Mango sales management system

A Project Report

Submitted in partial fulfillment of the

Requirements for the award of the Degree of

BACHELOR OF SCIENCE (COMPUTER SCIENCE)

By

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(Affiliated to Shivaji university

***Kolhapur)* SATARA 415124**

MAHARASHTRA

2020-21

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Sadguru Gadage Maharaj College, Karad
(Affiliated to Shivaji University Kolhapur)

KARAD-MAHARASHTRA-415124

CERTIFICATE

This is to certify that project entitled, "**Mango sales management system"**, is bonafied work of **Miss . Kavale Manali Nivant, Miss.Pawar Dhanashree Bajirao** being Seat No. submitted in partial fulfilment of the requirements for the award of degree of BACHELOR OF SCIENCE COMPUTER SCIENCE from Shivaji University Kolhapur.

Internal Guide **Coordinator**

External Examiner

Date: **college seal**

CERTIFICATE

Dist.-SATARA

This is certifying that **Miss. Kavale Manali Nivant, Miss.Pawar Dhanshree Bajirao** has successfully completed her project work entitled

"Mango sales management system"

as a part of her curriculum for B.Sc. (Computer Science) of Shivaji University Kolhapur.

Shivaji University Kolhapur.

Her work was satisfactory during the project period.

Authorized Signature

ABSTRACT

This review paper focuses on production and marketing of edible fruit like mango. Fruit crops play an important role in the national food security of people around the world. They are generally delicious and highly nutritious, mainly of vitamins and minerals that can balance cereal-based diets. Fruits supply raw materials for local industries and could be sources of foreign currency. Moreover, the development of fruit industry will create employment opportunities, particularly for farming communities. Mango (MangiferaIndica) is a fleshy stone fruit belonging to the panes Mangifera, consisting of numerous tropical fruiting trees in the flowering plant family Anacardiaceous. This review paper was carried out on production and marketing of mango fruit and the main objective is to review the production and marketing base of mango fruit for farm communities which encompass marketing channels, production practice, paste control mechanisms, market structure, marketing conduct and performance. Information flow on marketing production and marketing constrains was also looked from different sources. Finally, it was argued that market conduct and performance had been low due to traditional production practice and marketing constrains. Therefore, awareness should be created on modern production system of mango and convenience environment should be set on marketing system of mango that need to reduce cost.

ACKNOWLEDGEMENT

I am very glad to present this project "**Windows application**" named as" **Mango Sales Management System**" I take this opportunity to express my gratitude to many people, whose good wishes and positive approach have inspired me to take this project as success. However, it is imperative for me to mention some of them, who played a significant role in my project.

I am also thankful to my guide **Miss.Thorat N.S** for his attention and helpful guidance from beginning of project work.

I also very grateful thanks to **Mr Nalawade B.J**, Head of computer Science Department, Chiplun for providing all necessary facilities of laboratory and library at Sadguru Gadage Maharaj college, Karad.

Finally, I am thankful to my parents, my friends and all those people who have encourage me and help me.

DECLARATION

I here by declaring that the project entitled, "manage all **sales** processes off the grid. We are listening to mini grid providers, distributors and experts – to develop specialized features for special needs.**"** done at **Sadguru Gadage Maharaj Collage,** has not been 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 (COMPUTER SCIENCE)** to be submitted project as part of our curriculum.

Miss. Kavale Manali Nivant.
Miss. Pawar Dhanashree Bajirao

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Chapter 1

Introduction

1.1 Background

If we see the current method of managing the customer data then they use registers or simple Excel sheet. This old method for managing data is safe but not reliable and flexible. So to update this method I created this project.

This project is windows based application and name of this project is Mango sales management system. Especially this windows application is designed by which they can store and manage customer data easily. In this windows application there are four users such as customer, employee, and dealer. Admin have rights to add customer, employee, and dealer by giving them unique User ID and password. When customer registration add the customer with customer ID ,name, contact, address, email ID and so on. When customer submit data in database automatically unique customer ID will generate and by using that ID customer can only see our details.

The windows application work is not over, when customer will come again then by using his/ her customer ID and see his previous details like name ,contact no, address ,email id. So this system will saves both time and money. Customer also can check our own data by using customer ID.

Our windows application project provide some other services as follows:

- Data store in digital format.
- All detailed information about the customer,dealer,employee..
- Home delivery of mongoes according to customer choice.

1.2 Objectives

The main intension of this windows application project is to manage the customer data in digital format and again that information can reuse for that particular customer and, reduce the paperwork and go paperless.

User Satisfaction:

This windows application will provide a support role for user, then improving user satisfaction through better experience and service, along with reducing the time it takes to complete certain task.

Reduce time to complete a task:

As we know "Time is money", so nobody not want to waste our time or nobody likes to see their time is wasted.

Cost Reduction:

Customer data is stored in digital format so it can directly reduce some paper cost i.e. case paper cost.

1.3 Purpose and Scope

Purpose:

Windows Application for Customer and Dealer to reduce time and paperwork and, to avoid crowd and maintain social distance.

 Why this project is being done?

Windows Application for Owner of The Shop to store Customer data in digital format and Bill will directly send to appropriate Customer and, to reduce paperwork. Customer will avoid to go in crowd.

 How the project could improve the system?

Windows Application will provide the quick access of Customer data to Admin

Scope:

This system will help to manage and access the data faster than old system. Admin can easily add the Customer name without paper work, so they can manage the social distance. It is not possible to check out Mango's Quality without visiting Mango's Shop, but we can avoid to go in Mangoes shop by selecting the home delivery option

.

 Facilities:-

 User friendly Windows Application

 Electronic paperwork

 Option available for home delivery

 Customer can see our own data

Applicability:-

By using this system user can easily handle data and, work is completed with less time. As this system maintains the backup hence this is more secured so we can restore the data with the help of backup system. This system is user-friendly so authorised user can insert, update or delete the Customer data easily.

Achievements:-

By this system it save their time as well as money. Owner or Dealer can easily search, update, insert, and delete the records, so record finding task was made easier for Owner and Dealer. It reduce some paperwork is converted in to E-paper work.

Chapter 2

System Analysis

2.1 Existing system

This project is for "MANGO SALESMANAGEMENT SYSTEM ".The existing system is register based.

All records are store in register book such as customer, stock, employee etc.

All records are store in different register book because all record can't maintain in one single register book.

Existing system is handled manually & it I time consuming.

In this system we can add record easily but we can't update any exist record.

2.1.1 Problem in Existing System

- As the existing System manually .All the manual limitation affects working of functionality.
- The existing system is slow in terms of processing task.
- When lots of customer present it is very time consuming to look for individual product because of the large stock room this means fewer sales transaction are complete over there is less profit being made.
- Difficult to search any records.
- We can no generate report whenever it's necessary.
- We can't modify any records.

2.2 Proposed System

I have developed new computer based Mango Sales system to overcome the drawback of register based Mango Sales system.

This system will easy to the user to process task quickly. The proposed system will have a whole new stock control database. This will definitely improve the time taken to search for a specific product which wills more customers are attended to employee.

All details can be stored on database. This will be good when sale transaction is made .If will be recorded so if error arises in human error with sale transaction the system can check to see who carried out the sales transaction.

2.2.1 Scope and Limitation of the Proposed System

- Without your permission unautherised person can not access the system since it is secure.
- In our system we can easily add, update, and delete record.
- This system is faster than the register system.
- We can generate record whenever necessary.
- Easy to handle.
- Less time consuming.

2.3 Requirement Analysis

The SRS (Software Requirement Specification) document will include the expectations of customer from the project. This will include design, functions, performance and software attributes.

Overall Description:

It will describe the major components of the system, interconnections and external interfaces.

Specific Requirements:

It will describe the function of actors, their role in the system and constraints.

Software and hardware requirements:

There are two types of software and Hardware requirements for user and developer.

1. User:-

Hardware Required:

Below is a list of minimum hardware requirement

Operating System:-.

1. Windows 7, windows 8 or windows 10
2. Mac OSX 10.8+
3. Android

- Processor (CPU) with 2 gigahertz frequency or above.
- Keyboard Monitor Mouse or some other compatible pointing device
- Internet Connection Broadband (high-speed) Internet connection with a speed of 12Mbps to 14Mbps or higher if you want better response.

Software Required:

Below is a list of the minimum software requirement:-

Browsers:

1. Chrome
2. Mozilla Firefox
3. Internet Explorer

- Monitor Resolution 1024 X 768 or higher I order to get quick response.
- Those who are using unsupported browsers may experience issue in website so refer the mention above browser.

Browser Configuration:

- JavaScript must be enabled
- Cookies must be enabled.
- Adobe Acrobat Reader- for PDF files Adobe Reader Software is the global standard for document sharing. So this browser must be important in order to view some information.
- Pop-up windows must be enabled.

2. Developer:-

Hardware Required:

- 8GB RAM is required for Microsoft Visual Studio 2015.
- Well System of Windows 10 only.
- Processor (CPU) with 2 gigahertz frequency or above.

Software Required:

Operating System - Microsoft Windows 7 / Windows 8.1 /Windows 10 Front End - Microsoft Visual Studio 2015, Microsoft ASP.net4.7

Back End- Microsoft SQL Server 2008

Web Browser - Windows Internet Explorer 8.0 and above, Mozilla Firefox, Google Chrome, etc.

Front End

Microsoft Visual Studio 2015, Microsoft ASP.net4.7

Microsoft Visual Studio 2015

Microsoft Visual Studio is an Integrated Development Environment (IDE) from Microsoft. Visual Studio includes a code editing as well as code refactoring. The integrated debugger works both as a source-level debugger and machine-level debugger. Other built-in tools include a form designer for building GUI applications, web designer, class designer, and database schema designer.

Visual Studio supports different programming languages include C/C++ (via Visual C++), VB.NET (via Visual Basic .NET), C# (via Visual C#), etc. It also supports XML/XSLT, HTML/XHTML, JavaScript and CSS.

Microsoft ASP.Net 4.6

ASP.NET is a web application framework developed to allow programmers to build dynamic web sites, web applications and web services. It is the successor to the Microsoft's Active Server Pages (ASP) Technology.

ASP.NET is built on the Common Language Runtime (CLR), allowing programmers to write the Asp.NET code using any supported.Net language. ASP is a server side scripting environment that you can use to create dynamic WebPages or build powerful web applications. ASP pages are the files that contain the HTML tags, text, and script commands.

ASP pages can call ActiveX Components to perform tasks, such as Connecting to Database or Performing a Business Calculations. Using ASP, you can add interactive content to your web pages or build web applications that use HTML pages as the interface to the user.

Back End

Microsoft SQL Server 2008

Microsoft SQL Server is a computer application used to create desktop, enterprise and web-based database systems. It provides an environment used to generate databases that can be

accessed from different workstations, Internet or other media such as Personal Digital Assistant (PDA).

Microsoft SQL Server 2008 is comprehensive, integrated data management and analysis software that enables organizations to reliably manage mission critical information and confidently run today's increasingly complex business applications.

Microsoft SQL Server is an application used to create computer database for the Microsoft Windows Family of server operating system.

❖ FACT FINDING TECHINIQUE

The proper search strategy is used it include modeling method to make sense out of information collection.

1. Interviewing

2. Questionnaires

3. Review Existing Material

4. Observe Actual Workflow.

These techniques are used in system analysis. The four techniques are occurred successful the points noted regarding the system during investigation are studied every well.

These techniques are proven to be beneficial regarding preliminary investigation. These four techniques used in developing the system are called Fact finding techniques.

1. INTERVIEWING:

This technique is used to collect information from individual or from group however there are certain points to be remember in conducting interview.

2. QUESTIONARIES:

This technique is useful to collect all the information about various aspects of system from different person. This method can helpful to standards question format can yield more reliable data than another fact finding technique.

3. REVLEW EXISTING MATERIAL:

An existing can be better understood by examining the documents, forms, reports and files. The record review can take place at beginning of study.

4. OBSERVATION:

An analysis must always alert observation can bring in missed fact, new way to improve the existing procedure duplicate work done without proper attention. It can bring in what other fact finding techniques.

1. **How do you maintain the records of all customers?**

Ans: - We use the register to store all records of all customer.

2. **What kind of information you stored about customer?**

Ans:-We keep customer name, address, contact no.

3. **What kind of information you stored about product?**

Ans:-We keep product name, prize, quality, companyname.

4. **How do you maintain employee's information? Whattype of information you maintain?**

Ans: - We keep employee's photo, name, address, contact no., salary & join date. We use register to keep this information.

5. **What is process of your Mango Sales management?**

Ans: - we handle the customer one by one we are compute the customer requirement & then fulfill that requirement.

6. How do you store the billing details?

Ans: - We are store the bill details in register book.

2.6 Justification of Platform

The hardware and software are easily available for development of this application. It acts the efficient, portable and user friendly technology. ASP is one of the most appropriate languages because of the following reasons,

1. Generate dynamic web pages.

2. A process content of HTML form and also retrieves and respond to the data entered in the form.

3. Capable of inserting new data or retrieves existing data from the database.

❖ Feasibility Study

The feasibility study involves four main phases such as:

- Technical Feasibility.
- Behavioral Feasibility.
- Economic Feasibility.
- Operational Feasibility.

