

**CUSTOMER SUPPORT DIVISION  
AND INVENTORY SYSTEM**



PROJECT WORK DONE AT  
MARSHALS TECHNOLOGY Pvt.Ltd,  
CHENNAI

**PROJECT REPORT**

*P-1130*

SUBMITTED IN PARTIAL FULFILLMENT OF THE  
REQUIREMENT FOR THE AWARD OF THE DEGREE OF  
**M.Sc [APPLIED SCIENCE] SOFTWARE ENGINEERING**  
OF BHARATHIAR UNIVERSITY, COIMBATORE.

SUBMITTED BY  
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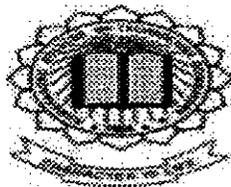
UNDER THE GUIDANCE OF

External Guide

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Internal guide

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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**KUMARAGURU COLLEGE OF TECHNOLOGY**

**COIMBATORE – 641 006**

**OCT 2003 – MARCH 2004**

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
KUMARAGURU COLLEGE OF TECHNOLOGY  
(Affiliated to Bharathiar University)  
COIMBATORE – 641 006  
OCT 2003 – MARCH 2004

## CERTIFICATE

This is to certify that the project entitled  
**CUSTOMER SUPPORT DIVISION  
AND INVENTORY SYSTEM**

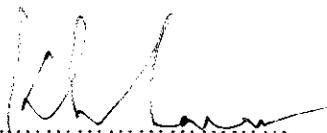
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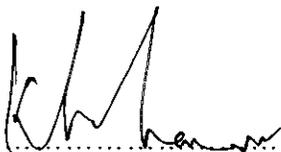
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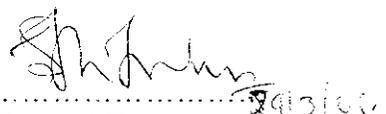
**M.Sc [Applied Science] SOFTWARE ENGINEERING**  
OF BHARATHIAR UNIVERSITY

  
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Professor and HOD

  
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Internal Guide

Submitted to University Examination held on .....

  
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Internal Examiner

  
.....  
External Examiner

## DECLARATION

I hereby declare that the project entitled "**CUSTOMER SUPPORT DIVISION AND INVENTORY SYSTEM**" submitted to **Bharathiar University**, Coimbatore as the project work of **Master of Science Degree in Software Engineering**, is a record of original work done by me under the supervision and guidance to **Mr.SENTHIL [Project Manager], MARSHALS TECHNOLOGY Pvt.Ltd, Prof.K.R.Baskaran-Asst.Professor & Course Coordinator [Software Engineering] , Kumaraguru College of Technology**, Coimbatore and this project work has not found the basis of the award of any Degree/Diploma/Associate ship /Fellowship or similar title to any candidate of any university.

Place :

Date :



**JACOB ABRAHAM**

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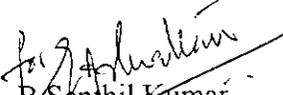


TO WHOMSOEVER IT MAY CONCERN

This is to Certify that Mr. Jacob Abraham of 5<sup>th</sup> Year M.Sc., Software Engineering, Kumaraguru College of Technology has successfully completed his project titled **Customer Support Division and Inventory System** developed on Visual Basic with Oracle.

During his tenure of the project we found his involvement and execution skill set very satisfactory.

We wish him all success for his career up-liftment.

  
B. Senthil Kumar  
Project Manager.

Date: 26/2/2004.  
Place: Chennai.

## **ACKNOWLEDGEMENT**

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The satisfaction and Euphoria that accompany the successful completion of any work would be incomplete unless, I mention the name of the people, who made it possible whose constant guidance and encouragement served as a beckon light and crowned my effort with success.

I express my sincere prayers and my heartfelt thanks to my Parents and all my friends for their support and loving prayers.

I am greatly thankful to Mr.Senthil Project manager and Mr.Jagan, Team leader, Marshals Technology, Chennai for permitting me to take part in the project.

I extend my profound gratitude to Dr.K.K.Padmanabhan B.Sc. (Eng), M.Tech, Ph.D., Principal, Kumaraguru College of Technology, Coimbatore for providing me an opportunity to do the project works as part of the curriculum.

I express my sincere thanks to Prof.Dr.S.Thangasamy B.E. (Hons), Ph.D., Head of the Department, Computer Science and Engineering for his valuable suggestions and advice.

I am immensely thankful to my guide Mrs.R.K.Kavitha. Lecturer, Dept of Computer science & Engineering, and course coordinator Mr.K.R.Baskaran B.E., M.S., Asst Professor, Dept of Computer science & Engineering for the valuable guidance and support throughout my project.

**JACOB ABRAHAM**

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## SYNOPSIS

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The project fully goes through the various process that are undertaken to manage the organization and a detail study is done from the data acquired and information gathered. The system is being developed as per the demand of the organization and end user requirement needs.

This project entitled "Customer Support Division and Inventory System" is developed using Oracle server as back end and Visual Basic as front end. The system helps to manage all documents related to buying and selling of Hardware and internet Packages. The system can handle all process that to be managed by the company like

- ☞ Sales
- ☞ Purchase
- ☞ Customer Details
- ☞ Account Management

The system is designed to overcome the problem in the organization without giving rise to ambiguity. The system is designed to operate in a healthy computer environment with the system being user friendly and guiding the user at each step.

# 1 INTRODUCTION

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## 1.1 PROJECT OVERVIEW

This project has been developed for the *EVERONN Systems*. This system facilitates storage, retrieval, processing and reporting of all related data for their automation of sales division and inventory division.

The system is a Customer support division and inventory system of Management Information System, which helps the administrator to track all kind of details in various perspectives and to improve the business. The MIS helps the manager to analyze the profit and loss for the whole year. This helps him to find the overall gain.

The system helps to input details about the various product details and the vendor details of the particular product. The purchase details of the required products and the daily sales details of the various products available are made by the operator of the software. The different kinds of reports are generated upon section for the ease of information tracking and the using the reports the due payments are collected. The pending amount details for vendor helps the administrator or the manager to pay amounts to the various vendors in time.

