



P-3366



SOFTWARE DEVELOPMENT FOR YARN TRADING SYSTEM

WITH SPECIAL REFERENCE TO SANJEEV TEXTILES, SOMANUR

P-3366

A SUMMER PROJECT REPORT (MBA703)

Submitted by

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Under the Guidance of

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in partial fulfillment for the award of the degree

of

MASTER OF BUSINESS ADMINISTRATION

in

Department of Management Studies

KUMARAGURU COLLEGE OF TECHNOLOGY

(An Autonomous Institution Affiliated to Anna University of Technology, Coimbatore)

COIMBATORE – 641 049

October, 2010



KUMARAGURU COLLEGE OF TECHNOLOGY
COIMBATORE -641 049

Department of Management Studies

A SUMMER PROJECT WORK (MBA703)
OCTOBER 2010

This is to certify that the project entitled

SOFTWARE DEVELOPMENT FOR YARN TRADING SYSTEM WITH
SPECIAL REFERENCE TO SANJEEV TEXTILES, SOMANUR

is the bonafide record of project work done by

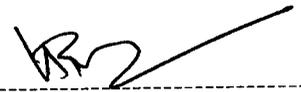
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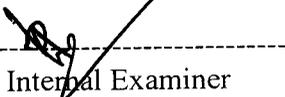


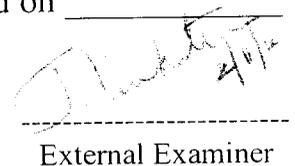
Project Guide



Head of the Department

Submitted for the Summer Project Viva-Voce examination held on _____


Internal Examiner


External Examiner



SANJEEV TEXTILES

ST/HRD/583-10

3/10/2010

PROJECT CERTIFICATE

This is to certify that Mr.N.Senthil Kumar, II MBA student of Kumaraguru college of technology has done a project work on "SOFTWARE DEVELOPMENT FOR YARN TRADING SYSTEM WITH SPECIAL REFERENCE TO SANJEEV TEXTILES" in our organization from july 2010 to October 2010.

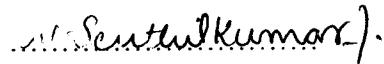
For SANJEEV TEXTILES

C. Thirumangalakudi

MANAGER

DECLARATION

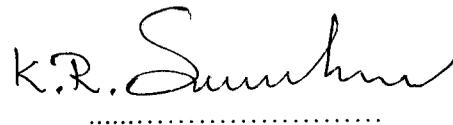
I affirm that the project work titled “**SOFTWARE DEVELOPMENT FOR YARN TRADING SYSTEM WITH SPECIAL REEFERENCE TO SANJEEV TEXTILES, SOMANUR**” being submitted in partial fulfillment for the award of Master of Business Administration is the original work carried out by me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other University.



N.SENTHIL KUMAR

(0920400047)

I certify that the declaration made above by the candidate is true.



Mr.K.R.Sathish kumar,
Lecturer.

ACKNOWLEDGEMENT

I express my sincere gratitude to our beloved chairman **Arutchelvar Dr. N.Mahalingam and Management** for the prime guiding spirit of Kumaraguru College of Technology.

I wish to express deep sense of obligation to **Mr.K.R.Sathish kumar, Lecturer, KCT Business School**, for his intensive guidance throughout my project.

I am greatly indebted to thank **Mr.C.Ganeshmoorthy**, Project Co-ordinator / Class Advisor and all other faculty members of KCT Business School for their kind support.

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INTRODUCTION

1. INTRODUCTION

1.1 OBJECTIVE OF THE STUDY

- To develop a software application for implementing yarn trading system to Sri Balaji Traders.
- To make suitable suggestions and recommendations to improve the present system\

1.2 COMPANY PROFILE

This project titled as “**SOFTWARE DEVELOPMENT FOR YARN TRADING SYSTEM WITH SPECIAL REFERENCE TO SANJEEV TEXTILES**” is being developed for the concern “**SANJEEV TEXTILES**”, Somanur

This mill is located in the following address 243 Devarayanpalayam (po), Somanur.

“Sanjeev textiles” started before 10 years. It was started by C. Thiyagarajan. The employees are well experienced in yarn. They manufacture best quality of yarns. They sold yarn to many customers of various cities in and around Tamilnadu.

The Balaji Traders Yarn Trading has now a spindle age capacity of 4200 spindles employing around 50 workers and 10 staff members. The yarn selling ranges from 20s to 90s (both cotton and polyester). The main sales center of our yarn is Somanur though a considerable quantity is sold in local markets.

1.3 PROJECT OVERVIEW

Yarn Trading are engaged in purchasing yarn from suppliers and Selling to customer and retailers. The project entitled is designed to automate the activities involved in managing the transaction in trade. The system gives the functionality such as Bill Preparation, Day to Day transaction, Yarn Purchase and Yarn sales and stock maintenance. Reports are prepared for purchase, customer list, total and sale. Moreover the reports are prepared as daily, weekly and monthly basis.

The indent is a document which contains requirements of the users in the corresponding departments. A purchase order for yarn is placed by the purchase department which contains the conformed stocks approved for purchasing. The company sends the Yarn stocks in the list in the purchasing order. The stock is updated accordingly.

The Receipts & Issues are prepared and database is appropriately by the system. The project products sophisticated reports as per to meet the company's requirements.

The Yarn Trading is developed under following seven modules,

YARN PURCHASE: (INWARDS)

- ❖ Monitoring the purchase transactions
- ❖ Placing Purchase order
- ❖ Purchase bill entry

YARN PURCHASE RETURN:

- ❖ Monitoring the purchase Return transactions
- ❖ Updating the stock

YARN SALES: (OUTWARDS)

- ❖ Monitoring the sales transaction
- ❖ Checking the availability
- ❖ Scheduling the delivery
- ❖ Calculating price and tax
- ❖ Sales return

YARN SALES RETURN:

- ❖ Monitoring the sales return transaction
- ❖ Maintaining the sales return details.

CUSTOMER MASTER:

- ❖ Monitoring the Customer Details.
- ❖ Checking the availability
- ❖ Maintaining the Customer Details.

ITEM MASTER:

- ❖ Maintaining the available yarn details.
- ❖ Updating the opening Stock
- ❖ Updating the Cost Price and Selling Price Entry
- ❖ The developed system deals with purchase, sales and stock details.

REPORTS:

The project produces sophisticated reports as per to meet the company's requirements.

PROBLEM DESCRIPTION

2. PROBLEM DESCRIPTION

2.1 EXISTING SYSTEM

Existing system archived the task manually through the department of purchase and sales. All inputs and transaction were entered into files manually whenever there was a request for the report details, they were taken from the files, analyzed and the results were filed in a report format. The study of existing system has enlightened the limitation of the system and has paved a way for the purposed system.

The existing system aims at improving the routine business activities like maintaining the supplier and customer database for future reference and customer mail, customer details ,billing (purchase and sale) and reports of the company .at present the details about sale ,purchase, are noted down in papers and registers, so it may be difficult to retrieve the data.

LIMITATIONS OF EXISTING SYSTEM

The limitations of the existing system are as follows:

- ❖ The work cannot be done faster and efficiently in a right manner, it is more complex
- ❖ The system was manual and very tedious to maintain and take reports, since all the data were stored in papers.
- ❖ All were written documents so, security is less.
- ❖ Since there are modifications involved, the data stored in paper are not reliable.
- ❖ Redundancy of data.
- ❖ Various types of queries by the company at the time of requirements are not possible.
- ❖ Unable to provide instinct reports required by the company.
- ❖ As it is character-based system, it is not user friendly.
- ❖ Incorrect manual calculation, results in a great loss.
- ❖ Reports are not sufficient and are very complex and time consuming.

2.2 PROPOSED SYSTEM

The basis for the proposed system is the recognition of the need for improving the existing system. For the growth of the company it was decided to have a fully automated system in which speed and accuracy were the main focus. The proposed system aims at overcoming the drawbacks of the existing system.

In the proposed system the customer requirements are exact and complete information regarding the works, which was done manually in the past .Details of all the firms to related to the company are also manipulated so that it will be easier for the company to choose the firms to achieve maximum benefit.

An important aspect of the new system is that it should be easy to incorporate the changes. The user should be able to make without any difficulty at any time. The computer is used as a tool to automate tasks that are repetitive, time consuming and labour intensive. to overcome of the existing system the limitation of the existing system it was decided to develop an integrated system.