1] Technical Feasibility:

The technical feasibility always focuses on the existing computer hardware & software and personnel. This also includes the need for more h/work s/w or personnel and the possibility of installing such facility. For example, if the current computer is operating at 80 percent capacity an arbitrary ceiling then running another application could overload the system or require additional hardware. This involve financial consideration to accommodate technical enhancement. If the budget is a serious constraint, then the project adjudges not feasibility.

2] Economical Feasibility:

It is also important that our system should be economically feasible and this measure of the cost effectiveness of a project. This is often called a cost. Benefit analysis. The software and hardware required for this system are easily available now a day. No additional cost will be incurred for expensive software or hardware. The system will also reduce lots of paper work. Chances of errors are very miner and provide consistent information. This will lead to better Output and will save lots of money.

3] Behavioral Feasibility:

People are inherently resistant to change and computers have been known to facilitate changes. An estimate should be made of how strong are action the user staff is l likely to have towards the development of computerized system. It is common knowledge that the computer installation has something to do with turnover, transfer, retraining and changes in employee job status. Therefore, it is understandable that the introduction of a candidate system special effort to educate the introduction of candidate system requires special effort to educate, sell and train the staff on new ways of conducting business.

4] Operational Feasibility:

Operational feasibility measure how well a solution will work on every operation. It is also a measure of how people feel about System Project. Industries among at office automation to achieve paperless concept which are achieved through computerization which will cut down manual working of employee of home appliance service centre. The proposed system is

operationally feasible because it works according to the user's need and the desired operation is done.

Chapter 3

System Design

3.1 Module Division

- **Login Module:** Used for managing the login details.
- **Admin Module:** Used for managing the users data of the system.
- **Employee Module:** Used for managing employee related details.
- **Customer Module:** Used for managing customer related details.
- **Dealer Module:** Used for managing dealer related details.

There are two types of Module:

1. User Module
2. Admin module

1. User module:-

User module allows an interface to user to view the complete website. It also provides the user to download the result in PDF format, eBooks and model question papers. It also provides the user to view the real time notice on online notice board, real time departmental Activities and image gallery. It allows the user to provide feedback related to system. This module doesn't provide login system for user.

2. Admin Module:-

Admin Module allows the Admin to login into his panel with his username and password. It allows the admin to view & update his owner profile. It allows uploading notice on notice board, academic Activities and images on online gallery. It allows the admin to view the user feedbacks in the form of report and to logout from admin panel

3.2 Data Dictionary

1. **Admin Login Table**

Field name	Data Types	Description	Field Size
User ID	varChar	Holds the user ID	Field Size:20
password	varChar	Holds the user Password	Field Size: 50

2. **Customer Registration**

Field Name	Data Type	Description	Field Size
Customer ID	Int	Holds The Customer ID	Field Size:20
Customer Name	varchar	Holds customer name	Field Size:50
Customer_Contact	varchar	Holds Customer Contact	Field Size:50
Customer_Address	varchar	Holds Customer Address	Field Size:50
Email ID	varchar	Holds Email ID	Field Size:50
Gender	varchar	Holds Customer Gender	Field Size:50

3. **product**

Field Name	Data Type	Description	Field Size
ID	Int	Holds The Inventory ID	Field Size:20
Product Name	varchar	Holds Inventory Name	Field Size:50
Quality	varchar	Holds Inventory Quality	Field Size:50
Price/100 piece	varchar	Holds Inventory Price	Field Size:50

4.Employee Registration

Field Name	Data Type	Description	Field Size
Employee ID	Int	Holds The Employee ID	Field Size:20
Employee Name	varchar	Holds Employee name	Field Size:50
Employee_Contact	varchar	Holds Employee Contact	Field Size:50
Employee_Address	varchar	Holds Employee Address	Field Size:50
Date Of Birth	varchar	Holds Employee Date Of Birth	Field Size:50
Gender	varchar	Holds Employee Gender	Field Size:50

5.Dealer Registration

Field Name	Data Type	Description	Field Size
Dealer ID	Int	Holds The Dealer ID	Field Size:20
Dealer Name	varchar	Holds Dealer name	Field Size:50
Dealer _Contact	varchar	Holds Dealer Contact	Field Size:50
Dealer _Email ID	varchar	Holds Dealer Address	Field Size:50
Account No	varchar	Holds Dealer Account No	Field Size:50
Bank Name	varchar	Holds Dealer Bank Name	Field Size:50

6. Canning

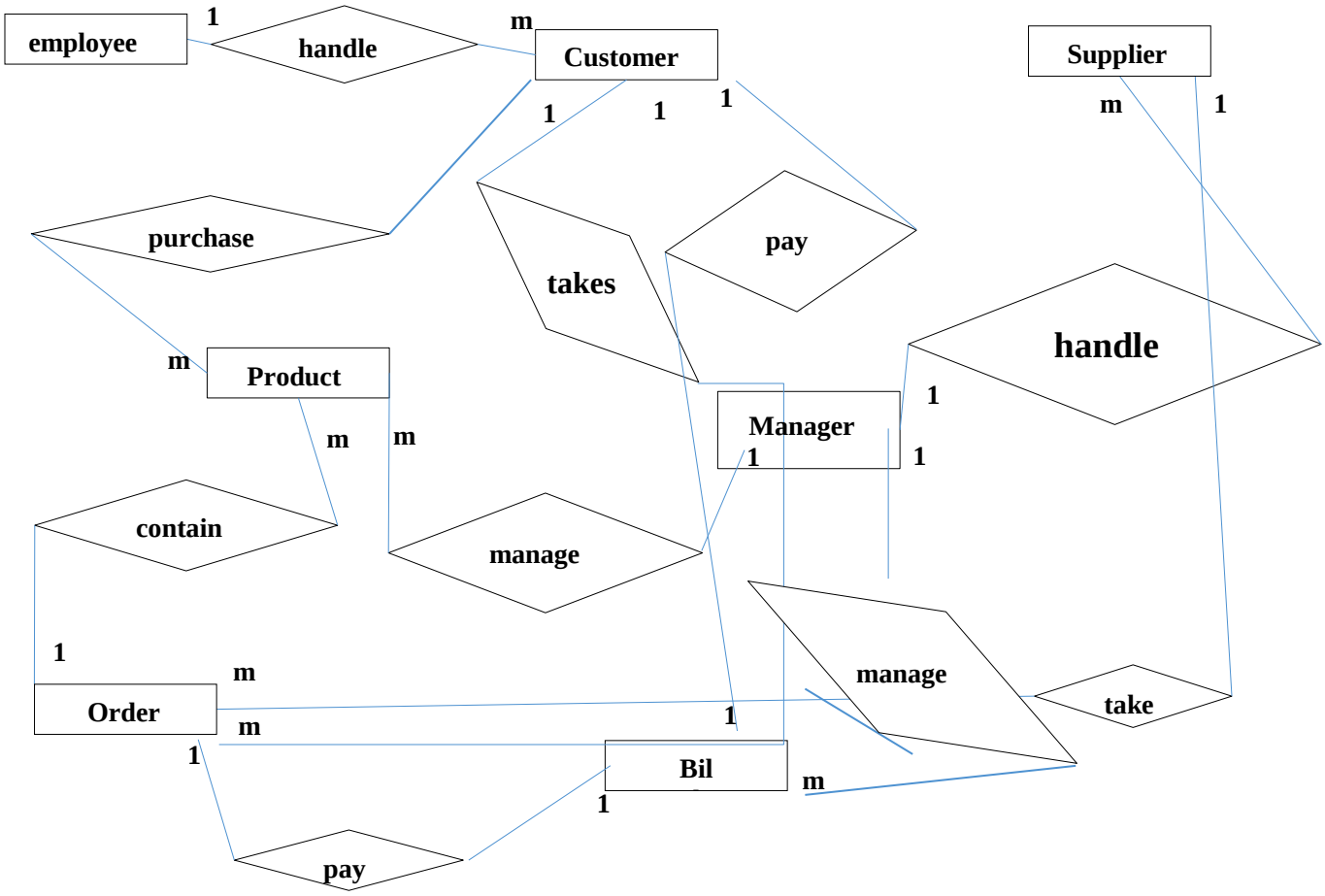
Attributes	Data types	Description	field size
Dealer ID	int	Create unique iD	50
Dealer Name	NvarChar	Full Name of dealer	50
Weight	NvarChar	weight of product	50
Rate	NvarChar	Rate of product	50
Total	NvarChar	Total price of product	50
Date	NvarChar	Date of product	50
Payments status	NvarChar	Check payment status	50

7.Billing

Attributes	Data types	Description	field size
Sr.no	int	Create a sr.no	50
Customer Name	NvarChar	Customer Name	50
Dated On	NvarChar	product delivery date	50
Total amount	NvarChar	Total amount of product	50

