

SALES MANAGEMENT SYSTEM FOR JIO NETWORK

Submitted By

ROSHINI KS (19PCC009)

Under the Guidance of

Ms. S. Saranya , M.COM (CA) ., M.Phil.,

In partial fulfilment of the requirement for the award of the degree of

Master of Commerce with Computer Applications



DEPARTMENT OF COMMERCE

AVINASHILINGAM INSTITUTE FOR HOME SCIENCE

AND HIGHER EDUCATION FOR WOMEN.

COIMBATORE- 641043.

MAY 2021



CERTIFICATE



PRISTINE ENTERPRISES
Jio Network Agency

No 177/3, AERODROME ROAD, SINGANAILLUR, COIMBATORE - 641005.

Date: 30.04.2021

TO WHOMSOEVER IT MAY CONCERN

This is certify that **ROSHINI KS, M.COM (CA)** student of Avinashilingam Institute of Home Science and Higher Education for Women, Coimbatore - 43, had successfully completed the project titled 'SALES MANAGEMENT SYSTEM FOR JIO NETWORK AGENCY' in our group of companies.

Period of project - May 2021.

During the project period their conduct and behavior was good.

Thank You,

Pristine Enterprises, Pvt. Ltd

T.S Krishnakumar

(T.S Krishnakumar)

Managing Director

CERTIFICATE

This is to certify that the project work entitled “**SALES MANAGEMENT SYSTEM FOR JIO NETWORK**”, submitted to Department of Commerce, Avinashilingam Institute for Home Science and Higher Education for Woman, Coimbatore, in partial fulfilment of **MASTER OF COMMERCE WITH COMPUTER APPLICATIONS**, is the record of the original project work done by **ROSHINI KS (19PCC009)** during the period of her study, under my supervision and guidance.

Signature of the Head of the Department

Signature of the Supervisor

Submitted for the viva voice examination held on _____

Internal Examiner

External Examiner



.....

DECLARATION

DECLARATION

I hereby declare that this project work entitled “**SALES MANAGEMENT SYSTEM FOR JIO NETWORK**” submitted to Department of Commerce, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, in partial fulfilment of the requirement for the award of the degree of **MASTER OF COMMERCE WITH COMPUTER APPLICATIONS** is the bonafide record of original project work done by **ROSHINI KS (19PCC009)** during the period of her study under the supervision and guidance of Ms. S Saranya, M.Com (CA), M. Phil., teaching assistant, Department of Commerce.

Place:

(ROSHINI KS)

Date:

Signature of the candidate



ACKNOWLEDGEMENT

ACKNOWLEDGEMENT

I would like to express my sincere thanks to **God Almighty**, for his constant love and grace that he has showed upon me, which kept me in good health, and sound mind without which my project would not have reached a successful end.

I would like to express my deep sense of reverential gratitude and sincere thanks to **Prof. S. P. Thyagarajan , Chancellor**, Avinashilingam Institute for Home Science and Higher Education for Woman, Coimbatore- 43 for the opportunity given to me for undertaking this study and for providing the needed facility during the course of my study.

I owe my gratitude to **DR. Premavathy Vijayan, M.Sc., M.Ed., Dip. Spl. Edn., M.Phil., Ph.D., Vice Chancellor**, Avinashilingam Institute for Home Science and Higher Education for Woman, Coimbatore- 43, for extending all resources that facilitated the conduct of the present study.

I express my gratitude to **Dr. S. Kowsalya, M.Sc., M.Phil., Ph.D Registrar**, Avinashilingam Institute for Home Science and Higher Education for Woman, Coimbatore, for providing all facilities necessary for the study.

I would express my boundless thanks to **Dr. (Mrs) P.Chitramani MBA, M.Phil., Ph.D., SLET, NET, Dean, School of Commerce and Management**, Avinashilingam Institute for Home Science and Higher Education for Woman, Coimbatore, for granting the facility required.

I am also grateful to **Dr. (Mrs). D. Geetha M.Com., Dip.Ed., M.Phil., Ph.D., Professor and Head of the Department of Commerce** for giving necessary help and support for completing the project successfully.

I express my heart full gratitude to my mentor **Ms. S. Saranya M.Com (CA), M.Phil., Department of Commerce**, for the valuable guidance and for her timely support, suggestions and motivation throughout the project.

I have a great pleasure in expressing my deep sense of my gratitude to all other staff and non-teaching staff that helped us to complete the project.

I would extend our thanks to one and all helped us directly and indirectly for successful completion of our project. Last yet importantly, we would like to thank our parents, friends and all our well-wishers for their kind inspiration.



ABSTRACT

ABSTRACT

The project entitled **“SALES MANAGEMENT SYSTEM FOR JIO NETWORK”** is developed using Microsoft Visual Studio.net 2012 as front end and SQL Server 2008 as back end. It is a complete system for managing the data in sales department which can be used to store customer, employee, product and order details. With the help of this application the administrator can store huge amount of data of customer visits along with the details of employees working and materials used. Data are effectively managed in system database. The contribution of the project will eliminate the difficulties and help the management in generating the reports periodically. It uses security provider software for better security, and could be accessed from any location and at any time. It could be improved in the future based on the needs of the user.

CONTENT



CONTENTS

CHAPTER NO	TITLE	PAGE NO
I	INTRODUCTION	
	1.1 Overview of the project	1
	1.2 Objectives of the Project	2
	1.3 Modules	3
	1.4 About the company	4
II	SYSTEM SPECIFICATION	
	2.1 System Configuration	5
	2.2 Software Features	7
III	SYSTEM ANALYSIS	
	3.1 Existing System	
	3.2 Proposed System	
	3.3 Feasibility Study	
IV	SYSTEM DESIGN AND DEVELOPMENT	
	4.1 Input design	
	4.2 Output design	
	4.3 File design	
	4.4 Database design	
	4.5 Test case design	
	4. 6 Data Flow Diagram	
	4.7 Entity Relationship Diagram	
	4.8 Table design	
	4.9 Code design & Form details	
V	SYSTEM TESTING	
VI	SYSTEM IMPLEMENTATION & MAINTENANCE	
VII	CONCLUSION & FUTURE ENHANCEMENT	
BIBLIOGRAPHY		

LIST OF FIGURES

Figure No	Title	Page No
1	Data Flow Diagram	
2	Entity Relationship Diagram	

LIST OF TABLES

Table No	Table Name	Page No
1	Catalogue	
2	Employee	
3	Enquiry	
4	Feedback	
5	Lucky Draw	
6	Order	
7	Payment	
8	Selection	



INTRODUCTION

CHAPTER I

INTRODUCTION

1.1 OVERVIEW OF THE PROJECT:

The “Sales Management System for Jio Network” is an application software developed for managing the various activities in the sales department for Pristine Enterprises. The data maintenance are done manually and now it is computerized to reduce the man power. Reputations can also be avoided. This application is mainly developed for handling the customers effectively through quick access of providing information and to report database of the required details at the end. The first activity is providing catalogue details to the customer based on their enquiry of the jio product or any plan, further the service selected by the customer is finalized with billing and payment process. Coding have been framed in the manner to automatically calculate to the system along with the rate for a particular plan required for the customer. The entered database on the whole will compile a report which helps the salesperson to provide information accurately within limited time. It is a complete system for managing Sales System of Jio Products in a most efficient way.

This system can be used to store the details of payment, billing, catalogue, enquiry, employee details and update the details based on the customer details and product details. Admin enters the details about the customer and product, deletion and reset button is also used to make the process faster and admin mainly checks the details of customer, products and updates the details in frequent intervals. Admin also deals with Feedback Form to report the customer satisfaction and Lucky Draw Portal is also managed and allotted to earn the goodwill of the Company.

1.2 Objectives of the Project:

The main objective of the project is

- ❖ To bring a full-fledged computerized organization that will enhance more accuracy and reduces major part of clerical works.
- ❖ To develop user friendly environment.
- ❖ To reduce the maintenance of the paper work that will make work of the employees easier.
- ❖ To generate fast, clear and legible reports without any ambiguity.

1.3 MODULES

Admin dashboard: admin, password

MDI Form Portal: The Ribbon in the frame paves child Forms required for the updating of existing system like Catalogue details, Enquiry details, Selection details, Billing details, Payment details, Employee details, Feedback, Lucky draw and Report.

5 Common buttons are used in these forms. They are:

Submit Update, Delete, Search and Reset.

Catalogue Details:

This table includes the details such as Product No, Product Name, Data benefits, Rate, Validity, Speed and Bonus.

Enquiry Details:

This table includes the details such as Enquiry Details, Customer Name, Contact No, Date, Plan Requirement, Validity, Price and Data Benefits.

Selection Details:

This table includes the details such as Product No, Product Name, Customer Name, Contact Number, Price, and Total.

Billing Details:

This table includes the details such as Order ID, Order Date, Customer Name, Contact Number, Address, Plans, Rate and Aadhar No.

Payment Details:

This table includes the details such as Order ID, Order Date, Customer Name, Contact Number, Address, Plans, Rate, Mode of Payment, GST (in %) and Total

Employee Details:

This table includes the details such as Employee ID, Employee Name, Gender, Age, Contact No, Education, Job Designation, Salary and Address.

Feedback details:

This table includes the details such as Contact No, Product Name, Customer Name, Date, and Description.

Lucky Draw:

This table includes the details such as Contact No, Product Name, Customer Name, Date, and Reward.

Report:

Displays the data entered in various forms in a database table.

1.4 ABOUT THE COMPANY

Pristine enterprises is situated at Ramanathapuram, Coimbatore near Maniakkar Street. It was established on 11th July, 2017.

Pristine enterprises is a high-class producer and audited supplier of jio sim cards. It is a Indian subsidy mobile network operator that operates national LTE network with large coverage across all circles. It provides various services to its customers ensuring valuable support according to their requirements.

Pristine enterprises take direct dealership from Reliance Jio org., Mumbai. Its annual turnover is 25 lakhs. The employee ranges around 30 members. Pristine provides telecom, high speed 4G internet data giving customers a new edge to compete on a global landscape.

It provides a complete telecom services solution to enterprises including internet leased lines. Pristine enterprises is one of the largest mobile network operators in Coimbatore.

Pristine Enterprises is classified as a non-government company and is registered with the registrar of the company. The existing software used to record the details of customers is Microsoft excel.

It undertakes sales and service of Jio products. The company is managed by the partners and is under the control of Reliance Jio Telecom Industry.

1.4.1 ABOUT THE DEPARTMENT

Sales Management System is maintaining the information about the sales process carried out on Pristine Enterprises. The basic aim is to record the details involved in sales. The range of sales held in this organization is huge. The process of sales activity depends upon the requirements of the customers.

They help aid and manage sales operations to hit their targets and achieve increased revenue for the company. They perform planning and development strategies by utilizing tools to help increase efficiency and productivity.

The foremost function of the sales department of Pristine Enterprises is to analyze the market, choose customer for sales and offer service guarantee to the prospective customers. The sales manager takes the responsibility of taking the decisions in respect of selling the products to their customers.

They help in providing variety of products and services that satisfy the needs of the customer. The sales manager produces consistent target achievement over time by their team's performance. Sales department of Pristine Enterprises create greater sales culture and environment to attain results. The day to day sales transactions are being maintained in the department. It includes the details of all the customers with their personal details who involve in the selling services of the company.

1.4.2 COMPANY PROFILE

Name of the Concern : PRISTINE ENTERPRISES

Year of Establishment: 2017

Name of the Director : Mr.Krishnakumar T S

Nature of the Business : Sales and Service

Type of organisation : Partnership Office

Address : 31-Near maniakarar street, Ramanathapuram, Coimbatore.

Contact No : 0422-4355455

No of Employees : 30

Banker : State Bank of India

e-mail : pristinejio@gmail.com

Annual turnover : 25 lakhs



SYSTEM SPECIFICATION

CHAPTER II

SYSTEM SPECIFICATION

A System Specification also known as System Requirement Software (SRS) is a document which sets out what the client expects and what is expected of the software system which is being developed. It is a mutual agreement and policy between client and developer and is a vital part of the Software Development Lifecycle.

2.1 SYSTEM CONFIGURATION

HARDWARE CONFIGURATION:

Processor (CPU) : Intel® Core™ i3-2328M CPU@ 2.20GHz2.20GHz

Memory (RAM) : 4.00 (Installed memory)

System type : 64- bit operating system, x64- based processor

Keyboard : 103 keys

Mouse : Optical Mouse

SOFTWARE CONFIGURATION:

Operating system : Windows 10

Front end : Visual Basic.Net 2012

Back end : Microsoft SQL 2008

2.2 SOFTWARE FEATURES

OPERATING SYSTEM – WINDOWS 10

Windows 10 is a series of personal computer operating systems produced by Microsoft as part of its Windows NT family of operating systems. It is the successor to Windows 8.1, and was released to manufacturing on July 15, 2015, and broadly released for retail sale on July 29, 2015. Windows 10 receives new builds on an ongoing basis, which are available at no additional cost to users. Mainstream builds of Windows 10 are labeled version YY/MM with YY representing the year and MM representing the month of release. There are additional test builds of Windows 10 available to Windows Insiders. Devices in enterprise environments can receive these updates at a slower pace, or use long-term support milestones that only receive critical updates, such as security patches, over their ten-year lifespan of extended support.