ADVANTAGES OF THE PROPOSED SYSTEM

- ❖ Cost is reduced in all aspects if the system.
- ❖ Eliminating the manual errors.
- ❖ Reducing manpower.
- ❖ Providing speed and accurate information to the user.
- ❖ Time delay is reduced.
- ❖ Security is provided
- ❖ Loss of data is prevented.
- ❖ Eliminating redundancy of data.
- ❖ Proposed is reliable ,maintainable ,extendible, reusable, interoperable and flexible

SPECIAL FEATURES OF THE PROPOSED SYSTEM

- ❖ Date wise / Month wise / year wise purchase report.
- ❖ Data wise / Month wise / year wise Sales report and Computer stock reports.
- ❖ Visual representation of sales status
- ❖ The grid concept enhance the access multiple tables at a time.
- ❖ Both keyboard and mouse event are provided

COMMON FEATURES OF THE PROPOSED SYSTEM

- ❖ All the modules would be multi-user in nature, allowing more than one user to simultaneously work on the same module.
- ❖ The system would be a codeless system for transaction entry by displaying the codes at the touch of a key.
- ❖ All the reports could be viewed on the screen also. So, only the necessary reports could be printed as hard copies.
- ❖ The modules would operate through user friendly menus with extensive interactive message, so that the user themselves could handle the system.

DEVELOPMENT PROCESS AND DOCUMENTATION

3. DEVELOPMENT PROCESS & DOCUMENTATION

3.1 REQUIREMENT ANALYSIS

3.1.1 HARDWARE SPECIFICATION

The Hardware of the computer consists of physical components such as Input Devices, Storage Devices, Processing & Control units and Output Devices. Computer includes external storage data in programs. The popular external storage mediums are Floppy Disk, Compact Disk etc,

The hardware Configuration involved in this project is,

Platform	:	windows XP
Processor	:	Pentium IV
RAM	:	512 MB
Hard Disk	:	80 GB
VDU	:	VGA Colour Monitor
Disk Driver	:	1.44 Floppy Disk Drive.

3.1.2 SOFTWARE SPECIFICATION

Software is a group of program that computers need to do a particular task, it is an essential requirement of computer system.

The Software used to develop the project is,

Operating System	:	Windows XP
Front –End	:	Visual Basic 6.0
Back –End	:	MS ACCESS 2003

3.1.3 SELECTION OF SOFTWARE

PLATFORM:

Windows XP Professional gives all the benefits of Windows XP Home Edition, plus additional remote access, security, performance, manageability and multi-lingual features that make the operating system to suit for businesses of all sizes and user who demand the most out of their computing experience.

New user interface - makes it easy to find details according to user needs.

A reliable foundation you can count on – keeps computer up and running when user needed it most.

Network Setup Wizard - easily connect & share the computers and devices.

Windows Messenger – the ultimate communications & collaboration tool with instant messaging, voice and video conferencing, and application sharing.

Windows Media Player for Windows XP - single place for finding, playing, organizing, and storing digital media.

Help & Support Center - easy to recover from problems and get help and support when needed.

File and Folder Management:

Windows XP provides several new ways to arrange and identify files when viewing them in folders such as My Documents.

ABOUT VISUAL BASIC 6.0



Microsoft Visual Basic is one of the best **GUIs** and version 6.0 is the latest Version of the popular programming language. With its new features, Visual Basic is an even stronger contender in the application development area than ever before.

Microsoft Visual Basic, the fastest and easiest to create applications for Microsoft windows. Visual Basic provides with a complete set of tools to simplify Rapid Application Development (**RAD**).

VISUAL BASIC 6.0

The “**Visual**” part refers to the method used to create the graphical user interface (**GUI**), Rather than writing numerous lines of code to describe the appearance and location of interface elements, we simply add rebuilt objects into place on screen. The “**Basic**” part refers to the BASIC (Beginners All - Purpose Symbolic Instruction Code) language, a language used by more programmers than any other language in the history of computing. Visual Basic has evolved from the original BASIC language and now contains several hundred statements, functions and keywords, many of which relate directly to the windows GUI.

The purpose of Visual Basic is to develop robust stand-alone application, games, and utilities less time than it takes in other languages. We can use also ActiveX technology to create internet-enabled applications that are limited only by our imagination.

Visual Basic 6.0 is the newest addition to the family of Visual Basic products. It allows us to create Windows applications for our PC without being an expert in C++ or other programming languages.

Visual Basic 6.0 is specially designed to utilize the Internet. It comes with several controls that allow us to create web-based applications called ActiveX executables. They will work just like stand-alone visual basic application, but they are accessed through the Microsoft Internet explorer 3.1

Web browser. This allows us to revise our applications and distribute them through the Internet.

Some new features in visual basic 6.0 are given below:

- ❖ VB 6.0 is most productive tool for creating high-performance enterprise and web-based applications.
- ❖ VB 6.0 integrated visual database tools and new data environment designer can visually design oracle and MS SQL sever databases and create reusable data access queries all without leaving the VB environment.
- ❖ Data report designer can quickly drag and drop custom data-bound controls to create forms or reports. Creation of custom data hierarchies is as easy as filling out a dialog box and dragging the command to the form.
- ❖ VB 6.0 professional edition is designed for individual professional or corporate developer who needs to create a client/server or Internet based applications.
- ❖ With the emergence of dynamic HTML page designer, multimedia rich applications can be developed using the document.
- ❖ Object model and dynamic HTML surface.

VISUAL BASIC 6.0 FEATURES

The Visual Basic Enterprise Edition contains all of the features includes with the Visual Basic professional edition and the Visual Basic learning edition . In addition, it contains the following features, available in the enterprise edition only. For more information about other editions of Visual Basic, see Visual Basic editions.

Visual Component Manager:

This tool stores, organizes, and shares reusable components. It can contain wizards, ActiveX components, Database connection objects, and many other components used in Visual Basic projects. It is suited to enterprise-wide component cataloguing and reuse because it is based on the open and scalable Microsoft Repository.

VISUAL DATABASE TOOLS INTEGRATION:

With these designers you can visually create and modify database schemes and queries: Create SQL Server and Oracle database tables, drag and drop to create views, and automatically change column data types.

Data access:

1. **ADO (ActiveX Data Objects).**
2. **Data Environment.**
3. **ADO Data Control.**
4. **Enhanced Data Binding.**
5. **OLEDB Support.**
6. **Visual Database Tools Integration.**
7. **Setup Wizard Data Enhancement.**
8. **Data Report.**
9. **Data View Window.**
10. **SQL Editor.**
11. **Hierarchical Flex Grid Control.**
12. **Data Repeater Control.**
13. **Passing ADO Record sets.**
14. **Data Form Wizard Enhancement.**
15. **Data Object Wizard.**
16. **File System Objects.**
17. **Format Objects.**

ADO CONTROL:

The ADO Data control user Microsoft ActiveX Data Objects (ADO) to quickly create connections between data-bound control and data provides. Data-bound controls are any controls that feature a Data Source property. Data provides can be any source written to the OLEDB specification. We can also easily create our own data provider using Visual Basic's class module.

Although we can use the ActiveX Data Objects directly in our applications, the ADO Data control has the advantage of being a graphic control (with back and Forward buttons) and an easy-to-use interface that allows we to create database applications with a minimum of code.

DATA REPORTS:

The Microsoft Data Reports designer is a versatile data report generator that features the ability to be created, banded hierarchical reports. Used in conjunction with a data source such as the Data Environment designer, we can create reports from several different relational tables. In addition to creating printable reports, we can also export the report to HTML or text files.

USES:

- ❖ Automatically create reports that are exported in HTML format for instant distribution on the Internet.
- ❖ Create reports that show the sums of transactions occurring on a daily basis.

DATA COMBO:

The Data Combo and Data List controls strongly resemble the standard list box and combo box controls, but there are some important difference that give them great flexibility and usefulness in database application. Both controls can be automatically filled from a database field from the data control to which they are bound. In addition, they can optionally pass selected field to a second data control, making them ideal for “lookup table” application.

TEXTBOX:

A Text Box control, sometimes called an edit field or edit control, displays information entered at design time, entered by the user, or assigned to the control in code at run time.

TIMER:

A Timer control can execute code at regular intervals by causing a Timer event to occur. The timer control, invisible to the user, is useful for background processing

TOOL BAR:

A Toolbar control contains a collection of Button objects used to create a toolbar that is associated with an application.

LABEL:

A Label control is a graphical control and we can use to display text that a user can't change directly.

LIST BOX:

A List Box control displays a list of items from which the user can select one or more, if the number of items exceeds the number that can be displayed, a scroll bar is automatically added to the List Box control.

