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INVENTORY CONTROL SYSTEM WITH PARTY BALANCES

BY

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ALLAH Says in Holly Quran

Oh! Prophet (Peace Be Upon Him) Say! If oceans are converted into ink to write the qualities of my creator, then the whole oceans would be consumed in writing before his qualities come to an end. And even if we produce the like of ink, would also be insufficient.

(AL-KAHF)

MFN-6545

DEDICATED

TO

MY PARENTS, UNCLE

AND

ALL FAMILY MEMBERS

MUHAMMAD IQBAL MIR

ABSTRACT

In this modern age, all manual systems are being replaced by computerized systems. We have done M.B.A. from Q.A.U and both of us are good in finance. Keeping this in view, the decision of making Inventory Control System was a big step ahead.

The main object was to develop a prompt and efficient computer based system, which is capable of replacing any manual Inventory Control System.

This system will maintain complete information about inventory. The information will be retrieved from the database in the form of queries and reports. The information stored in database will be manipulated with the help of various form layouts. The developed system will possess all the capabilities of a relational database system.

FINAL APPROVAL

This is certified that we have read project submitted by Muhammad Iqbal Mir and Rashad Islam and it is our judgment that this project is of sufficient standard to warrant its acceptance by the Quaid-I-Azam University, for the post graduate diploma in computer sciences.

COMMITTEE

EXTERNAL EXAMINER

SUPERVISOR
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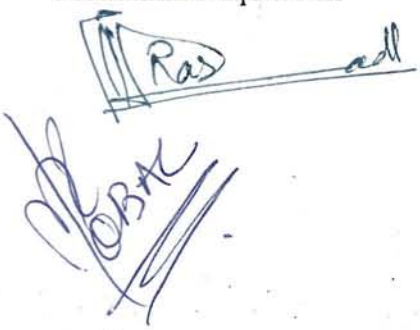
DECLERATION

I declare this software neither as a whole nor as a part has been copied from any source. It is further declared that we have completed our final project of post graduate diploma in computer sciences successfully as a result of our own struggle and research no portion of this whole work presented in this report have been submitted in support of any application for any other degree or qualification of this or any other university or institute of learning. If any part of the project and write up is proved to be copied out or there is any duplication of code then we will be responsible for the consequences.

Rashad Islam
Muhammad Iqbal Mir



PREFACE

Media and information technology are of out most importance in the present era. The remarkable advancement and discoveries in the computer technologies have contributed a lot towards the progress of these two in the past few decades.

This project is concerned with the development of software regarding Inventort Control System. It consists of

CHAPTER 1:	Describes the Introduction of the project and its objectives
CHAPTER 2:	Describes the designing phase including input / output along with their working and database design with the constraints placed on the fields.
CHAPTER 3:	Describes the project development and its implementation.
CHAPTER 4:	Provides a guide to users for their convenience.
APPENDICES:	Includes the different diagrams related to software design, layout of forms, reports and graphs.

CHAPTER 3 System Development & Implementation

3.1 Introduction
3.2 System Modules
3.3 System Testing
3.4 System Evaluation
3.5 Implementation
3.6 Conversion

CHAPTER 4 User Guide

APPENDICES

INTRODUCTION

1.1 MANUAL SYSTEM VS AUTOMATED SYSTEM

Long time ago, it was an uphill task to keep records of inventory on papers. That system had many problems as discussed below in detail. Now is the modern age. It is the world of computers and computer operators. So in this era every system is proposed to have automation to avoid many problems and to cope with existing problems.

Automation means to change a manual system with computer based system. This project is a tinny effort to change manual inventory system with computer based system.
It is hopped that this approach will meet nearly all possible requirements of an inventory control system. This system has a plus point that it can deal in part balances also.

1.2 FEATURES OF THE SYSTEM

For the system to be developed, the following are the proposed features.

- Be more efficient than manual system.
- Fast and easy access to the required information.
- Easy to use.
- Ensure security and protection of data.
- Be a system having data integrity and data consistency.

1.3 OBJECTIVES OF THE SYSTEM

It is important to establish some objectives that our project should meet. The computerized inventory control system has an edge over the manual inventory control system in context of the following aspects:

CODE

Codes will be assigned to reduce the storage and number of typing strokes used to input data codes are assigned keeping in mind the maximum range of value and type of information to eliminate any error. Codes will be small and easy.

Developer 6i software is ported to work under different operating system. Application developed for Developer 6i can be ported to many operating systems with a little or no modification.

SECURITY AND CONTROL

Developer 6i allows controlled access to the data base. It protects data from unauthorized access. by providing passwords and system failures.

INTEGRITY AND CONSISTENCY

Inconsistency between two entities that tend to represent the some effect is an example of lack of integrity. Developer 6i provides this by ensuring that data in database is inconsistent.

COMPATIBILITY

Developer 6i is compatible with industry and commercial standards including most operating systems. Application developed for Developer 6i can be used virtually on any system with little or no modification.

SINGLE USER AS WELL AS MULTI USER

Developer 6i supports not only user but also multi-user systems, which allow users to share frequently used programs and data, thus decreasing memory and I/O cost and increasing throughout.

CONNJECTIVITY

Developer 6i allows different types of computers and operating systems to share information across networks.

HIGH AVAILBILITY

At some sites, Developer 6i works hours per day with no down time to limit database throughout.

CLIENT/SERVER ENVIRONMENT

To take full advantage of given computer system on networks. Developer 6i allows processing to split the database server and client application.

SYSTEM DESIGN

2.1 INTRODUCTION

System designing is the most important of all phases in system life cycle. System design presents specific information for the designing of the input forms, output forms, codes and table structure.

2.2 RDBMS

A DBMS (database management system) is basically a computerized record keeping system: i.e. it is computerized system whose overall purpose is to maintain information and to maintain that information and to make that information available on demand.