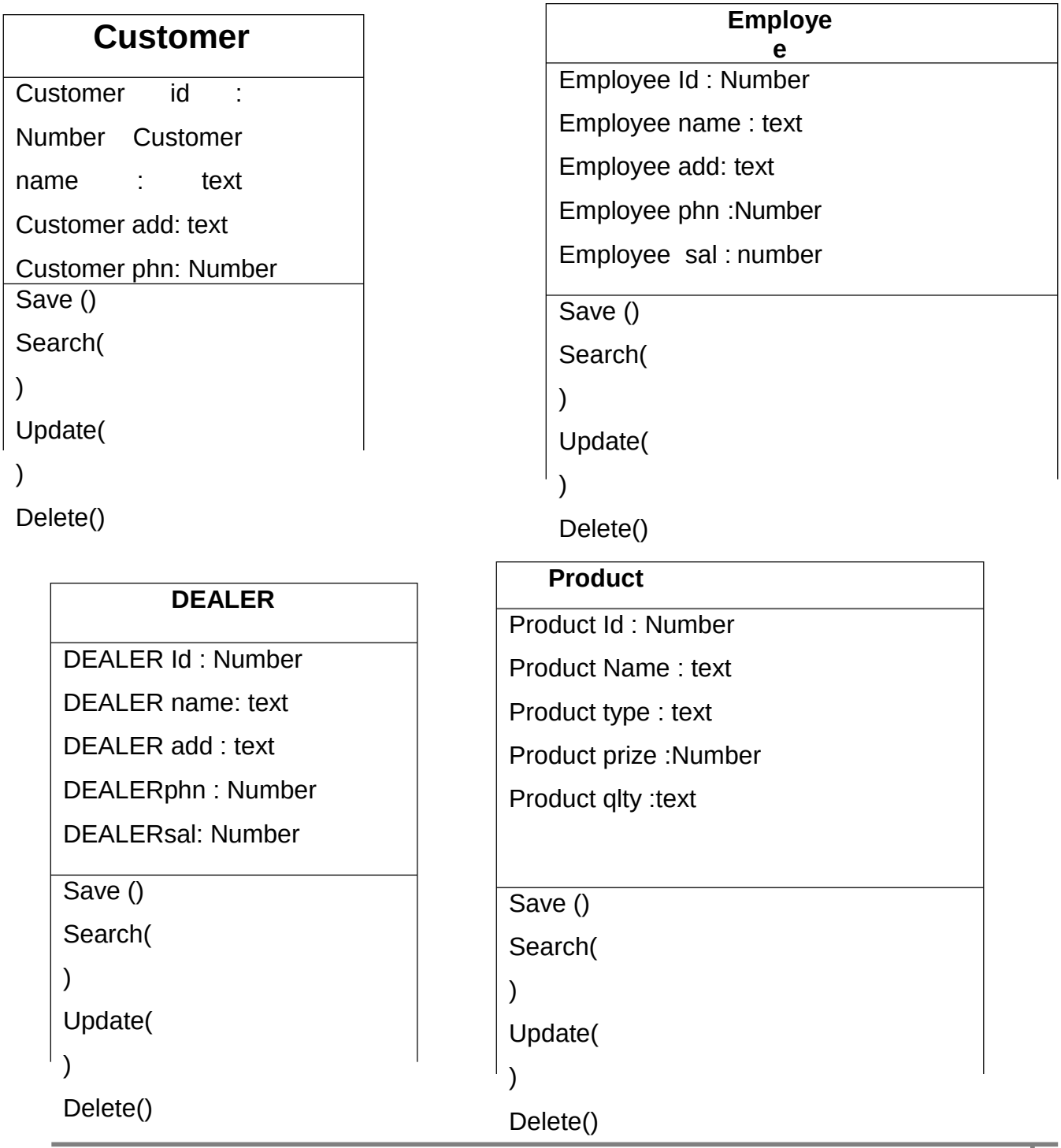
3.3 ER Diagram

E-R DIAGRAM FOR MANGO SALES MANAGEMENT SYSTEM :-

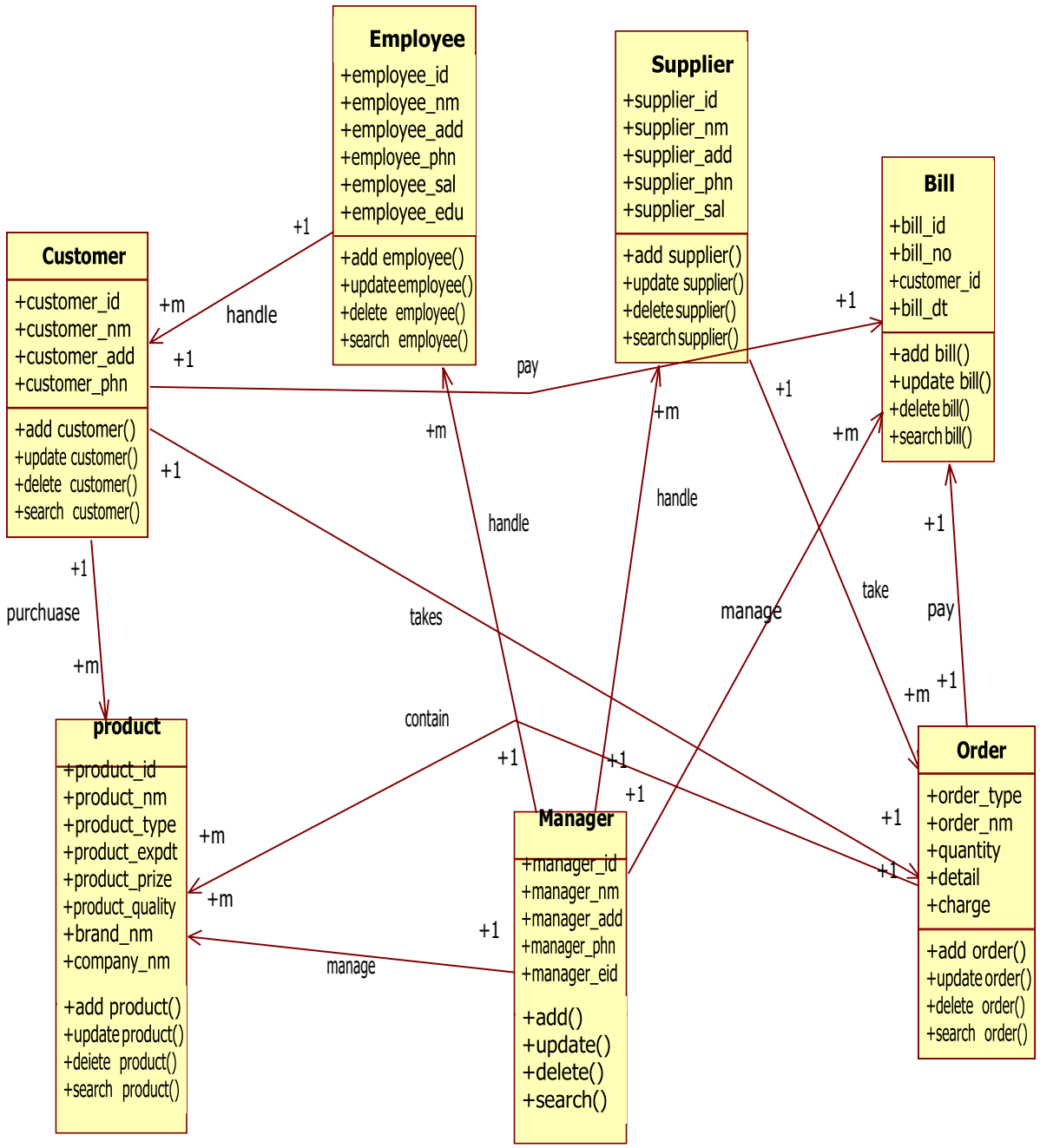


3.4 UML Diagrams

Class Diagram

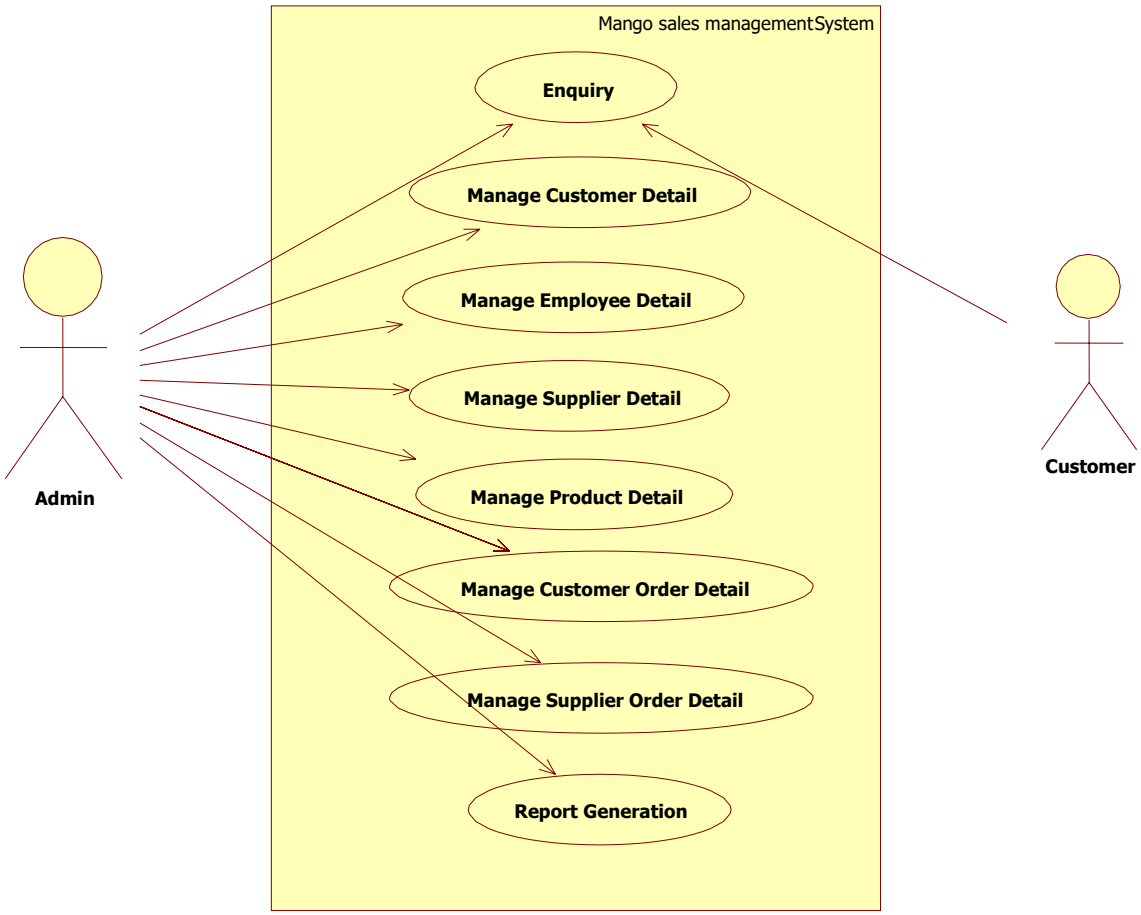


Class Association Diagram

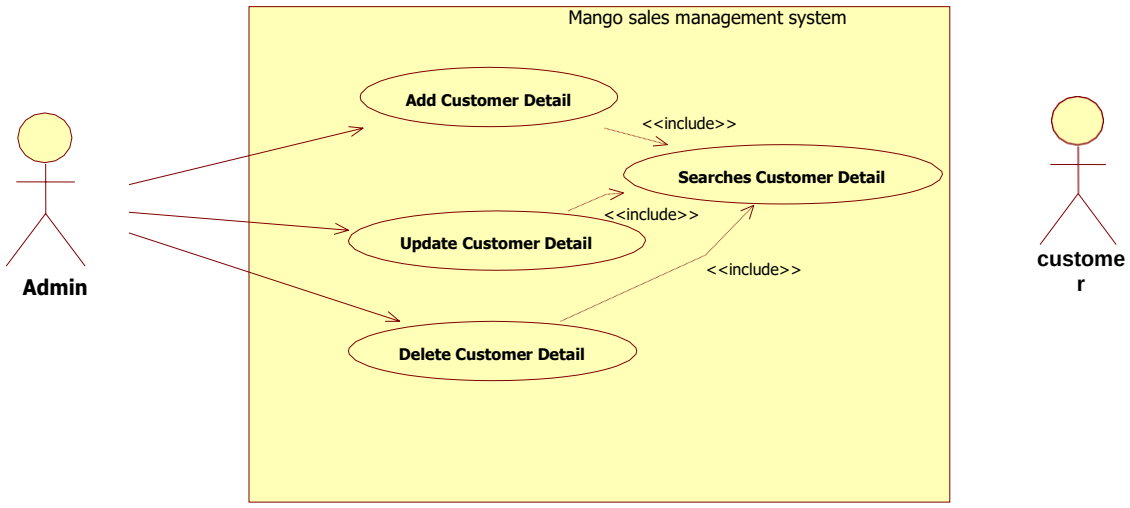

Employee
+employee_id
+employee_nm
+employee_add
+employee_phn
+employee_sal
+employee_edu
+add employee()
+update employee()
+delete employee()
+search employee()
Supplier
+supplier_id
+supplier_nm
+supplier_add
+supplier_phn
+supplier_sal
+add supplier()
+update supplier()
+delete supplier()
+search supplier()
Bill
+bill_id
+bill_no
+customer_id
+bill_dt
+add bill()
+update bill()
+delete bill()
+search bill()
Customer
+customer_id
+customer_nm
+customer_add
+customer_phn
+add customer()
+update customer()
+delete customer()
+search customer()
product
+product_id
+product_nm
+product_type
+product_expdt
+product_prize
+product_quality
+brand_nm
+company_nm
+add product()
+update product()
+deiete product()
+search product()
Manager
+manager_id
+manager_nm
+manager_add
+manager_phn
+manager_eid
+add()
+update()
+delete()
+search()
Order
+order_type
+order_nm
+quantity
+detail
+charge
+add order()
+update order()
+delete order()
+search order()
handle
pay
purchuase
takes
contain
manage
take
+1
+m