The MIS is powerful and user friendly package capable of providing required reports on demand, which will be useful for the company for its productivity.

The overview of the project is

- 🔗 System study of the requirements.
- 🔗 Reference of the studies made.
- 🔗 Rough design of the system.
- 🔗 Testing of the design through the operation.
- 🔗 Making the necessary changes.
- 🔗 Obtaining the final design.
- 🔗 Coding the project.
- 🔗 Testing the system.
- 🔗 Implementing the system.
- 🔗 Documenting the project.

## **1.2 ORGANIZATION PROFILE**

### **THE COMPANY**

Marshal's Technologies Ltd., an information technology Services Company was incorporated by the Marshal's Group in 1998. Headquartered at Chennai, India the company has branch offices across the country - Pondicherry, Bangalore, Mumbai, Delhi, Hyderabad and Bhuvaneshwar to name a few. The organization is committed to total customer satisfaction and creativity to continuously generate innovative solutions.

### **THE FOCUS**

In an environment of catalytic changes, globalization and rapid technology advances Marshals' is committed to continuously evolve, metamorphose and rise to meet the challenges of the future. The prime focus is on customized software development, re-engineering and application maintenance in many vertical areas including manufacturing and data

communication, systems integration, network solutions, IT education and development.

## **THE TEAM**

The basis of Marshals business excellence is built on its competencies and technical expertise of its brain ware. The company is managed by a team of IT savvy professionals who are experts in the field of the digital world. With over 150 employees, Marshals' also has professionals from leading business schools to add to its strength.

## **OUR BUSINESS ALLIANCES**

MTL has business and technology alliances with:

**Telecommunications Consultants India Limited (TCIL)**, a government of India enterprise and an ISO-9001 Company.

**Central Institute of Plastic Engineering Technology (CIPET)Chennai** for CADSODT a unique course in CAD / CAM.

**Bharat Sanchar Nigam Limited (BSNL)**, a government of India undertaking for certification of its telecom course.

Additionally MTL has an MOU with Vietnam Electronic Industrial Corporation (VEIC) to set up training centers in Vietnam, international vendors for broadband services.

## **SOFTWARE SOLUTIONS - OUR APPROACH**

At Marshals' we recognize the importance of structured processes and well defined methodologies in executing our projects. The rigor of the

preliminary study, the level of involvement from the client and the review mechanism are critical factors for achieving our defined project milestones. Marshals' has identified a unique methodology based on "Aggregate approach" to deliver the quality solutions to our valued customers. Marshals' has effectively implemented similar kind of approach in its other core business areas.

Marshals' methodology for providing solutions to our customer is broadly ensured through valuable inputs by

- 🏢 Project Management Cell
- 🏢 Software Solution Providers

The project management Cell of Marshals interacts with the client for the requirement and identifies the correct software solution providers and facilitates the coordination for delivering quality solutions.

The functional and technical expertise for the software solutions are provided by the Software Solution Partners with coordination from the Project Management Cell for the successful delivery and quality solutions to customers.

#### **Marshals' and its SSPs – Partial Client List**

- 🏢 Ventiel Belgium Valves India (P) Ltd
- 🏢 HVF
- 🏢 Dhanalakshmi Bank Ltd
- 🏢 Johnson & Johnson
- 🏢 Hero Cycles
- 🏢 Hindustan Lever Ltd

- 🏢 Ford India Ltd
- 🏢 GE Power Controls
- 🏢 Godrej
- 🏢 Murugappa Group
- 🏢 ITC Ltd
- 🏢 ABN AMRO Bank, India
- 🏢 ICICI, India
- 🏢 Citibank
- 🏢 Standard Chartered Bank, Zimbabwe
- 🏢 Royal & Sun Alliance, UK
- 🏢 Thomas Cook, UK
- 🏢 Ashok Leyland
- 🏢 LIC
- 🏢 Apollo Hospital
- 🏢 ONGC

## QUALITY

MARSHALS' lays a lot of emphasis on the Quality of its education. Right from curriculum development, the admission processes to the student appraisal and certification follow quality processes and procedures. MARSHALS' is already on its way to get an ISO Certification.

## **PROJECT ORIENTED TRAINING**

Practice makes a man perfect. Which is why, Marshals' has incorporated Projects as an integral part of its curriculum. The projects that students do are actually prototypes of real time projects that Marshals' or its associates may have done for their customers. By exposing the students to projects, they not only apply the knowledge that they have learnt in a class room environment but also learn vital project management skills such as on-time completion of projects, systems specifications and documentation.

## **2 SYSTEM STUDY AND ANALYSIS**

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### **2.1 REQUIREMENT SPECIFICATION**

Requirement Specifications for a component must have been completed.

The Requirement Specifications for a Component is complete when the following things have been specified completely.

- 📖 Activities
- 📖 Tasks
- 📖 Business Rules
- 📖 Errors
- 📖 Required Glossary for all the above

### **2.2 REQUIREMENTS OF NEW SYSTEM**

The new system should overcome the limitations of the existing system. It should provide better options for better data reporting and data comparisons. The system should be secure, faster, error free, and interactive. Thus main requirements identified are

#### **GOOD INTERACTION WITH THE USER**

The new system should be capable of good interaction with the user. Errors and warning messages should be clearly displayed. The system should be menu driven. In case of item selection, a list can be provided for selection. Thus error in entries could be reduced and foreign key reference can be maintained without cross checking.

## **CENTRALIZED DATABASE**

A database management system should be introduced by which storage and retrieval of data becomes easy. Large amount of data can be managed, data integrity can be ensured and data redundancy could be avoided.

## **SECURITY**

Since the storage data includes many details, there should be some level of security for the system. Software's in a multi-user environment should use some level of security.

## **PROVISION FOR QUICK REPORT GENERATION**

There should be provision for quick report generation. Graphs and charts can be introduced for better data representation.

## **2.3 PROPOSED SYSTEM**

The new system enjoys lot more sophistication. Care has been taken to make it user friendly as possible. Data storage has been centralized. Concept database have been introduced. The system is menu driven providing the user options for selecting appropriate form for processing. The system is designed in such a way as to gain maximum software support.