Windows 10 was developed by Microsoft. It is a closed source available through shared source initiative. It was released to manufacturing on July 15, 2015 . Windows 10 marketing target is to personal computing.

On Windows 10, Microsoft Store serves as a unified storefront for apps, video content, and e-books. Windows 10 also allows web apps and desktop software (using either Win32 or .NET Framework) to be packaged for distribution on Microsoft Store. Desktop software distributed through Windows Store is packaged using the App-V system to allow sandboxing.

FEATURES:

1. Start menu returns
2. Cortana on desktop.
3. Xbox app.
4. Project Spartan browser.
5. Improved multi-tasking.

6. Universal apps.
7. Office apps get touch support.
8. Continuum.
9. Action center.
10. Unified settings.

ADVANTAGES:

- ✚ It's the latest and greatest update of all the windows editions. Even critically acclaimed.
- ✚ From gaming perspective, it's got directx 12, which promises high frame rates with future games.
- ✚ The UI has been redesigned so the users of windows 7 or earlier can be comfortable using it.
- ✚ The metro/modern apps are redesigned to be comfortable using with mouse and keyboard.
- ✚ For windows phone users, better integration with the OS, like seeing the missed calls from mobile, sending text from mobile using windows 10 and lots more.
- ✚ Cortana, a virtual personal assistant has made her way to the OS which can be very useful.
- ✚ General stability and performance has been greatly increased. Windows 7 users would feel like riding Ferrari.
- ✚ With windows store, users can access lots of modern/mobile apps like twitter, fb, etc.
- ✚ With windows 10, most of the drivers will automatically updated by the OS itself, gone are the days when we used to search drivers of the hardware manually. But still some drivers have to be updated manually.
- ✚ New browser called Microsoft Edge is introduced.
- ✚ Virtual desktop is introduced.
- ✚ Better snap assist.
- ✚ I found significant improvement in gaming, especially the frame rates have improved.

FRONT END: VISUAL BASIC.NET 2012

Visual Basic.NET is a multi-paradigm, high level programming language, implemented on the .NET Framework. Microsoft launched VB.NET in 2002 as the successor to its original Visual Basic language. Although the ".NET" portion was dropped in 2005, this article uses "Visual Basic .NET" to refer to all Visual Basic languages releases since 2002, in order to distinguish between them and the classic Visual Basic. Along with Visual C#, it is one of the two main languages targeting the .NET framework. Visual basic.Net is a major component of Microsoft Visual Studio.Net suite. .Net is a framework in which Windows Application may be developed and run. .Net must go back in time and follow the development of Windows and the advent of Windows programming.

The .Net version of Visual Basic is a new improved version with more features and additions. Programming with Visual basic using.Net is called VB.Net. VB.Net the following version of 6.0 is an improved, stable, and full object oriented language. Visual studio .Net which is the latest version of visual studio, is based on the .net framework visual studio .net provides languages and tools that enable you to build web based, desktop and mobile application. Visual studio.Net can also create web services.

Visual Studio.Net includes the following program languages:

Visual Basic.Net

Visual C++ .Net

Visual C # .Net

FEATURES OF VISUAL BASIC.NET

- Common Type System (CTS) specifies the rules related to data types that languages must follow. As programs written in all languages are ultimately converted to MSIL, data types in all languages must be convertible to certain standard data types.
- CTS is a part of cross-language integration, which allows classes written in one language
- VB.NET provides support for language interoperability. However, it doesn't mean every to be used and extended by another language. program written in a language can be used by another language.
- To enable a program to be used with other languages, it must be created by following a set of rules called Cross Language Specifications (CLS).
- Cross-language inheritance is the ability to create a class in C# from a class created in VB.NET. When an exception is raised by a program written in C#, the exception can be handled by VB.NET. This kind of exception handling is called cross-language exception handling.
- VB.NET has brought a set of new features which are to be understood by every programmer developing applications for Windows. There is no way any Windows programmer can ignore VB.NET, unless he is desperate to be out dated.
- Microsoft will provide VB.NET as part of its operating systems in future releases. It is the platform for programmers. It is not new OS from Microsoft or a new language. It is the environment for which you develop applications.

BACK END: MS SQL 2008

Microsoft SQL Server is a relational database management system developed by Microsoft. As a database server, it is a software product with the primary function of storing and retrieving data as requested by other software applications— which may run either on the same computer or on another computer across a network (including the Internet).

Microsoft markets at least a dozen different editions of Microsoft SQL Server, aimed at different audiences and for workloads ranging from small single machine applications to large Internet-facing applications with many concurrent users.

Microsoft SQL Server also allows user-defined composite types (UDTs) to be defined and used. It also makes server statistics available as virtual tables and views (called Dynamic Management Views or DMVs). In addition to tables, a database can also contain other objects including views, stored procedures, indexes and constraints, along with a transaction log. A SQL Server database can contain a maximum of 231 objects, and can span multiple OS-level files with a maximum file size of 260 bytes (1 Exabyte). The data in the database are stored in primary data files with an extension .mdf. Secondary data files, identified with a .ndf extension, are used to allow the data of a single database to be spread across more than one file, and optionally across more than one file system. Log files are identified with the .ldf extension.

MS SQL 2008 FEATURES

1. Industry-leading performance.
2. 1 in price and performance—with massive scale.
3. Least vulnerable database.
4. Security and compliance.
5. Mission-critical availability.
6. High availability and disaster recovery.
7. End-to-end mobile BI.
8. Corporate business intelligence.
9. Built-in analytics.
10. Consistent experience.

ADVANTAGES OF MS SQL

Installation Is Streamlined

It can be installed via a setup wizard and the prerequisite updates are detected and downloaded by the installer automatically. The complexity of installing the software is minimized significantly because of automatic installation of updates. Other components such as analytical and database services can be installed separately afterward. Automatic updating also reduces maintenance costs quite significantly.

Security Features Are Better

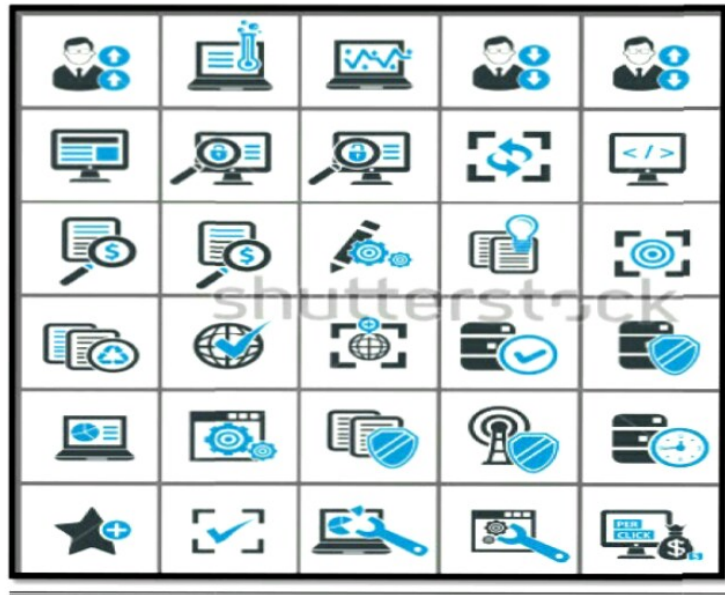
SQL Server 2008 uses Policy-Based Management to detect security policies that are noncompliant. This feature allows only authorized personnel access to the database. Security audits and events can be written automatically to log files.

Enhanced Performance

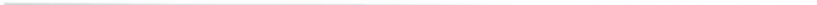
The MS SQL server has built-in transparent data compression feature along with encryption. Users don't need to modify programs in order to encrypt the data. The MS SQL server has access control coupled with efficient permission management tools. Further, it offers an enhanced performance when it comes to data collection.

Lower Cost of Ownership

SQL server includes effective data management and data mining tools along with disk partitioning. Your server's optimum maintenance can be ensured by following effective data management practices.



SYSTEM ANALYSIS



CHAPTER - III

SYSTEM ANALYSIS

System analysis is a process of gathering and interpreting facts, diagnosing problems and the information to recommend improvements on the system. It is a problem solving activity that requires intensive communication between the system users and system developers. System analysis or study is an important phase of any system development process. The system is studied to the minutest detail and analyzed. The system analyst plays the role of the interrogator and dwells deep into the working of the present system. The system is viewed as a whole and the input to the system are identified. The outputs from the organizations are traced to the various processes. System analysis is concerned with becoming aware of the problem, identifying the relevant and decisional variables, analyzing and synthesizing the various factors and determining an optimal or at least a satisfactory solution or program of action.

3.1 EXISTING SYSTEM

The existing software of the company is MS Excel. Software provides us the easiest way to maintain accounts. The business have to spend more time to manage the accounts but now accounting software made the job easier to manage larger amount of accounts data. The other process are maintained manually. Software provide us the easiest way to perform work related tasks in an easy way. Earlier, the businesses have to spend different time consuming resources to manage the accounts but now accounting software made the job easier to keep large amount of accounts data. Excel accounting software is beneficial for the professional accountants but it has some disadvantages.

DRAW BACKS OF EXISTING SYSTEM

1. Time consuming process.
2. It requires more paper work
3. Slow updating and retrieval of information.
4. There is a more chance of the loss of information.
5. Requires skilled Employee
6. Not user friendly

3.2 PROPOSED SYSTEM

The aim of proposed system is to develop a system of improved facilities. The proposed system has been developed in order to overcome all the limitations of the existing system. The system provides proper security and reduces the manual work and it is also user friendly. The system has a very simple design and is easy to implement. The system requires very low system resources and the system will work in almost all configurations. It has got following features:

Advantages of the proposed system

1. The system is user-friendly and interactive
2. Even people with basic computer knowledge can handle it easily.
3. Minimum time needed for the various processing
4. Greater efficiency.
5. It would provide data on concessions given to various sections.
6. Faster information retrieval and updating.
7. The reports are accurate and precise.
8. Errors are reduced.

The code that targets .NET and which contains certain extra Information “metadata” – to describe itself. While both managed and unmanaged code can run in the runtime, only managed code contains the information that allows the CLR to guarantee, for instance, safe execution and interoperability.

A user can bind the Command property of an Input Binding class to an instance that is defined in code. In this proposed system the following forms are used. They are:

3.3 FEASIBILITY STUDY:

An important outcome of the preliminary investigation is the determination that the system requested is feasible. Feasibility study is carried out to select the best system that meets the performance requirements. Feasibility study is both necessary and prudent to evaluate the feasibility of the project at the earliest possible time. It involves preliminary investigation of the project and examines whether the designed system will be useful. In this system each and every process can be feasible for the user and the developer.

The different types of feasibility are:

- Technical feasibility
- Behavioral feasibility
- Economical feasibility
- Operational feasibility

TECHNICAL FEASIBILITY:

Technical feasibility deals with the hardware as well as software requirements. Technology is not a constraint to type system development. Technical feasibility is the assessment of the technical view of the system. The system is developed for dot net environment; a platform independent tool is used to develop the system. The development risk concerns the probability, the function of all elements and its performance should be same in all platforms and in the system that is being developed.

The software used to develop this system is Windows XP, visual studio Dot net is done efficiently, and the concept of SQL helps to create the application backend. These components are also helpful in providing interactivity to java applications.

BEHAVIORAL FEASIBILITY:

It is common knowledge that computer illustrations have something to do with turnover transfers, retraining and changes in user or developer status. The main emphasis is customer service, personal contacts with customers. The proposed system produces best results and gives high performance. It can be implemented easily.

ECONOMICAL FEASIBILITY:

Economical feasibility deals about the economical impact faced by the organisation to implement a new system. Financial benefits must equal or exceed the costs. The cost of conducting a full system, including software and hardware cost for the class of application being considered should be evaluated.

Economic feasibility in this project:

- ✓ The cost to conduct a full system investigation is possible
- ✓ There is no additional manpower requirement.
- ✓ There is no additional cost involved in maintaining the proposed system

OPERATIONAL FEASIBILITY:

Operational feasibility refers to the measure of solving problems with the help of a new proposed system. It helps in taking advantages of the opportunities and fulfils the requirements as identified during the development of the project.