Use Case Diagram

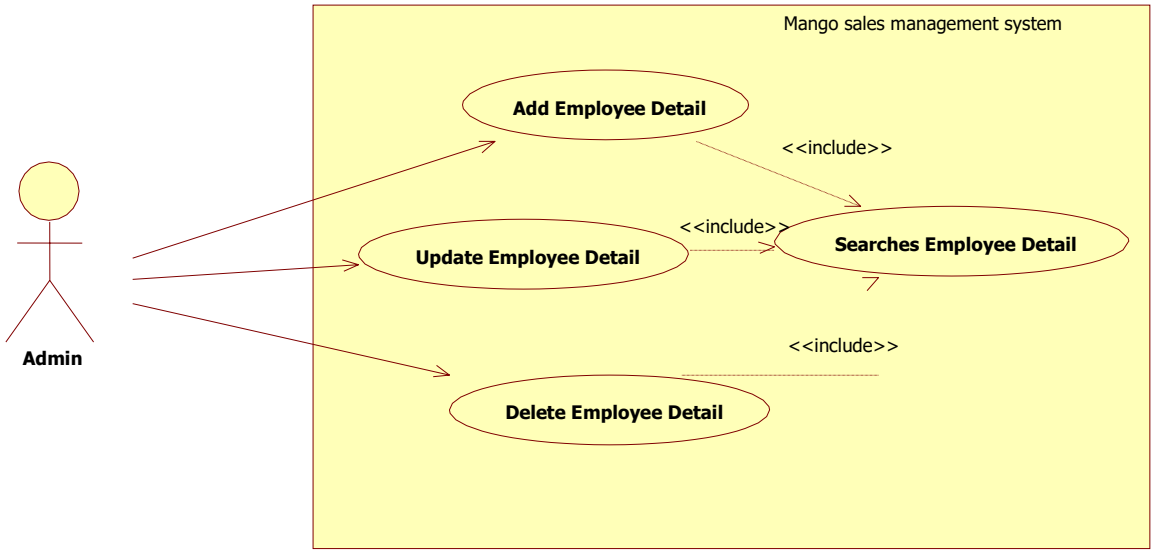
❖ HIGH LEVEL USE CASE DIAGRAM :-



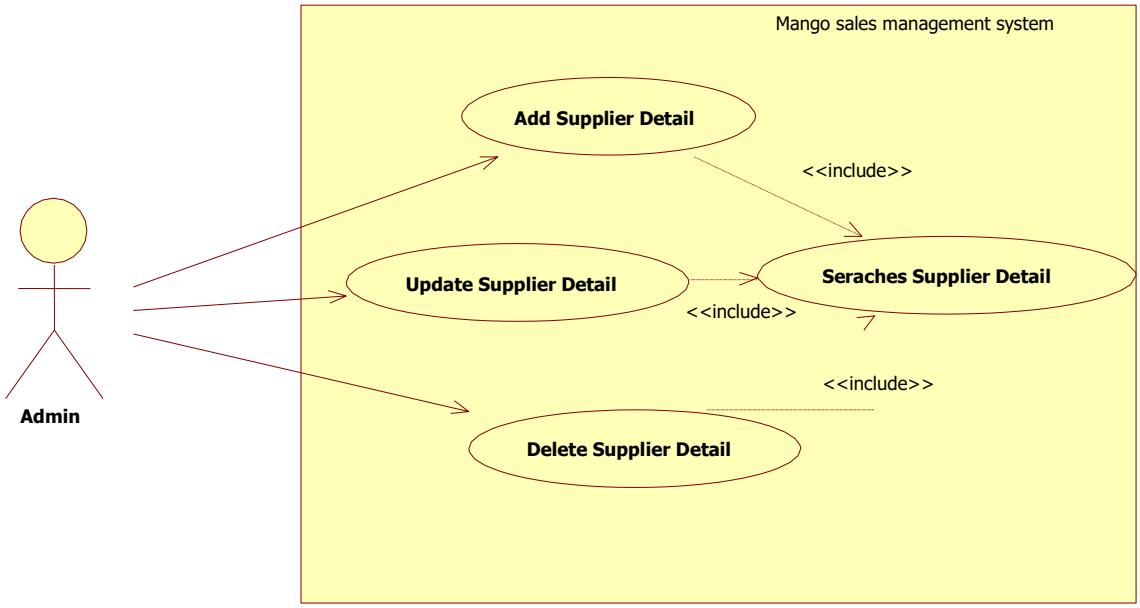
• MANAGECUSTOMER RECORD:-



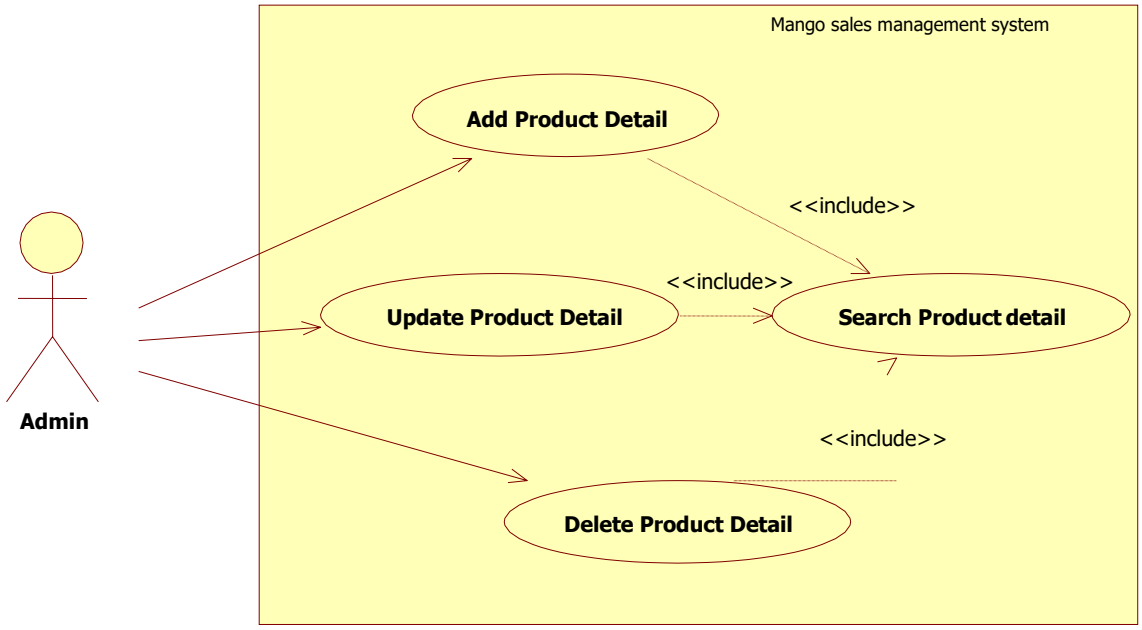
- **MANAGE EMPLOYEERECORD :-**



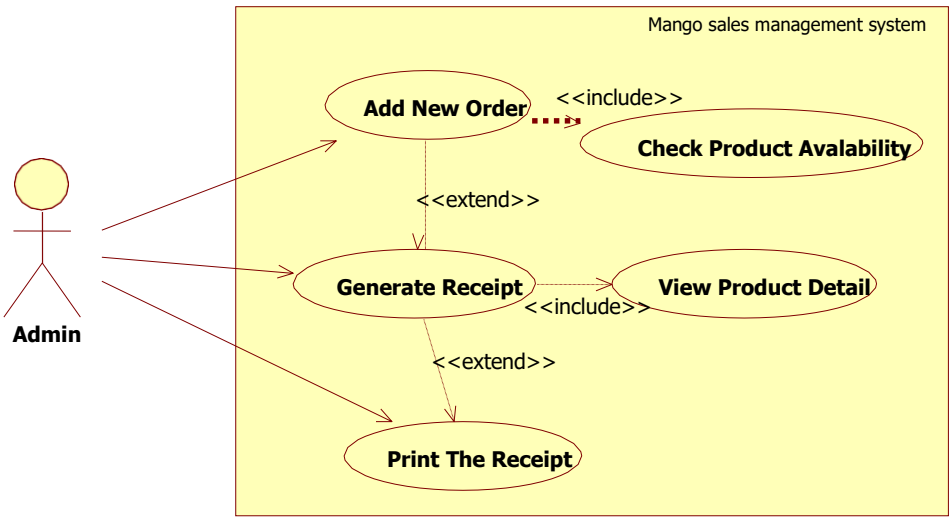
- **MANAGE DEALER RECORD :-**



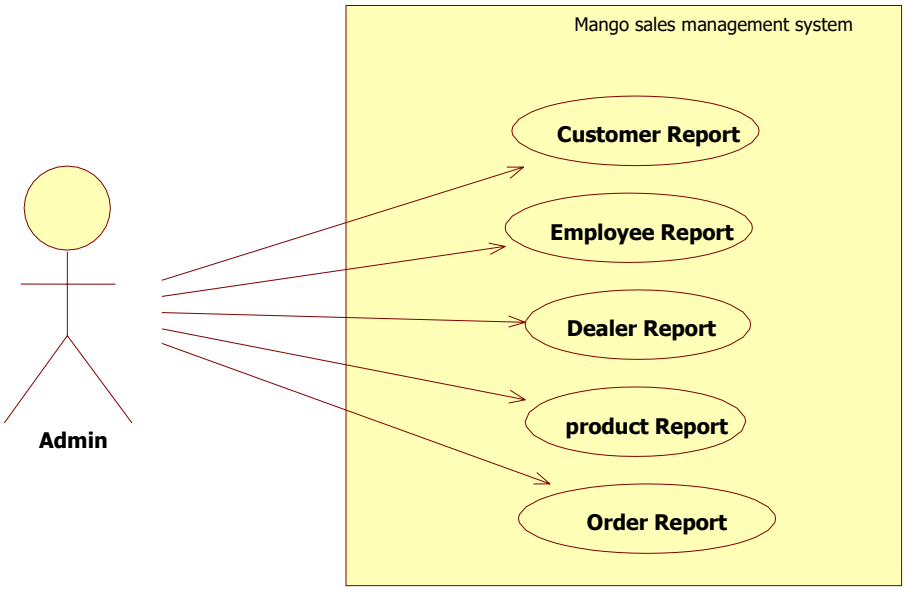
- **MANAGE PRODUCT RECORD :-**



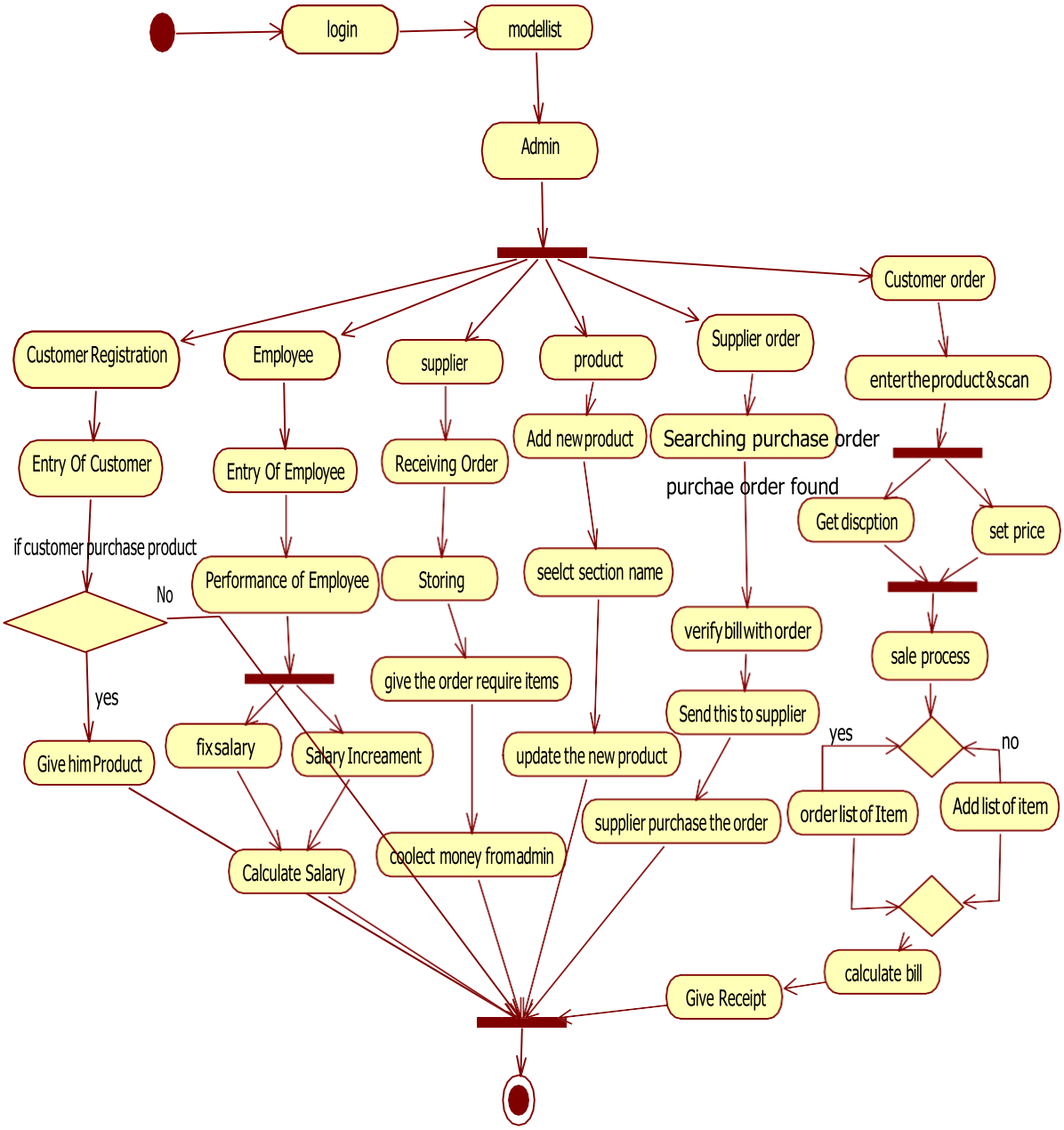
- **MANAGE CUSTOMER ORDER DETAIL :-**



- **MANAGE REPORT:-**

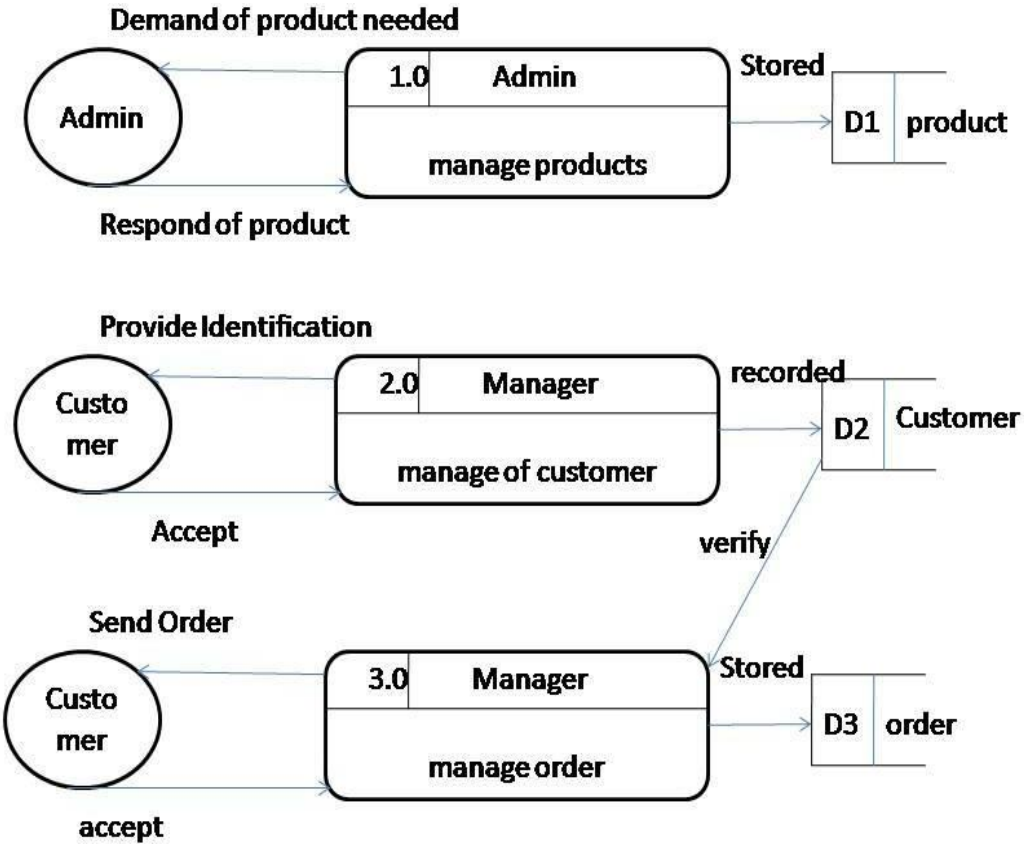


ACTIVITY DIAGRAM

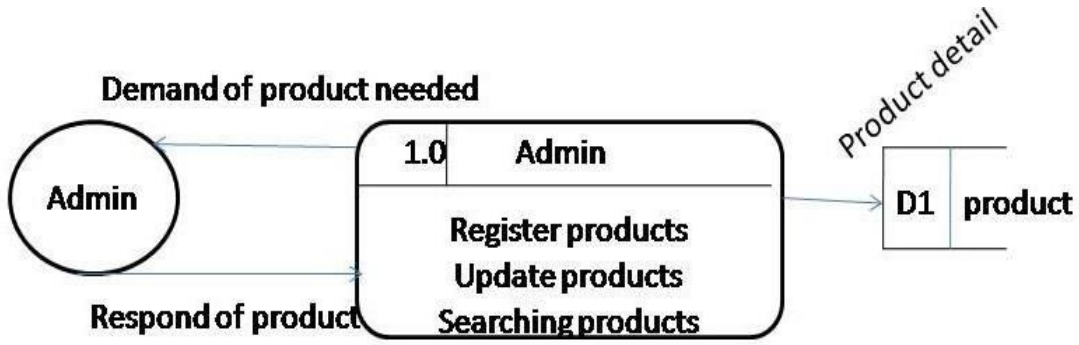


Data Flow Diagram

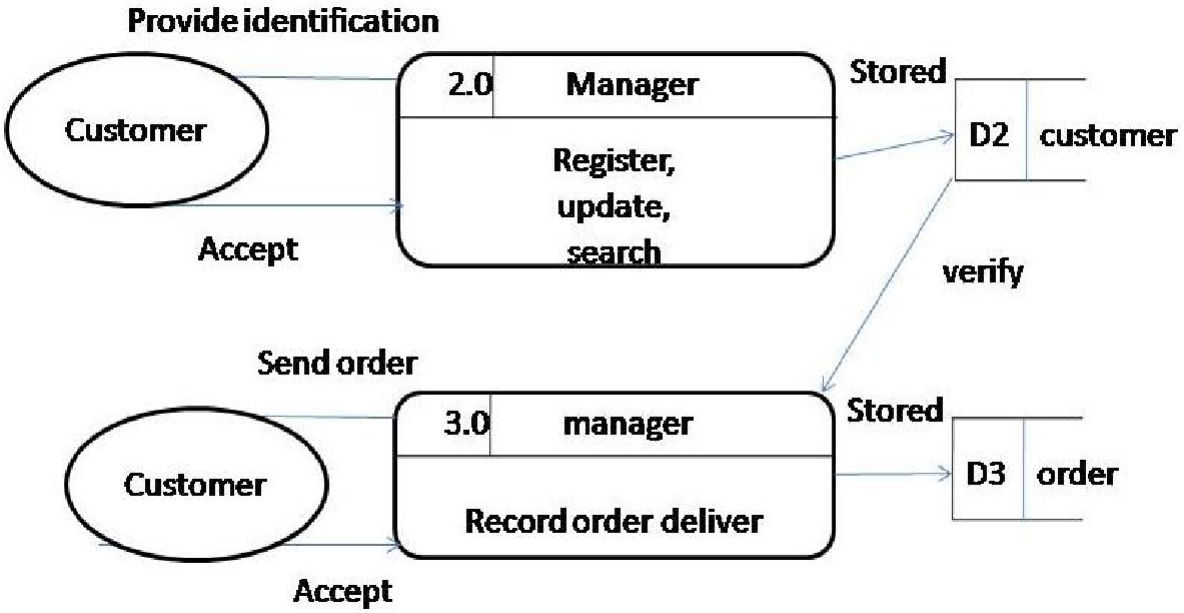
DFD LEVEL O FOR WHOLE



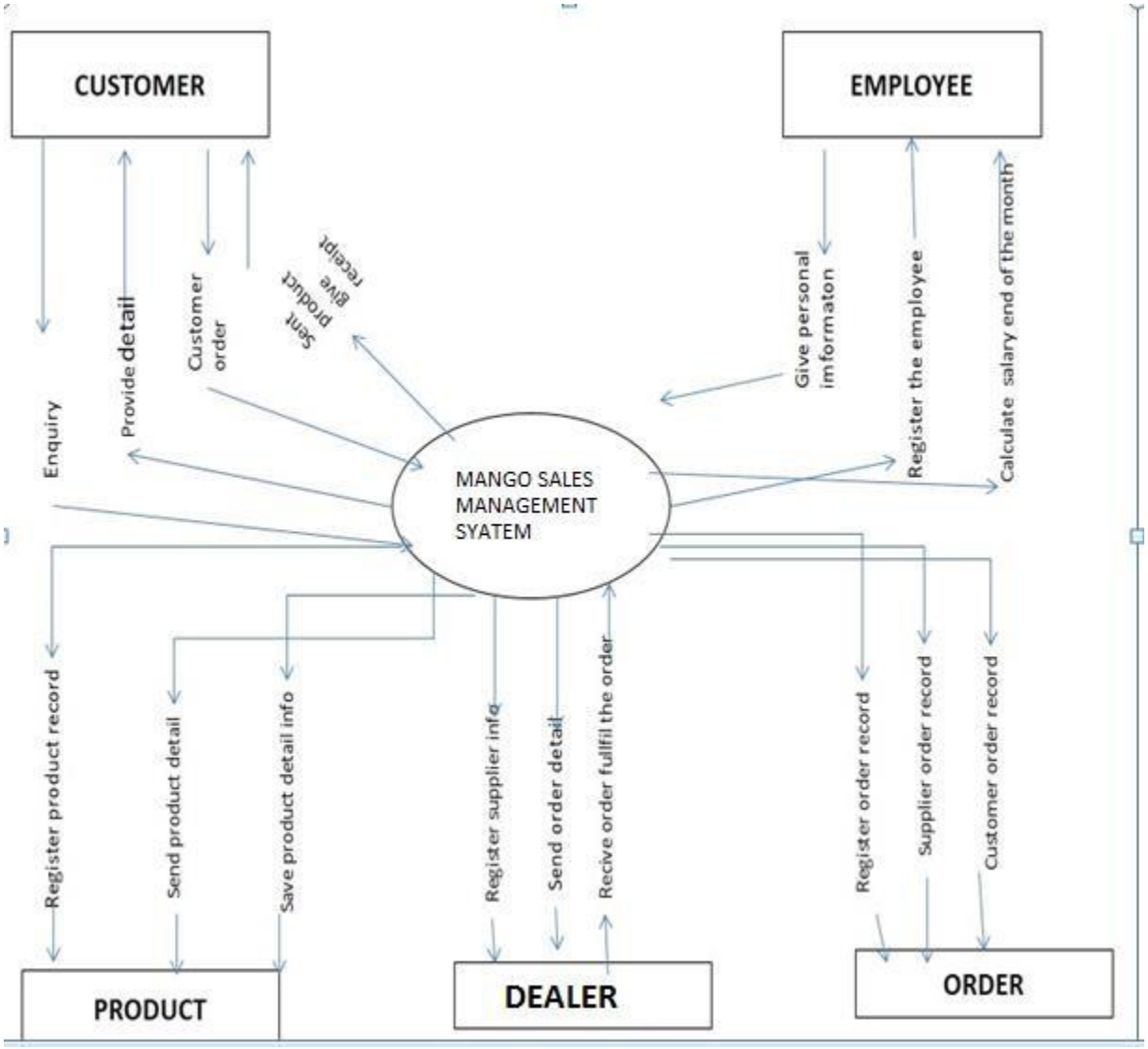
- **DFD LEVEL 1 FOR MANAGE PRODUCT**

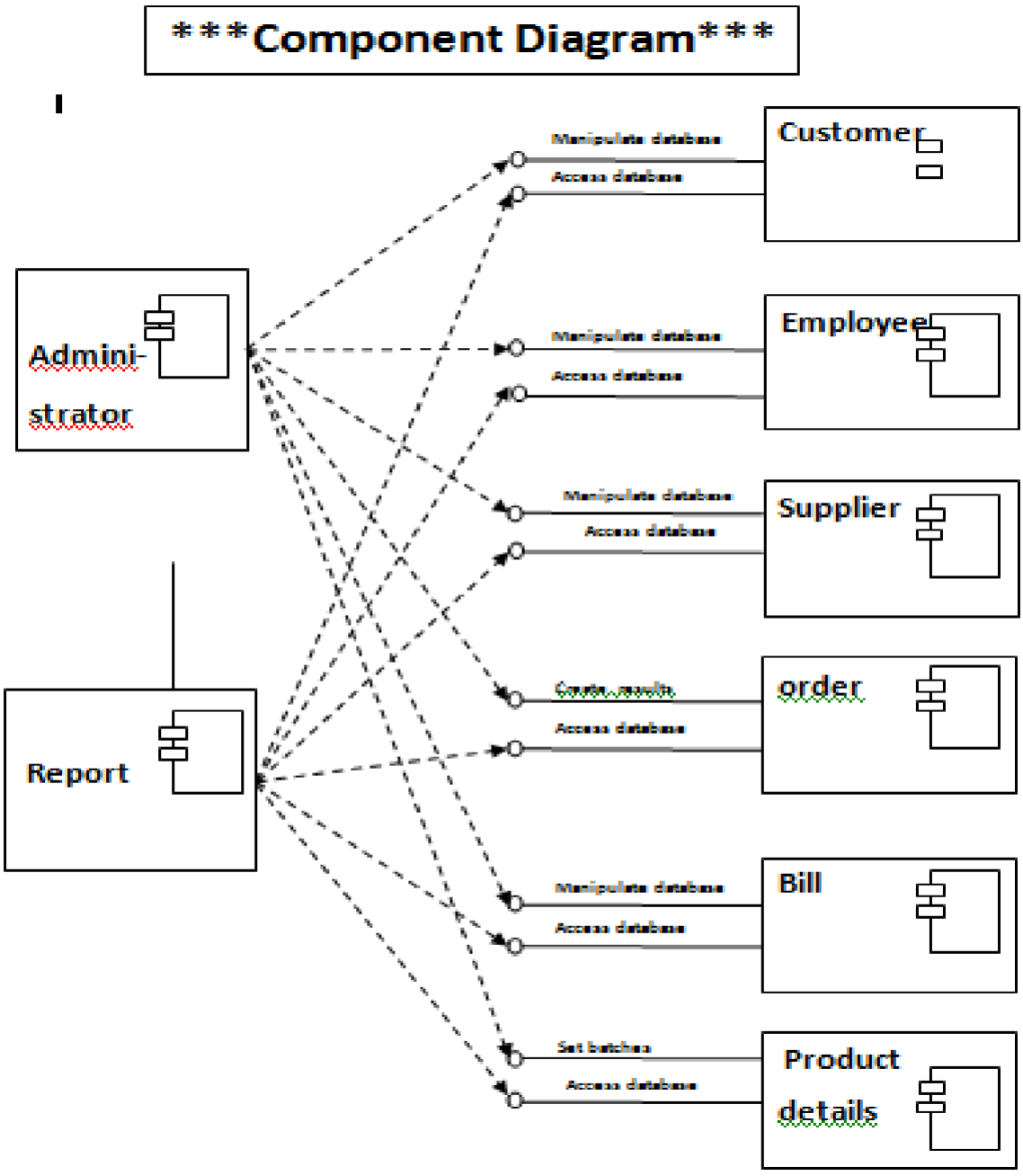


- **DFD LEVEL 1 FOR MANAGE CUSTOMER**

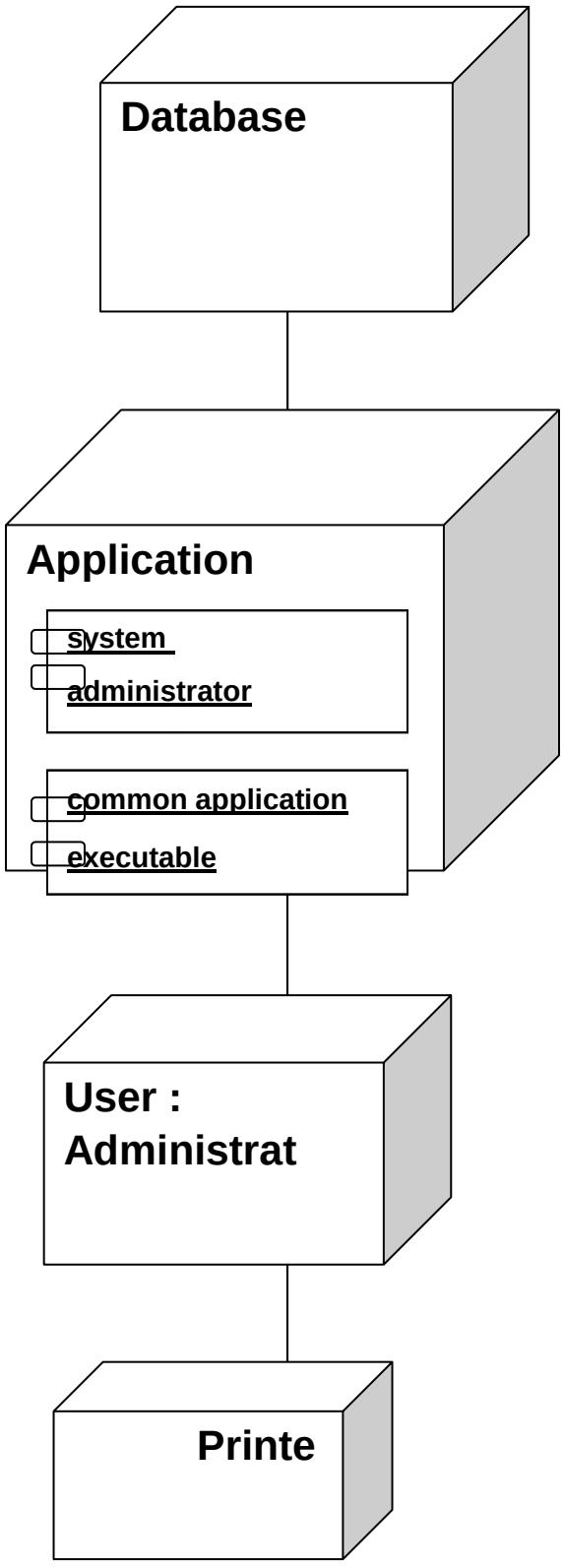


Context Diagram


CUSTOMER
EMPLOYEE
Provide detail
Enquiry
Customer order
Sent product bye receipt
Give personal imformaton
Register the employee
Calculate salary end of the month
MANGO SALES MANAGEMENT SYATEM
Register product record
Send product detail
Save product detail info
Register supplier info
Send order detail
Recive order fullfil the order
Register order record
Supplier order record
Customer order record
PRODUCT
DEALER
ORDER


Component Diagram
Admini-
strator
Report
Manipulate database
Access database
Customer
Manipulate database
Access database
Employee
Manipulate database
Access database
Supplier
Create, modify
Access database
order
Manipulate database
Access database
Bill
Set batches
Access database
Product
details

Deployment diagram



Chapter 4

Implementation and Testing

4.1 Code

Program Description

- **Home Page:**

  This web form consists of general description about the system and advertisement.

- **Portfolio:**

  This web form consists of the images of the Hospitals and Banners.

This program is design to carry out the process. In program the Employee information. Details aresaving in database. Through this program user can do following program.

INSERT:-

This is for inserting information in the database. If employee information insert at first time than information will save in the employeeinfo table.

UPDATE:-

If user wants to update some information from table .At that time we can update that record.

DELETE:-

If user wants to delete certain information from table. At same time we can delete that information.

SEARCH:-

If user wants to search specific record then that will be possible using search. User has to insert the eid for searching.

CANCEL:-

At the time of inserting record if user wants to cancel that record then user can cancel that record from saving using cancel button.

4.2 Testing Approach

Testing

Introduction

