MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

Project Report

on

Business Management Software

Submitted By:

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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE
GWALIOR - 474005 (MP) est. 1957

MAY-JUNE 2022

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A project report submitted in partial fulfilment of the requirement for the degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

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CERTIFICATE

This is certified that **Yash Jain** (0901CS191141) has submitted the project report titled **Business Management** Software under the mentorship of **Mr. Mir Shahnawaz Ahmad,** in partial fulfilment of the requirement for the award of degree of Bachelor of Technology in Computer Science and Engineering from Madhav Institute of Technology and Science. Gwalior.

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DECLARATION

We hereby declare that the work being presented in this project report, for the partial fulfilment of requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering at Madhav Institute of Technology & Science, Gwalior is an authenticated and original record of my work under the mentorship of **Mr. Mir Shahnawaz Ahmad**, **Assistant Professor**,Computer Science and Engineering.

We declare that we have not submitted the matter embodied in this report for the award of any degree or diploma anywhere else.

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Abstract

Business management software is a widely used term, and has been applied to various different types of software systems. However, a true business management system will be one that streamlines and manages most, if not all, aspects of business operations as an end-to-end, all-in-one solution.

One of the main benefits of business management software is that you only need one system to handle all your business needs. This eliminates the need for double entry of data, and simplifies the management of the system. Any information updated in the software will be reflected across all modules and through to any 3rd party applications, and all information is available in real-time. This results in better information management and reporting, fewer entry errors and more accurate data. However, because of the extensive nature of such systems the process of choosing and implementing one that best fits your needs is a large commitment. It involves investing the appropriate amount of resources (including time and money) into evaluating vendors and making a decision. Business management software can be deployed both as a hosted (cloud) and on-premises solution with some vendors providing both options.

Keywords: Business Management, Buyers Details, Product Details, Billing.

सार:

व्यवसाय प्रबंधन सॉफ्टवेयर एक व्यापक रूप से इस्तेमाल किया जाने वाला शब्द है, और इसे विभिन्न प्रकार के सॉफ्टवेयर सिस्टम पर लागू किया गया है। हालांकि, एक सच्ची व्यवसाय प्रबंधन प्रणाली वह होगी जो व्यवसाय संचालन के पहलुओं को एंड-टू-एंड, ऑल-इन-वन समाधान के रूप में सुव्यवस्थित और प्रबंधित करती है। व्यवसाय प्रबंधन सॉफ्टवेयर का एक मुख्य लाभ यह है कि आपको अपनी सभी व्यावसायिक जरूरतों को पूरा करने के लिए केवल एक प्रणाली की आवश्यकता होती है। यह डेटा की दोहरी प्रविष्टि की आवश्यकता को समाप्त करता है, और सिस्टम के प्रबंधन को सरल करता है। सॉफ़्टवेयर में अपडेट की गई कोई भी जानकारी सभी मॉड्यूल में और किसी भी तृतीय पक्ष एप्लिकेशन के माध्यम से दिखाई देगी, और सभी जानकारी रीयल-टाइम में उपलब्ध है। इसके परिणामस्वरूप बेहतर सूचना प्रबंधन और रिपोर्टिंग, कम प्रविष्टि त्रुटियां और अधिक सटीक डेटा होता है। हालांकि, इस तरह की प्रणालियों की व्यापक प्रकृति के कारण आपकी आवश्यकताओं के लिए सबसे उपयुक्त एक को चुनने और लागू करने की प्रक्रिया एक बड़ी प्रतिबद्धता है। इसमें विक्रेताओं का मूल्यांकन करने और निर्णय लेने में उचित मात्रा में संसाधनों (समय और धन सहित) का निवेश करना शामिल है। व्यवसाय प्रबंधन सॉफ़्टवेयर को होस्टेड (क्लाउड) और ऑन-प्रिमाइसेस समाधान दोनों के रूप में तैनात किया जा सकता है, जिसमें कुछ विक्रेता दोनों विकल्प प्रदान करते हैं।

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1.1 Introduction

The computer has brought revolution in every sphere of human life. Whether it is business, education field, governance, medical science etc. The computer has reduced the human work load, businesses are going global and everything is available at the click of mouse. The concept of e-shopping has been introduced and we can buy the products online and make payments through credit or debit cards.

Presently I am proposing the system "Billing Management System". The small stores issue their client handwritten bills and they enter details in manual registers. And maintain MS Excel file for product rate. So the proposed system will computerised their manual bill generation system

As stated above the general stores presently uses manual bills and hand written record to maintains their product list, customer list, and keep the invoice, there is lot of duplicate work, and chance of mistake. When the product prices are changed they need to update each and every hand written record.

There is no security; anybody can access any report and sensitive data, also there are no reports to find out the sales volume, stock list, and summary report. This Billing system is used to overcome the entire problem which the client is facing currently, and making complete atomization of manual billing system.

1.2 Objective and Scope

Customer, Products, Billing Generation: Automate the current manual bill generation system and maintain the products database, product invoice and maintain the data security, user rights.