System Design and Development

CHAPTER -IV

SYSTEM DESIGN & DEVELOPMENT

The design of the system is essentially a blue print or plan for the solution of the system to be developed. A part of the system or subsystem can itself be considered a system with its own complements. System Design is the most creative and challenging phase in the system life cycle. Design is the first step into the development phase for any engineered product or system. Design is a creative process. A good design is the key to effective system. System design is a solution how to approach the creation of a new system. System design transforms a logic representation of what is required to do into the physical specification. The specification is converted into physical reality during development.

4.1 INPUT DESIGN

Input design is the process of connecting the user-originated inputs into a computer to used formats. The goal of the input design is to make data entry Logical and free from errors. Errors in the input database controlled by input design develop application in a user-friendly manner. The forms are being designed in such a way that during the processing the cursor is placed in the position where the data must be entered. An option of selecting an appropriate input from the values of validation is made for each of the data entered. Concerning clients comfort the project is designed with perfect validation on each field and to display error messages with appropriate suggestions. Help desk managers also provide user entry to a new field whenever they can understand what is to be entered. Whenever user enter a error data, Parent form can be integrated and move to next field only after entering a correct data.

4.2 OUTPUT DESIGN

Computer output is the most important and direct source of information to the user. Efficient intelligible output design should improve the system's relationship with the user and admin in decision-making. Output design generally refers to the results generated by the system. For many end users on the basis of the output this evaluates the usefulness of the application. Efficient software must be able to produce and efficient effective reports.

4.3 FILE DESIGN

A code generator is a suite of programs that matches the input to an appropriate code template and from these produces modules of code. The code is made simple in such a way that another programmer can easily understand and work on that in future. The crucial phase in the system development life cycle is the successful implementation of the new system design. The process of converting as new or revised system into an operational one is known as system implementation. This includes all those activities that take place to convert from an old system to a new system. The system can be implemented only after a through testing is done and if it is found to work according to the specifications.

4.4 DATABASE DESIGN:

- ✓ The SQL Server Management Studio table design view the tables.
- ✓ Database Design is a crucial factor in the performance of a system, both in terms of system timings and in the case with which the system can be maintained or modified.
- ✓ To permit simple retrieval of data in response to query and response requests.
- ✓ To simplify the maintenance of data through updates, insertions and deletions.
- ✓ To reduce the need to restructure or reorganize data when new application requirements arise.

4.5 Test case design

Test case design focuses on a set of techniques, which meets all testing objectives, which are mentioned below.

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

Testing demonstrates that software functions work according to specifications. In addition data collected from testing provides a good indication of software reliability and some indication of software quality as a whole.

Testing results in the deduction in the numbers of errors. Critical modules are tested as early as possible. The following tests have been carried out after developing the system.

4.5.1 Preparation of test data

Taking various kinds of test data dose the above mentioned testing, Preparation of test data plays a vital role in system testing. After preparing test data the under study is tested using that test data, errors are again uncovered and corrected by implementing the above testing steps and corrections are noted for future use.

4.5.2 Using live test data

Live test data are those that are actually extracted from the organization. It is realistic data that will show how the system will perform for typical processing requirements, assuming that the live data entered are in fact typical such data generally will not test all combinations or formats that can enter the system.

4.5.3 Using artificial test data

Artificial test data are created solely for the test purposes, since they can be generated to test all combination of formats and values. The most effective test program use artificial test generated by person other than those whose wrote the programs, often an independent team of testers formulates a testing plan, using the system specification

4.5.4 Development

After the successful completion of the design phase, the next important step, which comes into account, is the development of the system according to the specified design. The main procedure of this phase is the coding of the designed system, in order to satisfy the requirements. The detailed input/output, text manipulation, logic comparison and storage/retrieval operation during system analysis stage provide the input for program preparation. Coding was carried out in a step-by-step manner. One or more programmers convert these operations into a program of instructions return a language and form acceptable to the computer hardware. User inter activeness was given stress and the system use maximum flexibility. Proper validations are done for every user-defined function

4.6 DATA FLOW DIAGRAM

A data Flow diagram (DFD) is a process-orientation representation of an application system. It is a picture of the movement of data between external entities and the process and data stores within a system. It is a graphical representation of the "flow" of data through an information system. DFDs can also be used for the visualization of data processing. It provides no information about the timing of processes, or about whether processes will operate in sequence or in parallel. It is an element of structured analysis. It is graphical representation of a system or a system or a portion of a system.

The components of a typical dataflow diagram are as follows,

- The entity process.
- The flow
- The data store.

DFD SYMBOLS:

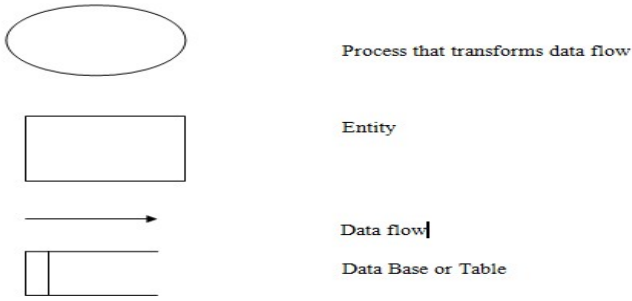
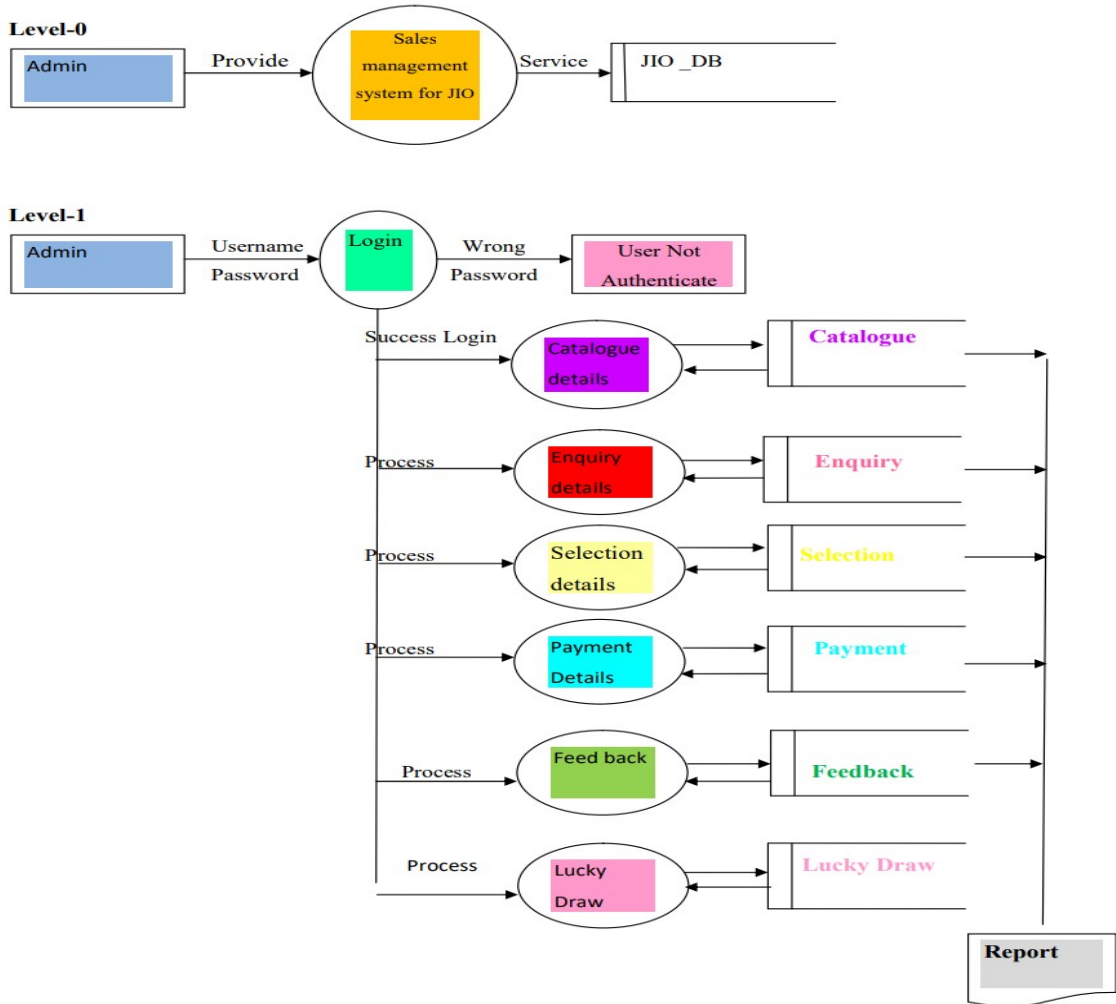


Figure No: 1

DATA FLOW DIAGRAM



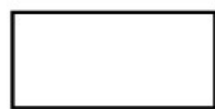
4.7 ENTITY RELATIONSHIP DIAGRAM

The Entity-Relationship (ER) model is a conceptual data model that views the real world as entities and relationships. A basic component of the model is the Entity-Relationship diagram, which is used to visually represent data objects. The model has been extended and today it is commonly used for database design. The entity relationship diagram is based on a perception of real world that consists of a collection of basic objects, called entities and of relationship among the objects. Entities are described in a database by a set of attributes. The set of all entities of the same type, and the set of all relationships of the same type, are termed as an entity set, and relationship set respectively. The overall logical structure of a database can be expressed graphically by an entity relationship diagram, which is built up using the notations

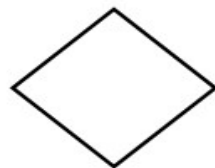
FEATURES OF ER MODEL

- It maps well to relational model.
- It is simple and easy to understand with minimum of training. Therefore, database designer to communicate with the end user can use the model.
- In addition, the model can be used as a design plan by the database to implement a data model in specific database management software.

ER-DIAGRM SYMBOL



Entity



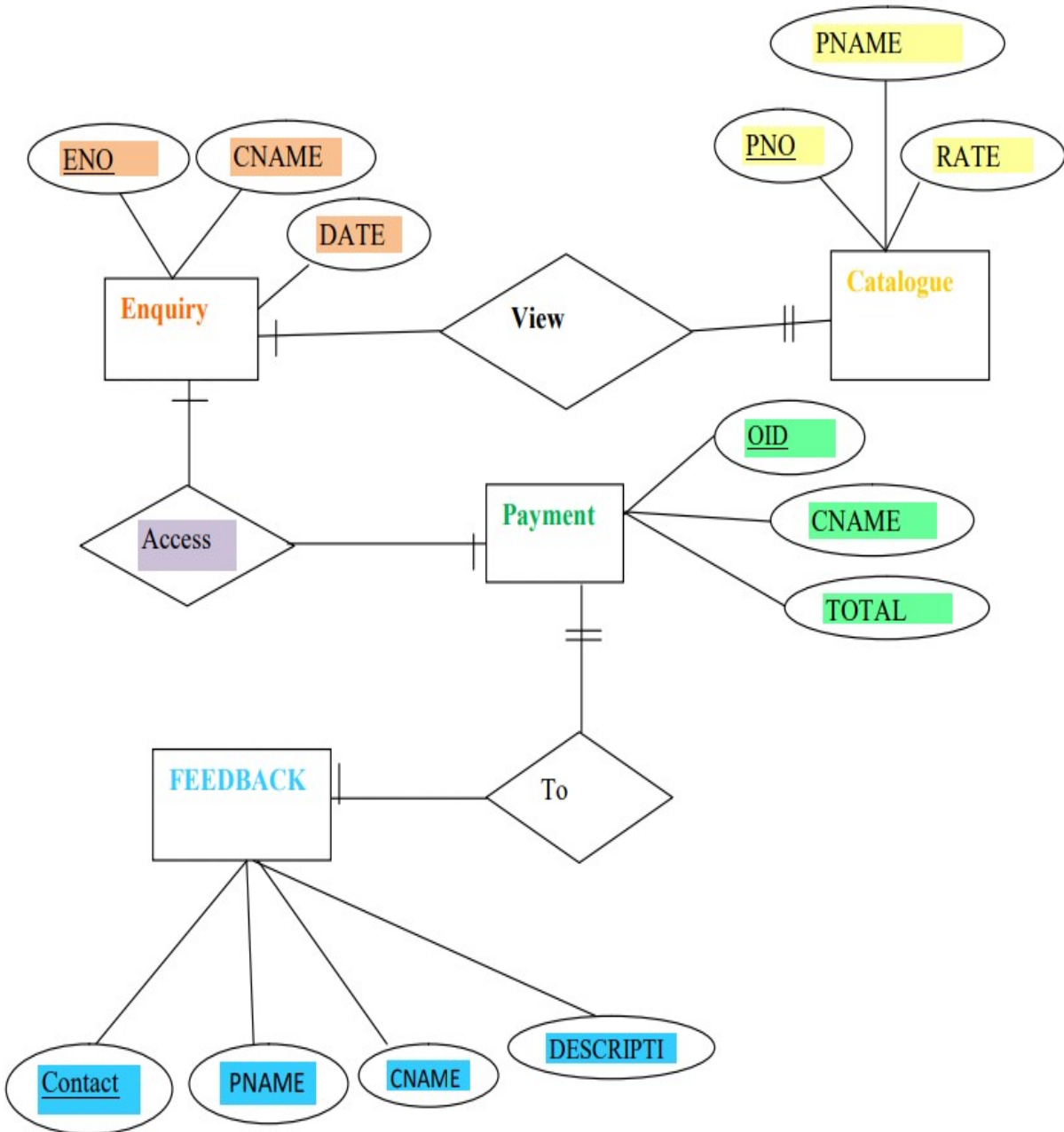
Relationship



Attributes

Figure No: 2

ENTITY RELATIONSHIP DIAGRAM



NORMALIZATION

Normalization is the process of efficiently organizing data in a database. There are two goals of the normalization process: eliminating redundant data (for example, storing the same data in more than one table) and ensuring data dependencies make sense (only storing related data in a table). Both of these are worthy goals as they reduce the amount of space a database consumes and ensure that data is logically stored. There are several benefits for using Normalization in Database.

