		Add
7	Gentosep	1	75.00		Add
8	Hemofix	1	900.00		Add
9	IcyKool Cream	1	85.00		Add

Selected Item				Reset Item
Name	Quantity	Price(Tk)	Sub Total	Action
Acifix	1	250.00	250	Remove
Bexipred Eye Drop	1	115.00	115	Remove
Deflux	10	90.00	900	Remove
Total(Tk): 1265				
<input type="checkbox"/> Confirm Order				<input type="button" value="Submit Order"/>

Figure 4.4: Order Creation Form.

4.1.8 Description of Order Creation Page

Making order is the main goal of this system. That's why order creation system must need to be user friendly. Shopkeepers just need to press 'add' to choose item and then need to press submit order button to make a successful order. Shopkeeper can remove selected item if he/she need. I have used PHP language for store order into database.

4.1.9 Shopkeeper Complain Form

By the Figure 4.5 I have described complain form that belonging by shopkeeper. That means the form which can submit shopkeepers complain to admin.



The image shows a dark blue background with the title "Send Your Complain" in a light blue font at the top center. Below the title, there are four input fields, each with a label and a dashed line for text entry: "Enter Your Name", "Address", "Short Subject", and "Your Complain". At the bottom center, there is a light blue button with the text "Send Complain".

Figure 4.5: Shopkeeper Complain Form.

4.1.10 Description of Shopkeeper Complain Form

Complain is an option of shopkeeper account. This is actually system related complain. If anyone found any error or if shopkeeper have any complain about the system, they can complain to admin via this complain form. Complain will show to admin.

4.1.11 Supplier's Home Page

By the Figure 4.6 I have described the home page of supplier that can access after successful login of supplier.

Logged In As: Dhaka Supplier Log Out

Smart MSR (Medical Sales Representative)
Beximco Pharmaceuticals Ltd
Dhaka Area

Dashboard | View Order | FAQ

Dhaka Supplier

User Name: dhakasupplier
Area: Dhaka Area
Phone: 1722947428
Email: bappy@gmail.com
Address: dhanmondi 15,dhaka

Time

4:17:35

Calendar

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Figure 4.6: Supplier Home Page.

4.1.12 Description of Supplier's Home Page

Supplier play's a great role of this Smart MSR system. Every company has several supplier's for supply the medicine which ordered by shopkeeper. Each and every medicine company has different supplier. The location of the shopkeeper defines which supplier will get the order list. That means shopkeeper and supplier need to under the same area. Suppose, shopkeeper orders medicine from Dhaka area means only supplier of Dhaka area can access the ordered list. Each supplier has some option. Such as view order, they can download order as .pdf file or can print order directly.

4.1.13 Admin Panel

By the Figure 4.7 I have described the admin panel of this system. Admin panel actually combined with many options. That is shown in the following figure.



Figure 4.7: Admin Panel.

4.1.14 Description of Admin Panel

Admin is the most powerful user among all users on a system. Admin can access his/her area after logged in from home page of the system. In this system admin can insert new medicine product into database for each company, admin can also delete and update product. Admin can view complains that are submitted by shopkeeper. Supplier account creation is another power of admin in this system.

4.1.15 Supplier Creation Form

By the Figure 4.8 supplier creation is described. Using this form admin can create supplier for each company and can assign supply area for each supplier.

Supplier Creation Form			
SELECT COMPANY BEXIMCO	SELECT DIVISION --SELECT DIVISION--	SELECT AREA --SELECT AREA--	
SUPPLIER NAME What is supplier full name?	SUPPLIER ADDRESS What is supplier address?	SUPPLIER USERNAME What is supplier username?	SUPPLIER PASSWORD What is supplier Password?
EMAIL ADDRESS What is supplier email address?		SUPPLIER CONTACT NUMBER What is supplier contact no.?	
<input type="button" value="Create Supplier"/>			

Figure 4.8: Supplier Creation Form.

4.1.16 Description of Supplier Creation Form

Supplier is another actor of this system who will supply products. Only admin can create supplier account for specific area. In this system several companies are adjusted to sale their medicine. That's why supplier creation is an important issue.

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Front-end Design

5.1.1 Introduction

Implementation means creating the system. In implementation phase the project get the graphical and functional working system. So, it's the main challenge to visualize a system as I need. Every system is for user. So, system need be user friendly to user. And in implementation phase the system goes to be practical from theoretical area. Smart MSR system is an online medicine ordering system, that's why it must be user friendly and need a good user interface that attracts the user.

5.1.2 Language

In every website the main structure is making a markup language that is HTML. HTML tags define the content area and metadata of each page. The whole design is maintained by cascading style sheet (CSS). In our system I have used the latest version of each language. The whole structure is markup by HTML5 and design part is standing under Bootstrap a framework of CSS. I also use so many raw CSS for most customize our system. But the main attractive language of our system is JavaScript. I have used PHP as programming language for creating logical and functional operations.

5.1.3 Design Part

In our system, design carries the responsibilities of user-friendly interface. So, at first, I divide our system four design part. That means every user of the system must visit to home page. Then from login user can go their area. Like after login shopkeeper can create order, can complain for service of system, can view their ordered list. Another user is supplier. And the main and powerful user of the system is admin. That's why design is divided into four parts that are shopkeeper, supplier, admin and overall home page.

CHAPTER 6

IMPACT ON SOCIETY

6.1 Impact on Society:

Our software will impact in society it will help to improve medical representative system. Our system is divided into different module that means each module has separate entity that makes the easy modification without changing the whole design. Shopkeepers can easily make order after successful login. Shopkeeper can understand about the system from FAQ page. Supplier will get order list after login. He/she can only view order, download order or print order. Admin can access his/her area after login and can insert new data, can delete data and can update data. I have developed our system by PHP as programming language and MySQL as backend part.

CHAPTER 7

CONCLUSION

7.1 Discussion and Conclusion

Our application software is totally online based so anyone can access it at anywhere of Bangladesh. The main advantage of our application is, I have no installation process and every computer has browser. User just needs to browse this system via internet. It's a process of online access and secures backup any confidential data. User also available this application at any time and any place of Bangladesh.

7.1.1 Limitations

Actually, virtual system comes from any manual real-life system. Each and every online system has some limitations. This Smart MSR (Medical Sales Representative) system also has some limitations. That's are given bellow,

- When a new company will come to add with this online system, system needs to update some html code.

Basically, this system has not any other limitations that will hamper system working except update mode. Because coming of new company needs some update of code.

7.2 Scope for Further Developments

In future our main target is to make mobile application for our system. Today's the smart phone users are increasing day by day. Most of the people use apps for customize their work without browsing website. So it is necessary to make a mobile application for our system. When I will lounge it shopkeeper need not browse our whole system, only open the application and can make their order.

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