A relational database is a database that is perceived by its user as a collection of time-varying normalized relations of assorted degrees. The software that manages the relational database is known as relational database management system (RDBMS)

2.3 DEVELOPER 6i

After considering a number of relational database management systems available these days. DEVELOPER 6i was selected the product from ORACLE Corporation that makes it easy to build data base applications it handles most of the issued elegantly and well using the features of ORACELE 7. Developer 6i provides a number of sophisticated tools for the development of applications. Some of these tools are given as

2.3.1 ORACELE SQL* PLUS

Oracle SQL PLUS is an interface through which SQL commands may by entered and executed. We can use SQL PLUS program in conjunction with SQL data base language and its procedural language extension PL/SQL. The SQL database language allows us to store and retrieve data in ORACLE SQL PLUS SQL and PL/SQL command languages are powerful enough to serve the needs of users with some database experience: Yet straightforward enough for new users who are just learning to work with ORACLE.

It is used for creating formatting and arranging interface items and boilerplate graphics. It provides us with complete set of drawing and editing tools. It provides quick excess to frequently used commands.

2.4.1.2 Pl/SQL Editor

It is used to write triggers, program units, procedure etc.

2.4.1.3 Object Nevigator

It is used to display editors. It provides work area for creating and modifying form objects.

2.4.2 FORMS

A form application represents data in an on line format consisting of a series of fields laid out in one or more windows. They also provide a good way of executing and changing that information. You can type data into the form fields or change that is in them. Depending upon what the form designer let you does. There is a particular kind of form called a master/detail form that divides the form into master record and several detail records. Once a form has been designed, data entry operators need not to know the SQL commands.

2.4.3 CANAVAS

A canvas is the surface on which you paint objects like text item push buttons and check boxes etc. The window is the frame or boarder which forms a view port for the user. The user may not see all of the canvas at any one time, only as much as the window on the canvas allows him to. This view is some time refereed to as the canvas view.

2.4.4 BLOCK

Block is the intermediate building unite for forms. You can think of a block in two ways, as a collection of items or as a collection of records, each of which has the same structure of items.

Block usually corresponds to one table in the database. A form may have one or more blocks. A block contains a group of related fields that are used to store some specific information.

- Input Design

2.5.1.1 OUTPUT DESIGN

The output design constitutes and important part of the system. The output may either be in soft form (displayed on screen) or in hard form (print out). The output design of the proposed system consists of the following

- Query : normally screen oriented
- Report : normally printed out
- Graphic display: normally printed out for decision purposes.

2.5.1.1 REPORTS

Reports are available in the following categories:

Items

1. Report to identify the Items in which company is dealing.
2. Most selling items btw. Two dates
3. Items purchased btw. Two dates
4. Items sold btw. Two dates

Stock

1. Report of the stock against item type (e.g. Perfume, Cream, Body spray, Shampoo etc.)
2. Single Item stock report with Consignment nos.
3. Report of those Items, which are in zero quantity.
4. Purchase prices of the items against different Consignment nos. User can view the average purchase prices also.
5. Sale prices of the items against different Consignment nos. User can view the average sale prices also.

Customer

1. Customer's personal Information
2. Customer's Information city vise.
3. Report of Permanent Customers
4. Report of Non-Regular Customers
5. Most Regular Customers btw. Two dates

A code is small combination of character used to represent a large item and is used whenever there is high chance of entering incorrect information.
Following are the advantages of introducing codes in the system:

- ✓ Codes save computer storage as compared to the actual data.
- ✓ Low chances of spell errors.
- ✓ Speeds up entry process.

The present system uses

- Item code.
- Supplier code.
- Customer code.
- City code.
- Warehouse code.
- Expense code.

2.6.2 FORM DESIGNING:

The input screens for the system are designed so as to handle exceptional cases, checks for possible errors are provided and resulting into an errors free output. The general characteristics of the input screens are.

2.6.2.1 Validation checks:

These checks are imposed at different hierarchical levels for instance all item level, block level, form level which don't allow the user to move ahead until a valid date is entered.

2.6.2.2 Duplicate Codes:

The possibility of entering a duplicate code has been totally eliminated.

2.6.2.3 List of Values

LOV's are provided for various items, on line help, this help is provided for a better understanding of the system and for ease of the user.

Field Name	Data Type
Wi_no	Number(10)
Wi_name	Varchar2(30)

(2)

Table Name: im_item_master

Description: This table holds the information about items and their codes

Primary key: im_item_id

Specifications:

Field Name	Data Type
Im_item_id	Number(10)
Im_name	Varchar2(50)
Im_quality	Varchar2(30)

(3)

Table Name: id_item_detail

Description: This table is detail table

Specifications:

Field Name	Data Type
Id_item_id	number(10)
Id_warehouse_no	number(10)
Id_cosignment_no	Varchar2(50)
Id_date	Date
Id_quantity	number(10)
Id_damage_qty	number(10)
Id_purchase_price	number(10)

(6)

Table Name: cm_customer_master

Description: This table holds the information about customers and their codes

Primary key: cm_customer_id

Specifications:

Field Name	Data Type
Cm_customer_id	Number(10)
Cm_name	Varchar2(50)
Cm_address	Varchar2(100)
Cm_city_id	Varchar2(20)
Cm_tel	Varchar2(20)
Cm_mobile	Varchar2(20)
Cm_email	Varchar2(20)
Cm_contact_person	Varchar2(20)
Cm_balance	Number(10,2)

(7)

Table Name: pm_purchase_master

Description: This table holds the information about purchases and their voucher numbers.