Testing is a process of executing a program with the intent of finding an error. Testing is a crucial element of software quality assurance and presents ultimate review of specification, design and coding.

System Testing is an important phase. Testing represents an interesting anomaly for the software. Thus, a series of testing are performed by the proposed system, before the system is ready for user acceptance testing.

A good test case is one that has a high probability of finding an as undiscovered error. A successful test is one that uncovers an as undiscovered error.

Testing Objectives -

Testing is a process of executing a program with the intent of finding .A good test is one that has a probability of finding an as yet undiscovered. A successful test is one that uncovers an undiscovered error.

Testing Principles-

All the test should be traceable to end user requirements. Tests should be planned long before testing begins. Testing should be in small scale and its progress should be large. Exhaustive testing is not possible. Testing should be conducted by the independent third party

When should you use unit testing?

Ideally all the time, by applying test-driven development. A good set of unit tests do not prevent bugs, but also improve your design, and make sure you can later refractor your code without everything completely breaking apart.

Popular tools for unit testing includes Mocha, Jasmine and Tape

4.2.1 Unit Testing

Unit testing is the practice of testing small pieces of code, typically individual function, alone and isolated. If your test uses some external resources, like the network or a database, its not a unit test.

Unit tests should be fairly simple to write. A unit tests should essentially just give the function that's tested some i/p, and then check what the function o/p is correct. In practice this can be vary, because if your code is poorly designed, writing unit tests can be difficult. Because of that, unit testing is the only testing method which also helps you write better code that's hard to unit test usually has poor design.

In a sense, unit testing is the backbone. You can use unit tests to help design your code and keep it as a safety net when doing changes, and the same methods you use for unit testing are also applicable to the other types of testing. All the other test types are also constructed for similar pieces as unit tests, they are just more complex ad less precise.

Unit tests are also great for preventing regressions – bugs that occur repeatedly. Many times there's been a particularly troublesome piece of code which just keeps breaking no matter how many times it is fixed. By adding unit test to check for those specific bugs, you can easily prevent situations like that. You can also use integration tests or functional tests for regression testing, but unit tests are much more specific, which makes it easy to pinpoint and then fix the problem.

When should you use unit testing?