Unauthorized entry into the system is prevented by passwords and login facilities, database security as well as application security is provided.

Data entry is made through user-friendly input screen. On data entry, validations are done on restrict duplicate and erroneous data.

Error message is been attached for all the forms.

## **3 PROGRAMMING ENVIRONMENT**

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### **3.1 HARDWARE CONFIGURATION**

Processor	: Intel Pentium III or higher
Clock Speed	: 300 MHz
RAM	: 128 MB
Hard Disk Space	: 20 GB

### **SOFTWARE CONFIGURATION**

Operating System	: Windows 98 Windows NT Workstation
Database	: Oracle 8i
Front End	: Visual Basic 6.0
Reporting Tool	: Crystal Reports 8.0

### **3.2 DESCRIPTION OF THE SOFTWARE USED**

Visual basic is a powerful programming system for developing sophisticated, graphical and Internet applications for Microsoft windows environment. Its productivity has been enhanced by addition of a complete set of tools to specify rapid application development.

<<Visual>> refers to the method used to create the graphical user interface (GUI) that the users illustrations, rather than writing numerous lines of code to describe the appearance, function and location of interface elements.

<<Basic>> refers to the BASIC programming language, a widely preferred language by many programmers for its simplicity. 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.

Visual Basic 6.0 introduces us to the new world of Active X technology, a unique way harness the Internet. Visual Basic offers many salient features to aid in the development of full - featured application including:

- Data access functionality allows creating of front-end applications that can work on most popular database systems.
- Active X technology allows usage of the functionalities provided by other applications, such as Microsoft Word, Microsoft Excel and
- other Windows applications and their possible deployment on the web.
- Applications developed using Visual Basic provide a true .EXE file that uses a runtime Dynamic Link Library (DLL), which can be freely distributed.
- Calling powerful API functions available in Visual Basic optimizes application performance.

## **ORACLE 8i**

A database server is the key to solving the problems of information management. In general, a server must reliably manage a large amount of data in a multi-user environment so that many users can concurrently access the same data. All this must be accomplished while delivering high level of performance. A database server must also prevent unauthorized access and provide efficient solutions for failure recovery.

The oracle server is an object-relational database management system that provides an open, comprehensive, and integrated approach to information

management. An Oracle Server provides efficient and effective solutions with the following main features:

**1. Client/Server (distributed processing) environments.**

To take full advantage of a given computer system or network, Oracle allows processing to be split between the database server and the client application programs. The computer running the database management system handles all of the database server responsibilities while the workstations running the database application concentrate on the interpretation and display of data.

**2. Large database and space management**

Oracle supports the largest of databases, potentially terabytes in size. To make efficient use of expensive hardware devices, it allows full control of space usage.

**3. Many concurrent database users**

Oracle supports large number of concurrent users executing a variety of database applications operating on the same data. It minimizes data contention and guarantees data concurrency.

**4. High transaction processing performance**

Oracle maintains the preceding features with a high degree of overall system performance. Database users do not suffer from slow processing performance.

## **5. Portability and Compatibility**

Oracle software is ported to work under different operating systems. Applications developed for Oracle can be ported to any operating system with little or no modification.



## 4 SYSTEM DESIGN

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### 4.1 DATABASE DESIGN

The term "DATABASE" is used to refer to any data available for information processing or retrieval operations, the term implies a particular structuring of the data, both conceptually and in physical storage.

The data records are physically organized and stored so as to promote share ability, availability, and integrity. The database approach is made operational by a database management system or DBMS or RDBMS, a software system, which performs the functions of defining, creating, revising, and controlling the database. It provides facilities for retrieving data, generating reports, revising data definitions, updating data and building applications.

### **NORMALIZATION**

One of the issues in database design is achieving a well- defined model of data to avoid update anomalies. Normal forms and normalization rules aid this. The normal forms are easily understood in terms of relational database design. The relational database model describes the database as tables or relations. Each relation consists of row's (called tables) representing entities and columns representing attributes. Normalization is used to determine how to cluster data items.

Normalization is the process of refining the data model. Through normalization, a collection of data in a record structure is replaced by successive record structures that are simpler and flexible to manage.

The reason why normalization is to be carried out is:

- ❏ To structure the data so that any pertinent relationships between entities can be represented.
- ❏ To permit simple retrieval of data in response to query and report requests.
- ❏ To simplify the maintenance of the data through updates, insertions and deletions.
- ❏ To reduce the need to restructure or reorganize data when new application requirements arise.

Hence from the conceptual data model to the physical database, the data structures have to go through a set of steps, namely the three steps of normalization that improve the quality of design of application.

## **FIRST NORMAL FORM**

First normal form is achieved when all repeating groups are removed so that a record is of fixed length. A structure is in the First normal form if there are no elements or group of elements that repeat for a single occurrence of the entity represented by that structure. By removing a repetitive group, we get an additional record structure. This creates the need for identifying a key field for the group for the group of elements making the additional record structure. This creates the need for identifying a key field for the group of elements making the additional structure. This is necessary, so that the original record and the new records are interrelated by a common data item.

## **SECOND NORMAL FORM**

Second normal form is achieved when a record is in first normal form and each element in the structure is fully dependent on the primary key. The analysis is conducted on structures that have combination keys - whether the full combined key derives non-key elements or is it derived from part of it.

The steps that transform first normal form structures to structures in second normal form

- ☞ Remove data elements that depend on part of the key.
- ☞ Treat partially dependent elements as separate structure.
- ☞ Identify key for this structure.