Primary key: pm_vo_no

Specifications:

Field Name	Data Type
Pm_vo_no	Number(15)
Pm_date	date
Pm_party_id	Number(10)
Pm_cashier	Varchar2(50)
Pm_total_price	Number(10,2)
Pm_remarks	Varchar2(100)

(10)

Table Name: prd_pur_return_detail

Description: This table is a puchase return detail table

Specifications:

Field Name	Data Type
Prd_return_id	Number(10)
Prd_vo_no	Number(10)
Prd_date	Date
Prd_item_id	Number(5)
Prd_warehouse_no	Number(10)
Prd_return_qty	Number(10)
Prd_unit_price	Number(10,2)
Prd_return_amount	Number(10,2)

(11)

Table Name: ed_employee_data

Description: This table holds the information about employees and their codes

Primary key: ed_emp_id

Specifications:

Field Name	Data Type
Ed_emp_id	Number(10)
Ed_name	Varchar2(50)
Ed_designation	Varchar2(50)
Ed_address	Varchar2(100)
Ed_tel	Varchar2(20)
Ed_join_date	Date
Ed_initial_pay	Number(10,2)
Ed_current_pay	Number(10,2)
Ed_balance	Number(10,2)

(13)

Table Name: sd_sale_detail

Description: This table is the detail table of sales

Specifications:

Field Name	Data Type
Sd_invo_no	Number(10)
Sd_date	Date
Ad_item_id	Number(5)
Sd_warehouse_no	Number(10)
Sd_qty	Number(5)
Sd_cost_amount	Number(10)
Sd_sale_price	Number(10,2)
Sd_amount	Number(10,2)
Sd_sales_profit	Number(10)
Sd_consignment_no	Varchar2(50)
Sd_profit_percentage	Varchar2(30)

(14)

Table Name: srm_sale_return_master

Description: This table holds the information about sales return and their codes

Primary key: srm_return_id

Specifications:

Field Name	Data Type
Srm_return_id	Number(15)
Srm_return_date	Date
Srm_invo_no	Number(15)
Srm_date	Date
Srm_customer_id	Number(15)
Srm_customer_name	Varchar2(100)
Srm_cashier	Varchar2(50)
Srm_total_price	Number(10,2)
Srm_remarks	Varchar2(100)

(17)

Table Name: vm_voucher_master

Description: This table holds the information about vouchers and their codes

Primary key: vm_vo_no

Specifications:

Field Name	Data Type
Vm_vo_no	Number(15)
Vm_date	Date
Vm_cashier	Varchar2(50)
Vm_party_id	Number(10)
Vm_party_name	Varchar2(50)
Vm_amount	Number(10,2)

(18)

Table Name: em_expense_master

Description: This table holds the information about expenses and their codes

Primary key: em_expense_id

Specifications:

Field Name	Data Type
Em_expense_id	Number(10)
Em_name	Varchar2(50)

(21)

Table Name: crp_cash_receipt_payment

Description: This table holds the information about cash receipts or payments

Primary key: crp_no

Specifications:

Field Name	Data Type
Crp_transaction	Varchar2(30)
Crp_no	Number(10)
Crp_party_id	Number(10)
Crp_date	Date
Crp_dr_amount	Number(10.2)
Crp_cr_amount	Number(10.2)
Crp_remarks	Varchar2(200)

SYSTEM DEVLEOPMENT AND IMPLEMENTATION

3.1 INTRODUCTION

The salient feature in the development of an efficient computerized system is software development. The purpose of software development is to transfer the complete proposed system into the executable computer system.

Programming is not just a science it has rather growing into an article of much aesthetic values. There are number of clearly identifiable steps that are always involved in the programming phase, and these provide a convenient framework. These steps are:

1. Defining the problem
2. Planning a solution
3. Maintaining the program.

Thus the purpose of programming task is to code, debug and test each program module before and after integrating them into software.

The development of modules is the most complicated and time consuming staged of the system development. The programs are developed in order to have consistency or compatibility with the proposed system. Each module has to do its job properly, according to the input and output requirements of the system.

3.2 SYSTEM MODULES:

In an automated system, different modules have been constructed separately by programming. Purpose of each module is to perform a specific task. Automated computers inventory modules uses al-mostly all the features of Oracle.

In order to facilitate the user operation, updation on several forms can be done during the data entry process as well as through main menu options. If, by chance, some mistake occurs while data is entered, the user has option to update the wrong entries even if he/she has saved that

evaluation is also important because it judges the compatibility of developed system with the existing system generally, information that incorporates properties such as accuracy. Timeliness, completeness. Conciseness etc is declared to be successful.

However, comparisons are often made in one or more of these properties for economic reasons. The user of a new system is in the best position to determine, on an ongoing basis, effectiveness of the system.

3.4.1 ACCURACY:

Accuracy is ratio of correct information to the total volume of information produced over a period. The accuracy level depends upon the types of information produced. Validation checks have been made to ensure accuracy and fool proofing the system.

3.4.2 TIME LINES:

In the previous manual system, the major problem faced by the management was that if somebody needed some information, he had to wait a few days for the result. till the information has no longer needed. One of the important characteristics of new system is that it provides query management which responds instantaneously and accurately.

3.4.3 CONCISENES

Concise information that summarizes the relevant data, makes various types of searches and comparative analysis easier, and point out areas of interest, enables a general user and specially the management to make the better, effective and timely decisions.

3.4.4 EFFICIENCY:

The new system is efficient not only because it contains all the three information characteristics stated above, but also due to some reasons. It is more users friendly, is menu driven provide ready online help and does it all while maintaining security of users and their relative information above all, it ensures data integrity and enhanced reliability.

3.4.5 LIST OF VALUES:

3.6 CONVERSION:

In data processing conversion is defined as the process of changing.

- ✓ From one data processing to another.
- ✓ From one form of representation to the other.

There are several conversion options available that will reduce the risk of mishap in the new system. There are four basic patterns while implementing the new system.

1. Direct conversion Method.
2. Gradual change over Method
3. Parallel conversion Method.
4. Pilot conversion Method.

The main purpose in conducing comparative study is to argue for one method of conversion over the other by keenly studying the advantages and limitations in either of the conversion methods. An implementation phase is rigidly based upon this comparative study.

3.6.1 DIRECT CONVERSION METHOD:

Direct conversion method stresses upon introduction of a completely new system without any reference to the existing system. The old system is abandoned and the new system becomes operational. This method is suitable when the new system becomes operational. This method is suitable when the new system is entirely different from the existing one.

3.6.2 GRADUAL CONVERSION METHOD:

Gradual conversion technique allows one program at a time to replace an activity of the existing system. Gradually, the present system is substituted by the newly designed system. Small-scale operations are conducted first to confirm that this changeover is successful. When the new system is completely tested, the old system is gradually discarded and the process continues until the new system is totally functional.

3.6.3 PARALLEL CONVERSION METHOD:

CHAPTER 4

USER GUIDE

Here on the Main Window, there is a menu bar which has three kinds of menus

- Start
- Forms
- Window

Now we will explain these menus.