Ideally all the time, by applying test-driven development. A good set of unit tests do not prevent bugs, but also improve your design, and make sure you can later refractor your code without everything completely breaking apart. Popular tools for unit testing includes Mocha, Jasmine and Tape.

4.2.2 Integration Testing

As the name suggests, in integration testing the idea is to test how parts of the system work together – the integration of the parts. Integration tests are similar to unit tests, but there's one big difference: while unit tests are isolated from other components, integration tests are not. e.g. A unit test for database access code would not talk to a real database, but an integration test would.

Integration testing is mainly useful for situations where unit testing is not enough. Sometimes you need to have tests to verify that two separate systems – like a database and your app-work together correctly, and that calls for an integration test. As a result, when validation integration test results, you could –

E.g. validate a database related test by querying the database to check the database to check the database is correct.

Integration tests are often slower than unit tests because of the added complexity. They also might need some set up or configuration, such as the setting up of a test database. This makes writing and maintaining them harder than unit tests, so you should focus on unit tests unless you absolutely need an integration test.

You should have fever integration tests than unit tests. You should mainly use them if you need to test two separate systems together, or if a piece of code is too complex to unit test. But in the latter case, I would recommend fixing the code so it's easy to unit test instead.

Integration tests can usually be written with the same tools as unit tests.

Test Cases And Validations

Case no	Unit To Tested	Assumption	Test-Data	Step To Be Executed	Excepted Result	Actual Result	Pass / fail
	Login Form	Username=”Admin” Password=”Admin”	Username=”Admin” Password=”Admin”	Open Login page Insert Login & password	Message Display “Invalid Login”	Message Incorrect password	Pass
		Username=”Admin” Password=”Admin”	Username=”Admin” Password=”Admin”	Open Login page Insert Login & password	Message Display “Invalid Login”	Message Enter Username password	Pass
		Username=”Admin” Password=”Admin”	Username=”Admin” Password=”Admin”	Open Login page Insert Login & password	Message Display “Invalid Login”	Message Enter username & password	Pass

		Username=”Admin” Password=”Admin”	Username=”Admin” Password=”Admin”	Open Login page	Message Display “Invalid	Message Enter Username	Pass

				Insert Login & password	Login”		
		Username=”Admin” Password=”Admin”	Username=”Admin” Password=”Admin”	Open Login page Insert Login & password	Message Display “Invalid Login”	Message Display Welcome	Pass