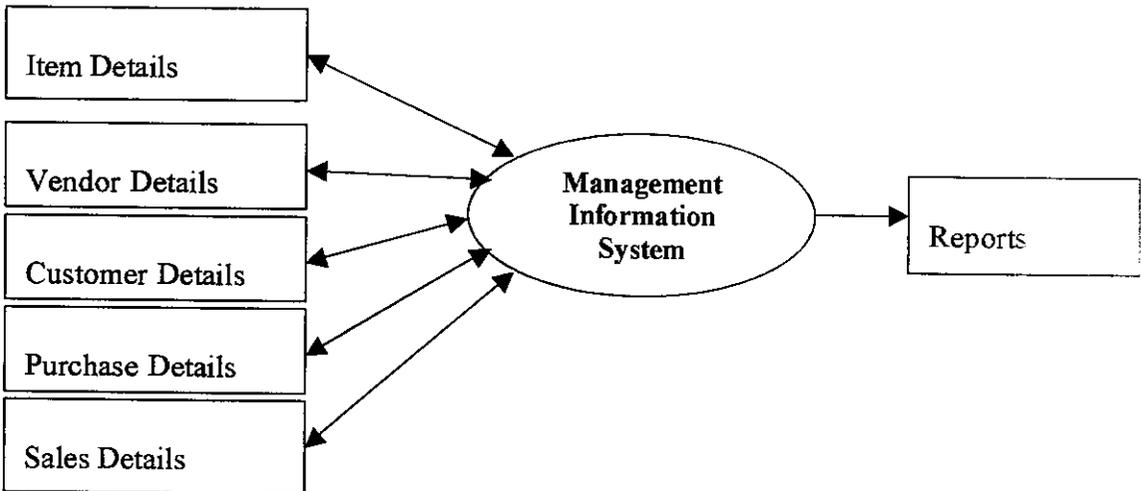
## **THIRD NORMAL FORM**

A structure is in the third normal form if the values of its non-key elements are not dependent on any other non-key elements. It is verified whether there are any elements whose values can be calculated or derived from other data elements. If such elements exist, then a decision can be made regarding the utility of retaining that element.

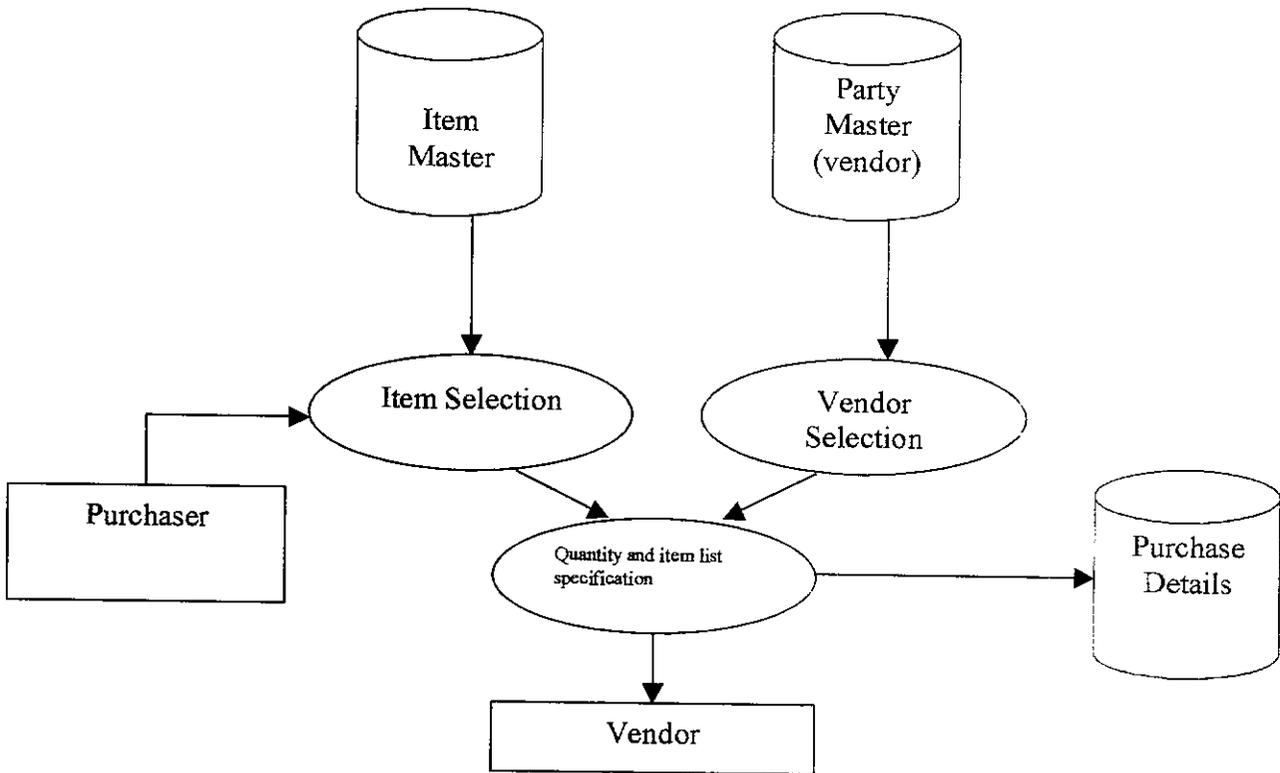
The steps that transform the second normal form to third normal form are:

- ☞ Remove data elements that
- ☞ Depend on other non-key elements
- ☞ Can be calculated or derived through logic
- ☞ Interdependent elements are treated as separate structures.
- ☞ Decisions were made while deleting computable elements.