4.2.1 START:

In the Start menu there are two items

- **Home**
- **Exit**

When the user will select the Home item then the main window of the module will show to the user upon which the name of the company is written and which is base for the software, it is the main window where the user can select the different modules to do his/her different transactions, on the main window the name of the company is shown and the name of the screen is shown(each and every screen in this project has it name e.g. main window, purchase information, static information, sale return information etc.). And the current system time and the date will show to the user.

When the user will select the Exit item then the software will be closed, it means that user want to close the software if he don't like to do work more.

4.2.2 FORMS:

In this menu there are three items

- Static Information
- Purchase
- Sale

Basically these three items are pointing to different modules which contain the information about different transactions according to the names of these items following modules will open

- Static Module
- Purchase Module
- Sale Module

We will discuss briefly these modules latter.

4.2.3 WINDOWS:

And the current system time and the date will show to the user.

When the user will select the Exit item then the software will be closed, it means that user want to close the software if he don't like to do work more.

4.3.2 STATIC INFORMATION:

This menu contain the different items which are containing the pointers to the different screens to do different transactions which are related to the static information. Static information are those information which are not changeable on the daily bases, you can say that information which are permanently required to the user for example the information about the supplier of the commodities in which the company dealing, these information contain the name of the supplier, address, phone, email etc. about a supplier so these information are not changed on the daily bases so these information are called the static information. This menu contains the following static information:

- Items
- Supplier
- Customer
- Employees
- City

Now we will brief these items one by one:

4.3.2.1 Items:

When the user click the item which name is Item then a screen will open which will show the required information about the items, items are those items in which the company is dealing for example if the company is dealing like the cloths then the items will be related to the different kinds of the product e.g. shirts, pants, jackets etc.

On this screen following items are available in which the user can enter the data or select the data.

Following information are required for an item:

- Item ID: An item will be given a unique ID, unique means if u have given and ID number to an item then this ID number can not be given to the any other item, this is number field so no character will be written in this field, it means that the number between 0..to..9 will be written in this field.

4.3.2.2 Supplier:

When the user will click this item which name is Supplier a screen will open which will contain the whole information about the Supplier of the company, Supplier is that person from which we purchase the products for sale, so the all required information about the supplier will be stored and fetch from the database.

On this screen following fields are available in which the user can enter the data or select the data.

Following information are required for a Supplier.

- Supplier ID: Each Supplier will be given a unique ID, unique means if you have given an ID number to a Supplier then this ID number can not be given to any other Supplier. this is number field so no character will be written in this field, it means that the number between 0..to..9 will be written in this field.

- Supplier Name: The name of the company or the person from which we purchase the products will be given in this field.

- Address: The address of the Supplier will be given in this field.

- City: The city in which the Supplier or the Supplier Company is located will be given in this field. All the cities in this list will come from the Screen of cities, all the cities in which the Supplier or Customer are living will be entered from that screen and in this field the cities will shown which are already stored in the database.

- Tel#: The telephone number of the Supplier if Supplier has, will be given in this field.

- Mobile#: The Mobile number if the Supplier has will be given in this field.

- Email: The Email address of the Supplier will be given in this field.

- Contact Person: The name of the person or the company will be given in this field who introduced the Supplier with the company.

- Customer ID: Each Customer will be given a unique ID, unique means if you have given an ID number to a Customer then this ID number can not be given to any other Customer, this is number field so no character will be written in this field, it means that the number between 0..to..9 will be written in this field.

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- Address: The address of the Customer will be given in this field.

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- Tel#: The telephone number of the Customer if Customer has, will be given in this field.

- Mobile#: The Mobile number if the Customer has will be given in this field.

- Email: The Email address of the Customer will be given in this field.

- Contact Person: The name of the person or the company will be given in this field who introduced the Customer with the company.

- Fetch Button: A button is given in front of the Customer ID field, when the user press that button a list of values will be open which contains the all items which has been insert in the database, the IDs and the name of the Customers will be shown in that list the user can select one of the rows of which he/she want to see the detail after selection the user will press the OK button the detail about that row will be shown on the screen.

Note: When the user will enter the Customer ID and then press the Tab there are two possibilities of the action that will take place after the Tab, one is this that the Customer ID has been given already to a Customer, if this condition is true the whole information Customer name, quality, purchase price and the sale price will be shown to the user in the related field, it means the screen

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- Fetch Button: A button is given in front of the Customer ID field, when the user press that button a list of values will be open which contains the all items which has been insert in the database, the IDs and the name of the Customers will be shown in that list the user can select one of the rows of which he/she want to see the detail after selection the user will press the OK button the detail about that row will be shown on the screen.

Note: When the user will enter the Customer ID and then press the Tab there are two possibilities of the action that will take place after the Tab, one is this that the Customer ID has been given already to a Customer, if this condition is true the whole information Customer name, quality, purchase price and the sale price will be shown to the user in the related field, it means the screen

Note: When the user will enter the City ID and then press the Tab there are two possibilities of the action that will take place after the Tab, one is this that the City ID has been given already to an City, if this condition is true the whole information City name will be shown to the user in the related field. it means the screen is providing the facility of search also now the user can not save the record because the City ID is given already to a City, in the 2nd possibility the City Id is not given to a City already then the cursor will go to the City. City Name, it means that user can now enter the complete information about the new City and then the user will click the save button on the toolbar then the record will be saved in the database and a message successful addition of the record will be given to the user.

4.3.2.5 Employee:

When the user will click this item which name is Employee a screen will open which will contain the whole information about the Employee. So the all required information about the Employee will be stored and fetch from the database.

On this screen following fields are available in which the user can enter the data or select the data. Following information are required for an Employee.

- Employee ID: Each Employee will be given a unique ID. unique means if you have given an ID number to a Employee then this ID number can not be given to any other Employee, this is number field so no character will be written in this field, it means that the number between 0..to..9 will be written in this field.

- Employee Name: The name of the company or the person from which we purchase the products will be given in this field.

- Address: The address of the Employee will be given in this field.