Ø **Report Generation**: A Report Generation system will be developed for the user of Billing and Invoicing System. This Billing System will have both details and summary type reports for analysis the sales volume, sales trend, and available stock

Ø To develop a system for the management of sales, Purchase and stock maintenance processes that will be performed with a click of mouse button.

Ø To develop a system that has a good management of data along with integrity and minimizing redundancy.

Ø To develop a system that will be user friendly in all possible ways.

Ø To develop a system that provides easier work than existing system for the user.

To develop a secure system that can be accessed only by authorised users.

1.3 Project Features

The following sections summarize features and functionality performed by user. Please see bellow

Manage Customers - Analyze Customers
Project is able to identify drops in sales
Project is able to handle customer's request with stock available in store.
Manage Products (Catalog, Categories)
Project is able to browse products
Project is able to add a new product
Project is able to edit an existing product
User (System Admin.) is able to search the database
User (System Admin.) is be able to search the database by product
Print Bills & Reports
User is able to print bills report with its invoice number.
User is able to print stock details.
User is able to print bills report between particular dates.

Table: 1.3 **Product Features**

1.4 Feasibility

1.4.1Operational Feasibility

In Operational Feasibility the degree of providing service to requirements is analyzed along with how easy the product will be to operate and maintain after deployment. Along with this other operational scopes are determining usability of product, Determining suggested solution by software development team is acceptable or not etc.

The project is feasible in terms of operations as it can be implemented anywhere with internet connectivity and system to process

1.4.2 Economic Feasibility

In the Economic Feasibility study, the cost and benefit of the project are analyzed. This means under this feasibility study a detailed analysis is carried out of what will be the cost of the project for development which includes all required costs for final development like hardware and software resources required, design and development cost and operational cost and so on. After that, it is analyzed whether the project will be beneficial in terms of finance for the organization or not.

The project has an economical constraint as the API with more number of request and good internet connectivity require more budget

1.4.3 Legal Feasibility

In Legal Feasibility study project is analyzed from a legal point of view. This includes analyzing barriers of legal implementation of project, data protection acts or social media laws, project certificate, license, copyright etc. Overall it can be said that Legal Feasibility Study is a study to know if proposed project conform to legal and ethical requirements. The project is feasible legally.

1.5 System Requirements

Windows Based Requirements:

Computers running Microsoft Windows must meet the following minimum hardware and software requirements.

Microsoft Windows: 7/8/10/11

2 GB RAM minimum, 4 GB RAM recommended

1GB of available disk space minimum

1280 * 800 minimum screen resolutions

Software Requirement: An Operating System

Hardware Requirement: Laptop/Computer and Printer

CHAPTER 2: LITERATURE REVIEW

Whenever, the problem is visualized, it is not the same as it appears. But there are some other aspects also that come into the picture only after a sharp and deep study of the problem.

This phase of system development is of great importance because it is must, for a system analyst it si necessary to have a deep knowledge of the topic on which he is working. The survey conducted by me helps to discover problems and challenges in making the present system.

The current system is difficult to manage, not easily searchable, hard to maintain, as there is enormous amount of data handling involved in Billing management System. All this information is stored at different places. All information is handled manually and by some information is handled by MS-Excel which is really tiresome and error prone. There is no organized manner to perform the stores functions, resulting in surplus and confusing data. So my goal is to provide an organized method for different individual (working staff) to be able to access and modify this data.

Problems Faced by the Current System

- Information is stored in written form in registers and some MS-Excel. This has many disadvantages. Checking a record in a register takes more time.
- Registers require more space.
- There is no space for proper management stocks in the store.
- Retrieving information from registers is more difficult and error prone.
- It is difficult to find and modify existing records.
- Current system being manually is more error prone.

Main objectives of the project are:

- To integrate the various general store information at one place.
- To reduce the paperwork involved to be the minimum.
- To generate invoice for every customer date wise. To generate bill date to date wise.

CHAPTER 3: PRELIMINARY DESIGN

The first step in the system development life cycle is the preliminary investigation to determine the feasibility of the system. The purpose of the preliminary investigation is to evaluate project requests. It is not a design study nor does it include the collection of details to describe the business system in all respects. Rather, it is the collecting of information that helps committee members to evaluate the merits of the project request and make an informed judgment about the feasibility of the proposed project.

3.1 Software Development Life Cycle Model

3.1.1 Rapid Application Development

Reason: since the software size was not much large and there was a time-bound and the project was made in modules therefore in this project, I used Rapid Application Development. A software project can be implemented using this model if the project can be broken down into small modules wherein each module can be assigned independently to separate teams. These modules can finally be combined to form the final product.