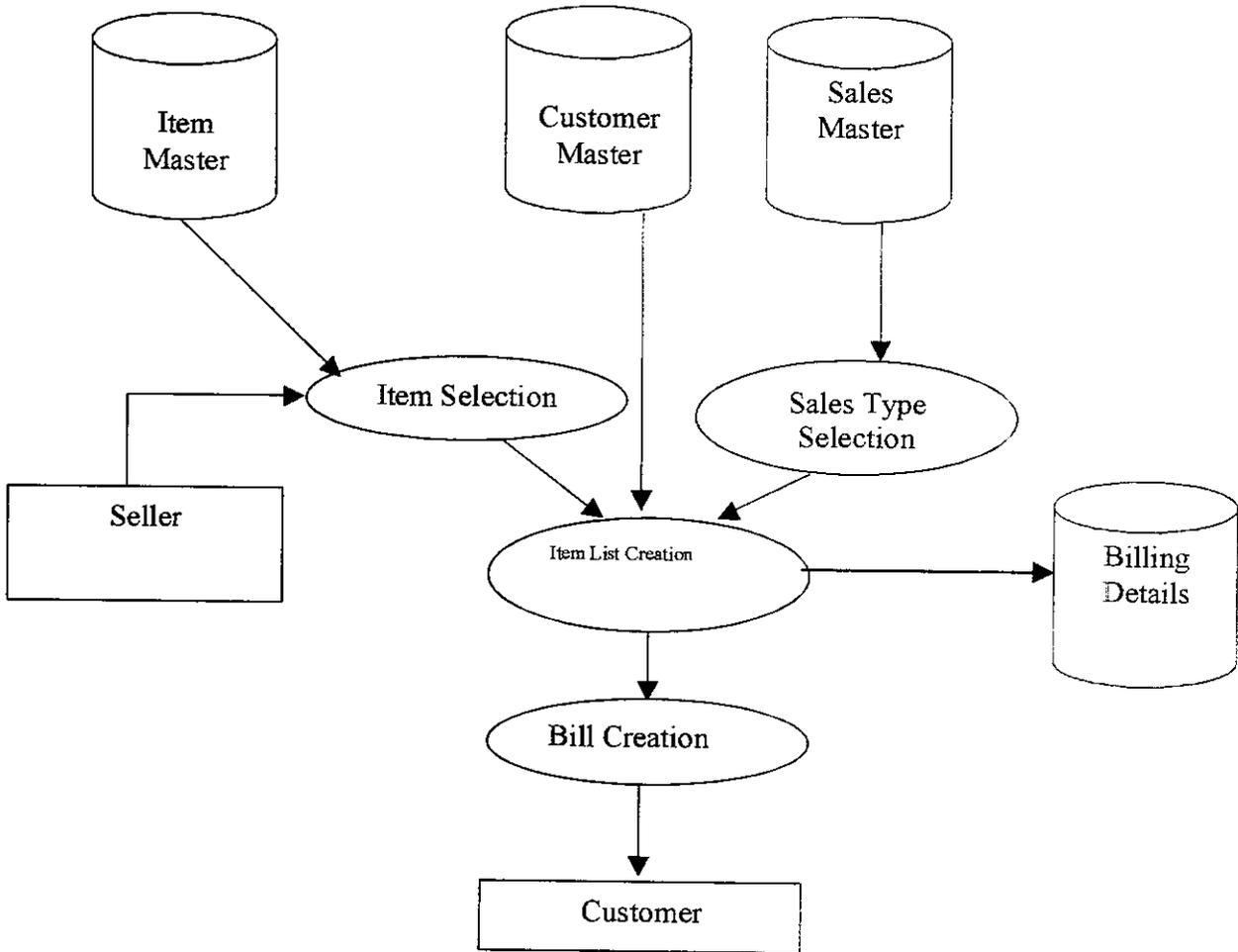
## 4.2 DATA FLOW DIAGRAM



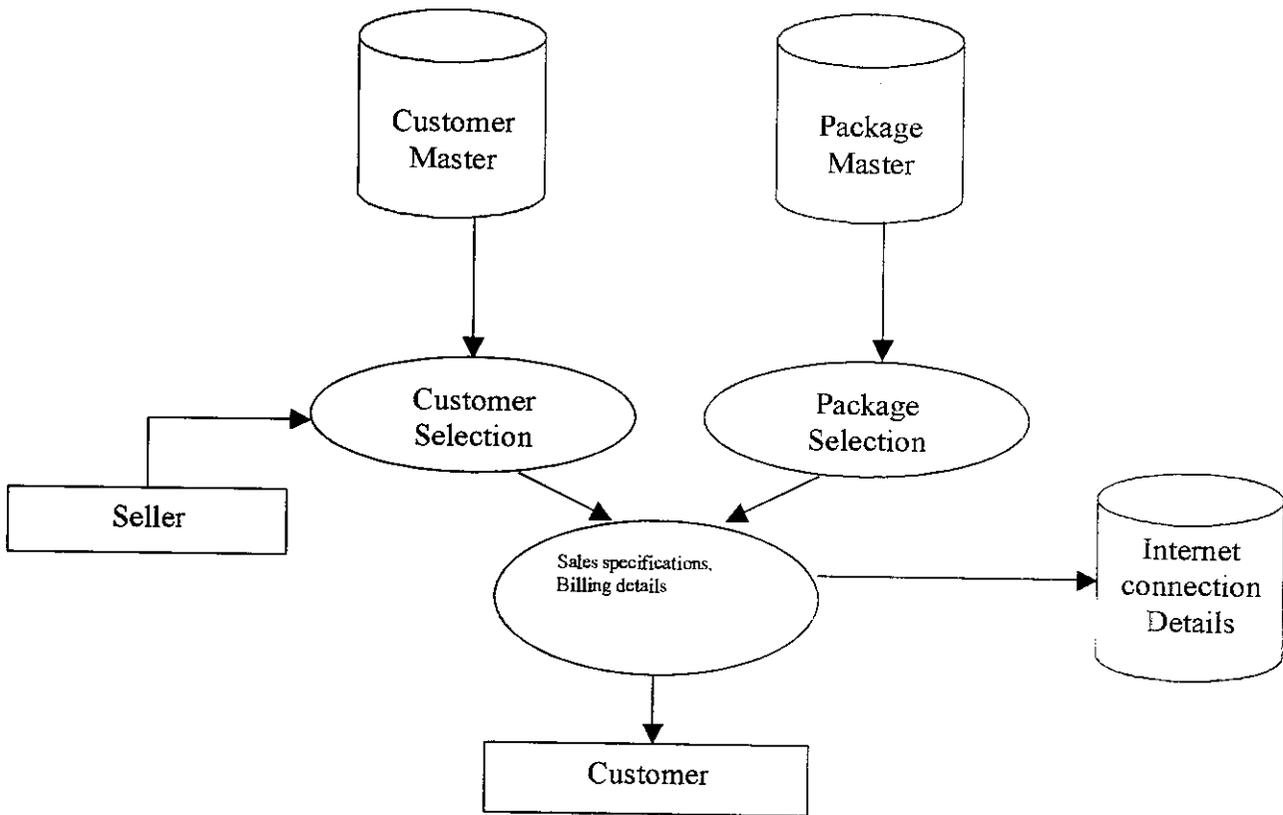
# PURCHASE MODULE



# SALES MODULE



# INTERNET CONNECTION SALES MODULE



## 5 SYSTEM IMPLEMENTATION AND TESTING

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### 5.1 SYSTEM IMPLEMENTATION

Implementation is the stage when theoretical design is turned in to a working model. This stage is considered as a critical stage in achieving a successful new system. It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve change over, training of user staff and evaluation of change over methods.