BENEFITS:

- Eliminate data redundancy
- Improve performance
- Query optimization
- Faster update due to less number of columns in one table
- Index improvement

FIRST NORMAL FORM (1NF)

First normal form (1NF) sets the very basic rules for an organized database: Eliminate duplicative columns from the same table. Create separate tables for each group of related data and identify each row with a unique column or set of columns (the primary key).

- Remove repetitive groups
- Create Primary Key

SECOND NORMAL FORM

- Second Normal Form (2NF) further addresses the concept of removing duplicative data.
- Meet all the requirements of the first normal form.
- Remove subsets of data that apply to multiple rows of a table and place them in separate tables.
- Create relationships between these new tables and their predecessors through the use of foreign keys.
- Remove columns which create duplicate data in a table and relate a new table with Primary Key – Foreign Key relationship.

THIRD NORMAL FORM (3NF)

- Third normal form (3NF) goes one large step further:
- Meet all the requirements of the second normal form.
- Remove columns that are not dependent upon the primary key.
- Country can be derived from State also... so removing country

4.8 TABLE DESIGN

A database is a collection of inter-related files with minimum tendency to serve the user quickly and efficiently. The data is stored in tables. The data must be provided in the right form for input and the information produced must be in the format acceptable. The tables designed are as follows:

TABLE DESIGN

TABLE NAME : CATALOGUE

PRIMARY KEY : PRODUCT NO

FOREIGN KEY : NO

Table No: 01

Column Name	Data Type	Size	Description
Product No	Int	-	Product Number
Product Name	Varchar	20	Product Name
Databenefits	Varchar	10	Data Benefits
Rate	Int	-	Rate
Validity	Varchar	10	Validity
Speed	Varchar	10	Speed
Bonus	Varchar	10	Bonus

Source: Computed Data

TABLE NAME : EMPLOYEE

PRIMARY KEY : EMPLOYEE ID

Table No: 02

Column Name	Data Type	Size	Description
Employee ID	Int	-	Employee ID
Employee Name	Varchar	20	Employee Name
Gender	Varchar	10	Gender
Age	Int	-	Age
Contact	Int	-	Contact
Education	Varchar	20	Education
Job	Varchar	20	Job
Experience	Int	-	Experience
Salary	Int	-	Salary
Address	Varchar	50	Address

Source: Computed Data

TABLE NAME : ENQUIRY

PRIMARY KEY : ENQUIRY NO

Table No: 03

Column Name	Data Type	Size	Description
Enquiry No	Int	-	Enquiry No
Customer Name	Varchar	20	Customer Name
Contact	Int	-	Contact
Date	Date	-	Date
Plans	Varchar	50	Plans
Validity	Varchar	10	Validity
Price	Int	-	Price
Daily Benefit	Varchar	10	Daily Benefit

Source: Computed Data

TABLE NAME : FEEDBACK

PRIMARY KEY : CONTACT

Table No: 04

Column Name	Data Type	Size	Description
Contact	Int	-	Contact
Product Name	Varchar	20	Product Name
Customer Name	Varchar	20	Customer Name
Date	Date	-	Date
Description	Varchar	Max	Description

Source: Computed Data

TABLE NAME : LUCK DRAW

FOREIGN KEY : CONTACT

Table No: 05

Column Name	Data Type	Size	Description
Contact	Int	-	Contact
Product	Varchar	20	Product
Customer	Varchar	20	Customer
Date	Date	-	Date
Reward	Varchar	Max	Reward

Source: Computed Data

TABLE NAME : ORDER

PRIMARY KEY : ORDER ID

Table No: 06

Column Name	Data Type	Size	Description
Order Id	Int	-	Order Id
Order Date	Date	-	Order Name
Customer Name	Varchar	20	Customer Name
Contact	Int	-	Contact
Address	Varchar	50	Address
Plans	Varchar	20	Plans
Rate	Int	-	Rate
Aadhar No	Int	-	Aadhar No

Source: Computed Data

TABLE NAME : PAYMENT

PRIMARY KEY : ORDER ID

Table No: 07

Column Name	Data Type	Size	Description
Order Id	Int	-	Order Id
Order Date	Date	-	Order Name
Customer Name	Varchar	20	Customer Name
Contact	Int	-	Contact
Address	Varchar	50	Address
Plans	Varchar	20	Plans
Rate	Int	-	Rate
Payment	Int	-	Payment
GST	Int	-	GST
Total	Int	-	Total

Source: Computed Data

TABLE NAME : SELECTION

PRIMARY KEY : PRODUCT NO

Table No: 08

Column Name	Data Type	Size	Description
Product No	Int	-	Product No
Product Name	Varchar	20	Product Name
Customer Name	Varchar	20	Customer Name
Contact	Int	-	Contact
Price	Int	-	Price
Total	Int	-	Total

Source: Computed Data

4.9 CODE DESIGN

Code is an ordered collection of symbols designed to provide unique identification of an attribute. Codes can be used for various purposes. They can specify object's physical or performance characteristics and they can be used to give operational instructions. They also can show inter relationships and may sometimes used to achieve secrecy or confidentiality. Codes are designed for optimum human-oriented use and machine efficiency. Codes possess uniqueness, expandability, conciseness, uniform nets, simplicity, versatility, sort ability, meaningfulness and operability.

Sufficient effort and time is spent in the preliminary study of the problem to design an efficient code. Activate serve scripting is object oriented. The source code is designed so that it can do transaction efficiently. It is the code that dose all the updating, modifications, etc. for all object used in the project there exist an associated source code, which explains the work of that object. It also describes the flow of the project. Source code is enhanced by structured coding techniques by good internal comments and features provided by the language.

The code design in this project is made modular. The modular behavior enables easy debugging and testing. Inserting comment statement wherever enhances the coding. This is done during the documentation process coding is done in such a way that errors can be trapped easily. Also modifications can easily be appended due to the codes modular behavior.

CODING DESIGN

LOGIN FORM

Public Class Form1

Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click

 If TextBox1.Text = "" Or TextBox2.Text = "" Then

 MsgBox("Enter All Fields")

 ElseIf TextBox1.Text = "roshini" And TextBox2.Text = "roshini" Then

 MsgBox("Welcome To Jio Networks")

 MDIFORM.Show()

 Me.Hide()

 Else

 MsgBox("Invalid User Name & Pass word")

 TextBox1.Text = ""

 TextBox2.Text = ""

 TextBox1.Focus()

 End If

End Sub

Private Sub Form1_Load(sender As Object, e As EventArgs) Handles MyBase.Load

 Dim boundWidth As Integer = Screen.PrimaryScreen.Bounds.Width

 Dim boundHeight As Integer = Screen.PrimaryScreen.Bounds.Height

 Dim x As Integer = boundWidth - Me.Width

 Dim y As Integer = boundHeight - Me.Height

 Me.Location = New Point(x / 2, y / 2)

End Sub

End Class

MDI FORM

Public Class MDIFORM

Private Sub CATALOGUEToolStripMenuItem_Click(sender As Object, e As EventArgs)

Handles CATALOGUEToolStripMenuItem.Click

catalogue.Show()

End Sub

Private Sub ExitToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles

ExitToolStripMenuItem.Click

End

End Sub

Private Sub EnquiryDetailsToolStripMenuItem_Click(sender As Object, e As EventArgs)

Handles EnquiryDetailsToolStripMenuItem.Click

Enquiry.Show()

End Sub

Private Sub SelectionDetailsToolStripMenuItem_Click(sender As Object, e As EventArgs)

Handles SelectionDetailsToolStripMenuItem.Click

Selection.Show()

End Sub

Private Sub BillingDetailsToolStripMenuItem_Click(sender As Object, e As EventArgs)

Handles BillingDetailsToolStripMenuItem.Click

Billing.Show()

End Sub

Private Sub PaymentDetailsToolStripMenuItem_Click(sender As Object, e As EventArgs)

Handles PaymentDetailsToolStripMenuItem.Click

Payment.Show()

End Sub

```
Private Sub EmployeeDetailsToolStripMenuItem_Click(sender As Object, e As EventArgs)
Handles EmployeeDetailsToolStripMenuItem.Click
    Employee.Show()
End Sub
```

```
Private Sub FeedbackDetailsToolStripMenuItem_Click(sender As Object, e As EventArgs)
Handles FeedbackDetailsToolStripMenuItem.Click
    Feedback.Show()
End Sub
```

```
Private Sub LuckyDrawToolStripMenuItem_Click(sender As Object, e As EventArgs)
Handles LuckyDrawToolStripMenuItem.Click
    Luckydrawn.Show()
End Sub
```

```
Private Sub CatalogueToolStripMenuItem1_Click(sender As Object, e As EventArgs)
Handles CatalogueToolStripMenuItem1.Click
    cataloguerpt.Show()
End Sub
```

```
Private Sub PaymentToolStripMenuItem_Click(sender As Object, e As EventArgs) Handles
PaymentToolStripMenuItem.Click
    Paymentrpt.Show()
End Sub
```

```
Private Sub LuckyDrawToolStripMenuItem1_Click(sender As Object, e As EventArgs)
Handles LuckyDrawToolStripMenuItem1.Click
    Luckyrpt.Show()
End Sub
```

```
Private Sub MDIFORM_Load(sender As Object, e As EventArgs) Handles MyBase.Load
End Sub
End Class
```

CATELOGUE DETAILS

```
Imports System.Data.SqlClient
```

```
Public Class catalogue
```

```
Dim con As New SqlConnection("Data Source=MYPE-PC\SQLSERVER;Initial
Catalog=jionetworks;Persist Security Info=True;User ID=sa;pwd=sql;")
```

```
Dim com As New SqlCommand
```

```
Dim adp As New SqlDataAdapter
```

```
Dim ds As New DataSet
```

```
Dim qry As String
```

```
Dim i As Integer
```

```
Private Sub catalogue_Load(sender As Object, e As EventArgs) Handles MyBase.Load
```

```
Dim boundWidth As Integer = Screen.PrimaryScreen.Bounds.Width
```

```
Dim boundHeight As Integer = Screen.PrimaryScreen.Bounds.Height
```

```
Dim x As Integer = boundWidth - Me.Width
```

```
Dim y As Integer = boundHeight - Me.Height
```

```
Me.Location = New Point(x / 2, y / 2)
```

```
Try
```

```
Dim p As String
```

```
qry = "Select productno from catalogue"
```

```
com = New SqlCommand(qry, con)
```

```
adp = New SqlDataAdapter(com)
```

```
ds = New DataSet
```

```
adp.Fill(ds, "catalogue")
```

```
i = ds.Tables(0).Rows.Count
```

```
p = ds.Tables(0).Rows(i - 1)(0)
```

```
p = Mid(p, 1)
p = Val(p) + 1
TextBox1.Text = +p
Catch ex As Exception
    TextBox1.Text = "100"
End Try
End Sub
```

```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
```

```
    If TextBox1.Text = "" Or TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text = "" Or TextBox5.Text = "" Or TextBox6.Text = "" Or TextBox7.Text = "" Then
```

```
        MsgBox("Enter All Fields")
```

```
    Else
```

```
        qry = "Insert into catalogue values('" + TextBox1.Text + "','" + TextBox2.Text + "','" + TextBox3.Text + "','" + TextBox4.Text + "','" + TextBox5.Text + "','" + TextBox6.Text + "','" + TextBox7.Text + "')"
```

```
        com = New SqlCommand(qry, con)
```

```
        con.Open()
```

```
        com.ExecuteNonQuery()
```

```
        MsgBox("Sucessfully Saved")
```

```
        con.Close()
```

```
        TextBox2.Text = ""
```

```
        TextBox3.Text = ""
```

```
        TextBox4.Text = ""
```

```
        TextBox5.Text = ""
```

```
        TextBox6.Text = ""
```

```
        TextBox7.Text = ""
```