If no item is selected, the List Index property value is -1. The first item in the list is List Index 0, and the value of the List Count property is always one more than the largest List Index value.

COMBO BOX:

A Combo Box control combines the features of a Text Box control and List Box control-users can enter information in the text box portion or select an item from the list box portion of the control.

DATA COMBO:

The Data Combo control is a data-bound Combo Box that is automatically populated from a fields in an attached data source, and optionally update a field in a related table of another data source.

DATA GRID:

Displays and enables data manipulation of a series of rows and Columns representing records and fields from a Record sets object.

DATA LIST:

The Data List control is a data-bound list that is automatically populated from a field in an attached data source, and optionally updates a field in a related table of another data source.

CHECK BOX:

A Check Box control displays an X when selected; the X disappears when the Check Box is cleared. Use this control to give the user a True/False or Yes/No option. We can use Check Box controls in groups to display multiple choices from which the user can select one or more. We can also set the value of a Check Box programmatically with the Value property.

COMMAND BUTTON:

Use a Command Button control to begin, interrupt, or end a process. When chosen, a command Button appears pushed in and so is sometimes called a push button.

DATA REPORT OBJECT:

The Data Report object is the programmable object that represents the Data Report designer.

SCROLL BAR CONTROLS:

Scroll bars provide easy navigation through a long list of items or a large amount of information.

EVENTS:

An event is a specific action that occurs on or with a certain object. Visual Basic can respond to a variety of events: mouse clicks, changes in data, forms opening or closing, and many others. Events are usually the result of user action.

Using either an event procedure or a macro, we can add our own Custom response to closing an event occurs on a form, or control.

DELETE:

The delete event occurs when the user performs some action, such as pressing the DEL key, to delete a record, but before the record is actually deleted.

CHANGE EVENT:

The change event occurs when the contents of a text box or the text portion of a combo box change. It also occurs when we move from one page to another page in a tab control. Examples of this event include entering a character directly in the text box or combo box or changing the control's Text property setting by using a macro or Visual Basic.

ADVANTAGES OF VISUAL BASIC:

The following key points make Visual Basic an excellent development tool:

- 1) Visual Basic applications are event-driven. Event driven means the user is in control of the application. The user generates a stream of events each time by clicking the mouse or by pressing a key on the keyboard.
- 2) Visual Basic supports the principles of objects oriented design, means that we can compartmentalize different aspects of our application as objects and develop and test those objects independently of the rest of the application. By modifying certain properties and invoking the methods of these objects.
- 3) Visual Basic is infinitely extensible through the use of Active X controls, dynamically linked libraries (DLLs), and add-ins. We can create those Active X controls and DLLs for use in other windows applications such as Excel word or access.

MICROSOFT ACCESS

Microsoft access is a fully featured database management system (DBMS) that lets us collect, organize, find, display, and print information about our personal and business life. The amount and variety of information it can deal with is staggering. Access comes with wizards and a variety of predefined database elements.

ACCESS CONCEPTS AND TERMS:

Microsoft has its own take on certain standard DBMS terms and has added a few new terms to the database world.

DATABASE:

A database is simply a collection of used data. The phone book is an example. Access database include such objects as tables, queries, forms, and more.

TABLES:

In access tables are collection of similar data. With all tables can be organized differently, and contain mostly different information – but they should all be in the same database file. For instance we may have a database file called video store. Containing tables named members, tapes, reservations and so on. These tables are stored in the same database file because they are often used together to create reports to help to fill out on screen forms.

RELATIONAL DATABASE:

Access is a relational database. Which means that it allow data that has been stored different places to be linked. Relational databases tools like access can help us manage information in three important ways. They can

- ❖ Reduce redundancy
- ❖ Facilitate the sharing of information
- ❖ Keep data accurate

RECORDS:

A record is all the information contained in one row of an access data sheet table. We might include a row for each entry.

FIELDS:

Fields are places in a table where we store individual chunks of information.

PRIMARY KEY AND OTHER INDEXED FIELDS:

Access use key fields and indexing to help speed many database operations. We can tell access, which should be key fields, or access can assign them automatically.

CONTROLS AND OBJECTS:

Controls are access objects that help us display, print and use our data. They can be things like field labels that we drag around when designing reports. Or they can be pictures, or titles for reports, or boxes containing the results of calculations.

QUERIES AND DYNASETS:

Queries are request to information. When access responds with its list of data, that response constitutes a dynast. A dynamic set of data meeting our query criteria. Because of the way access is designed, dynasts are updated even after we have made our query.

FORMS:

Forms are onscreen arrangement that make it easy to enter and read data. We can also print the forms if we want to. We can design form our self, or let the access Auto form feature.

REPORTS:

Reports are paper copies of dynasts. We can also print reports “to disk”, if we like. Access helps us to create the reports. There are even wizards for complex printouts.

PROPERTIES:

Properties are the specifications we assign to parts of our database design. We can define properties for fields, forms, controls, and most other access objects.

CALCULATIONS, EXPRESSIONS, AND FUNCTIONS:

We can have access to do the calculations as required. We can instruct Access to perform specific calculations by building expressions using built in functions.

WIZARDS:

Wizards are built in assistants that know how to guide us through steps necessary for common tasks.

Access wizards can help us create

- ❖ Queries
- ❖ Tables
- ❖ Forms
- ❖ Reports
- ❖ Macro
- ❖ Mailing labels
- ❖ Modules
- ❖ Controls and buttons

3.2 SYSTEM ANALYSIS & DESIGN

Design is the process of translating requirements defined during analysis into several designs activities for user requirements. The designer select requirements needed to implement the system in this phase; the design of the database also takes place. After identifying the problem, limitations are opportunities to improve the efficiency system. A detail design of the proposed system is done. In database design several objectives are considered such as,

- ❖ Controlled Redundancy
- ❖ Data Independence
- ❖ More Information at low cost
- ❖ Accuracy and Integrity
- ❖ Recovery and Failure
- ❖ Security
- ❖ Performance

Design Type:

The system design is the last phase that indicates the final system and process of the designed system. In the design phase, we design the database tables, input screens and the output reports. The data dictionary/database tables are designed by analyzing various functions involved in the system and the format of the fields are also designed.

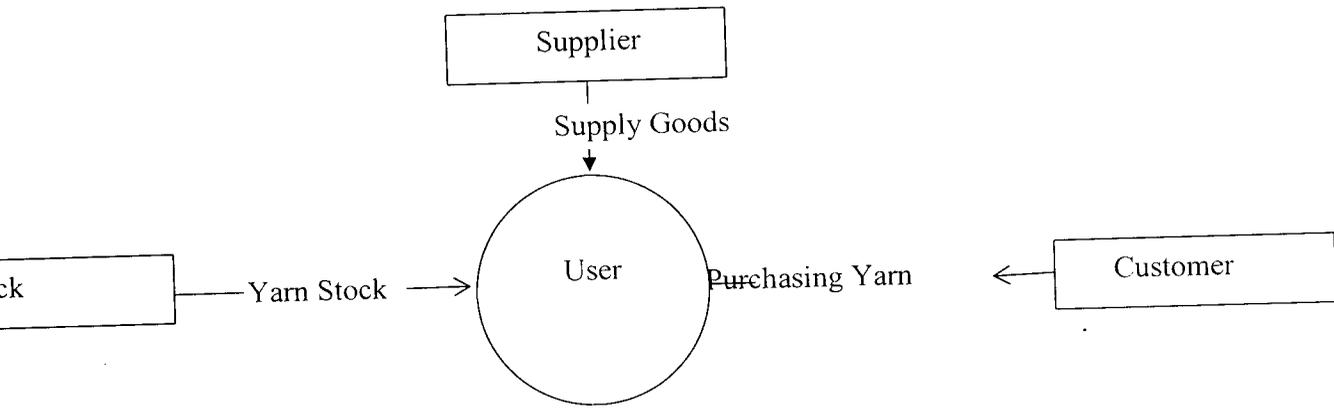
The fields in the database tables should be in self-explanatory and the screen should be made user friendly and descriptive, as the user may not be aware of the system messages. Also the screen design should be standardized. For a particular task the user should use standard screen format.

This kind of standardized will avoid wrong entries and errors. Then regarding the menu design, the menu should be brief, compact and self-explanatory. From the menu user can invoke the system. The menu should be sharp. Also the pop-up option is used to invoke the various sub menus in the system from the main menu. In material planning system the database tables are designed by using all the necessary fields in a compact manner.