The processes conducted during the implementation stage are,

- ☞ Testing of developed modules with sample data.
- ☞ Correction of errors.
- ☞ Testing the system to meet user requirements.
- ☞ New files with actual data had been created.
- ☞ Changes were made according to users suggestions.
- ☞ Changes were made according to user's suggestions.

Users were given training for the new system

#### 5.1.1 INVENTORY

In this screen all the Purchase and Sales details are stored.

- ☞ **Purchase Data Entry :** This is used to record all the stocks that are purchased from the suppliers. All the data are been maintained in a separate database.

📖 **Sales Data Entry :** This is used to record all the stocks which are sold to the customers. All the data's are been maintained in separate database.

📖 **Internet Connection Sales Entry :** In this module all the internet connections that are sold are maintained in a separate database.

## 5.1.2 CASH MANAGEMENT

In this screen all the Cash Transactions are maintained.

📖 **Miscellaneous Expense :** All the general expenses that are incurred in the company are maintained in the database. (For eg: System Failure, Electricity Bill)

📖 **Sales Payment :** All the payment dues which are yet to be received from the customers are maintained.

📖 **Purchase Payment :** All the payments which are yet to be made to the suppliers by the company are maintained.

## 5.1.3 REPORTS

This screen is used to produce all the reports.

📖 **Purchase Report :** All the purchases that are made in the company are recorded and the reports are generated accordingly.

📖 **Sales Report :** All the sales that are made in the company are recorded and the reports are generated accordingly.

📄 **Current Stock Report :** The current stocks which are available in the company is displayed when the request is made by the user.

📄 **Internet Connection Expiry Report :** The internet connections which are sold by the company maintains the expiry details of the package so that the company can intimate their customers for the renewal.

## **5.2 TESTING**

The important step in the development process of a system is testing the application to check it whether it is running properly and efficiently. Since this application is a real time system, the ideal test data should also be of real time.

### **UNIT TESTING**

Unit testing refers to the testing of individual software units or related units, where a unit is the smallest functional part of an application. Unit testing makes heavy use of White box testing techniques along with Black box techniques.

In our environment, a typical screen and its associated components make a unit. White box testing measures like code-walkthroughs, control flow graphing are used extensively at this level apart from functional testing efforts like messages, boundary values etc.

### **SYSTEM TESTING**

Testing conducted on a complete, integrated system to evaluate the system's compliance with its specified requirements. Software once validated for meeting functional requirements must be verified for proper interface with other system elements like hardware, databases and people. System Testing verifies

that all these system elements mesh properly and the software achieves overall function / performance.

## **5.2.2 TESTING TYPES**

### **STRUCTURAL TESTING : WHITE BOX TESTING**

Those testing techniques, which involve understanding of the control structure of software components and their procedural design, form a part of Structured Testing. Code-walkthroughs of front-end and back-end code come under this type of testing.

#### **Branch Testing**

Testing designed to execute each outcome of each decision point in a program.

#### **Control Flow Graphing**

A technique to generate the graphical representation of the sequence in which operations are performed during the execution of a program.

#### **Basis Path Testing**

This is a white box control structure testing technique that enables the definition of "basis set" of execution paths. Test cases derived to exercise the "basis set" ensure that every statement in the program is executed at least once during testing.

### **Condition Testing**

This is a white box control structure testing technique that exercises the testing of each logical condition contained in a program.

### **Data Flow Testing**

This is a white box control structure testing technique that aims at generating test cases to satisfy the execution control of program depending upon the data values and sequences of operation.

## **FUNCTIONAL TESTING : BLACK BOX TESTING**

Those testing methods that need functional understanding of 'what' a software unit is supposed to perform rather than 'how' forms a part of Functional Testing. Business rule validations through sample data in a test sequence come under this type of testing.

### **Back-to-back testing**

Testing in which two or more variants of a program are executed with the same inputs, the outputs are compared and errors analyzed in case of discrepancies.

### **Bottom-up Testing**

A type of integration testing that begins with construction and testing of atomic modules and moves up to integrate and test the entire application.

## **Top-down Testing**

A type of integration testing that employs depth-first integration or breadth first integration to start with the controlling module of the application and integrate tests the rest of the modules. This testing employs test drivers and stubs for testing and relies on Regression Testing to ensure testing completion.

## **Regression Testing**

Regression Testing refers to the selective re-testing of a system or component to verify that modifications have not caused unintended effects and the system component still conforms to the specified requirements.

## **Stress Testing**

Stress testing is a type of system testing that aims at confronting the system with varied levels of abnormal situations in terms of consumption of computer resources like quantity, frequency or volume.

## **Performance Testing**

Performance testing is a type of system testing that aims to determine whether a system meets the performance requirements within the physical limitation of the computing environment of the system.

## **COMPONENTS OF TESTING PROCEDURE**

### **Test**

An activity in which a component is executed under specified conditions, the results are observed or recorded and evaluated with the expected outcome or target.

### **Test Bed**

An environment containing the simulators, tools and other support elements needed to conduct a test.

### **Test Plan**

Test Plan refers to the document that plans for testing of a system or component under various criteria of the testing strategy and procedures.

### **Test Case**

A document that specifies the test inputs, execution conditions, and predicted results for an item to be tested with respect to the testing criteria.

### **Test Criteria**

Refers to the major focus areas of testing for a given test strategy. The test Criteria relies heavily on the appropriate testing technique adopted.

### **Test Log**

Refers to a chronological record of all relevant statistics about the execution of a test.