3.2 Data Flow Diagram

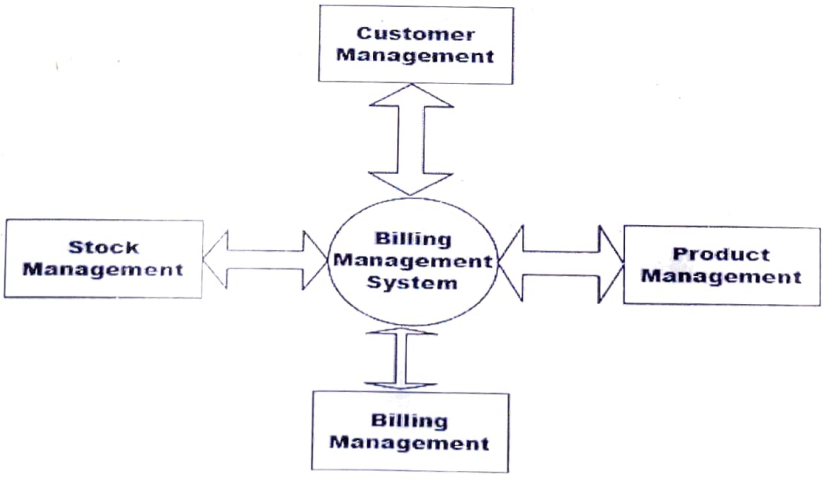

Fig 3.2.1 Data flow diagram

3.3 Tools & Technologies

3.3.1 Java

Java is a general-purpose programming language that is class-based and object-oriented. The programming language is structured in such a way that developers can write code anywhere and run it anywhere without worrying about the underlying computer architecture.

3.3.2 My SQL

MySQL is a database management system.

It may be anything from a simple shopping list to a picture gallery or the vast amounts of information in a corporate network. To add, access, and process data stored in a computer database, you need a database management system such as MySQL Server.

3.3.3 NetBeans

NetBeans IDE is a free and open source integrated development environment for application development on Windows, Mac, Linux, and Solaris operating systems. The IDE simplifies the development of web, enterprise, desktop, and mobile applications that use the Java and HTML5 platforms.

CHAPTER 4: FINAL ANALYSIS AND DESIGN

4.1 Introduction

Analysis collects a great deal of unstructured data through interviews, questionnaires, on-site observations, and procedural manuals and like. It is required to organize and convert the data through system flowcharts, data flow diagrams, structured English, decision tables and the like which support future development of the system.

The Data flow diagrams and various processing logic techniques show how, where, and when data are used or changed in an information system, but these techniques do not show the definition, structure and relationships within the data.

It is a way to focus on functions rather than the physical implementation. This is analogous to the architect's blueprint as a starting point for system design. The design is a solution, a "how to" approach, compared to analysis, a "what is" orientation.

System design is a highly creative process. This system design process is also referred as data modeling. The most common formatted used the E-R notation explains the characteristics and structure of data independent of how the data may be stored in computer memories.

The process of system design can be divided into three stages. They are:

- Structure design (already discussed)
- Database design
- Interface design

As we know that system design is a solution to "How to approach to the creation of new system". It provides the understudying and procedural details necessary for implementing the system. The steps involved during system design were as follow: -

4.1.1 LOGICAL AND PHYSICAL DESIGN

The current physical system was thoroughly reviewed from point of view how the data flows, what are its file contents, its volumes and frequency etc.

After this input, output specifications security & control specification were prepared. It was also decided that how physical information will flow through the system and a physical design walkthrough.

4.1.2 OUTPUT DESIGN

Program output is most important and direct source of information to the user. Efficient intelligible output design improves the system's relationship with the user and help in decision making. A major form of output is a hardcopy from printer. The format of outputs is designed in such a way that it is simple to read and interpret In the present output we have clearly labeled title it contains date and time and all the fields are clearly mentioned (labeled).

4.1.3 INPUT DESIGN

Input design is the process of converted user originated inputs to a computer based format in accurate input data are the most cause of errors in data processing. So, the input should be well design and error free. Input data is collected and organized into groups of similar data once identified appropriate input media is selected for processing.

4.1.4 SCREEN DESIGN

The screen design for inputting the inputs were also panned as the format of inputs.

4.2 Interface Design

User interface design creates an effective communication medium between a human and a computer. Following asset of interface design principles, design identifies objects and action and then creates a screen layout that forms the basis for a user interface prototype. Interface deign of General Store Billing System is based on the following three principles.

Place the user in control

During the information gathering session for General Store Billing System (HR General Store), HR General Store user was asked about the attributes that he would like to have in the GUI interface. This was done to simplify the usage of software.

Reduce the user memory load

During The design Process of General Store Billing System all the possibilities such as using mnemonics for Particular action, providing visual cues etc. are worked out to make user comfortable working with our software and to make him remember less information.

Make the interface consistent

All possible efforts are undertaken to maintain standard user interface.

Some of these are:

1. All visual information (likes form) is organized according to a standard that is maintain throughout all screen displays.
2. Consistent navigation is defined and implemented.

Information is display to the user in an easily understandable way and layout. Visual layout is based on a real world image. Entry filling process first shows list that is for categorizing information and then information is saved according to that categorization.

Different indications are provided to enable the user to know the context of the work at hand.

Indications

Proper interaction is necessary for good interface design. As computer industry grows it becoming more and more versatile. There are number of interaction device present in the Market like keyboard, mouse, digital pen, voice recognition commands etc which can be used for giving input. Also

interaction is not only concerted with device interaction, it is also concerned with system interaction mean how much comfortable user feels while interaction with system.