- City: The city in which the Employee belongs will be select from the list. All the cities in this list will come from the Screen of cities, all the cities in which the Supplier or Customer are living will be entered from that screen and in this field the cities will shown which are already stored in the database.

- Tel#: The telephone number of the Employee if Employee has, will be given in this field.

- Items Report: Items Report will show the whole detail about the items and their quantity.
- Supplier Report: Supplier Report will show the details about all suppliers of the company.
- Customer Report: Customer Report will show the details about all customers of the company.

4.3.4 WINDOWS:

In this menu there are different items which are showing the different conditions of the active windows.

4.3.5 TOOL BAR:

On the tool bar there are following buttons:

- Save: To save the record press this button.
- Update: To update the record press this button.
- Clear: To clear the screen press this button.
- Home: To go back to Home Screen then press this button.
- Exit: To Exit from this module press this button.

4.4 PURCHASE INFORMATION MODULE:

This module contains two kinds of information:

- Purchase
- Purchase Return

The user can enter the data related to the purchases and the purchase return from this module and the required reports about the above transactions can be seen from this module. When this module will open the main window upon which there is a menu bar and a tool bar and this window is showing the company name, the status of the module, name of the module and the current date and the time of the system.

The menu bar contains the following menus:

- Start
- Purchases
- Reports
- Windows

- Date: The current Date of the system will automatically written in this field which shows that the voucher for a purchase transaction was made on this date.

- Cashier Name: Cashier name is the logging name of the person who is doing that transaction, the user name of the database will be stored in this field.

- Party ID: Party ID is the ID of the Supplier from which you are purchasing the items.

- Fetch Button: Fetch button will show you a list of values in which the IDs and the names of the all supplier will be shown. The user will select the specific supplier and then press the button the related Supplier ID will automatically written in the Party ID field.

- Name: Name field shows the name of the supplier. When the user enter the Supplier ID in the field of Party ID then Press the Tab, the software will automatically show the name of that Supplier in this field, this field is disabled because the name depends upon the Party ID/Supplier Id.

- Remarks: This field is required when user wants to store some comments about this transaction then he/she can write some comments/remarks in this field.

Part 2:

This part is showing the details of the Purchase Voucher

- Item ID: Enter the Item ID to which you want to purchase.
- Fetch Button: If user has forgotten the ID of a specific item he/she can press this button then the all items with their IDs and names will be shown in a list of values, user can select on of them and then press OK the related information about that specific Item ID will be shown in the relevant fields.
- Description: As the user enter the Item ID the software will automatically fetch the name of the item against that specified Item ID. The user cannot enter the any value in this field.
- Pur. Price: As the user enters the Item ID the software will automatically fetch the last purchase price from the database in this field. User can enter new Purchase Price in this field.

information about the purchase return against a purchase voucher will be stored and fetch from the database on this screen.

On this screen following fields are available in which the user can enter the data or select the data.

This Screen is divided into three parts; the detail against each part is as follow:

Part1:

- Return ID: A Return ID will be given to each Purchase Return Transaction. This ID is auto generate.
- Return Date: Current System Date will be automatically fetched in this field, which shows that the Return transaction was made on this date.
- Voucher No: The Voucher number will be given here against which the user wants to do the Return transaction as the user will enter the Voucher Number, all information about this Voucher number which was stored in database will automatically fetched on the screen.
- Remarks: Any comments about this transaction can be written in this field.

Part 2:

This part show the whole detail about the transaction which was made against the above Voucher Number.

- Return Qty: The user will enter the return quantity in this field against the specific item ID in this row.
- Total Price: This field shows the total amount the user has returned from this screen.

Part 3:

This part is showing two fields first is, how much amount was made when this voucher was made and second is, how much amount the user is returning back.

4.4.3 REPORTS:

This menu contains four reports which are related to the Purchase and Purchase Return. These reports are as following:

- Purchase Voucher Report: This Report will show the whole detail about a Purchase transaction against a specific Voucher Number.

main window where the user can select the different modules to do his/her different transactions, on the main window the name of the company is shown and the name of the screen is shown(each and every screen in this project has it name e.g. main window, Sale information, static information, sale return information etc.)
And the current system time and the date will show to the user.

When the user will select the Exit item then the software will be closed, it means that user want to close the software if he don't like to do work more.

4.5.2 SALE:

In this menu there are two items:

- Sale
- Sale Return

4.5.2.1 Sale (Item):

When the user clicks the Sale item then a screen will open which name is Sale Information, the user can sale different items from this screen, all information about the Sale against Sale Invoice will be stored and fetch from the database on this screen.

On this screen following fields are available in which the user can enter the data or select the data.
This Screen is divided into three parts, the detail against each part is as follow:
Part1:

- Invoice Number: When the user will enter the data for a specific Sale then each transaction will be given a unique Invoice number, and the Invoice number cannot be duplicate. The Invoice Number will be written in this field and the data type of this field is number so only number between 0 to 9 can be written in this field.
- Date: The current Date of the system will automatically be written in this field which shows that the Invoice for a Sale transaction was made on this date.
- Cashier Name: Cashier name is the logging name of the person who is doing that transaction; the user name of the database will be stored in this field.
- Party ID: Party ID is the ID of the Customer from which you are purchasing the items.

Part 3:

This part shows the detail about the payment of the Sale Invoice.

- Total Price: The total price of the Sale Invoice will automatically written in this field.
- Amount Paid: The total Amount paid by the user will be written in this field.
- Balance: When user enters the Amount Paid and press the Tab the balancing amount will automatically write in this field using this formula (Total Price – Amount Paid).

Note: When the user will enter the Invoice Number and then press the Tab there are two possibilities of the action that will take place after the Tab, one is this that the Invoice Number has been given already to a Sale Invoice, if this condition is true the whole information about that Invoice Number will be shown to the user in the related field, it means the screen is providing the facility of search also now the user can not save the record because the Invoice Number is given already to an Sale Transaction, in the 2nd possibility the Invoice Number is not given to any Sale Transaction already then the cursor will go to the Party ID, it means that user can now enter the complete information about the new Sale Transaction and then the user will click the save button on the toolbar then the record will be saved in the database and a message successful addition of the record will be given to the user.