Try

Dim p As String

qry = "Select productno from catalogue"

com = New SqlCommand(qry, con)

adp = New SqlDataAdapter(com)

ds = New DataSet

adp.Fill(ds, "catalogue")

i = ds.Tables(0).Rows.Count

p = ds.Tables(0).Rows(i - 1)(0)

p = Mid(p, 1)

p = Val(p) + 1

TextBox1.Text = +p

Catch ex As Exception

TextBox1.Text = "100"

End Try

End If

End Sub

Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click

If TextBox1.Text = "" Or TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text = "" Or TextBox5.Text = "" Or TextBox6.Text = "" Or TextBox7.Text = "" Then

MsgBox("Enter All Fields")

Else

qry = "Update catalogue set productname='" + TextBox2.Text + "',databenefits='" + TextBox3.Text + "',rate='" + TextBox4.Text + "',validity='" + TextBox5.Text + "',speed='" + TextBox6.Text + "',bonus='" + TextBox7.Text + "' where productno='" + TextBox1.Text + "'"

com = New SqlCommand(qry, con)

con.Open()

com.ExecuteNonQuery()

MsgBox("Sucessfully Updated")

con.Close()

```
TextBox2.Text = ""
```

```
TextBox3.Text = ""
```

```
TextBox4.Text = ""
```

```
TextBox5.Text = ""
```

```
TextBox6.Text = ""
```

```
TextBox7.Text = ""
```

```
Try
```

```
Dim p As String
```

```
qry = "Select productno from catalogue"
```

```
com = New SqlCommand(qry, con)
```

```
adp = New SqlDataAdapter(com)
```

```
ds = New DataSet
```

```
adp.Fill(ds, "catalogue")
```

```
i = ds.Tables(0).Rows.Count
```

```
p = ds.Tables(0).Rows(i - 1)(0)
```

```
p = Mid(p, 1)
```

```
p = Val(p) + 1
```

```
TextBox1.Text = +p
```

```
Catch ex As Exception
```

```
TextBox1.Text = "100"
```

```
End Try
```

```
End If
```

```
End Sub
```

```
Private Sub Button3_Click(sender As Object, e As EventArgs) Handles Button3.Click
```

```
    If TextBox1.Text = "" Or TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text =  
"" Or TextBox5.Text = "" Or TextBox6.Text = "" Or TextBox7.Text = "" Then
```

```
        MsgBox("Enter All Fields")
```

Else

```
qry = "Delete from catalogue where productno=" + TextBox1.Text + ""
com = New SqlCommand(qry, con)
con.Open()
com.ExecuteNonQuery()
MsgBox("Sucessfully Deleted")
con.Close()
```

```
TextBox2.Text = ""
TextBox3.Text = ""
TextBox4.Text = ""
TextBox5.Text = ""
TextBox6.Text = ""
TextBox7.Text = ""
```

Try

```
Dim p As String
qry = "Select productno from catalogue"
com = New SqlCommand(qry, con)
adp = New SqlDataAdapter(com)
ds = New DataSet
adp.Fill(ds, "catalogue")
i = ds.Tables(0).Rows.Count
p = ds.Tables(0).Rows(i - 1)(0)
p = Mid(p, 1)
p = Val(p) + 1
TextBox1.Text = +p
Catch ex As Exception
    TextBox1.Text = "100"
End Try
```

End If

End Sub

```
Private Sub Button5_Click(sender As Object, e As EventArgs) Handles Button5.Click
```

```
    TextBox2.Text = ""
```

```
    TextBox3.Text = ""
```

```
    TextBox4.Text = ""
```

```
    TextBox5.Text = ""
```

```
    TextBox6.Text = ""
```

```
    TextBox7.Text = ""
```

```
End Sub
```

```
Private Sub Button4_Click(sender As Object, e As EventArgs) Handles Button4.Click
```

```
    Try
```

```
        qry = "Select * from catalogue where productno=" + TextBox1.Text + ""
```

```
        com = New SqlCommand(qry, con)
```

```
        adp = New SqlDataAdapter(com)
```

```
        ds = New DataSet
```

```
        adp.Fill(ds, "catalogue")
```

```
        TextBox1.Text = ds.Tables("catalogue").Rows(0)(0)
```

```
        TextBox2.Text = ds.Tables("catalogue").Rows(0)(1)
```

```
        TextBox3.Text = ds.Tables("catalogue").Rows(0)(2)
```

```
        TextBox4.Text = ds.Tables("catalogue").Rows(0)(3)
```

```
        TextBox5.Text = ds.Tables("catalogue").Rows(0)(4)
```

```
        TextBox6.Text = ds.Tables("catalogue").Rows(0)(5)
```

```
        TextBox7.Text = ds.Tables("catalogue").Rows(0)(6)
```

```
    Catch ex As Exception
```

```
        MsgBox("Invalid Id")
```

```
    End Try
```

```
End Sub
```

```
End Class
```

ENQUIRY DETAILS

```
Imports System.Data.SqlClient
```

```
Public Class Enquiry
```

```
    Dim con As New SqlConnection("Data Source=MYPE-PC\SQLEXPRESS;Initial  
Catalog=Jionetworks;Persist Security Info=True;User ID=sa;pwd=sql;")
```

```
    Dim com, com1 As New SqlCommand
```

```
    Dim adp, adp1 As New SqlDataAdapter
```

```
    Dim ds, ds1 As New DataSet
```

```
    Dim qry, qry1 As String
```

```
    Dim i As Integer
```

```
Private Sub Enquiry_Load(sender As Object, e As EventArgs) Handles MyBase.Load
```

```
    Dim boundWidth As Integer = Screen.PrimaryScreen.Bounds.Width
```

```
    Dim boundHeight As Integer = Screen.PrimaryScreen.Bounds.Height
```

```
    Dim x As Integer = boundWidth - Me.Width
```

```
    Dim y As Integer = boundHeight - Me.Height
```

```
    Me.Location = New Point(x / 2, y / 2)
```

```
Try
```

```
    Dim p As String
```

```
    qry = "Select enquiryno from enquiry_tb"
```

```
    com = New SqlCommand(qry, con)
```

```
    adp = New SqlDataAdapter(com)
```

```
    ds = New DataSet
```

```
    adp.Fill(ds, "enquiry_tb")
```

```
    i = ds.Tables(0).Rows.Count
```

```
    p = ds.Tables(0).Rows(i - 1)(0)
```

```
    p = Mid(p, 1)
```

```
    p = Val(p) + 1
```

```
    TextBox1.Text = +p
```

```
Catch ex As Exception
```

```
    TextBox1.Text = "200"
```

```
End Try
```

```

qry = "Select productname from catalogue"
com = New SqlCommand(qry, con)
adp = New SqlDataAdapter(com)
ds = New DataSet
adp.Fill(ds, "catalogue")
i = ds.Tables(0).Rows.Count
For j = 0 To i - 1
    ComboBox1.Items.Add(ds.Tables("catalogue").Rows(j)(0))
Next
End Sub

```

```

Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    If TextBox1.Text = "" Or TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text =
"" Or TextBox5.Text = "" Or TextBox6.Text = "" Then
        MsgBox("Enter All Fields")
    Else
        qry = "Insert into enquiry_tb values(" + TextBox1.Text + "," + TextBox2.Text + "," +
TextBox3.Text + "," + DateTimePicker1.Text + "," + ComboBox1.Text + "," +
TextBox4.Text + "," + TextBox5.Text + "," + TextBox6.Text + ")"
        com = New SqlCommand(qry, con)
        con.Open()
        com.ExecuteNonQuery()
        MsgBox("Sucessfully Saved")
        con.Close()
        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox4.Text = ""
        TextBox5.Text = ""
        TextBox6.Text = ""
        ComboBox1.Text = "select"
        DateTimePicker1.Text = Date.Today
    End If
End Sub

```

```

Try
    Dim p As String
    qry = "Select enquiryno from enquiry_tb"
    com = New SqlCommand(qry, con)
    adp = New SqlDataAdapter(com)
    ds = New DataSet
    adp.Fill(ds, "enquiry_tb")
    i = ds.Tables(0).Rows.Count
    p = ds.Tables(0).Rows(i - 1)(0)
    p = Mid(p, 1)
    p = Val(p) + 1
    TextBox1.Text = +p
Catch ex As Exception
    TextBox1.Text = "200"
End Try
End If
End Sub

```

```

Private Sub ComboBox1_SelectedIndexChanged(sender As Object, e As EventArgs) Handles
ComboBox1.SelectedIndexChanged
    qry1 = "Select * from catalogue where productname='" + ComboBox1.Text + "'"
    com1 = New SqlCommand(qry1, con)
    adp1 = New SqlDataAdapter(com1)
    ds1 = New DataSet
    adp1.Fill(ds1, "catalogue")
    TextBox4.Text = ds1.Tables("catalogue").Rows(0)(4)
    TextBox5.Text = ds1.Tables("catalogue").Rows(0)(3)
    TextBox6.Text = ds1.Tables("catalogue").Rows(0)(2)
End Sub

```

Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click

If TextBox1.Text = "" Or TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text = "" Or TextBox5.Text = "" Or TextBox6.Text = "" Then

MsgBox("Enter All Fields")

Else

qry = "Update enquiry_tb set customername=" + TextBox2.Text + ",contact=" + TextBox3.Text + ",dt=" + DateTimePicker1.Text + ",plans=" + ComboBox1.Text + ",validity=" + TextBox4.Text + ",pricee=" + TextBox5.Text + ",dailybenefit=" + TextBox6.Text + " where enquiryno=" + TextBox1.Text + ""

com = New SqlCommand(qry, con)

con.Open()

com.ExecuteNonQuery()

MsgBox("Sucessfully Updated")

con.Close()

TextBox2.Text = ""

TextBox3.Text = ""

TextBox4.Text = ""

TextBox5.Text = ""

TextBox6.Text = ""

ComboBox1.Text = "select"

DateTimePicker1.Text = Date.Today

Try

Dim p As String

qry = "Select enquiryno from enquiry_tb"

com = New SqlCommand(qry, con)

adp = New SqlDataAdapter(com)

ds = New DataSet

adp.Fill(ds, "enquiry_tb")

i = ds.Tables(0).Rows.Count

p = ds.Tables(0).Rows(i - 1)(0)

```
    p = Mid(p, 1)
    p = Val(p) + 1
    TextBox1.Text = +p
Catch ex As Exception
    TextBox1.Text = "200"
End Try
End If
End Sub
```

```
Private Sub Button3_Click(sender As Object, e As EventArgs) Handles Button3.Click
    If TextBox1.Text = "" Or TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text =
"" Or TextBox5.Text = "" Or TextBox6.Text = "" Then
        MsgBox("Enter All Fields")
    Else
        qry = "Delete from enquiry_tb where enquiryno=" + TextBox1.Text + ""
        com = New SqlCommand(qry, con)
        con.Open()
        com.ExecuteNonQuery()
        MsgBox("Sucessfully Deleted")
        con.Close()

        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox4.Text = ""
        TextBox5.Text = ""
        TextBox6.Text = ""
        ComboBox1.Text = "select"
        DateTimePicker1.Text = Date.Today
```

Try

Dim p As String

qry = "Select enquiryno from enquiry_tb"

com = New SqlCommand(qry, con)

adp = New SqlDataAdapter(com)

ds = New DataSet

adp.Fill(ds, "enquiry_tb")

i = ds.Tables(0).Rows.Count

p = ds.Tables(0).Rows(i - 1)(0)

p = Mid(p, 1)

p = Val(p) + 1

TextBox1.Text = +p

Catch ex As Exception

TextBox1.Text = "200"

End Try

End If

End Sub

Private Sub Button4_Click(sender As Object, e As EventArgs) Handles Button4.Click

Try

qry = "Select * from enquiry_tb where enquiryno=" + TextBox1.Text + """

com = New SqlCommand(qry, con)

adp = New SqlDataAdapter(com)

ds = New DataSet

adp.Fill(ds, "enquiry_tb")

TextBox1.Text = ds.Tables("enquiry_tb").Rows(0)(0)

TextBox2.Text = ds.Tables("enquiry_tb").Rows(0)(1)

TextBox3.Text = ds.Tables("enquiry_tb").Rows(0)(2)

DateTimePicker1.Text = ds.Tables("enquiry_tb").Rows(0)(3)