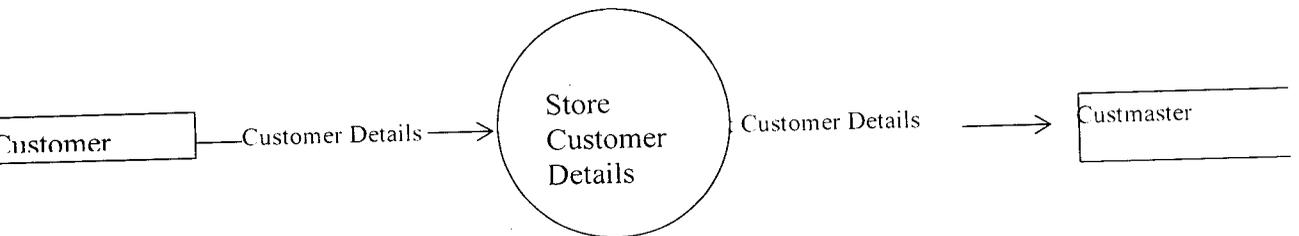
3.2.1 DATA FLOW DIAGRAM

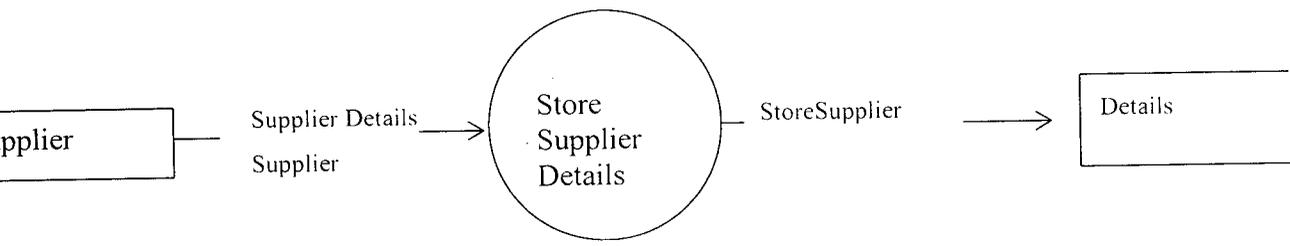
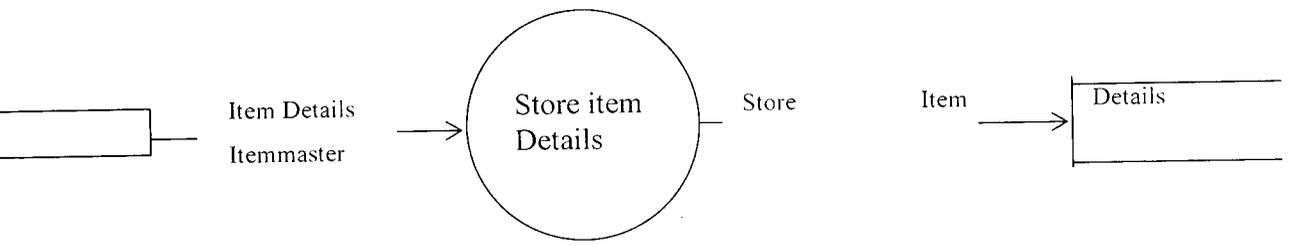
- ❖ It can help as in identifying the flow of data in a system without specifying the media or hardware involved.
- ❖ It uses a few simple symbols connected by arrow represents among data, flows, and external entities source and destinations stores.
- ❖ It is simple to draw and easily depict the basic components and flow of the system.
- ❖ It can be drawn in a increasing level of details starting with the summary high-level view and proceeding to more detailed lower level views.
- ❖ This supports a modular structured, top-down view of the system component and flows.
- ❖ It can be used to represent physical viewpoints.