4.5.2.2. Sale Return:

When the user clicks the Sale Return item then a screen will open which name is Sale Return Information, the user can Return the Saled items from this screen, all information about the Sale return against a Sale Invoice will be stored and fetch from the database on this screen. On this screen following fields are available in which the user can enter the data or select the data.

This Screen is divided into three parts, the detail against each part is as follow:

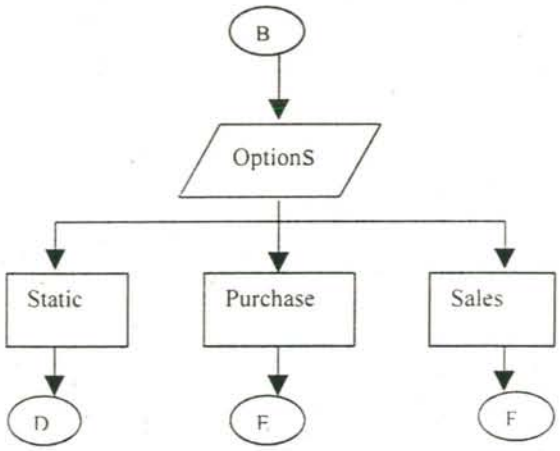
Part1:

- Return ID: A Return ID will be given to each Sale Return Transaction. This ID is auto generate.
- Return Date: Current System Date will be automatically fetched in this field, which shows that the Return transaction was made on this date.
- Invoice No: The Invoice number will be given here against which the user wants to do the Return transaction as the user will enter the Invoice Number, all information about this Invoice number which was stored in database will automatically fetched on the screen.

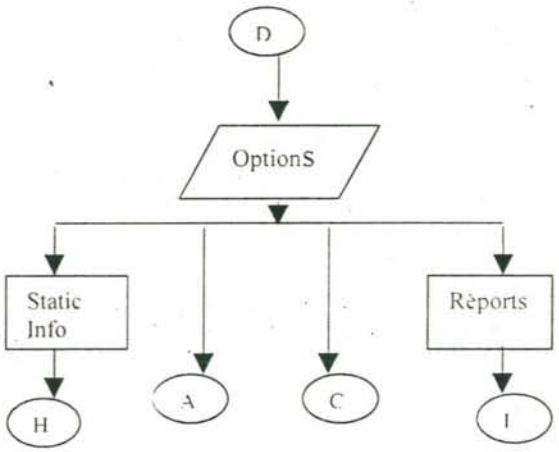
APPENDIX
A

SYSTEM
FLOWCHARTS

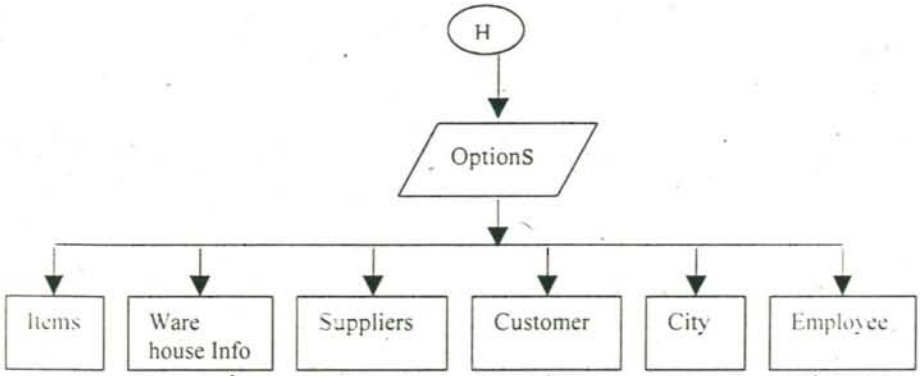
(3)


B
OptionS
Static
Purchase
Sales
D
E
F

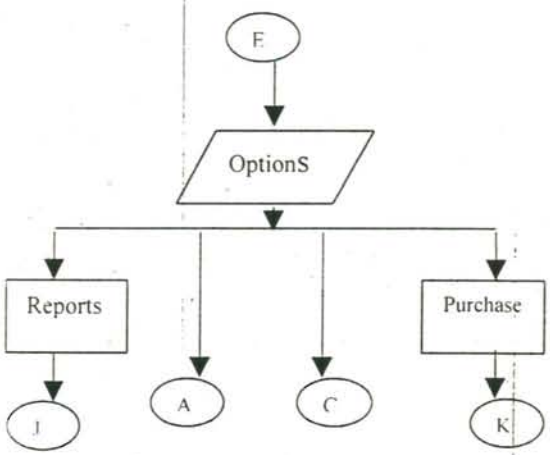
(4)


D
OptionS
Static Info
Reports
H
A
C
I

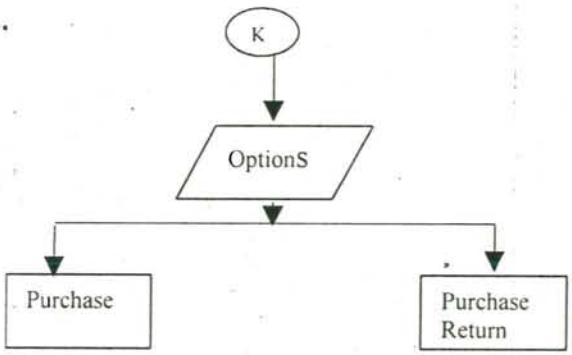
(5)


H
OptionS
Items
Ware house Info
Suppliers
Customer
City
Employee

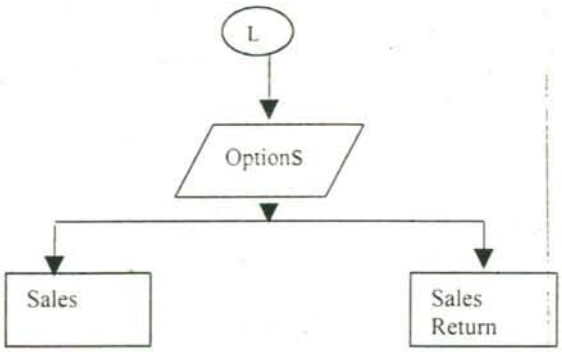
(7)