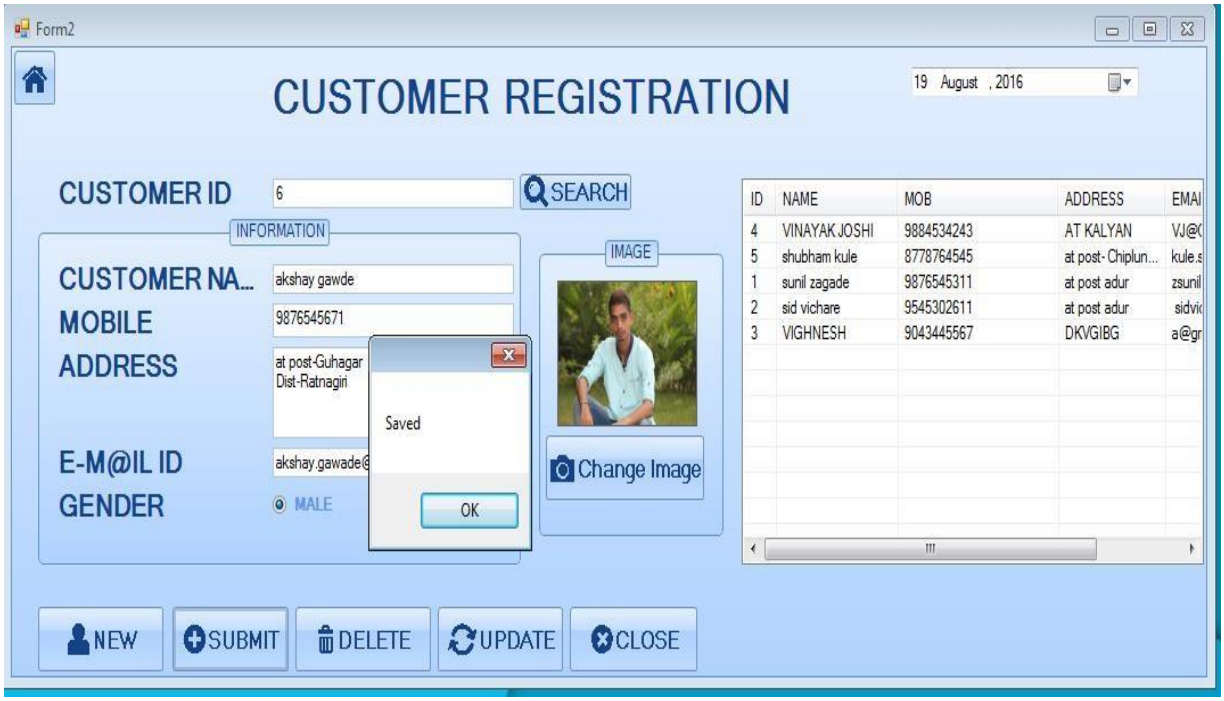
Chapter -5

Result and Discussion

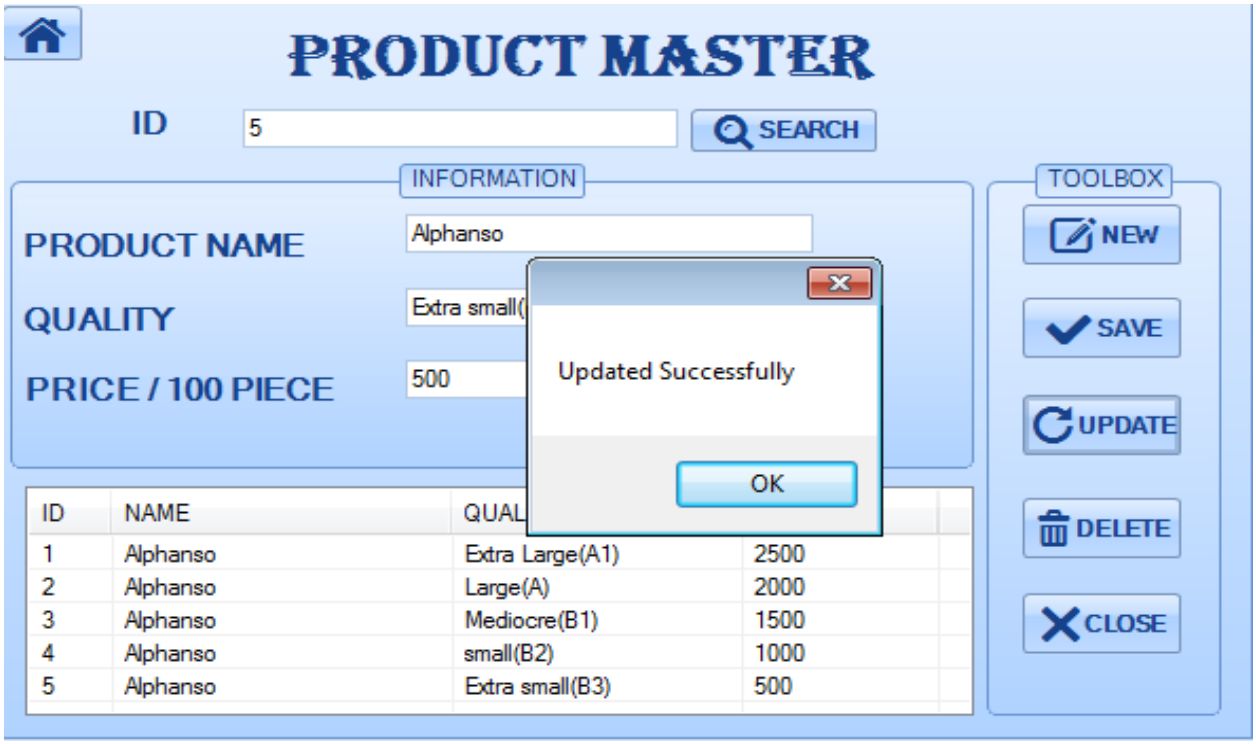
Screen Layout

- Login Form

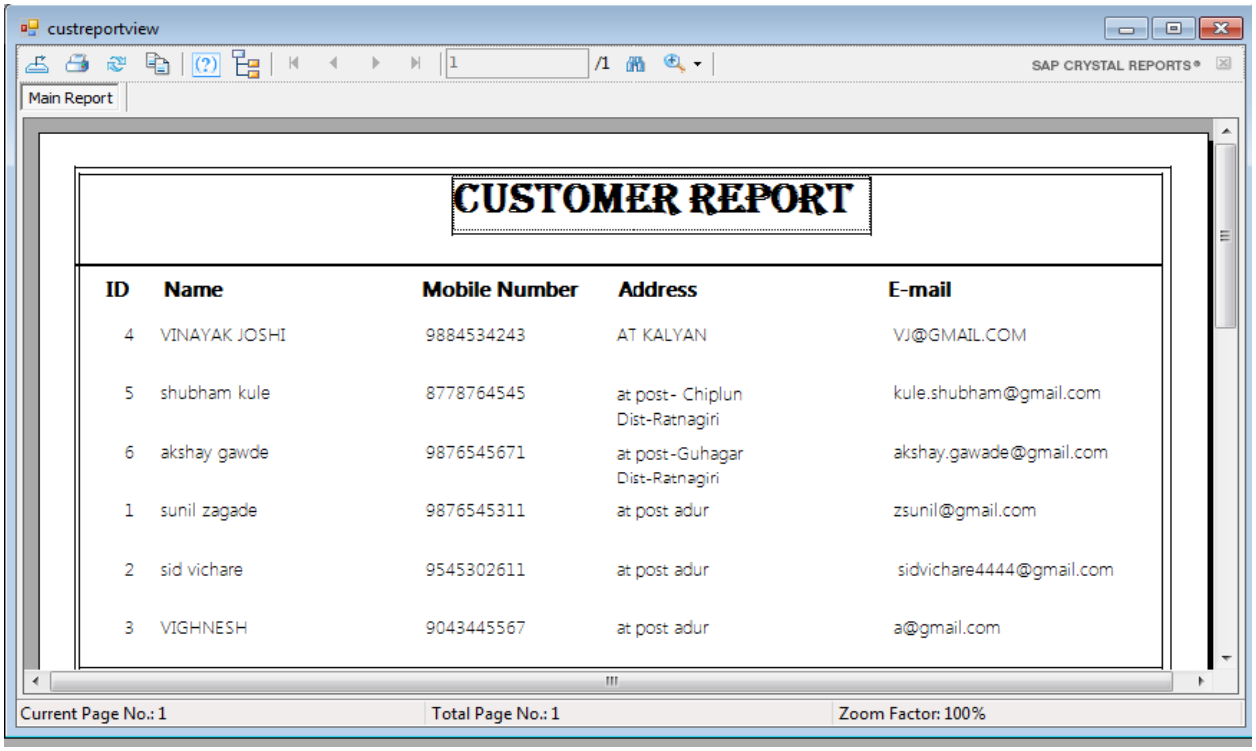
- Customer Registration



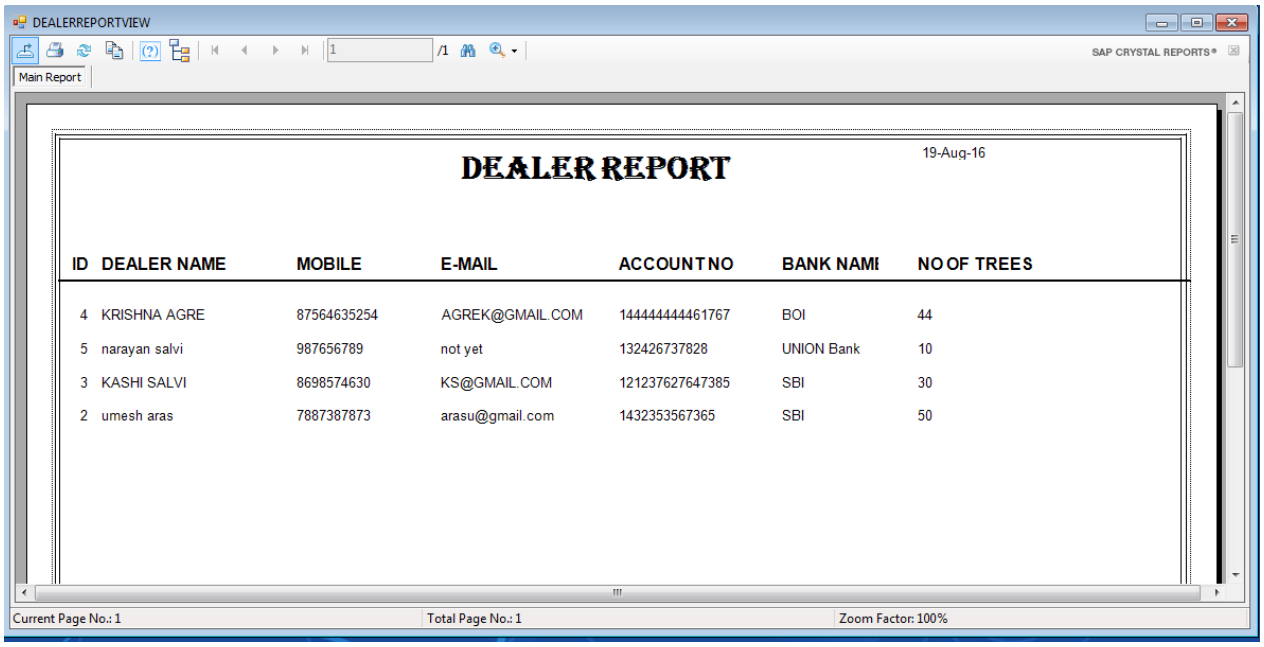
- **Product Master**



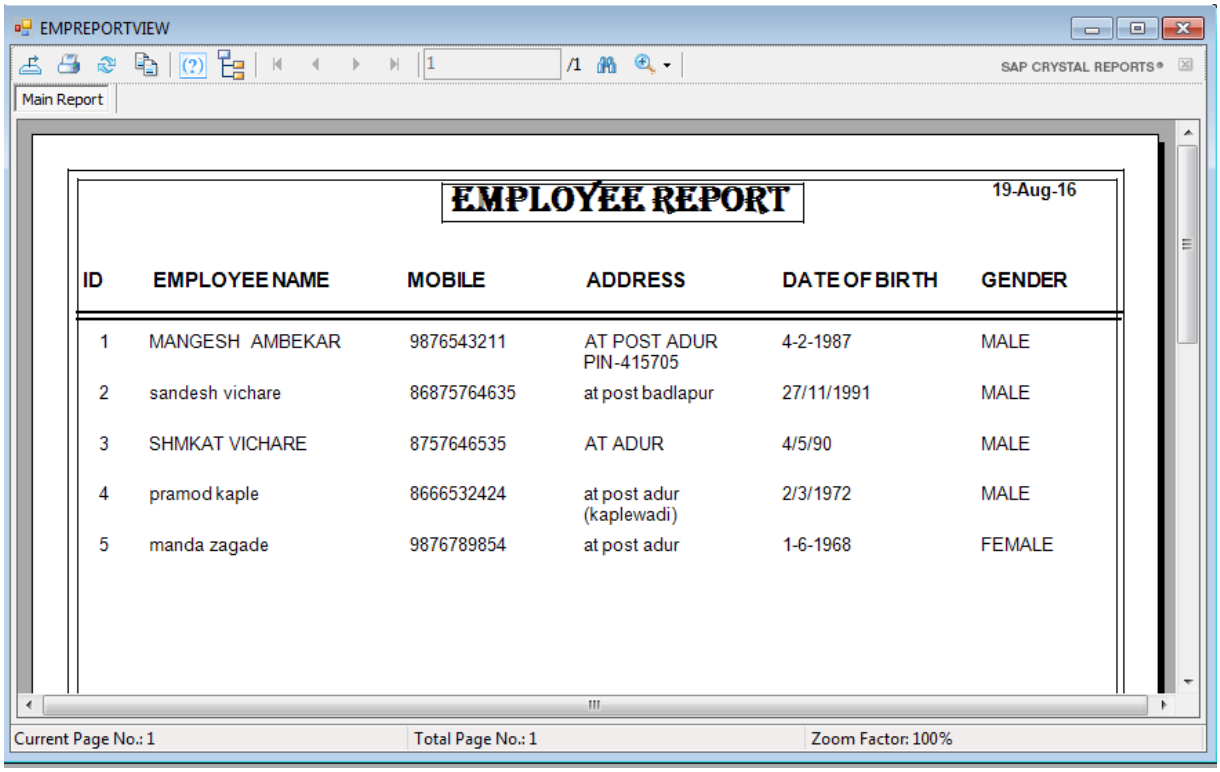
- **Customer Report**



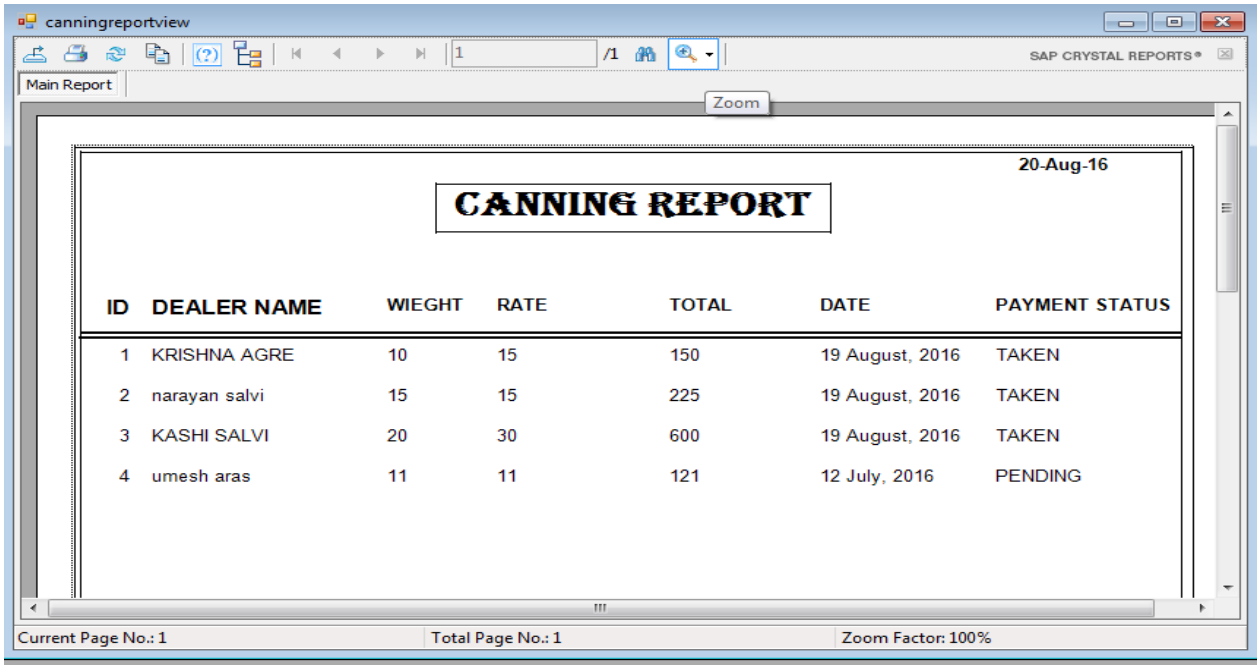
- Dealer Report



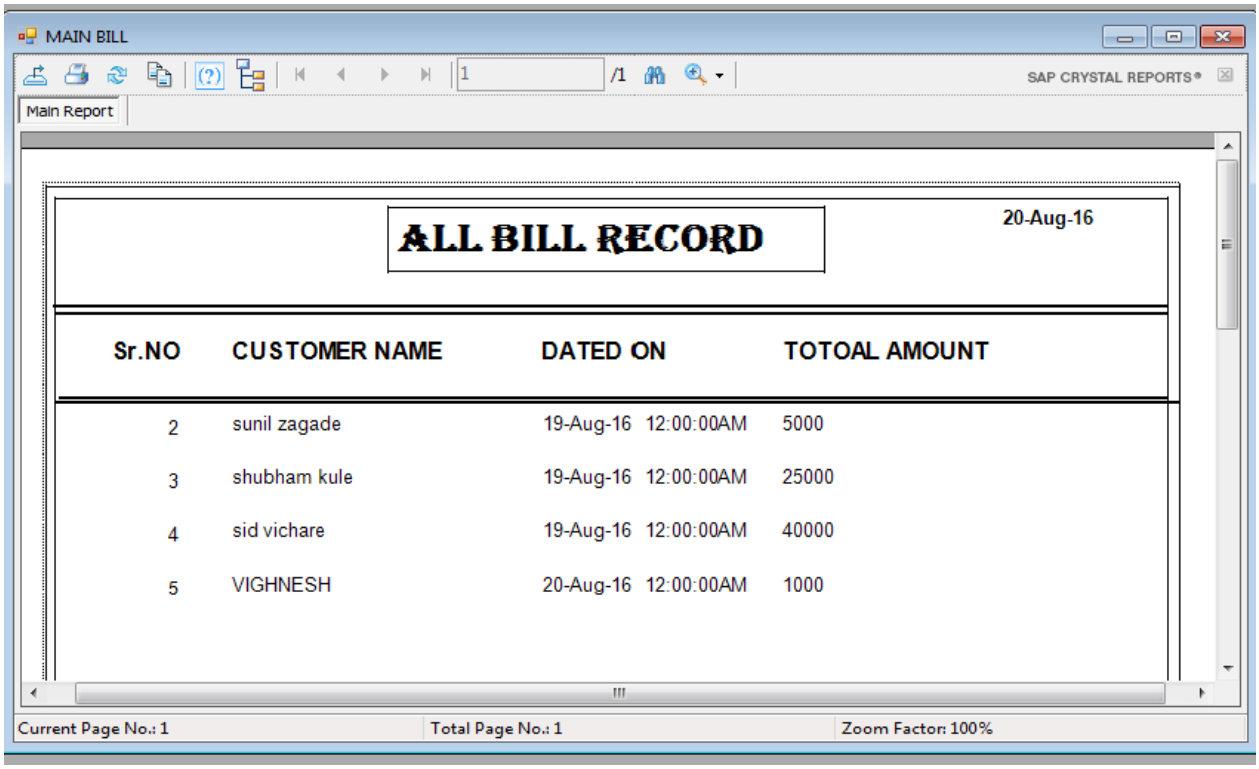
- Employee Report



- Canning Report



- All Bill Record


MAIN BILL
SAP CRYSTAL REPORTS
Main Report
ALL BILL RECORD
20-Aug-16
Sr.NO CUSTOMER NAME DATED ON TOTOAL AMOUNT
2 sunil zagade 19-Aug-16 12:00:00AM 5000
3 shubham kule 19-Aug-16 12:00:00AM 25000
4 sid vichare 19-Aug-16 12:00:00AM 40000
5 VIGHNESH 20-Aug-16 12:00:00AM 1000
Current Page No.: 1
Total Page No.: 1
Zoom Factor: 100%

Coding Layout

Login form

```
using System;
usingSystem.Collections.Generic;
usingSystem.ComponentModel;
usingSystem.Data;
usingSystem.Drawing;
usingSystem.Linq;
usingSystem.Text;
usingSystem.Windows.Forms;
usingSystem.Data.SqlClient;


namespace MANGO_SALES_MANAGEMENT
{
publicpartialclasslogin : Form
    {


SqlConnectioncn = newSqlConnection("data source=.\\sqlexpress;initial
catalog=Mangodb;integrated security=true");
SqlCommandcmd = newSqlCommand();
SqlDataReaderdr;
public login()
        {
InitializeComponent();
        }
```

```
privatevoid Form1_Load(object sender, EventArgs e)
        {


        }

privatevoid buttonX2_Click(object sender, EventArgs  e)
        {
Environment.Exit(O);
        }

privatevoid labelX6_Click(object sender, EventArgs e)
        {
FORGOT_PASSWORD 0 = newFORGOT_PASSWORD();
O.Show();


        }

privatevoid panel1_Click(object sender, EventArgs  e)
        {
Environment.Exit(O);
        }

privatevoid labelX4_Click(object sender, EventArgs e)
        {
if (textBoxX1.Text == "" || textBoxX2.Text == "")
MessageBox.Show("Please Enter Username or Password");
```

```
else
            {
cn.Open();
cmd.CommandText = "select pass from login where id ='" + textBoxX1.Text + "' ";
cmd.Connection = cn;
dr = cmd.ExecuteReader();
if (dr.Read())
                {
if (dr[0].ToString().Equals(textBoxX2.Text))
                    {
MessageBox.Show("Welcome ");
welcome o = newwelcome();
o.Show();
this.Hide();
                    }
else
MessageBox.Show("Incorrect Password");

                }
else
MessageBox.Show("Incorrect Username");
cn.Close();

            }
        }
```

```
privatevoid labelX5_Click(object sender, EventArgs e)
        {
MessageBox.Show("WANT TO CLOSE");
this.Close();
        }

}
    }
```

CUSTOMER MASTER

```
using System;
usingSystem.Collections.Generic;
usingSystem.ComponentModel;
usingSystem.Data;
usingSystem.Drawing;
usingSystem.Linq;
usingSystem.Text;
usingSystem.Windows.Forms;
usingSystem.Data.SqlClient;

namespace MANGO_SALES_MANAGEMENT
{
publicpartialclassCustomer_Registration : Form
    {
```

```
SqlConnectioncn = newSqlConnection("data source=.\\sqlexpress;initial
catalog=mangodb;integrated security=true");

SqlCommandcmd = newSqlCommand ();

SqlDataReaderdr;

AutoCompleteStringCollectionstr = newAutoCompleteStringCollection();


publicCustomer_Registration()

        {

InitializeComponent();

        }

publicstaticBitmapByteToImage(byte[] blob)

        {

//MemoryStreammStream = new MemoryStream();

byte[] pData = blob;

mStream.Write(pData, 0, Convert.ToInt32(pData.Length));

Bitmapbm = newBitmap(mStream);

mStream.Dispose();

returnbm;

        }

publicvoidcle()

        {

textBoxX10.Clear();

textBoxX5.Clear();

textBoxX6.Clear();

textBoxX7.Clear();

textBoxX8.Clear();
```

```
textBoxX9.Clear();
                radioButton3.Checked = false;
                radioButton4.Checked = false;
                pictureBox2.Image = null;
            }
publicvoiddisp()
            {
listView1.Items.Clear();
cn.Open();
cmd.CommandText = "select * from c_registration";
cmd.Connection = cn;
dr = cmd.ExecuteReader();
while (dr.Read())
                {
ListViewItem lv = newListViewItem(dr[0].ToString());
lv.SubItems.Add(dr[1].ToString());
lv.SubItems.Add(dr[2].ToString());
lv.SubItems.Add(dr[3].ToString());
lv.SubItems.Add(dr[4].ToString());
lv.SubItems.Add(dr[5].ToString());



listView1.Items.Add(lv);
                }


cn.Close();
```

```
        }


privatevoid buttonX15_Click(object sender, EventArgs e)
        {
this.Close();
        }

privatevoid buttonX12_Click(object sender, EventArgs e)
        {
this.Close();
        }

privatevoid buttonX14_Click(object sender, EventArgs e)
        {


if (textBoxX10.Text == "")
            {
MessageBox.Show("Please Enter Customer ID");
            }
elseif (textBoxX9.Text == "")
            {

MessageBox.Show("Please Enter  Name");
            }
```

```
elseif (textBoxX8.Text == "ABC")
                {


MessageBox.Show("Invalid mobile number Please Enter Numbers Only");
                }
elseif (textBoxX7.Text == "")
                {


MessageBox.Show("PleaseEnter Customer Contact No.");
                }
string g = "";
if (radioButton3.Checked)
                    g = radioButton3.Text;
elseif (radioButton4.Checked)
                    g = radioButton4.Text;


cn.Open();
cmd.CommandText = "insert into c_registration(id,cname,mob,mail,addrs,g,img) values('" +
textBoxX10.Text + "','" + textBoxX9.Text + "','" + textBoxX8.Text + "','" +
textBoxX7.Text + "','" + textBoxX6.Text + "','" + g + "','" + pictureBox1.Image + "')";
cmd.Connection = cn;
cmd.ExecuteNonQuery();
MessageBox.Show("Saved");
cn.Close();
disp();
cle();
```