Design feature of interaction:

Since different use have different preference as someone like to work thought mouse or someone thought keyboard therefore choice have been provided to user for using for using mouse and keyboard. Software interact equally well with both using the device.

Our System is designed for interruptible interaction mean when involved in sequence of action the use can interrupt the sequence to do something else (without loosing the work that had been done).

Login Screen

When a user starts the software, the first form he encounters is the login form. In the login form the user has to choose store name then fill his Username and password. The form is used to keep check in, so that unauthorized users are granted access to the system.

The MDI From

After the user enters the correct username and password, a MDI form appears on the screen. This MDI form provides different options which enable the user to perform different action. It has five options which are sub titled under different forms. Each option has been provided to facilitate user in different ways.

4.3 Results

4.3.1 Login Page

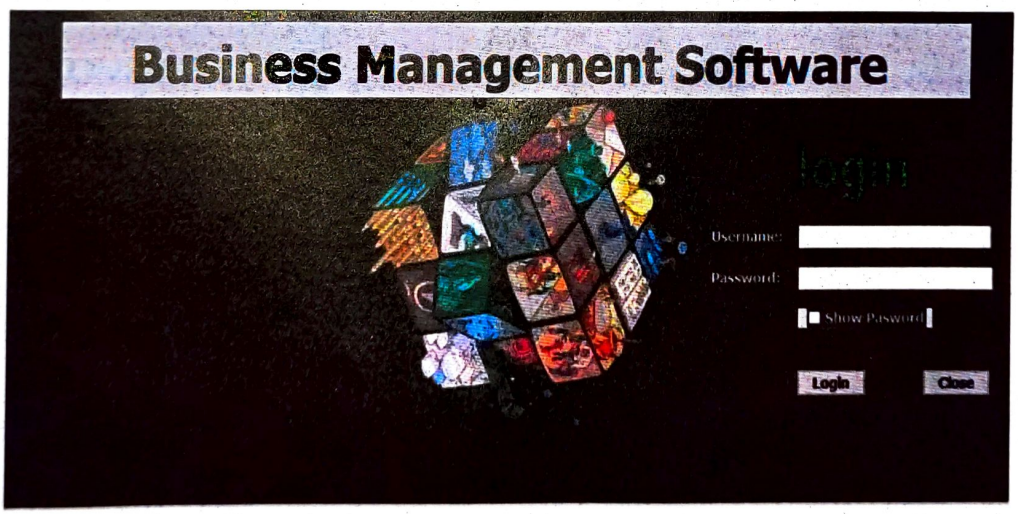

Fig 4.3.1 Login Page

4.3.2 Home page

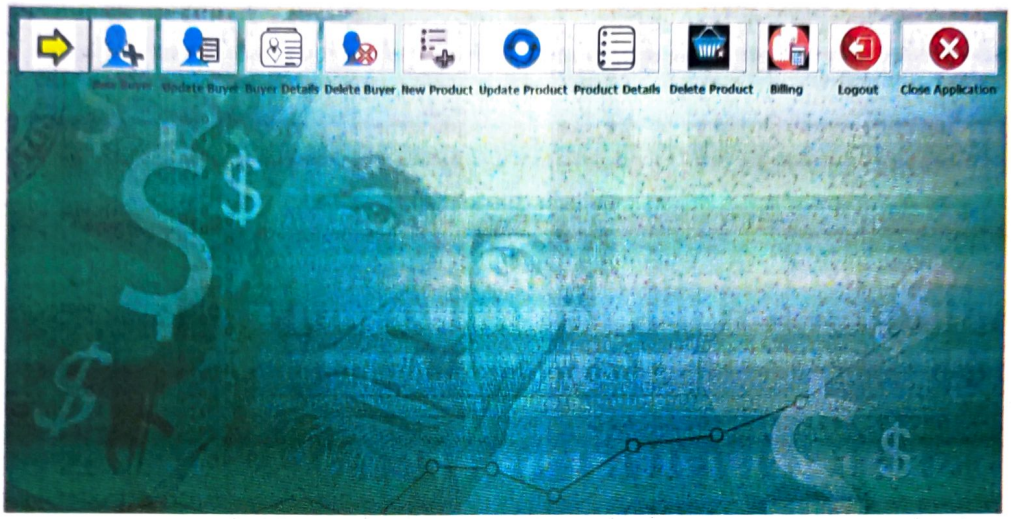

Fig 4.3.2 Home Page

4.3.3 New Buyer

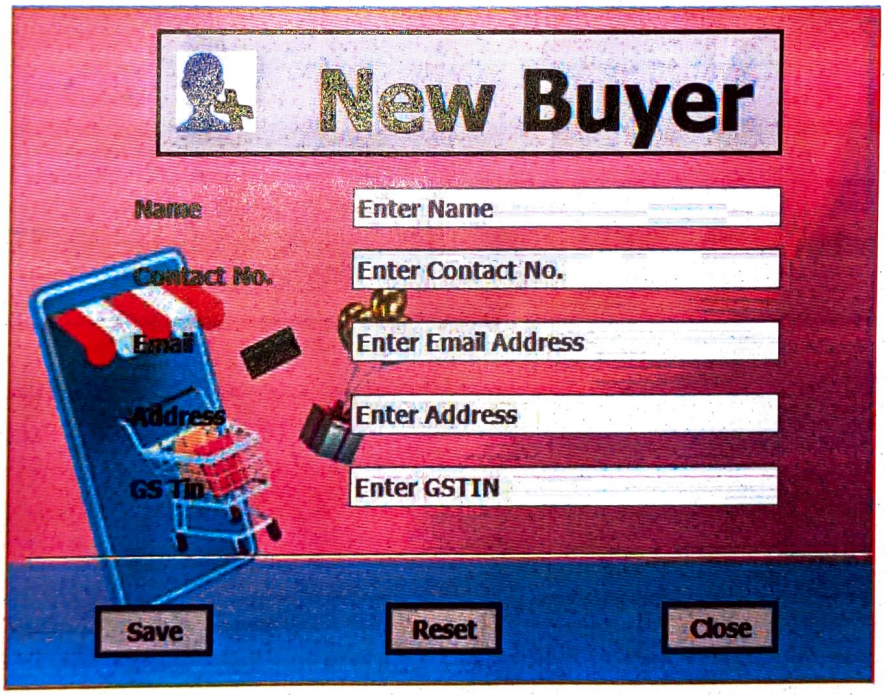

Fig 4.3.3 New Buyer Page

4.3.4 Update Buyer

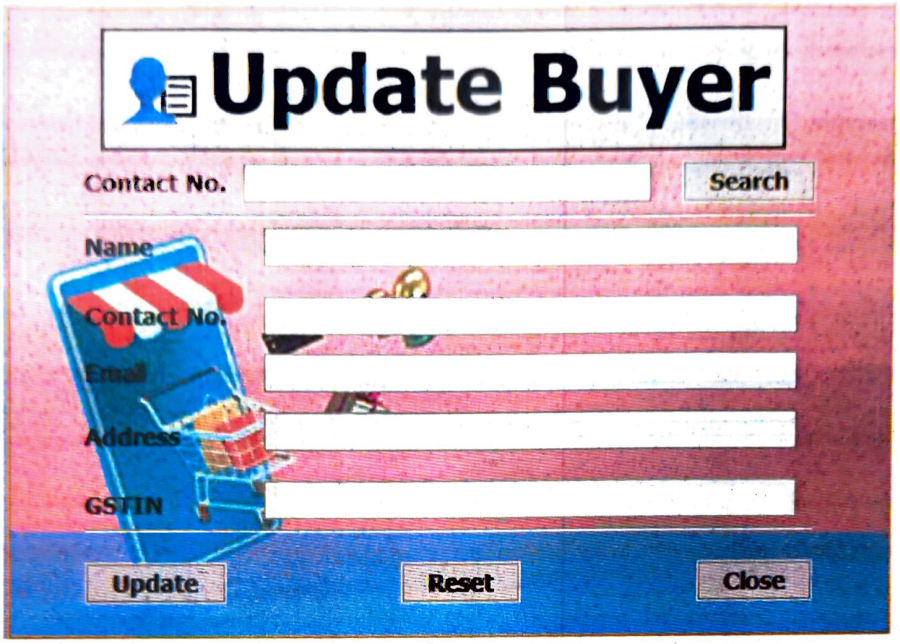

Fig 4.3.4 Update Buyer Page

4.3.5 Buyer Details

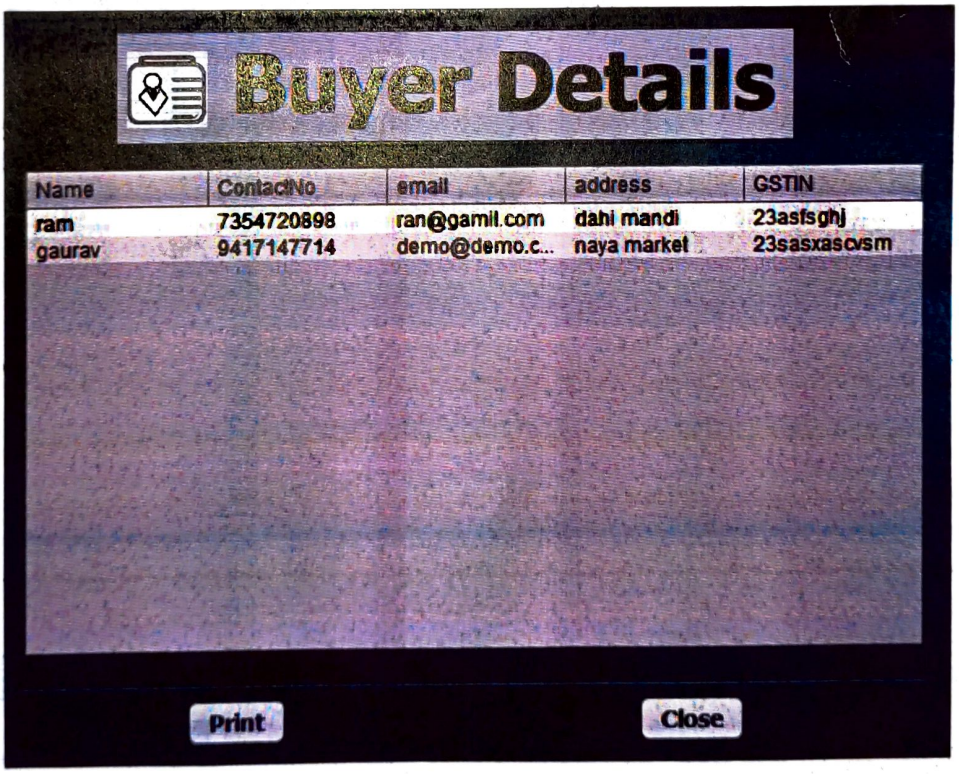

Fig 4.3.5 Buyer Details Page

4.3.6 Delete Buyer

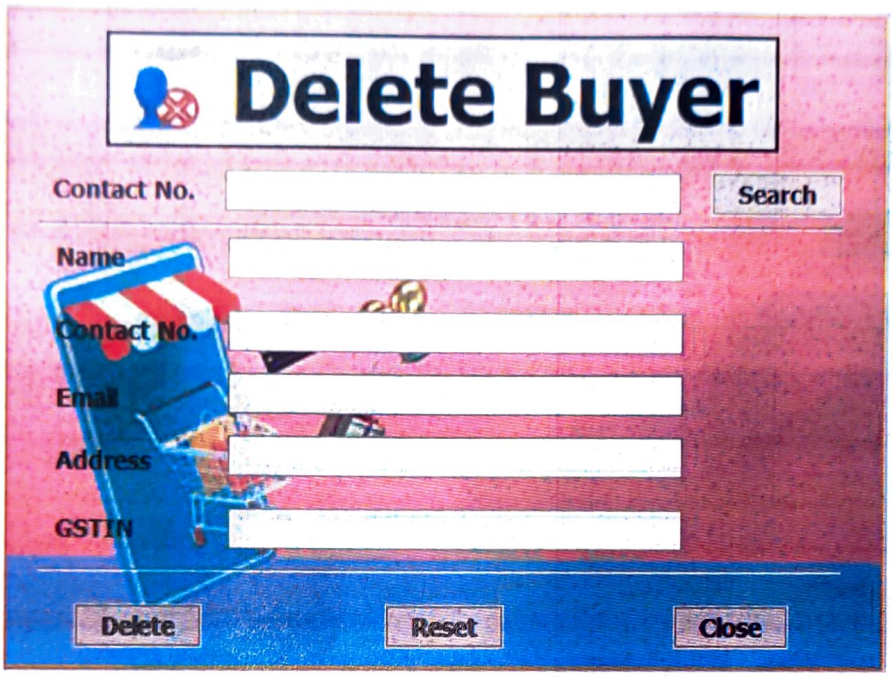

Fig 4.3.6 Delete Buyer Page

4.3.7 New Product

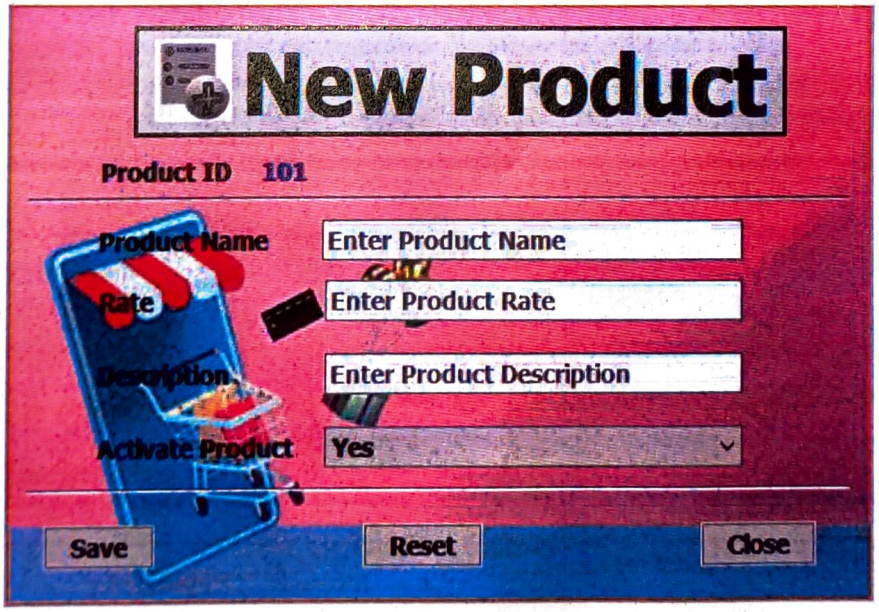

Fig 4.3.7 New Product Page

4.3.8 Update Product

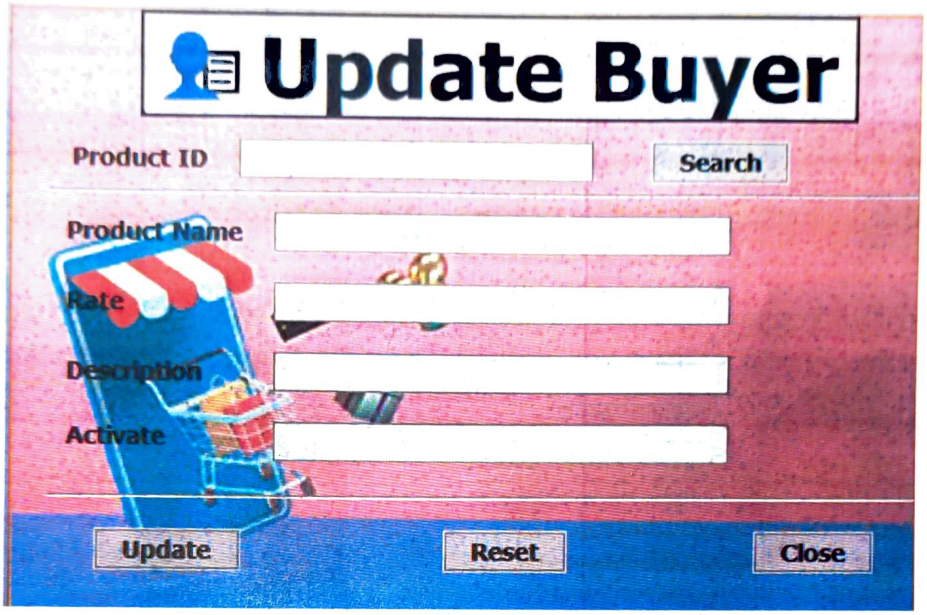

Fig 4.3.8 Update Product Page

4.3.9 Product Details

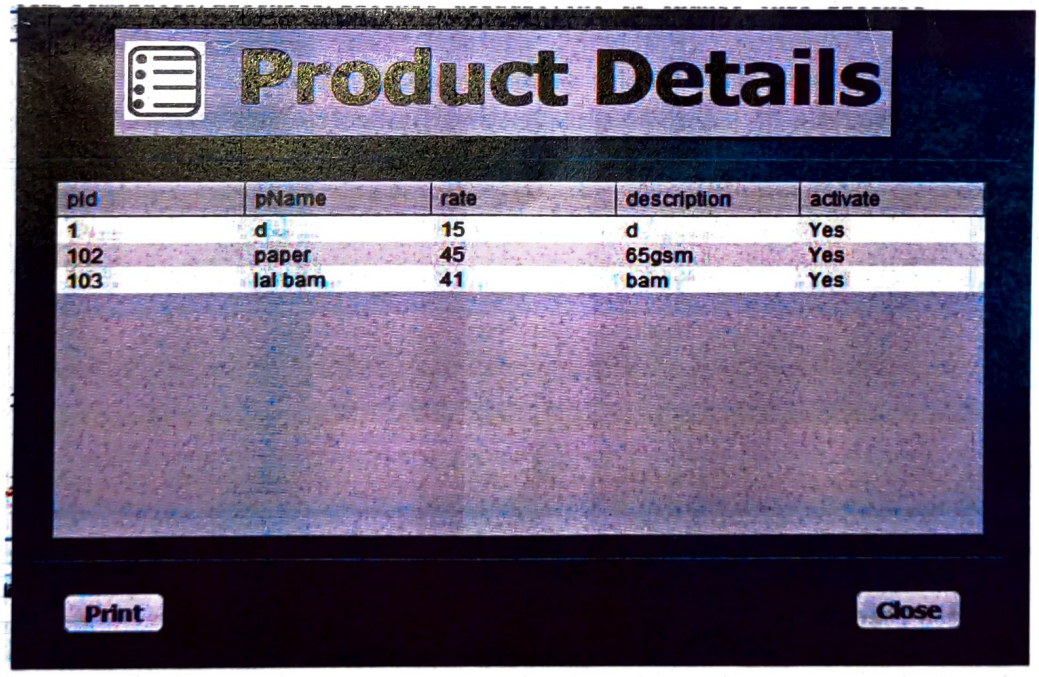

Fig 4.3.9 Product Details Page