Context Flow Diagram for Yarn Trading

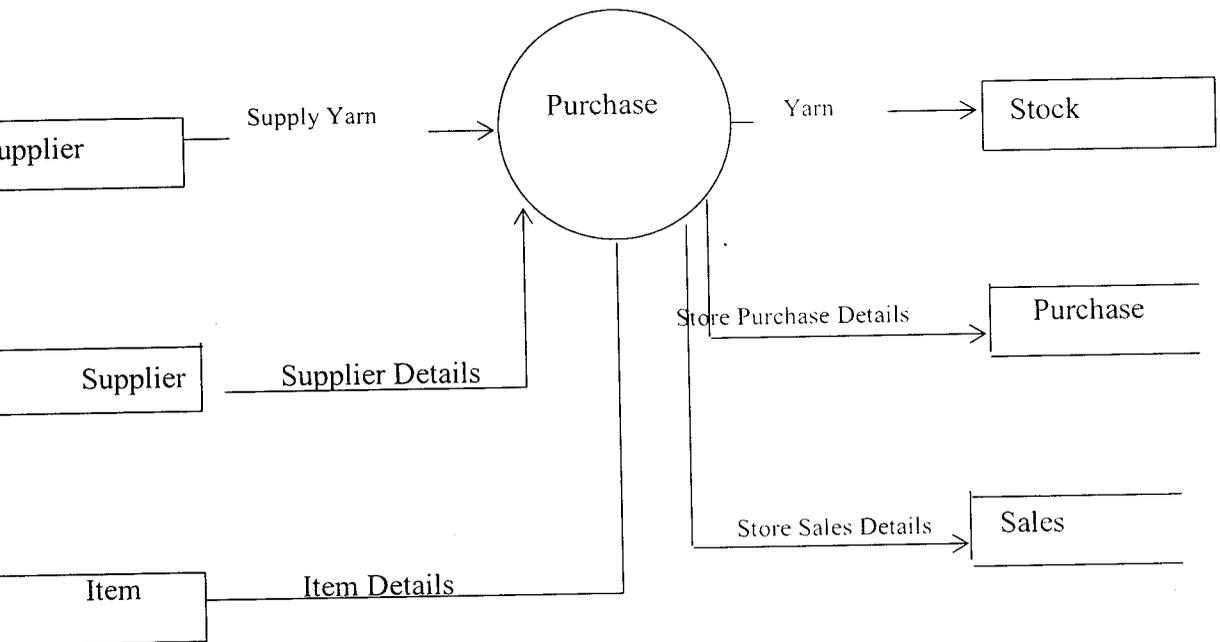


Data Flow Diagram for Master Detail Maintenance

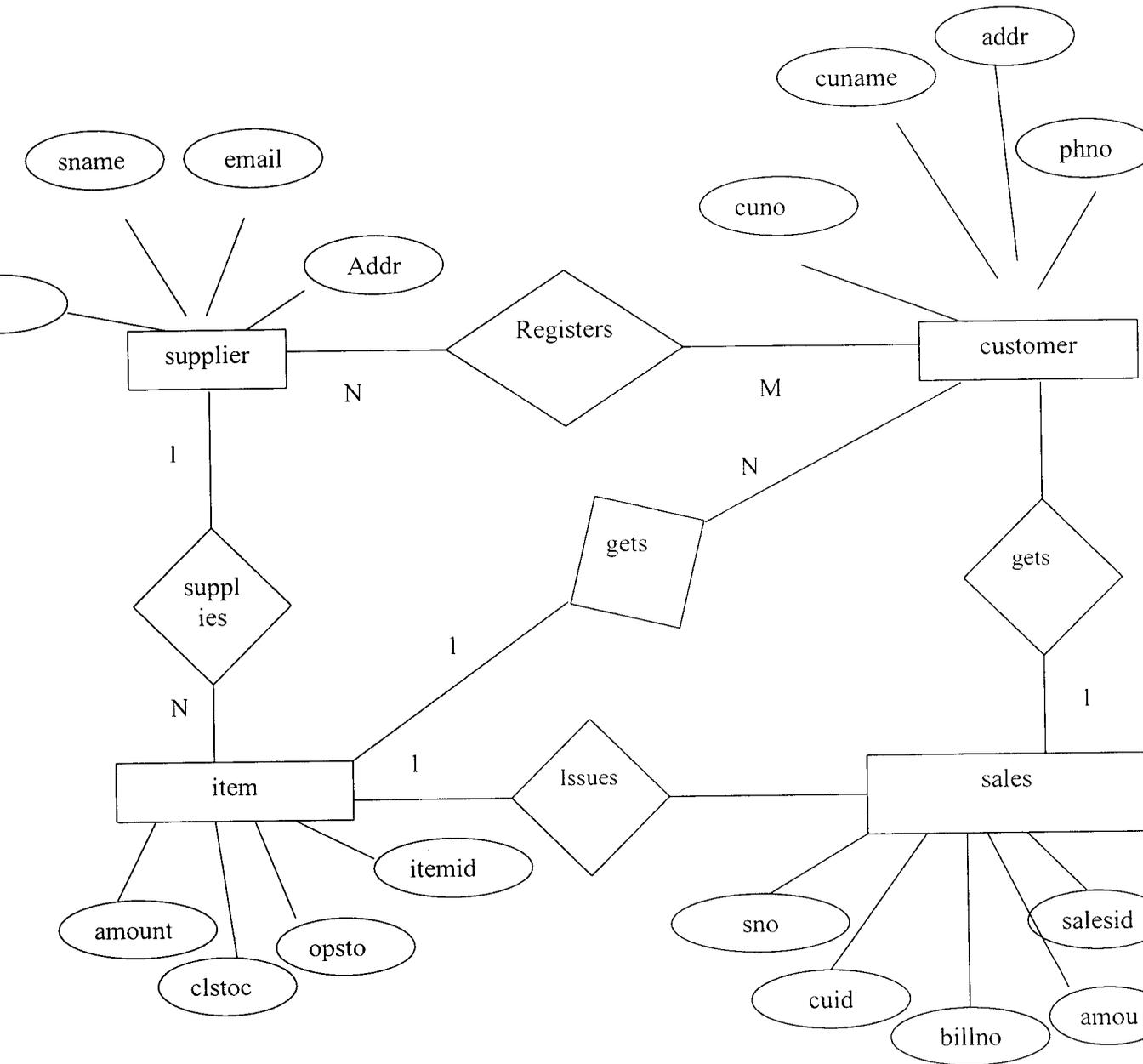




(a) Data Flow Diagram for Processing



ENTITY RELATIONSHIP DIAGRAM



SYSTEM DESIGN & DEVELOPMENT

The most creative and challenge phase of the system life cycle is system design. The design focuses on the detailed implementation of the system. System design is the process of planning a new system. The objectives of the proposed system are the driving forces behind the design process. Based on the input values and output requirements, the system is designed .it proceeds with the design of the database and the control logic that uses the data to generate useful information.

System design goes through two phases of development and they are logical and physical design. When analyst prepares logical system design, they specify then user needs of detail virtually determines information flow and out of the system and the required data sources

Physical design produces the working system by defining the design specification that tells the programmers what the system must do.

First step in design phase the system design description will be ready which is used as the base for the coding design.

It gives a detailed concentration on the technical and other specifications that will make the new system operational are

- ❖ Input design, which are the inputs that are to be fed into system.
- ❖ Database designs are the tables used for the system
- ❖ Procedural design describes the flow of the system
- ❖ Output design of the system.

A good system design has high user acceptance because it helps to solve the problems in business performance, and meets the information needs, within a sensible time scale, with a quality and security of information.

3.2.2 DATABASE DESIGN (TABLE DESIGN)

A “database design is a collection of inter-related data stored with a minimum of redundancy to serve many applications”. To develop a database that satisfies the information needs of today as well as for tomorrow, it is necessary to understand the database conceptually. The first task of the designer is to develop the conceptual model. The steps in the development of the conceptual model are;

- ❖ Data Analysis
- ❖ Relational Identity
- ❖ Graphical Representation
- ❖ Design Process

The database design is an important factor both in system testing and maintaining. It minimizes the artificial embedded in using separate files. The primary objective of the database design is fast response in less time. The database has three major aspects:

STRUCTURES

Structures are well-defined object that store the data of the database.

OPERATORS

The integrity rule is a law that governs which operation are allowed on the data structures of a database.

MAIN OBJECTIVE OF DATABASE:

- ❖ Control redundancy-database storing data only once.
- ❖ Ease of learning and user-friendly.
- ❖ Modifying data at low cost.

Data independence-changing hardware and storage procedure or adding a new without rewriting application program.

Table Name: custmaster

Primary Key: Custcode

ColumnName	Field Type	SIZE	Description
Custcode	Number	4	CustomerCode
Custname	text	22	Customer Name
Address	text	50	Address
City	text	11	City
Phone	number	10	Phone details
Fax	number	8	Fax details
Email	Text	22	Mail Details

The above database table is designed to acquire and store the customer master details customer code, name, address, city, phone , fax and mail details.

Table Name: itemmaster

Primary Key: icode

ColumnName	Field Type	SIZE	Description
Icode	Number	4	Itemcode
Iname	text	22	ItemName
OpeningStock	Number	4	Opening Stock details
Unit	Number	4	Unit details
opStockdate	Date	4	Opening stock date
Costprice	Number	5	CostPrice
Sellingprice	Number	5	Selling Price

The above database table is designed to acquire and store the item master details item code, item name, opening stock details, unit details, opening stock date, cost price, and selling price

Table Name: itempur

Primary Key:Icode,SupplierCode

ColumnName	Field Type	SIZE	Description
Icode	Number	4	ItemCode
Quantity	Number	4	Quantity details
Suppliercode	Number	4	Code of the supplier
PurchaseNo	Number	4	Purchase No details
Date	Date		Purchase Date

The above database table is designed to acquire and store the item purchase details item code , quantity , purchase , purchase date

Table Name: payment

Primary Key: Paymentno

ColumnName	Field Type	SIZE	Description
Paymentno	Number	4	Payment number
PDate	Date		Paymentdate
Paymentmode	text	7	Mode of Payment
Chequeno	Number	8	Cheque No details
Chdate	Date		Cheque date
SupplierCode	Number	4	SupplierCode
Amount	Number	6	Amount

The above database table is designed to acquire and store the payment details , payment number , mode of payment , cheque no , supplier code amount.

Table Name: purret

Primary key: bill_no

Foreign key:supplier_code

ColumnName	Field Type	SIZE	Description
Billno	Number	4	Bill no
Billdate	Date		Billing date
Billmode	text	6	Mode of the Bill
Suppliercode	Number	4	Supplier Code
Total	Number	6	Total

The above database table is designed to acquire and store the purchase return details . bill no , bill date , mode of the bill , supplier code.

Table Name: salesret

Primary Key: billno

Foreign key: cust_code

ColumnName	Field Type	SIZE	Description
Billno	Number	4	Bill no
Billdate	Date		Billing date
Billmode	text	6	Mode of the Bill
Custcode	Number	4	Customer Code

The above database table is designed to acquire and store the sales return details , bill no , bill date , mode of the bill , customer code.

Table Name: stock

Primary Key: Itemcode

ColumnName	Field Type	SIZE	Description
Itemcode	Number	4	Itemcode details
Itemname	text	17	Itemname
QtyHand	Number	6	Quantity in Hand

**The above database table is designed to acquire and store stock details ,
item code , item name , quantity.**

Table Name:Supplier

Primary Key:Suppliercode

Column Name	Field Type	SIZE	Description
Suppliercode	Number	4	Supplier Code
Suppliername	text	22	Supplier Name details

**The above database table is designed to acquire and store the supplier
details , supplier name , supplier code.**

3.2.4 INPUT DESIGN

The first step in system design is to design input within predefined guidelines. Input design is a part of the overall system design. In this phase the designer's task is to identify those data items that will be an input to the system. The designer finds a linkage to the input data from the output.

Once the data items are identified, it is necessary to find the documents from where these data are taken. A document containing several data items will be treated as a record in the system. The major objective of the input design is to make data entry easy, logical and error free.

The input design is the process of converting user-originated inputs to the computer-based format. If the data entered in the system is incorrect, the user cannot get the designed is such a way that the user will not find any difficulty in switching from one field to the other.

Inaccurate input data are the most common cause of errors in data processing. Errors entered by data entry operators can be controlled by input design. It is the process of converting user-originating inputs to a computer-based format.

The equality of system input determines the quality of the system output. The input design also determined whether the user could interact efficiently with the system. The system is provided with auto-hint facilities, which assist the user in entering the data and to perform certain functions.

Validations are made for each and every data entered. Help message are provided whenever a user enters the wrong entry into a particular field. This make the user to understand what is to be entered. After making valid entry to one field, the user can move to the next field.

Therefore the input focuses on effectiveness, accuracy, easy to use, consistency and attractiveness. Thus it is a user-friendly system.

3.2.5 OUTPUT DESIGN

One of the most important features system for the user is the output it produces. Output is the direct source of the information to the user.

The output design should be able to communicate information to the user in the organizations effectively. The information, as an output, can be printed, displayed or stored. If it is necessary to print the information, as a report, then the designer has to decide the format of the report. If it is to be displayed, the designer has to provide a screen format.