ComboBox1.Text = ds.Tables("enquiry_tb").Rows(0)(4)

```

        TextBox4.Text = ds.Tables("enquiry_tb").Rows(0)(5)
        TextBox5.Text = ds.Tables("enquiry_tb").Rows(0)(6)
        TextBox6.Text = ds.Tables("enquiry_tb").Rows(0)(7)
    Catch ex As Exception
        MsgBox("Invalid Id")
    End Try
End Sub

Private Sub Button5_Click(sender As Object, e As EventArgs) Handles Button5.Click
    TextBox2.Text = ""
    TextBox3.Text = ""
    TextBox4.Text = ""
    TextBox5.Text = ""
    TextBox6.Text = ""
    ComboBox1.Text = "select"
    DateTimePicker1.Text = Date.Today
End Sub
End Class

```

PAYMENT DETAILS

```

Imports System.Data.SqlClient

Public Class Payment
    Dim con As New SqlConnection("Data Source=MYPE-PC\SQLEXPRESS;Initial
Catalog=Jionetworks;Persist Security Info=True;User ID=sa;pwd=sql;")
    Dim com, com1 As New SqlCommand
    Dim adp, adp1 As New SqlDataAdapter
    Dim ds, ds1 As New DataSet
    Dim qry, qry1 As String
    Dim i As Integer

```

```
Private Sub Payment_Load(sender As Object, e As EventArgs) Handles MyBase.Load
```

```
    Dim boundWidth As Integer = Screen.PrimaryScreen.Bounds.Width  
    Dim boundHeight As Integer = Screen.PrimaryScreen.Bounds.Height  
    Dim x As Integer = boundWidth - Me.Width  
    Dim y As Integer = boundHeight - Me.Height  
    Me.Location = New Point(x / 2, y / 2)  
    qry = "Select orderid from order_tb"  
    com = New SqlCommand(qry, con)  
    adp = New SqlDataAdapter(com)  
    ds = New DataSet  
    adp.Fill(ds, "order_tb")  
    i = ds.Tables(0).Rows.Count  
    For j = 0 To i - 1  
        ComboBox1.Items.Add(ds.Tables("order_tb").Rows(j)(0))  
    Next  
End Sub
```

```
Private Sub ComboBox1_SelectedIndexChanged(sender As Object, e As EventArgs) Handles  
ComboBox1.SelectedIndexChanged
```

```
    qry1 = "Select * from order_tb where orderid='" + ComboBox1.Text + "'"<br>  
    com1 = New SqlCommand(qry1, con)  
    adp1 = New SqlDataAdapter(com1)  
    ds1 = New DataSet  
    adp1.Fill(ds1, "order_tb")  
    TextBox2.Text = ds1.Tables("order_tb").Rows(0)(1)  
    TextBox3.Text = ds1.Tables("order_tb").Rows(0)(2)  
    TextBox4.Text = ds1.Tables("order_tb").Rows(0)(3)  
    TextBox5.Text = ds1.Tables("order_tb").Rows(0)(4)  
    TextBox6.Text = ds1.Tables("order_tb").Rows(0)(5)  
    TextBox7.Text = ds1.Tables("order_tb").Rows(0)(6)  
End Sub
```

```
Private Sub TextBox8_LostFocus(sender As Object, e As EventArgs) Handles  
TextBox8.LostFocus
```

```
    Dim v As String
```

```
    v = Val(TextBox7.Text) + Val(TextBox7.Text) * Val(TextBox8.Text) / 100
```

```
    TextBox9.Text = v
```

```
End Sub
```

```
Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
```

```
    If TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text = "" Or TextBox5.Text =  
"" Or TextBox6.Text = "" Or TextBox7.Text = "" Or TextBox8.Text = "" Or TextBox9.Text = ""  
Then
```

```
    MsgBox("Enter All Fields")
```

```
Else
```

```
    qry = "Insert into payment_tb values('" + ComboBox1.Text + "','" + TextBox2.Text + "','"  
+ TextBox3.Text + "','" + TextBox4.Text + "','" + TextBox5.Text + "','" + TextBox6.Text + "','"  
+ TextBox7.Text + "','" + ComboBox2.Text + "','" + TextBox8.Text + "','" + TextBox9.Text +  
"')"
```

```
    com = New SqlCommand(qry, con)
```

```
    con.Open()
```

```
    com.ExecuteNonQuery()
```

```
    MsgBox("Sucessfully Saved")
```

```
    con.Close()
```

```
    TextBox2.Text = ""
```

```
    TextBox3.Text = ""
```

```
    TextBox4.Text = ""
```

```
    TextBox5.Text = ""
```

```
    TextBox6.Text = ""
```

```
    TextBox7.Text = ""
```

```
    TextBox8.Text = ""
```

```
    TextBox9.Text = ""
```

```

        ComboBox1.Text = "Select"
        ComboBox2.Text = "Select"
    End If
End Sub

Private Sub Button2_Click(sender As Object, e As EventArgs) Handles Button2.Click
    If TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text = "" Or TextBox5.Text =
"" Or TextBox6.Text = "" Or TextBox7.Text = "" Or TextBox8.Text = "" Or TextBox9.Text = ""
Then
        MsgBox("Enter All Fields")
    Else
        qry = "Update payment_tb set payment=" + ComboBox2.Text + ",gst=" +
TextBox8.Text + ",total=" + TextBox9.Text + " where orderid=" + ComboBox1.Text + ""
        com = New SqlCommand(qry, con)
        con.Open()
        com.ExecuteNonQuery()
        MsgBox("Sucessfully Updated")
        con.Close()

        TextBox2.Text = ""
        TextBox3.Text = ""
        TextBox4.Text = ""
        TextBox5.Text = ""
        TextBox6.Text = ""
        TextBox7.Text = ""
        TextBox8.Text = ""
        TextBox9.Text = ""
        ComboBox1.Text = "Select"
        ComboBox2.Text = "Select"
    End If
End Sub

```

Private Sub Button3_Click(sender As Object, e As EventArgs) Handles Button3.Click

 If TextBox2.Text = "" Or TextBox3.Text = "" Or TextBox4.Text = "" Or TextBox5.Text = "" Or TextBox6.Text = "" Or TextBox7.Text = "" Or TextBox8.Text = "" Or TextBox9.Text = ""

Then

 MsgBox("Enter All Fields")

Else

 qry = "Delete payment_tb where orderid=" + ComboBox1.Text + ""

 com = New SqlCommand(qry, con)

 con.Open()

 com.ExecuteNonQuery()

 MsgBox("Sucessfully Deleted")

 con.Close()

 TextBox2.Text = ""

 TextBox3.Text = ""

 TextBox4.Text = ""

 TextBox5.Text = ""

 TextBox6.Text = ""

 TextBox7.Text = ""

 TextBox8.Text = ""

 TextBox9.Text = ""

 ComboBox1.Text = "Select"

 ComboBox2.Text = "Select"

End If

End Sub

Private Sub Button4_Click(sender As Object, e As EventArgs) Handles Button4.Click

Try

 qry = "Select * from payment_tb where orderid=" + ComboBox1.Text + ""

 com = New SqlCommand(qry, con)

 adp = New SqlDataAdapter(com)

 ds = New DataSet

 adp.Fill(ds, "payment_tb")

```
    TextBox2.Text = ds.Tables("payment_tb").Rows(0)(1)
    TextBox3.Text = ds.Tables("payment_tb").Rows(0)(2)
    TextBox4.Text = ds.Tables("payment_tb").Rows(0)(3)
    TextBox5.Text = ds.Tables("payment_tb").Rows(0)(4)
    TextBox6.Text = ds.Tables("payment_tb").Rows(0)(5)
    TextBox7.Text = ds.Tables("payment_tb").Rows(0)(6)
    ComboBox2.Text = ds.Tables("payment_tb").Rows(0)(7)
    TextBox8.Text = ds.Tables("payment_tb").Rows(0)(8)
    TextBox9.Text = ds.Tables("payment_tb").Rows(0)(9)
    Catch ex As Exception
        MsgBox("Invalid Payment ID")
    End Try
End Sub
```

```
Private Sub Button5_Click(sender As Object, e As EventArgs) Handles Button5.Click
    TextBox2.Text = ""
    TextBox3.Text = ""
    TextBox4.Text = ""
    TextBox5.Text = ""
    TextBox6.Text = ""
    TextBox7.Text = ""
    TextBox8.Text = ""
    TextBox9.Text = ""
    ComboBox1.Text = "Select"
    ComboBox2.Text = "Select"
End Sub
End Class
```

LUCKY DRAW

```
Imports System.Data.SqlClient
```

```
Public Class Luckydrawn
```

```
    Dim con As New SqlConnection("Data Source=MYPC-PC\SQLEXPRESS;Initial  
Catalog=Jionetworks;Persist Security Info=True;User ID=sa;pwd=sql;")
```

```
    Dim com, com1 As New SqlCommand
```

```
    Dim adp, adp1 As New SqlDataAdapter
```

```
    Dim ds, ds1 As New DataSet
```

```
    Dim qry, qry1 As String
```

```
    Dim i As Integer
```

```
Private Sub Luckydrawn_Load(sender As Object, e As EventArgs) Handles MyBase.Load
```

```
    Dim boundWidth As Integer = Screen.PrimaryScreen.Bounds.Width
```

```
    Dim boundHeight As Integer = Screen.PrimaryScreen.Bounds.Height
```

```
    Dim x As Integer = boundWidth - Me.Width
```

```
    Dim y As Integer = boundHeight - Me.Height
```

```
    Me.Location = New Point(x / 2, y / 2)
```

```
    qry = "Select contact from feedback_tb"
```

```
    com = New SqlCommand(qry, con)
```

```
    adp = New SqlDataAdapter(com)
```

```
    ds = New DataSet
```

```
    adp.Fill(ds, "feedback_tb")
```

```
    i = ds.Tables(0).Rows.Count
```

```
    For j = 0 To i - 1
```

```
        ComboBox1.Items.Add(ds.Tables("feedback_tb").Rows(j)(0))
```

```
    Next
```

```
End Sub
```

```

Private Sub ComboBox1_SelectedIndexChanged(sender As Object, e As EventArgs)
Handles ComboBox1.SelectedIndexChanged
    qry = "Select * from feedback_tb where contact='" + ComboBox1.Text + "'"
    com = New SqlCommand(qry, con)
    adp = New SqlDataAdapter(com)
    ds = New DataSet
    adp.Fill(ds, "feedback_tb")
    TextBox1.Text = ds.Tables("feedback_tb").Rows(0)(1)
    TextBox2.Text = ds.Tables("feedback_tb").Rows(0)(2)
    DateTimePicker1.Text = ds.Tables("feedback_tb").Rows(0)(3)
End Sub

```

```

Private Sub Button1_Click(sender As Object, e As EventArgs) Handles Button1.Click
    If TextBox1.Text = "" Or TextBox2.Text = "" Or TextBox3.Text = "" Then
        MsgBox("Enter All Fields")
    Else
        Try
            qry = "Insert into luckydraw values('" + ComboBox1.Text + "','" + TextBox1.Text +
            "','" + TextBox2.Text + "','" + DateTimePicker1.Text + "','" + TextBox3.Text + "'"
            com = New SqlCommand(qry, con)
            con.Open()
            com.ExecuteNonQuery()
            MsgBox("Win this Number in Lucky Draw")
            con.Close()
        Catch
        End Try
    End If
End Sub

```

```
ComboBox1.Text = "Select"  
    TextBox1.Text = ""  
    TextBox2.Text = ""  
    TextBox3.Text = ""  
    DateTimePicker1.Text = Date.Today  
    Catch ex As Exception  
        MsgBox("Already Win this Number")  
    End Try  
End If  
End Sub
```

```
Private Sub Button5_Click(sender As Object, e As EventArgs) Handles Button5.Click  
    ComboBox1.Text = "Select"  
    TextBox1.Text = ""  
    TextBox2.Text = ""  
    TextBox3.Text = ""  
    DateTimePicker1.Text = Date.Today  
End Sub  
End Class
```