4.3.10 Delete Product

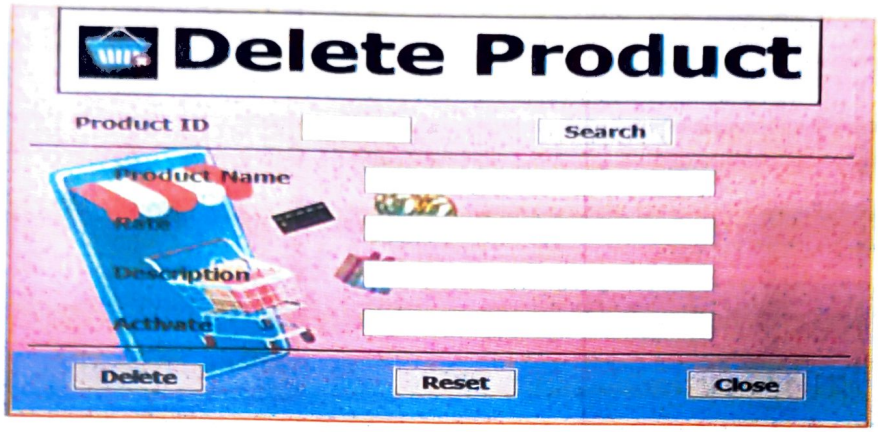

Fig 4.3.10 Delete Product Page

4.3.11 Billing

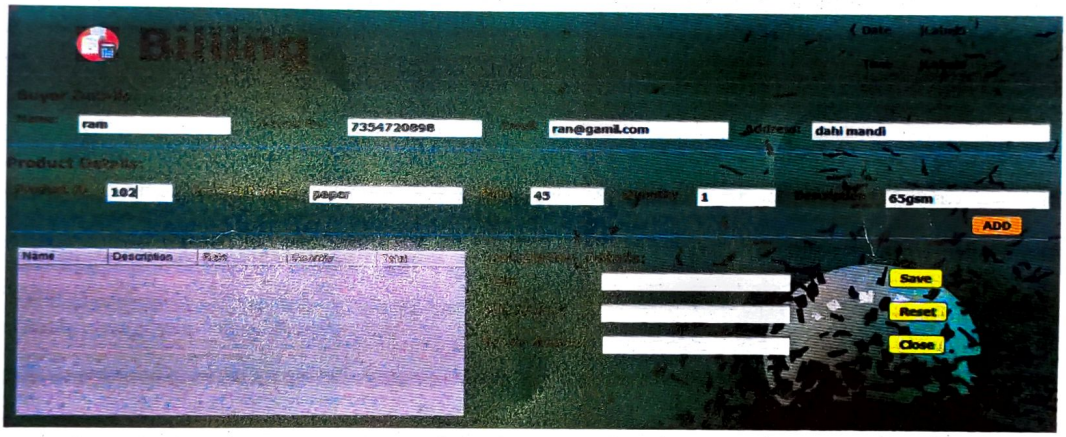

Fig 4.3.11 Billing Page

4.3.12 Logout

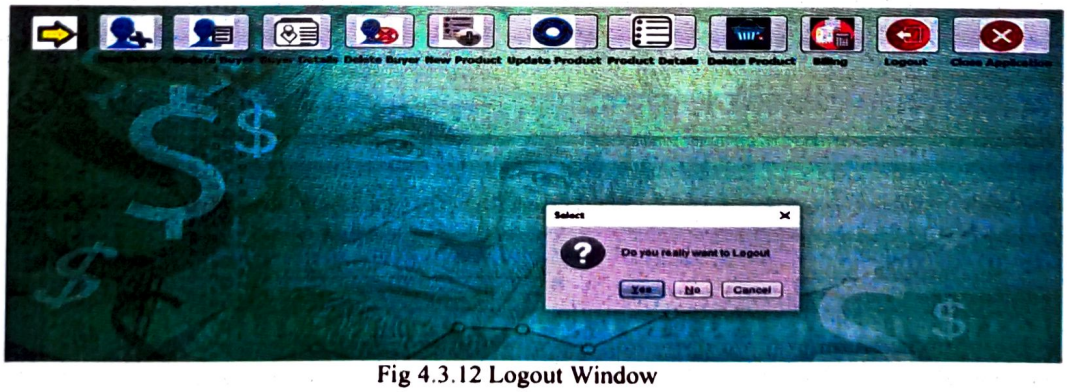

Fig 4.3.12 Logout Window

CHAPTER 5: CONCLUSION, LIMITATIONS AND FUTURE SCOPE

5.1Conclusion

Running a small business can be quite demanding and it is essential that the owner or manager has the means to run the businesses practices and processes efficiently and effectively. Without this a business will start to lose vital customers and this will lead to problems that could ultimately spell the end for a small business.

One way to ensure that a small business is running as smoothly as possible is to have the right kind of software. Small business management software can really help to make all the difference to the effective and efficient running of any small business.

By only using the one software application to perform a multitude of different tasks other software applications are effectively made redundant.

In monetary terms this means that all licenses for other software applications can be cancelled when small business management software takes over.

Many small businesses find themselves unable to afford several different software applications which can cause issues with various processes.

When employees are able to complete projects, create quotes and invoices, fill in timesheets, create customer contacts via CRM contact management, chase up sales leads, stay on top of unpaid invoices, share documents, and more using one application, it is clear to see where money can be saved.

Small business management software can help the owner and managers of any small business to effectively track the progress of projects. Instead of having to find the time to speak to employees involved in various projects, an owner or manager can simply check on the status of the project via the software application.

No more waiting to speak to employees about whether or not a project is on schedule. Simply login to the application and check it yourself.

5.2 Future Scope

So there are many things for future enhancement of this project. The future enhancements that are possible in the project are as follows.

- To optimize the query this is embedded in the system.

- Linking and integration of any legacy system for accounting.
- This project further can developed as a online general store billing system.

5.3 Limitations

This project is developed for single user (business requirement); however there are lots of scopes to improve the performance of the Billing and Invoice System in the area of user interface, database performance, and query processing time. Etc. Only single user can use the software i.e. the system is standalone.

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