```
        }

privatevoid buttonX11_Click(object sender, EventArgs e)
        {

openFileDialog1.ShowDialog();
            pictureBox2.ImageLocation = openFileDialog1.FileName;
        }

privatevoid buttonX8_Click(object sender, EventArgs  e)
        {
try
            {
cn.Close();
cn.Open();
cmd.CommandText = "select max(id) from c_registration";
cmd.Connection = cn;
dr = cmd.ExecuteReader();
if (dr.Read())
                {
                    textBoxX10.Text = Convert.ToString(Convert.ToInt32(dr[0].ToString())
+ 1);
                }
cn.Close();
textBoxX5.Clear();
textBoxX6.Clear();
```

```
textBoxX7.Clear();
textBoxX8.Clear();
textBoxX9.Clear();
                radioButton3.Checked = false;
                radioButton4.Checked = false;
                pictureBox2.Image = null;



            }
catch (Exception ex)
            {
cn.Close();
                textBoxX10.Text = "1";
disp();
            }
        }

privatevoid buttonX13_Click(object sender, EventArgs e)
        {
cn.Open();
cmd.CommandText = "delete from c_registration where id='" + textBoxX10.Text + "'";
cmd.Connection = cn;
cmd.ExecuteNonQuery();
cn.Close();
cle();
MessageBox.Show("delete Successfully");
```

```
        }

privatevoid buttonX9_Click(object sender, EventArgs  e)
        {

textBoxX10.Focus();
cn.Open();
cmd.CommandText = "select * from c_registration where id='" + textBoxX10.Text + "'";

cmd.Connection = cn;
dr = cmd.ExecuteReader();
if (dr.Read())
            {
                textBoxX10.Text = dr[0].ToString();
                textBoxX9.Text = dr[1].ToString();
                textBoxX8.Text = dr[2].ToString();
                textBoxX7.Text = dr[4].ToString();
                textBoxX6.Text =  dr[3].ToString();
if (dr[5].ToString() == "MALE")
                    radioButton4.Checked = true;
else
                    radioButton3.Checked = true;

            }
else
MessageBox.Show("Record Not Found");
```

```
cn.Close();
disp();
        }

privatevoid buttonX4_Click(object sender, EventArgs  e)
        {
openFileDialog1.ShowDialog();
            pictureBox1.ImageLocation = openFileDialog1.FileName;
        }

privatevoid buttonX1_Click(object sender, EventArgs e)
        {
String g = "";
if (radioButton1.Checked)
                g = radioButton1.Text;
elseif (radioButton2.Checked)
                g = radioButton2.Text;

cn.Open();
cmd.CommandText = "update c_registration set cname='" + textBoxX2.Text + "',mob='" +
textBoxX3.Text + "',addrs='" + textBoxX5.Text + "',mail='" + textBoxX4.Text + "',g='" + g
+ "',img='" + pictureBox1.Image + "' where id='" + textBoxX1.Text + "'";
cmd.Connection = cn;
cmd.ExecuteNonQuery();
cn.Close();
MessageBox.Show("Updated Successfully");
        }
```

```
privatevoid buttonX3_Click(object sender, EventArgs  e)
        {
this.Close();
        }

privatevoid buttonX2_Click(object sender, EventArgs  e)
        {
cn.Open();
cmd.CommandText = "delete from c_registration where id='" + textBoxX1.Text + "'";
cmd.Connection = cn;
cmd.ExecuteNonQuery();
cn.Close();
MessageBox.Show("delete Successfully");
        }

publicImage m { get; set; }

privatevoid buttonX5_Click(object sender, EventArgs  e)
        {
String g = "";
if (radioButton3.Checked)
                g = radioButton3.Text;
elseif (radioButton4.Checked)
                g = radioButton4.Text;
```

```
cn.Open();

cmd.CommandText = "update c_registration set cname='" + textBoxX9.Text + "',mob='" +
textBoxX8.Text + "',addrs='" + textBoxX6.Text + "',mail='" + textBoxX7.Text + "',g='" + g
+ "',img='" + pictureBox2.Image + "' where id='" + textBoxX10.Text + "'";

cmd.Connection = cn;

cmd.ExecuteNonQuery();

cn.Close();

MessageBox.Show("Updated Successfully");

        }



privatevoidCustomer_Registration_Load(object sender, EventArgs e)

        {

disp();

        }
```

Chapter 6

Conclusion and Future

Work

Conclusion

- The contribution of computers in our daily life, almost in every respective fields of life as emerged rapidly since from the time it has been invented. Computers play very important role of easing out the complications of the major aspect into a minor one.

- This project of mine deals with management system in computerized manner. The aim of this system was to reduce the manual work and the errors generated in it. In the today's computer area, the automation of the work of the management system helps to increase the speed of operation. Also the overall performance of the system and accuracy is increased.

- The tests carried out on this project reported that the software is totally bugged free. I feel that this epic endeavor that we stepped into results in a system that performs all the functions that it is expected to do.

- Computer results achieve the proper check of data maintaining consistency, proper validation checks and also checked the specific data entry points.

Scope of Future Work

Keeping the user's needs the school management system is developed. Hope that you are satisfied with our work and get as much pleasure out of it as. The user will find no difficulty in handling this system. But if so, then for their purpose the following

things are provided at every stage so that they can handle it easily.
They are as follows:

On every stage the user can find:

1. **Error Massage.**
2. **Validation Massage.**

We have developed this software as regards to the security and user flexibility. This software can also be modified as per requirements of individual institution.

Chapter-7 References

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