While designing the report and the screen formats, the designer should pay attention to the concepts of information presentation so that the utility of the system is not reduced because of a noise, an information overload, an incomplete coverage etc. the designer should decide an appropriate balance the print reports and the display screens.

Each report should have an appropriate title with a period references, data etc. The pages should be numbers, with the title repeated and at the end of processing it should provide the statistics such as number of records, items etc.

SYSTEM IMPLEMENTATION

4. SYSTEM IMPLEMENTATION

The system should be verified at each of the software using documents produced during the previous stage.

Verification are rebuilding the right product. Verification involves the checking program confirms to each specification. The verification is used to run the system in the stimulated environment using stimulated data.

The stimulated test is to primarily looking for error and omission regarding end user and design specification. Verification starts with requirements review and continuous through design and code to review to product testing.

To satisfy the objective static and dynamic technique of system checking and analysis should be used.

Static technique concerned with analysis and checking representations such as design diagram, requirements documents. Dynamic techniques or test involve exercising an implementation.

4.1 SYSTEM TESTING

System testing is actually a series of different tests whose primary purpose is to fully exercise the computer-based system. System testing ensures that software build has the ability to incorporate with other system elements. Here a series of tests that simulate bad data or other potential errors at the software interface are done.

TESTING STRATEGIES

Testing is a set of activities that can be planned in advance and conducted systematically. Different testing techniques are appropriate at different points in time. Testing and debugging are different activities, but debugging must be accommodated in any testing strategy.

4.1 UNIT TESTING

Unit testing comprises the set of tests performed by an individual programmer prior to integration of the unit into a larger system. The module interface is tested to ensure that information properly flows into and out of the program unit. The local data structure is examined to ensure that data stored temporarily maintains its integrity during all steps in an algorithm's execution. Boundary conditions are tested to ensure that the module operates properly at boundaries established to limit or restrict processing. All independent paths through the control structure are tested.

4.2 INTEGRATION TESTING

Integration testing is systematic technique for constructing the program structure while at the same time conducting tests to uncover errors associated with interfacing. The objective is to take unit tested components and build a program structure that has been dictated by design.

Modules are integrated by moving downward through the control hierarchy, beginning with the main control module and modules subordinate to the main control module are incorporated into the structure in either depth-first or breath-first. This type of testing is called Top-Down integration testing.

Bottom-up integration testing, begins construction and testing with atomic modules. Low level components are combined into clusters. The cluster is tested. The clusters are combined moving upward in the program structure.

4.3 VALIDATION TESTING

Validation testing refers to different set of activities that are performed to ensure that the software has been built is traceable to customer requirements. in other words this test deals with “are we building product”. Both plan and procedure are designed to ensure that all functional requirements are satisfied, all behavioral characteristics are achieved, all performance requirements are met, behavioral characteristics are achieved, all performance requirements are met, documentation is correct and human engineered and other requirements are met.

SNAPSHOTS

SNAPSHOTS

INPUT SCREENS:

MAIN FORM



CUSTOMER MASTER

CUSTOMER MASTER				
Customer Code	<input type="text"/>			
Customer Name	<input type="text"/>			
Address	<input type="text"/>			
City	<input type="text"/>			
Phone	<input type="text"/>			
Fax	<input type="text"/>			
E-Mail	<input type="text"/>			
Save	Edit	Delete	Find	Exit

ITEM MASTER

ITEM MASTER

Item Code

Item Name

Unit

Cost Price

Selling Price

Save	Edit	Delete	Find	Exit
------	------	--------	------	------

PURCHASE ORDER

ITEM PURCHASE ORDER ENTRY	
Item Name	<input type="text"/>
Quantity	<input type="text"/>
Rate	<input type="text"/>
Amount	<input type="text"/>
	<input type="button" value="Save"/>
	<input type="button" value="Exit"/>

PAYMENT ENTRY

PAYMENT ENTRY

Payment No. Date Ref No

Payment Mode Amount

Cheque No Date

Supplier Name

Save

Edit

Delete

Find

Exit

PURCHASE INVOICE

PURCHASE INVOICE				
Bill No	<input type="text"/>	Bill Date	<input type="text"/>	
Bill Type	<input type="text" value="Cash"/>	Name	<input type="text"/>	
Address	<input type="text"/>		Total	<input type="text"/>
Quantity	<input type="text"/>		Tax	<input type="text"/>
Grand Total			<input type="text"/>	
Save	Edit	Delete	Find	Exit

PURCHASE RETURN

PURCHASE RETURN		
Bill No	<input type="text"/>	
Bill Date	<input type="text"/>	Save
Bill Type	<input type="text" value="Cash"/>	Exit
Supplier Name	<input type="text"/>	
Total	<input type="text"/>	

SALES BILL

SALES BILL				
Bill No	<input type="text"/>	Bill Date	<input type="text"/>	
Bill Type	<input type="text" value="Cash"/>	Name	<input type="text"/>	
Address	<input type="text"/>	Total	<input type="text"/>	
Quantity	<input type="text"/>	Tax	<input type="text"/>	
	Grand Total	<input type="text"/>		
Save	Edit	Delete	Find	Exit

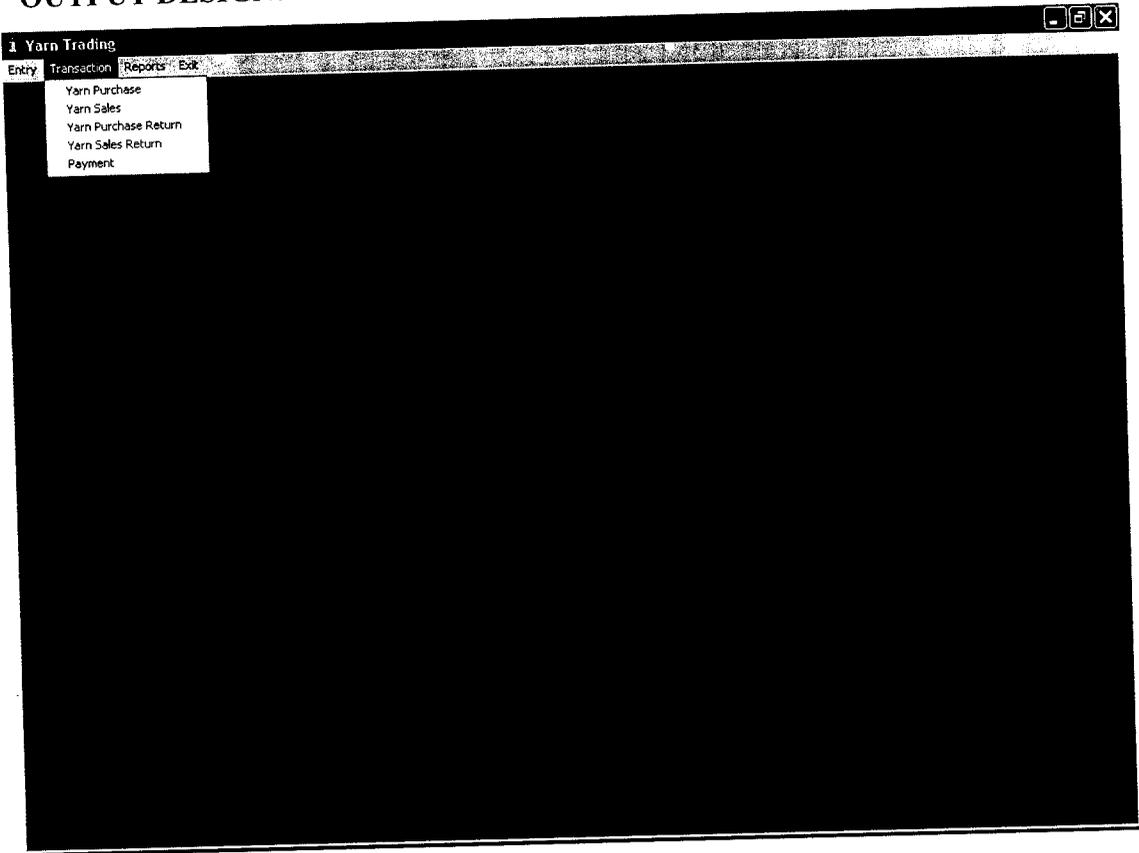
SALES RETURN

SALES RETURN	
Bill No	<input type="text"/>
Bill Date	<input type="text"/>
Bill Type	Cash <input type="text"/>
Supplier Name	<input type="text"/>
Total	<input type="text"/>

Save

Exit

OUTPUT DESIGN:



MAIN FORM



P-3366

CUSTOMER MASTER

Customer Code	02
Customer Name	Apparels Garments
Address	22 Tirupur
City	Tirupur
Phone	0421-2345566
Fax	0421-7878890
E-Mail	Apparels@yshoo.com

Save Edit Delete Find Exit

CUSTOMER DETAILS

ITEM MASTER

Item Code	003					
Item Name	50's Count					
Opening Stock	100					
Unit	10					
Opening Stock Date	16/03/2007					
Cost Price	2000					
Selling Price	2500					
<table border="1"><tr><td>Save</td><td>Edit</td><td>Delete</td><td>Find</td><td>Exit</td></tr></table>		Save	Edit	Delete	Find	Exit
Save	Edit	Delete	Find	Exit		

ITEM MASTER DETAILS

ITEM MASTER

Item Code	003
Item Name	50's Count
Opening Stock	100
Unit	30
Opening Stock Date	16/03/2007
Cost Price	2000
Selling Price	2500
<input type="button" value="Save"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Find"/> <input type="button" value="Exit"/>	

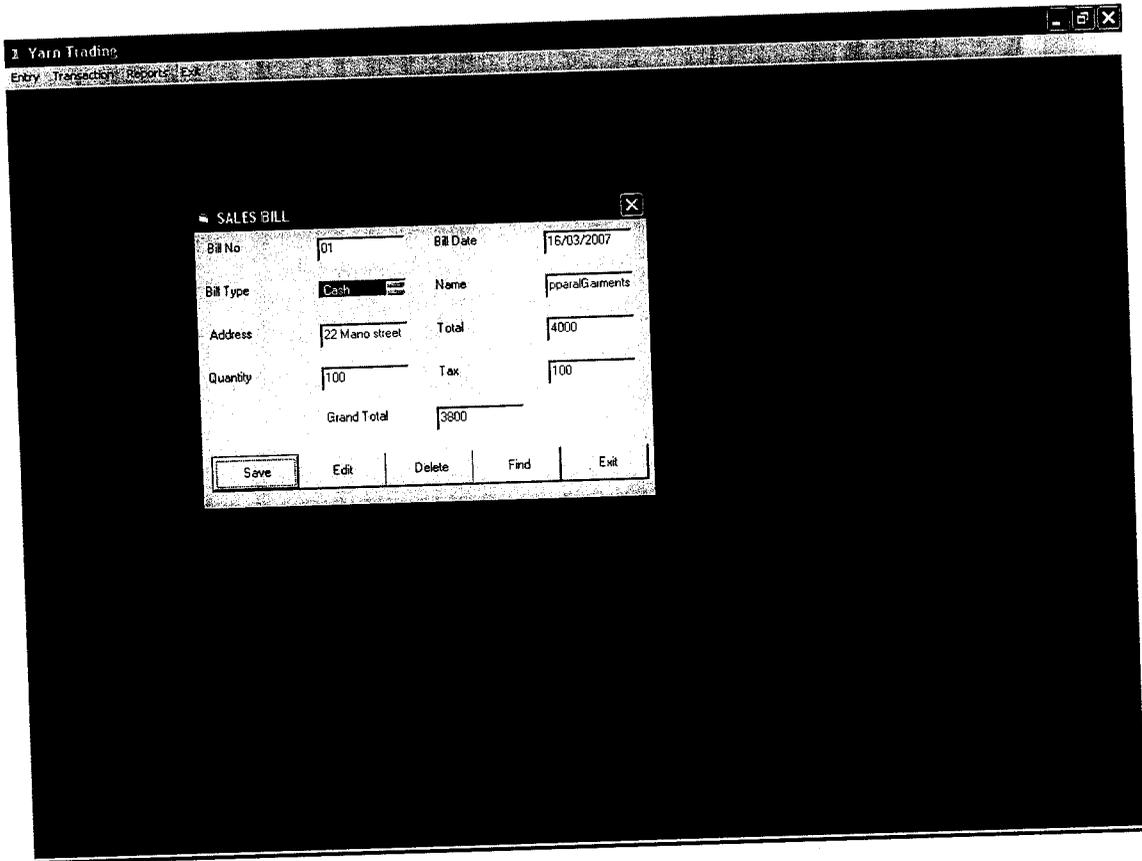
ITEM MASTER

ITEM PURCHASE ORDER ENTRY

Item Name	50's Count
Quantity	2000
Rate	100
Amount	200000

Save
Exit

ITEM PURCHASE



SALES BILL

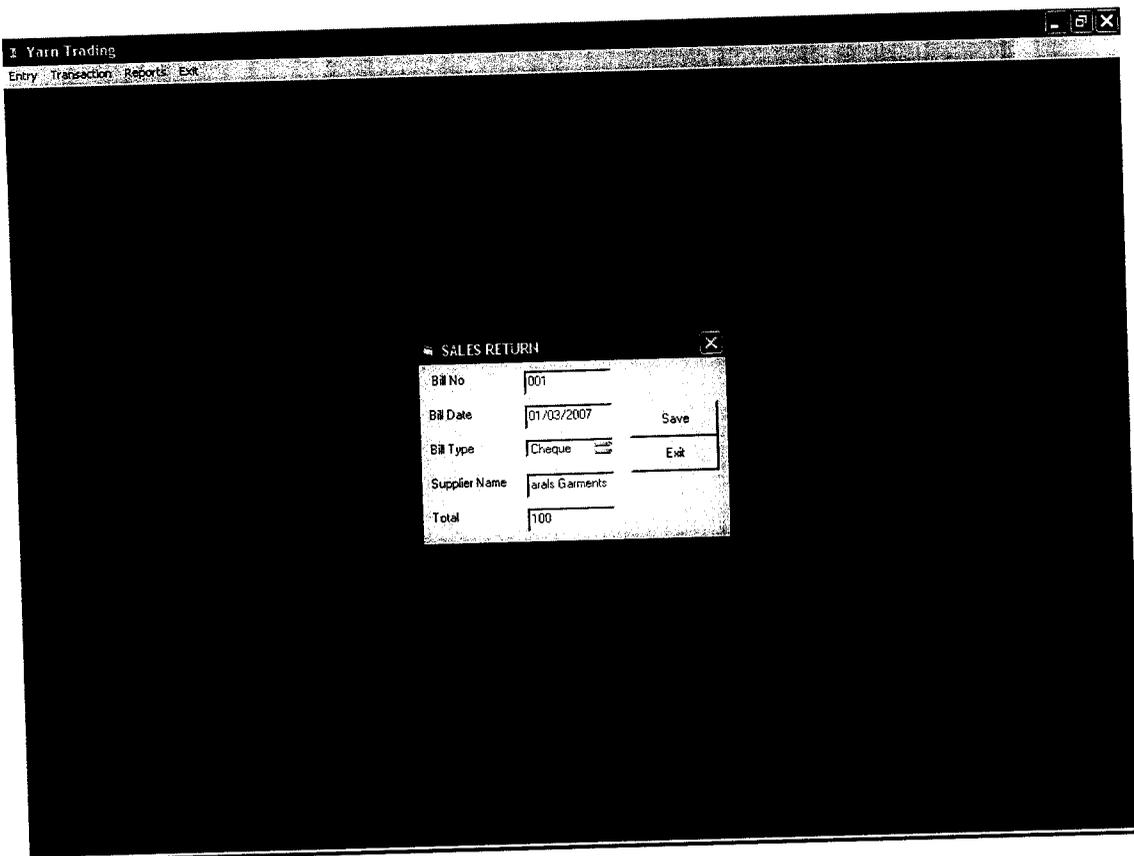
Yarn Trading

Entry Transaction Reports Exit

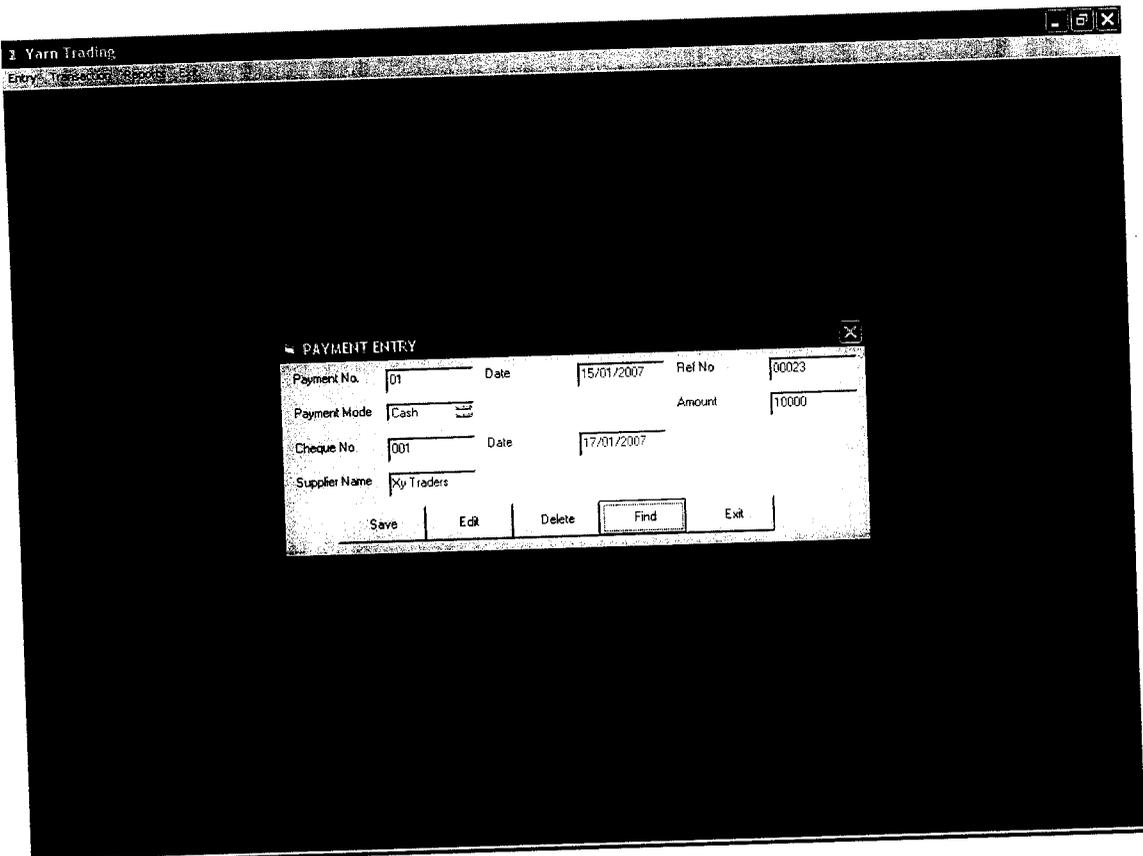
PURCHASE RETURN

Bill No	01	<input type="button" value="Save"/> <input type="button" value="Exit"/>
Bill Date	15/03/2007	
Bill Type	Cash	
Supplier Name	W Traders	
Total	10000	

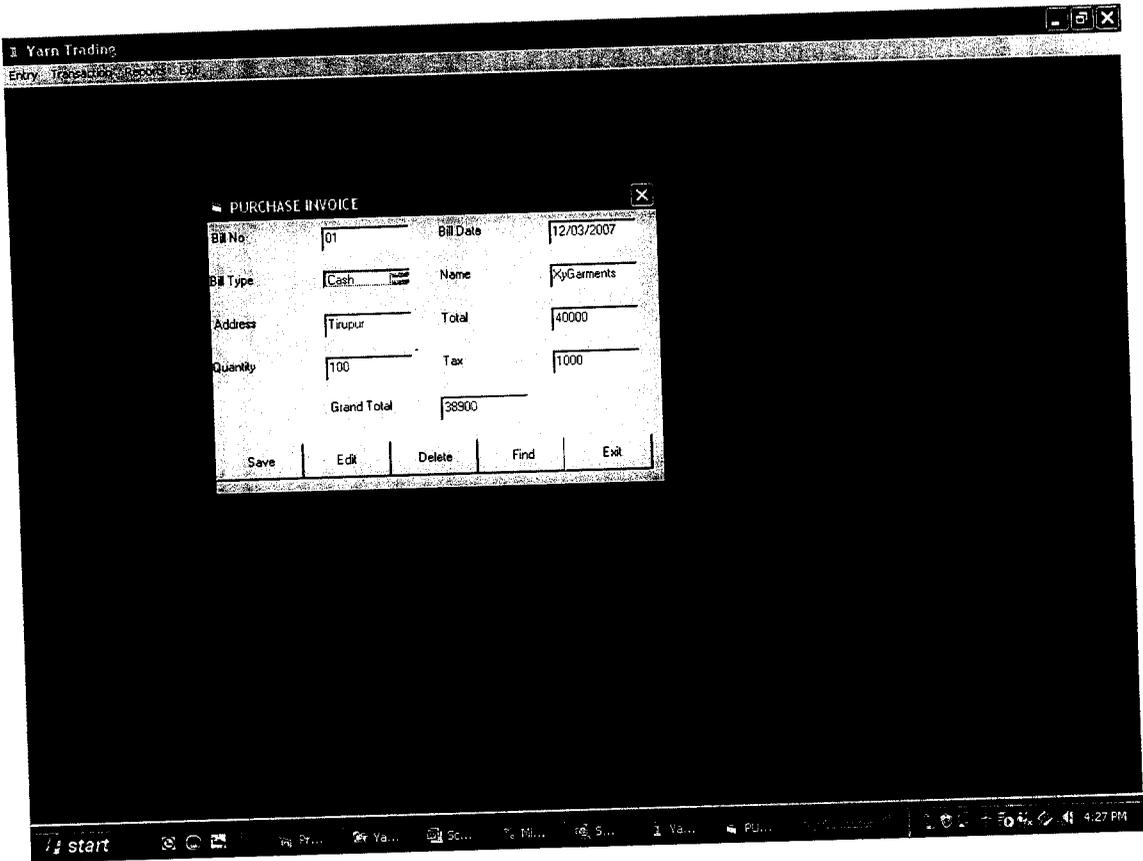
PURCHASE RETURN



SALES RETURN



PAYMENT ENTRY



PURCHASE INVOICE ENTRY

DataReport2

Zoom 100%

Yarn Trading
Customer Master

cust code	Cust name	Address	City	Phone	Fax	E-mail
1	Ravi	22	Raja Street	98976657	Nil	ravi@yaho
2	Apparels	22 Tirupur	Tirupur	0421-234	0421-78788	Apparels@

Pages: 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

CUSTOMER REPORT

ITEM MASTER REPORT

Zoom: 100%

Yarn Trading
ITEM MASTER REPORT

Item Code	Item Name	Opening Stock	Unit	Stock Date	Cost Price	Selling
1	50's count	100				
3	50's Count	100	10	3/16/2007	2000	2500

Pages: |<<| |>>|

ITEM DETAILS REPORT