E
OptionS
Reports
Purchase
J
A
C
K

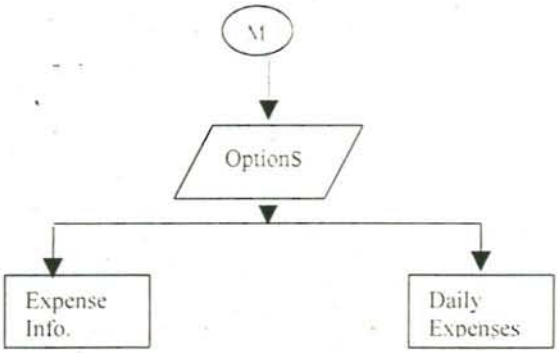
(8)


K
OptionS
Purchase
Purchase
Return

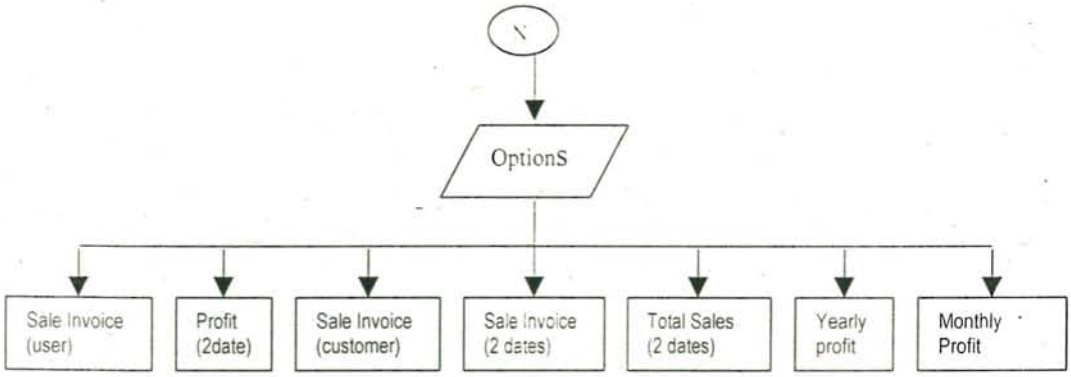
(11)


L
OptionS
Sales
Sales Return

(12)


M
OptionS
Expense Info.
Daily Expenses

(13)


N
OptionS
Sale Invoice (user)
Profit (2date)
Sale Invoice (customer)
Sale Invoice (2 dates)
Total Sales (2 dates)
Yearly profit
Monthly Profit

APPENDIX C

SAMPLE INPUTS / OUTPUTS

All Expenses Report

Report run on: October 23, 2003 6:50 PM

Expense ID	Name
1	electricity
2	telephone bill
3	misc

Item's Information

Report run on: October 23, 2003 6:52 PM

Item ID	Name	Item Type
1	PONDS	Local
2	LUX	Local
3	LUX	Imported
4	JUDE	Imported
5	JUDE	Local
6	TIBAT	Local

Citys Information

Report run on: October 21, 2003 12:00 AM

City ID	Name
1	LAHORE
2	KARACHI
3	GUJRANWALA
4	GUJRAT
5	MIAN CHANU
6	KHANEWAL
7	KOETA
8	SARGODHA

Customer's Information

Report run on: October 21, 2003 12:02 AM

[illegible]ID	1
[illegible]	BODLA
[illegible]	FAIZ COLONY
[illegible]	LAHORE
[illegible]one#	051-566565
[illegible]	
[illegible]	
[illegible] Person	BODLA

Balance
0

Expences on a Date

Report run on: October 23, 2003 9:09 PM

Date	23/10/2003
Total amount for WH exp	11
Expenses Amount	
Balance	3

Expenses Id	Name	
1	electricity	2
2	telephone bill	5
3	misc	4

Item Purchased btw. two dates

Item ID PF 1

From PF 2 To PF 3

Item purchased Report

Report run on: October 23, 2003 6:53 PM

From 01-FEB-2003 To 01-FEB-2

Item ID	1	PONDS			
Date	Consignment No	Warehouse Name	Qty	Price	Am
19-OCT-03	1-ABDULLAH SHOUKAT-19-OCT-03	Shadman	10	250	25
19-OCT-03	2-USMAN-19-OCT-03	lakar mandi	25	125	31
20-OCT-03	3-ABDULLAH SHOUKAT-20-OCT-03	lakar mandi	25	250	62
		Total:	**60**		**118**

Date1	01022003
Date2	01022004

U.K Traders Lahore

Total Purchases with Suppliers

Report run on: October 23, 2003 7:33 PM

Supplier ID	Name	Total Pur. Amount
1	ABDULLAH SHOUKAT	81750
2	USMAN	15900
	Total:	**97650**

Profit between two dates

Report run on: October 23, 2003 7:11 PM

From 01-FEB-2003 To 01-FEB-2004

Date	Invoice No	Profit
19-OCT-2003	1	150
19-OCT-2003	2	200
19-OCT-2003	3	3050
	Total:	3

Purchase Prices of Items

Report run on: October 23, 2003 7:28 PM

[redacted]

WH No	WH Name	Consignment No	Pur. Price	Quantity
1	Shadman	1-ABDULLAH SHOUKAT-19-OCT-03	250	0
3	lakar mandi	2-USMAN-19-OCT-03	125	23
3	lakar mandi	3-ABDULLAH SHOUKAT-20-OCT-03	250	25

[redacted]

WH No	WH Name	Consignment No	Pur. Price	Quantity
2	iqbal town	1-ABDULLAH SHOUKAT-19-OCT-03	350	19
2	iqbal town	3-ABDULLAH SHOUKAT-20-OCT-03	350	100

[redacted]

WH No	WH Name	Consignment No	Pur. Price	Quantity
3	lakar mandi	1-ABDULLAH SHOUKAT-19-OCT-03	450	65
2	iqbal town	2-USMAN-19-OCT-03	365	35