## 6 CONCLUSION

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The whole system is developed based on the client requirements by fulfilling all their needs. The system can be upgraded when it is necessary, due to its flexibility. The software is very simple and user friendly. The major aspect of the software is, it helps the company management to track information in all possible way.

The software can be installed in network computers and the data is saved centrally, hence providing a complete centralized information system for the various persons of the company at various levels.

The major achievements which the system offers,

- ❖ The package is highly user friendly and the record maintenance is up-to-date.
- ❖ Systematic processing of details and report generation
- ❖ The changes can be easily made to documents
- ❖ Reports are generated on demand.

## **7 ENHANCEMENTS**

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Good software must be able to incorporate future modifications and enhancements. Throughout the maintenance phase changes keep cropping up and the system must be able to adjust itself to the changing situations. The system has been developed keeping this in mind. The system has been so developed that change in configuration leaves minimum impact on the performance. The application has been developed such that newer methods can be just added without affecting the other methods.

The application has been coded in a manner that any future enhancements to be made can be incorporated without much effort.

## **8 REFERENCES**

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### **Books:**

E. Stephen, VB 6.0 - The Reference

Richard, Oracle 8i

### **Websites:**

[www.vb101.com](http://www.vb101.com)

[www.howstuffworks.com](http://www.howstuffworks.com)

[www.otn.oracle.com](http://www.otn.oracle.com)

[www.oracle.co.jp](http://www.oracle.co.jp)

[www.starlingtech.com/books](http://www.starlingtech.com/books)

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*APPENDICES*

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## 9 APPENDICES

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### TABLE STRUCTURE

Table Name : item\_master

Purpose : to maintain the item details

Primary key : item\_id

FIELD NAME	TYPE	DESCRIPTION
ITEM_ID	VARCHAR2(5)	ITEM NUMBER
ITEM_NAME	VARCHAR2(50)	ITEM NAME
ITEMTYPE	VARCHAR2(50)	ITEM TYPE
QTY	NUMBER(5)	QUANTITY

Table Name : customer\_master

Purpose : to maintain the customer details

Primary key : customer\_id

Name	Type	
CUSTOMER_ID	VARCHAR2(10)	CUSTOMER NUMBER
CUSTOMER_NAME	VARCHAR2(50)	CUSTOMERNAME
ADDRESS1	VARCHAR2(50)	ADDRESS
ADDRESS2	VARCHAR2(50)	ADDRESS
CITY	VARCHAR2(25)	CITY
PINCODE	VARCHAR2(6)	PINCODE
STD_CODE	VARCHAR2(8)	STDCODE
PHONE1 NUMBER	VARCHAR2(13)	OFFICE PHONE
PHONE2	VARCHAR2(13)	PERSONAL PHONE
MOBILE_NO	VARCHAR2(10)	MOBILE
EMAIL_ADDRESS	VARCHAR2(50)	EMAIL
CUST_COMPANY_NAME	VARCHAR2(50)	COMPANY NAME

Table Name : purchase\_master  
 Purpose : to maintain the purchase details  
 Primary key : invoice\_no

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INVOICE_NO	VARCHAR2(100)	INVOICE NUMBER
PARTY_NAME	VARCHAR2(50)	PARTY NAME
PURCHASE_DATE	DATE	PURCHASE DATE
ITEM_TYPE	VARCHAR2(50)	ITEM TYPE
ITEM_NAME	VARCHAR2(50)	ITEM NAME
QTY	NUMBER(5)	QUANTITY
PRICE_PER_UNIT	NUMBER(19,4)	PRICE PER UNIT
TOTAL_AMT	NUMBER(19,4)	TOTAL AMOUNT
ITEM_DESCRIPTION	VARCHAR2(200)	ITEM DESCRIPTION

Table Name : internet\_connections  
 Purpose : to maintain internet package sales details  
 Foreign key : customer\_id,p\_invoice\_no,p\_party\_name,sales\_invoice\_no

CUSTOMER_ID	VARCHAR2(50)
PACKAGE_DETAILS	VARCHAR2(50)
USER_NAM	VARCHAR2(50)
REGISTERED_DATE	DATE
EXPIRE_DATE	DATE
BILLING_PRICE	NUMBER(19,4)
SYS_MONTH	VARCHAR2(50)
SYS_YEAR	VARCHAR2(50)
SERIALNUMBER	VARCHAR2(50)
STATUS	NUMBER(2)
P_INVOICE_NO	VARCHAR2(100)
P_PARTY_NAME	VARCHAR2(50)
P_RATE	VARCHAR2(50)
P_DATE	VARCHAR2(50)
SALES_INVOICE_NO	VARCHAR2(100)

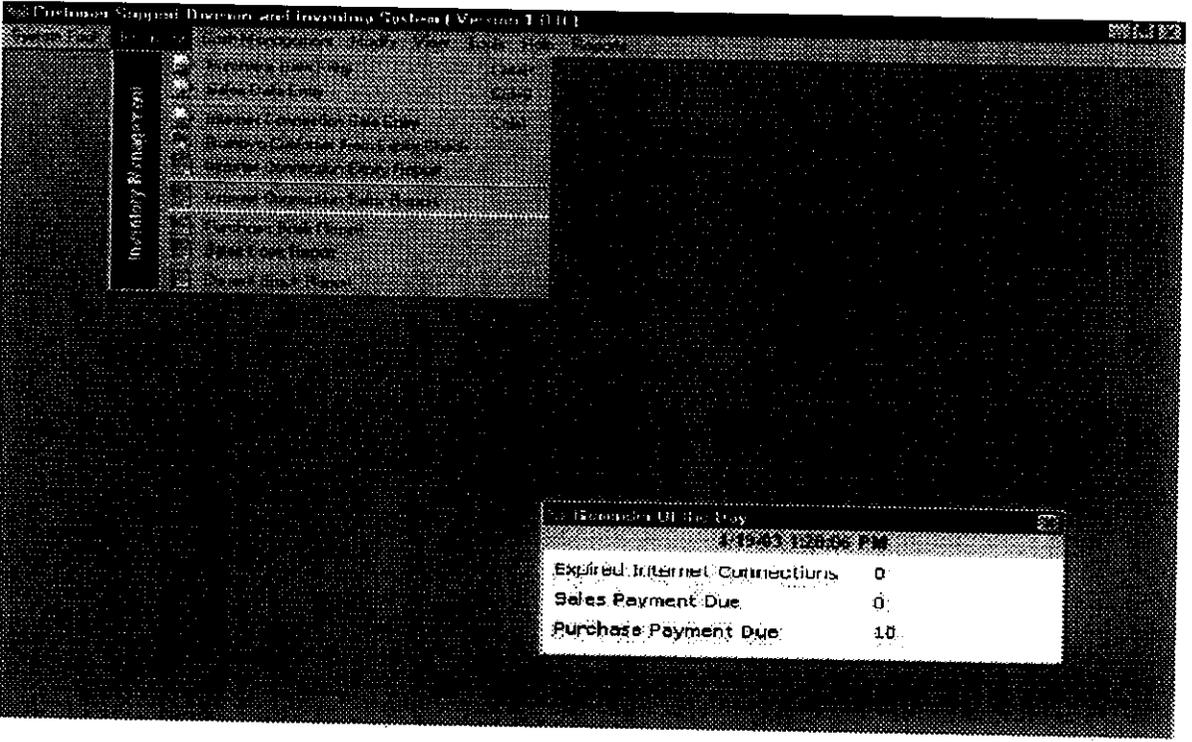
Table Name : available\_purchased\_stock