PURCHASE ORDER REPORT

Zoom: 100%

Yarn Trading
Purchase Order Report

Item Name	Quantity	Rate/Unit	Total Amount
50's Count	2000	100	200000

Pages: << >>

PURCHASE ORDER REPORT

SALES REPORT

Zoom: 100%

Yarn Trading
Sales Report

Bill No	Bill Date	Bill Type	Name	Total
1	3/16/2007	Cash	Apparel/Garments	3600
Grand Total				3600

Pages: << >>

SALES REPORT

PURCHASE REPORT

Zoom: 100%

Yarn Trading
Purchase Report

Bill No	Bill Date	Bill Type	Supplier Name	Total
1	12/3/2007		XyGarments	38900
Grand Total				38900

Pages: 1/1

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PURCHASE REPORT

CONCLUSION

6. CONCLUSION

The main objective of the project is to bring a full-fledged computerized organization, and to enable the Yarn Trader to maintain records, which makes work of the employees easier.

Thus, the proposed system has been developed with good amount of flexibility without compromising on the response time

Computerization of the entire system will enhance more accuracy and reduces major part of clerical works. Fast, clear and legible reports can be generated without any ambiguity. User friendliness is a unique feature of the system.

Hence by developing a system that is user-friendly in nature, many users are able to work on the system with little of computer knowledge and training.

BIBLIOGRAPHY

7. BIBLIOGRAPHY

Reference:

Mark Spenkik, Andrew.J.Indovina, David Jung,
“ Visual Basic 6.0”,
Techmedia, New Delhi,1999

Elisa M.Awad ,
“ System analysis and design “,
Golgotha publishers (P) Ltd.,
Second Edition, New Delhi, 1992
Richards Fairely,
“Software Engineering Concepts”

Erich A Smith, Valor Whister & Hank Marques,
“Visual Programming Bible
(Comdex Computer Publishing)

John Clark Craig and Jeff Web
“**Microsoft Visual Basic 6.0 Developers Workshop**”,
Wiley Computer Publication, Edition August 1999
Marvin Gore and John Stubbe
“**Elements of System Analysis**”

Techmedia, Edition June 1998

www.vblist.com www.msdn.com