Sale Invoice btw two dates against Customer ID

Customer ID: 1
From: 01022003
To: 01022004

Invoice No: 3 Date: 19-OCT-03
Customer ID: 1 BODLA
Total Price: 4000
Discount: 0
Amount Paid: 4000
Remaining Amount: 0
Sales Profit: 3050 Profit Percentage: 321
Warehouse Exp Amount: 152.5
Remarks:

Item Id	Name	WH No	Consignment No	Qty	Sale Price	Amount	Profit
2	LUX	2	2-USMAN-19-OCT-03	2	1000	2000	1300

Sale Invoice Report (for user)

Sale Invoice No. 1

Invoice No	1	Date	19-OCT-03
Customer ID	2	AKISA	
Total Price	1600		
Discount	25		
Amount Paid	1500		
Remaining Amount	75		
Sales Profit	150	Profit Percentage	9
Warehouse Exp. Amount	2.5		
Remarks			

Item Id	Name	WH No	Consignment No	Qty	Sale Price	Amount	Profit
2	LUX	2	1-ABDULLAH SHOUKAT-19-OCT-03	2	350	700	0
1	PONDS	1	1-ABDULLAH SHOUKAT-19-OCT-03	3	300	900	150

Purchase Voucher Report

Report run on: October 23, 2003 7:00 PM

Purchase Voucher Report

Voucher No. PF 1

Voucher No 1 Date 19-OCT-2003

Party ID 1 ABDULLAH SHOUKAT

Total Amount 40500

Remarks

	Title	WH No	Qty	Price	Amount
1	PONDS	1	10	250	2500
2	LUX	2	25	350	8750
4	JUDE	3	65	450	29250

Supplier's Information

Report run on: October 23, 2003 7:45 PM

Supplier ID	1
Name	ABDULLAH SHOUKAT
Address	GARDEN TOWN
City	LAHORE
Tel#	042-5845210
Mobile#	
Email	
Contect Person	abdullah

Balance

Sale Report btw. two dates

From 01022003

To 01022004

Sale Report btw. two dates

Report run on: October 23, 2003 7:24 PM

From 01-FEB-2003 To 01-FEB-20

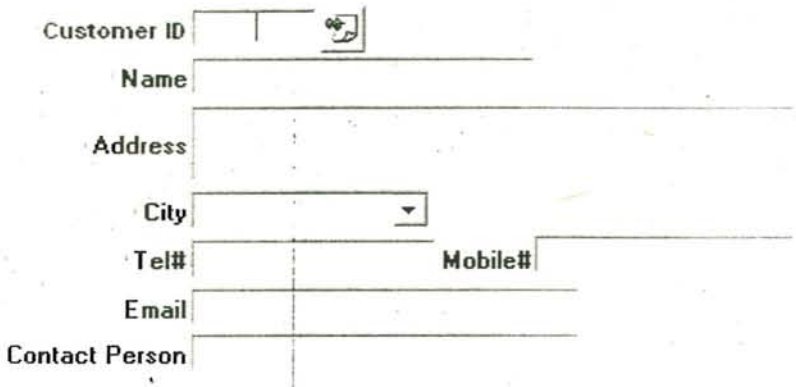
Invo. No	Date	Cust. ID	Name	Total Price	Discount	Paid Amount	Rem. Amt
1	19-OCT-03	2	AKJSA	1600	25	1500	
2	19-OCT-03	3	NABEEL	1400	0	1000	
3	19-OCT-03	1	BODLA	4000	0	4000	
			Total:	7000	25	6500	

Cash Receipt & Payments

Transaction			
CRP No.	4	Date	23-OCT-2003
Customer ID			
Balance			
Amount			
Remarks			

Scr-004	Customer Information...!	23 Oct,0

Customer Information



cr-006	Employee Information...!	23 Oct,03 0

Employees Information

Employee ID

Name

Designation

Address

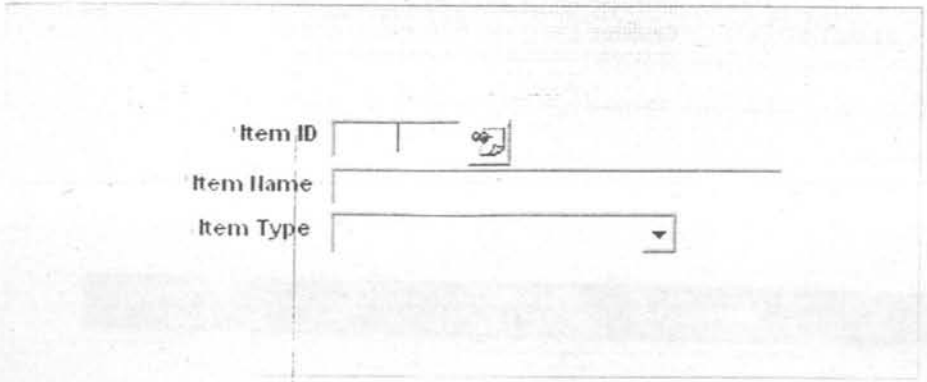
Tel=

Joining Date

Basic Salary

Gross Salary

Item Information



Sales Invoice

Invoice Ilo | Date | Cashier

Customer ID

Balance

Remarks

Item ID	Description	Wli No.	Cost/Unit	Sale Qty	Total Cost	Price/Unit	Sale Amount	Profit	Profit%

Tota Cost

G. Sale

Discount 0

Ilet Sale

Amount Paid

Profit %

Remaining Amount

Supplier Information

Supplier ID

Name

Address

City

Tel# Mobile#

Email

Contact Person

Purchase Return

Return ID	2	R. Date	23-OCT-2003	Cashier	Rashid
Vo. No	1	Date	19-OCT-03		
Party ID	1		ABDULLAH SHOUKAT		
Consignment#	1-ABDULLAH SHOUKAT-19-OCT-03				
Remarks					

Purchase

Information about those items which you have purchased against this voucher

Item ID	Description	WH No.	Unit Price (Rs)	Qty	Amount (Rs)
1	PONDS	1	250	10	2500
2	LUX	2	350	25	8750
4	JUDE	3	450	65	29250
			Total Price		40500

Purchase Return

Reduction of items from stock

Unit Price (Rs)	Qty	Amount (Rs)
	Total Price	