Purpose : to maintain the stock details available

Foreign Key : Invoice\_no

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INVOICE_NO	NOT NULL VARCHAR2(100)
PARTY_NAME	VARCHAR2(50)
PURCHASE_DATE	DATE
ITEM_TYPE	VARCHAR2(50)
ITEM_NAME	VARCHAR2(50)
QTY	NUMBER(5)
PRICE_PER_UNIT	NUMBER(19,4)
TOTAL_AMT	NUMBER(19,4)
ITEM_DESCRIPTION	VARCHAR2(300)



Web Management

- Home
- Customer Support
- Product Inventory
- Order Management
- Payment Management
- System Administration
- Help
- Logout

Branch: 0101 Day

Expired Internet Connections	0
Sales Payment Due	0
Purchase Payment Due	10

- Mark & Ernie
- John & Mary Smith
- Robert & Susan
- David & Jane
- James & Lisa
- Michael & Sarah

Purchase Entry Form

# Purchase Entry Form

Invoice Number:  Purchase Date: 19-Apr-2003  
Party Name:

Item Type:    
Item Name:    
Total Qty:  Price Per Unit:  Total Amount:   
Item Description:

Item Name	Qty	Price	Total Amt	Description



Customer ID   
Customer Name

Package Detail   
Purchased From

Item	Description	Quantity	Unit Price	Total Price

Purchased Price   
Serial Number   
User Name   
Registered Date   
Expire Date   
Billing Price

Expense Data Entry Form

Expense Type	Synthetic Fuels	Yes
Date	19-Apr-2003	
Amount	4100	
<input type="button" value="Save"/>		

New Purchase Entry

Party Name:

Invoice Number:

Purchase Date:

Item Type	Description	Qty	Unit Price	Total Amount	Days to Delivery
CD WRITER	LO CD WRITER	5	3000	15000	
FLOPPY DISK	SONY 1.44	100	110	11000	

Item Name	Qty Available
<b>CABINET</b>	
ATX CABINET	1
<b>CABLE</b>	
ATA SOUND CABLE	225
<b>CD ROM</b>	
SAMSUNG 52X CD ROM	4
SONY 56X	1
<b>CD WRITER</b>	
LG CD WRITER	5
SONY 32X CD WRITER	12
<b>FLOPPY DISK</b>	
SONY 1.44	103
<b>GRAPHICS CARD</b>	
INTEL 82810	3
<b>Internet Connection</b>	
JINDAL ONLINE 100 HRS PACK	1
Sathyam 100 Hrs Pack	100
WILNET ONLINE 100 HRS PACK	1
<b>Keyboard</b>	

Item Type	Item_name	Qty	Rate Per Unit	Total Amount	Item Description
<b>Purchase Book</b>					
Purchase Date : 18-April-2003					
<b>Invoice Number</b>	100001	<b>Party Name</b>	MicroWare Peripherals		
<b>Purchase Date</b>	18-April-2003				
FLOPPY DISK	SONY 1.44	100.00	110.00	11,000.00	
CD WRITER	LG CD WRITER	5.00	3,000.00	15,000.00	
			<b>Total Amount</b>	<u>26,000.00</u>	
<b>Invoice Number</b>	1004	<b>Party Name</b>	INFOBYTE PVT LTD		
<b>Purchase Date</b>	18-April-2003				
CD WRITER	SONY 32X CD WRITER	2.00	3,500.00	7,000.00	
CABLE	ATA SOUND CABLE	20.00	200.00	4,000.00	
			<b>Total Amount</b>	<u>11,000.00</u>	
<b>Invoice Number</b>	23	<b>Party Name</b>	Swiya Graphics		
<b>Purchase Date</b>	18-April-2003				
CABLE	ATA SOUND CABLE	5.00	2,300.00	11,500.00	
MotherBoard	Intel 840 GL	2.00	8,900.00	17,800.00	

## Sales Book

Item Type	Item_name	Qty	Rate Per Unit	Total Amount
Sales Date : 18-Apr-2003				

Invoice Number	COMP006	Party Name	Ramesh		
Sales Date		18-Apr-2003			
CABINET	ATX CABINET	1.00	3,400.00	3,400.00	
Total Amount				3,400.00	

Invoice Number	COMP007	Party Name	DIVYEN K PATEL		
Sales Date		18-Apr-2003			
Harddisk	SAMSUNG 20 GB	2.00	4,555.00	9,110.00	
Total Amount				9,110.00	

Invoice Number	COMP008	Party Name	Siskumaran		
Sales Date		18-Apr-2003			
Internet Connecfon	WILNET ONLINE 100 HRS PACK	1.00	4,343.00	4,343.00	
Total Amount				4,343.00	