FORM DETAILS

LOGIN FORM

Form1

Jio SALES MANAGEMENT SYSTEM FOR JIO NETWORKS **Jio**

LOGIN FORM

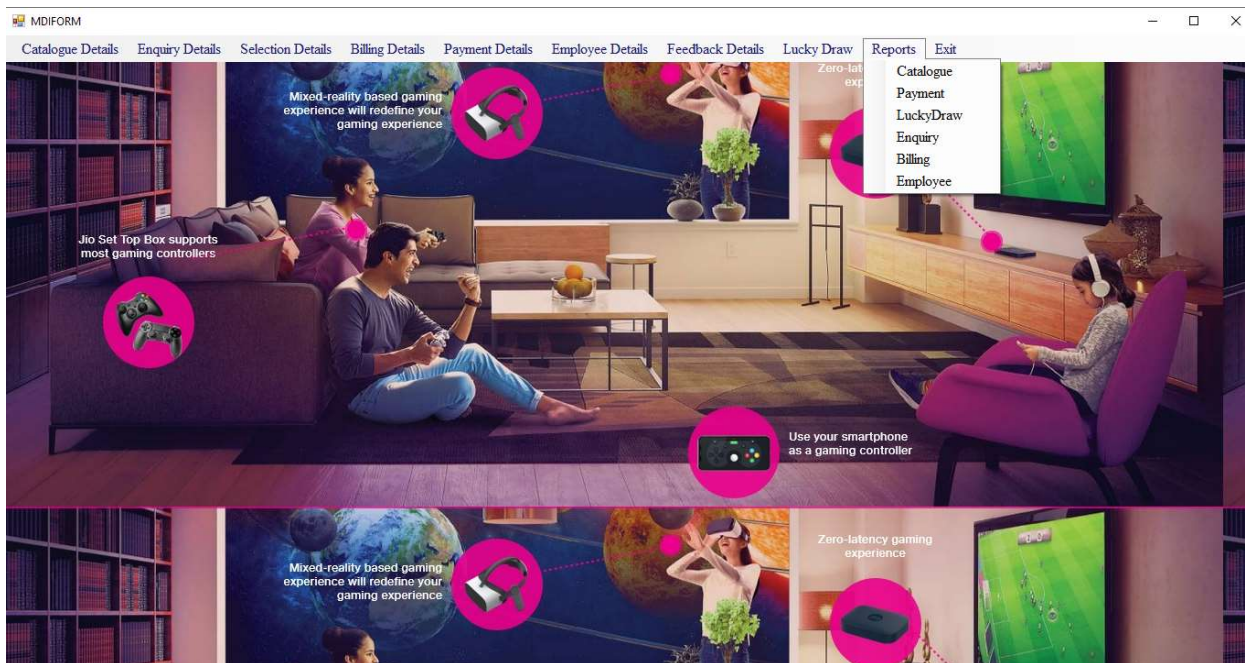
USER NAME

PASS WORD

LOGIN

Jio Fiber **Jio Fiber**

MDI FORM




CATALOGUE DETAILS

catalogue

CATALOGUE DETAILS

Product No:	<input type="text" value="102"/>	
Product Name:	<input type="text" value="Mini Recharge Pack"/>	<input type="button" value="SUBMIT"/>
Data Benefits:	<input type="text" value="1 GB/day"/>	<input type="button" value="UPDATE"/>
Rate:	<input type="text" value="100"/>	<input type="button" value="DELETE"/>
Validity:	<input type="text" value="24"/>	<input type="button" value="SEARCH"/>
Speed:	<input type="text" value="64 kbps"/>	<input type="button" value="RESET"/>
Bonus:	<input type="text" value="500 MB"/>	




ENQUIRY DETAILS

Enquiry

ENQUIRY DETAILS

Enquiry No:	<input type="text" value="201"/>	
Customer Name:	<input type="text" value="roshini"/>	<input type="button" value="SUBMIT"/>
Contact No:	<input type="text" value="7871851065"/>	<input type="button" value="UPDATE"/>
Date:	<input type="text" value="01/05/2021"/>	<input type="button" value="DELETE"/>
Plan Requirement:	<input type="text" value="Super value pack"/>	<input type="button" value="SEARCH"/>
Validity:	<input type="text" value="28 days"/>	<input type="button" value="RESET"/>
Price:	<input type="text" value="249"/>	
Data Benefits:	<input type="text" value="2 GB/day"/>	




SELECTION DETAILS

Selection

SELECTION DETAILS

Product No:	<input type="text" value="201"/>	<input type="button" value="SUBMIT"/> <input type="button" value="UPDATE"/> <input type="button" value="DELETE"/> <input type="button" value="SEARCH"/> <input type="button" value="RESET"/>
Product Name:	<input type="text" value="201"/> <input type="text" value="202"/> <input type="text" value="203"/>	
Customer Name:	<input type="text" value="roshini"/>	
Contact No:	<input type="text" value="7871851065"/>	
Price:	<input type="text" value="249"/>	
Total:	<input type="text"/>	




BILLINGDETAILS

Billing

BILLING DETAILS

Order ID:	<input type="text" value="311"/>	<input type="button" value="SUBMIT"/> <input type="button" value="UPDATE"/> <input type="button" value="DELETE"/> <input type="button" value="SEARCH"/> <input type="button" value="RESET"/>
Order Date:	<input type="text" value="01/05/2021"/>	
Customer Name:	<input type="text" value="roshini"/>	
Contact No:	<input type="text" value="7871851065"/>	
Address:	<input type="text" value="17/19 7th street extension
gandhipuram"/>	
Plans:	<input type="text" value="Super value pack"/>	
Rate:	<input type="text" value="249"/>	
Aadhar No:	<input type="text" value="546445556456"/>	




PAYMENT DETAILS

Payment

PAYMENT DETAILS

Order ID:	<input type="text" value="311"/>	
Order Date:	<input type="text" value="01/05/2021"/>	
Customer Name:	<input type="text" value="roshini"/>	<input type="button" value="SUBMIT"/>
Contact No:	<input type="text" value="7871851065"/>	<input type="button" value="UPDATE"/>
Address:	<input type="text" value="17/19 7th street extension
gandhipuram"/>	<input type="button" value="DELETE"/>
Plans:	<input type="text" value="Super value pack"/>	<input type="button" value="SEARCH"/>
Rate:	<input type="text" value="249"/>	<input type="button" value="RESET"/>
Mode of Payment:	<input type="text" value="CARD"/>	
GST(%):	<input type="text" value="3"/>	
Total:	<input type="text" value="256.47"/>	




EMPLOYEEDETAILS

Employee

EMPLOYEE DETAILS

Employee ID:	<input type="text" value="510"/>	
Employee Name:	<input type="text" value="Vikram"/>	
Gender:	<input type="text" value="Male"/>	<input type="button" value="SUBMIT"/>
Age:	<input type="text" value="27"/>	<input type="button" value="UPDATE"/>
Contact No:	<input type="text" value="7871851065"/>	<input type="button" value="DELETE"/>
Education:	<input type="text" value="BSC CS"/>	<input type="button" value="SEARCH"/>
Job Designation:	<input type="text" value="Sales"/>	<input type="button" value="RESET"/>
Experience:	<input type="text" value="2"/>	
Salary:	<input type="text" value="9000"/>	
Address:	<input type="text" value="Coimbatore"/>	



FEEDBACK DETAILS

Feedback

FEEDBACK DETAILS


Contact No:

Product Name:

Customer Name:

Date:

Description:



LUCKYDRAW

Luckydrawn

LUCKY DRAW


Contact No:

Product Name:

Customer Name:

Date:

Reward:




CATALOGUE REPORT

cataloguerpt

CATALOGUE REPORTS

	productno	productname	databenefits	rate	validity	speed	bonus
▶	100	Mobile Best Seller	1.5 GB/day	599	84 days	12 MBPS	5 GB
	101	Super value pack	2 GB/day	249	28 days	64 Kbps	3 GB
	102	Mini Recharge P...	1 GB/day	100	24	64 kbps	500 MB
*							




PAYMENT REPORT

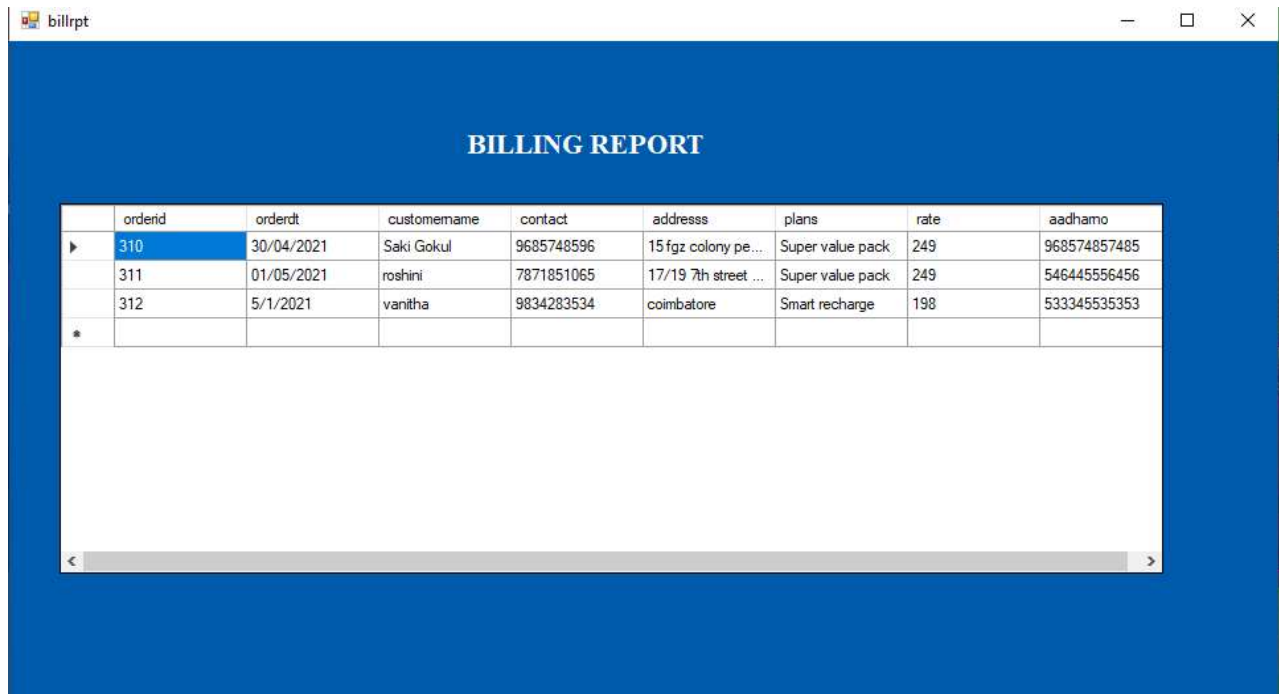
Paymentrpt

PAYMENT REPORTS

	orderid	orderdate	custname	contact	address	plans	rate	payment	gst	total
▶	310	30/04/2021	Saki Gokul	9685748596	15 fgz colony pe...	Super value pack	249	CASH	5	261.45
	311	01/05/2021	roshini	7871851065	17/19 7th street ...	Super value pack	249	CARD	3	256.47
*										



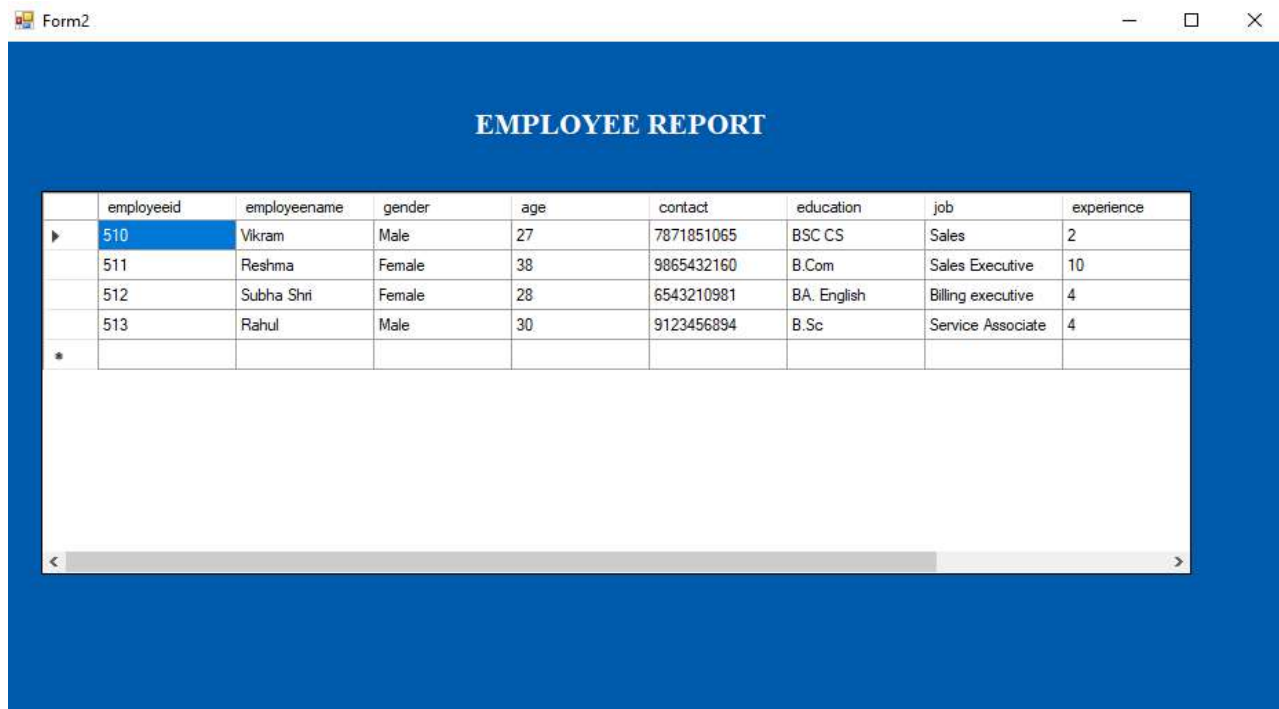
BILLING REPORT



The screenshot shows a web application window with a blue header and a white table. The table is titled "BILLING REPORT" and contains the following data:

orderid	orderdt	customername	contact	address	plans	rate	aadhamo
310	30/04/2021	Saki Gokul	9685748596	15 fgz colony pe...	Super value pack	249	968574857485
311	01/05/2021	roshini	7871851065	17/19 7h street ...	Super value pack	249	546445556456
312	5/1/2021	vanitha	9834283534	coimbatore	Smart recharge	198	533345535353
*							

EMPLOYEE REPORT



The screenshot shows a web application window with a blue header and a white table. The table is titled "EMPLOYEE REPORT" and contains the following data:

employeeid	employeename	gender	age	contact	education	job	experience
510	Vikram	Male	27	7871851065	BSC CS	Sales	2
511	Reshma	Female	38	9865432160	B.Com	Sales Executive	10
512	Subha Shri	Female	28	6543210981	BA. English	Billing executive	4
513	Rahul	Male	30	9123456894	B.Sc	Service Associate	4
*							



System Testing

.....

SYSTEM TESTING

CHAPTER - V

SYSTEM TESTING

System testing is the state of implementation, which is aimed at ensuring that the system works accurately and efficiently as expected before live operation commences. It certifies that the whole set of programs hang together. System testing requires a test plan that consists of several key activities and steps for running program, string, system and user acceptance testing. The implementation of newly designed package is important in adopting a successful new system. Testing is important stage in software development. System test is a implementation which should be a confirmation that all is correct and an opportunity to show the users that the system works as they expected. It accounts the largest percentage of technical effort in software development process. Testing phase is the development phase that validates the code against the functional specifications. Testing is vital to the achievement of the system goals. The objective of testing is to discover errors. To fulfill this objective a series of test step such as the unit test, integration test, validation and other system tests where planned and executed.

TESTING AND METHODOLOGIES

In the system testing the whole system is tested for interface between each module and program units that are tested and recorded. This testing is done with sample data. The securities and communication between interfaces are tested. System testing is actually a series of different tests whose primary purpose is to fully exercise the computer based system although each test has a different purpose. It's work is to verify that all system elements have been properly integrated and perform allocated function.

It involves two kinds of activities namely

- Integrated testing
- Acceptance testing

INTEGRATED TESTING

Integrated testing is a systematic technique for constructing tests to uncover errors associated with interface.

Objective is to take unit tested modules and build a program structure that has been dictated by design

ACCEPTANCE TESTING

Acceptance testing involves planning an execution of a Unit testing (functional test, performance test and stress test) to verify that the implemented system satisfies the requirement. The acceptance testing is the final stage of the user the various possibilities of the data are entered and the results are tested.

UNIT TESTING

Here each program is tested individually so any error apply unit is debugged. The sample data are given for the unit testing. The unit test results are recorded for further references. During unit testing the functions of the program unit validation and the limitations are tested. Unit testing is testing changes made in a existing or new program. This test is carried out during the programming and each module is found to be working satisfactorily. For example in the enquiry form after entering all the fields we click the submit button. When submit button is clicked, all the data in form are validated. Only after validation entries will be added to the database. Unit testing comprises the set of tests performed by an individual prior to integration of the unit into large system. The situation is illustrated in as follows

Coding-> Debugging ->Unit Testing -> Integration testing->Output Testing

The four categories of test that a programmer will typically perform on a program unit

- Functional test
- Performance test
- Stress Test
- Structure test

Functional test involve exercising the code with nominal input values for which the expected results are known as well as boundary values and special values.

Performance testing determines the amount of execution time spent in various parts of unit program through put and response time and device utilization by the program. This term is often used interchangeably with ‘stress’ and ‘load’ testing. Performance Testing is done to check whether the system meets the performance requirements. Different performance and load tools are used to do this testing.

A variation of **stress testing** called sensitivity testing in same situations is a very small range of data contained in the bounds of valid data may cause extreme and even erroneous processing or profound performance degradation.

Structured testing is concerned with exercising the internal logic of a program and traversing paths. Functional testing, stress testing performance testing are referred as “*black box*” testing and structure testing is referred as “*white box*” testing.

OUTPUT TESTING

Asking the user about the format required by them tests the output generated by the system under consideration .It can be done in two ways, One on screen and other on printer format. The output format on the screen is found to be correct as the format designed in system test.

Other testing methodologies are

VALIDATION TESTING

Software validation is achieved through a series of test that demonstrates the conformity and requirements. Thus the proposed system under consideration has to be tested by validation and found to be working satisfactorily. For example: phone number field should contain number otherwise it produces an error message. Similarly in all the forms the fields are validated.

ALPHA TESTING:

The objective of this testing is to identify all possible issues or defects before releasing it into the market or to the user. Alpha testing is carried out at the end of the software development phase but before the Beta Testing. Still, minor design changes may be made as a result of such testing. Alpha testing is conducted at the developer’s site. In-house virtual user environment can be created for this type of testing.

ACCESSIBILITY TESTING:

The aim of accessibility testing is to determine whether the software or application is accessible for disabled people or not. Here disability means old age and other disabled groups. Various checks are performed such as font size for color and contrast for color blindness etc.

BACK-END TESTING:

Whenever an input or data is entered on front-end application, it stores in the database and the testing of such database is known as Database Testing or Backend testing. Database testing involves testing of table structure, schema, stored procedure, data structure and so on. In back-end testing GUI is not involved, testers are directly connected to the database with proper access and testers can easily verify data by running a few queries on the database. There can be issues identified like data loss, deadlock, data corruption etc during this back-end testing and these issues are critical to fixing before the system goes live into the production environment.

COMPATIBILITY TESTING:

It is a testing type in which it validates how software behaves and runs in a different environment, web servers, hardware, and network environment. Compatibility testing ensures that software can run on a different configuration, different database, different browsers, and their versions. Compatibility testing is performed by the testing team.



System Implementation and Maintenance

CHAPTER - VI

SYSTEM IMPLEMENTATION & MAINTENANCE

SYSTEM IMPLEMENTATION

Implementation is the process that actually yields the lowest-level system elements in the system hierarchy (system breakdown structure). System elements are made, bought, or reused. Production involves the hardware fabrication processes of forming, removing, joining, and finishing, the software realization processes of coding and testing, or the operational procedures development processes for operators' roles. If implementation involves a production process, a manufacturing system which uses the established technical and management processes may be required.

The purpose of the implementation process is to design and create (or fabricate) a system element conforming to that element's design properties and requirements. The element is constructed employing appropriate technologies and industry practices. This process bridges the system definition processes and the integration process.

The new system may be completely new, replacing an existing manual or automated system or it may be major implementation which becomes necessary so that a reliable system based on the requirements of the organization can be provided. Successful implementation may not guarantee improvement in the organization using the new system, but improper installation will prevent it. It has been observed that even the best system cannot show good results if the analysts managing the implementation do not attend to every important detail. This is an area where the system analysts need to work with utmost care.

Implementation is the stage in the project where the theoretical design is turned into a working system. The most crucial stage is achieving a successful new system and giving a user confidence in that the new system will work efficiently and effectively in the implementation stage. The stage consists of

- Testing a developed program with sample data
- Detection and correction of error
- Creating whether the system meets a user requirements
- Making necessary changes as desired by users.
- Training user personal

IMPLEMENTATION PROCEDURES

The implementation phase is less creative than system design. A system design may be dropped at any time prior to implementation, although it becomes more difficult when it goes to the design phase. The final report of the implementation phase includes procedural flowcharts, record layouts, and a workable plan for implementing the candidate system design into a operational design.

List of System implementation is the important stage of project when the theoretical design is tuned into practical system. The main stages in the implementation are as follows:

- Planning
- Training
- System testing and
- Changeover Planning

OPERATIONAL DOCUMENTATION:

Documentation means of communication; it establishes the design and performance criteria of the project. Documentation is descriptive information that portrays the use and operation of the system. The user will have to enter the user name and password if it is valid, user can participate. Otherwise if it is new user he needs to register documentation means of communication; it establishes design & performance criteria for phases of the project. Documentation is descriptive information that portrays he use &/or operation of the system.

DOCUMENTATION TOOLS:

Document production & desktop publishing tool support nearly every aspect of software developers. Most software development organizations spend a substantial amount of time developing documents, and in many cases the documentation process itself is quite inefficient. It is not to use unusual software for development effort on documentation. For this reason, Documentation tools provide an important opportunity to improve productivity.

DOCUMENT RESTRUCTURING:

Creating document is far too time consuming. If the system works, we'll live with what we have. In some cases, this is the correct approach. It is not possible to recreate document for hundreds of computer programs. Documentation must be updated, but we have limited resources. It may not be necessary to fully re-document an application. Rather, those portions of the system that are currently undergoing change are fully documented. The system is business critical and must be fully re-documented. Even in this case, an intelligent approach is to pare documentation to an essential minimum.

SYSTEM MAINTENANCE

Maintenance is actually implementation of the review plan that is as important as it is for programmers, and analyst is to perform or identify with the maintenance. There are psychologically personality and professional reasons for this. Analyst and programmers spend fair more time maintaining programmer then they do writing them. Maintenances account for 50-80% of total system development. Maintenance is expensive .One way to reduce the maintenance costs are through maintenance management and software modification audits Types of maintenance are

- Perfective maintenance
- Preventive maintenance

PERFECTIVE MAINTENANCE:

Changes made to the system to add features or to improve the performance. In future any more features can be added in “.NET Communication” and it can easily adopt the changes.

PREVENTIVE MAINTENANCE:

Changes made to the system to avoid future problems. Any changes can be made in the future and our project can adopt the changes.



.....

CONCLUSION & FUTURE ENHANCEMENT

CHAPTER – VII

CONCLUSION & FUTURE ENHANCEMENT

CONCLUSION

In every concern, computerization plays the most important role in day-to-day activities. The computerization of sales management system is reliable and very easy to use. It saves a lot of time and is very efficient. The flexibility of the program developed is quite high. The use of computerization has very little chance of committing any data entry error since it has enough validation check. The system is flexible and changes can be made without any difficulties. The use of MY SQL software serves the purpose for which it has been developed, as the user can process data and create reports much faster than manual system. This helps the user to keep backup information's which is not possible in manual recording. The software has been developed to reduce the work pressure of the users. The primary aim of development of the software has been to help the officials at the concern to easily manage the voluminous data.

FUTURE ENHANCEMENT

The project has been developed and the objectives are achieved successfully. The project has been developed with front end as VB.Net and backend as SQL Server. The front end can also be changed. ASP.Net can replace the front-end tool such as HTML and CSS for more speed. To provide better facility regarding security, it uses security provider software and we can access from any place and anywhere. It can have an enhancement in the future according to the user's requirements.



.....

BIBLIOGRAPHY

BIBLIOGRAPHY

TEXT BOOKS REFERRED:

- Jesse liberty. “**Learning Visual Basic.net**”. A. O’ Relilly Media publication. 01October2002.
- Tim Anderson, “**programming VB.NET 2005**”. McGraw Hill Higher Education. 01 May 2006.
- Shivprasad Koirala. “**.NET: Interview Questions**”. BPB Publications. 2006.
- Steven Holzner. “**Visual Basic .NET Black Book**”. Coriolis. 2002.
- Sathiaseelan J G R. “**Programming with VB .Net**”. Dreamtech press India Pvt.ltd. 2009.
- Elias Awath, “**SYSTEM ANALYSIS AND DESIGN**”, Tata Mc Graw Hill Publication, Sixth Edition, 2003.
- S Ramachandran, “**COMPUTER AIDED DESIGN**”, Air Walk Publication, Third Edition, 2003.
- Richard Fairley, “**SOFTWARE ENGINEERING CONCEPTS**” ,Tata Mc Graw Hill Publication, Second Edition,1997.
- Fred Barwell, “**Professional VB.NET**”, 2nd Edition.
- Harvey M. Deitel, Paul J. Deitel, Tem R. Nieto, “**Visual Basic .NET How to Program**”. 2nd Edition.

Website:

-  www.google.com
-  www.youtube.com
-  www.wikipedia.org
-  www.vbdotnetheaven.com
-  www.w3school.com
-  www.tutorialspoints.com
-  www.quora.com
-  www.developer.com
-  www.15seconds.com