

# Accounts Receivable & Payable System

**PROJECT REPORT**

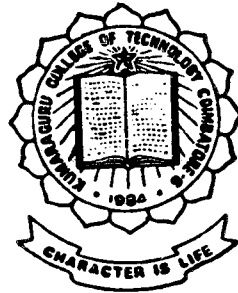
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Dissertation Submitted in partial fulfilment of the  
requirements for the Degree of  
**MASTER OF COMPUTER APPLICATIONS**  
of the Bharathiar University

By

S. M. ARISH

Reg. No. 9438MO189



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**Kumaraguru College of Technology**

COIMBATORE - 641 006.

**JUNE 1997**

# *Certificate*

This is to certify that this project work entitled

## **"Accounts Receivable and Payable System"**


*Submitted to*


**KUMARAGURU COLLEGE OF TECHNOLOGY**  
(Affiliated to Bharathiar University)

in partial fulfilment of the requirements for the award of Degree of  
**MASTER OF COMPUTER APPLICATIONS**  
is record of original work done by


**Mr. S.M.ARISH,**  
(Reg.No. 9438MO189)

during his period of study in the Department of Computer Science and Engineering,  
Kumaraguru College of Technology, Coimbatore-641006, under my supervision  
and guidance and this project work has not formed the basis for the award  
of any Degree/Diploma/Associateship/Fellowship or similar title  
to any candidate of any university.

  
Professor and Head

  
Staff-in-Charge

Submitted for university Examination held on 3 /6 /1997

  
Internal Examiner

  
External Examiner

## *Declaration*

I hereby declare that the project work entitled

**ACCOUNTS RECEIVABLE AND PAYABLE SYSTEM**  
*at*  
**RAVIDHANDRA SYSTEMS AND COMPUTER SERVICES LIMITED,**  
**COIMBATORE**

Submitted in Partial fulfilment of the requirements for the award of the Degree of  
**MASTER OF COMPUTER APPLICATIONS**  
is a report of original work done by me during my period of study in

**KUMARAGURU COLLEGE OF TECHNOLOGY**  
(Affiliated to Bharathiar University)  
Coimbatore-641 006.

Under the Supervision of  
**Mr.S.UDAYA KUMAR, M.E.,**

Name of the Candidate  
**S.M.ARISH**

Register Number  
**9438MO189**

Signature of the Candidate



Date : *02-06-1997*  
Place : Coimbatore

RAVICHANDRA

# Systems and Computer Services Ltd

(A Joint Venture company of M/s. ELCOT - A Government of Tamilnadu undertaking)

Professor and Head,  
Department of Computer Science & Engineering,  
Kumaraguru College of Technology,  
Chinnavedampatti Coimbatore 6.

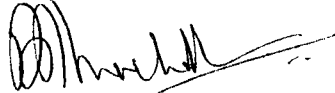
03.05.1997.

Dear Sir,

This is to certify that Mr. S.M.Arish, Final MCA student of your college has done a project work titled "**Accounts Receivable & Payable System**" in RPG/400 under AS/400 environment during January '96 to April 1996 in our Company for his fulfillment of MCA degree .During the course of the project work his attendance rating was 89% and his conduct was good. We wish him well in life.

Thanking You,

Sincerely Yours,  
for M/S.RAVICHANDRA  
SYSTEMS & COMPUTER SERVICES LTD



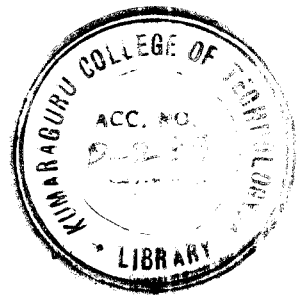
DIRECTOR - TECHNICAL.

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POST BOX No. 4036 - 1029, AVANASHI ROAD - LIC BUILDING II FLOOR - COIMBATORE - 641 018 - Tamilnadu India

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Ph: 91 - 422 - 214844, 211961 Fax: 91 - 422 - 214844



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## Acknowledgement

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## ACKNOWLEDGEMENT

I express my sincere gratitude to my beloved Principal **Dr.S.Subramanian M.Sc., (Engg.),Ph.D., S.M.I.E.E.E., M.I.S.T.E.** for allowing me to do this project.

I would like to extend my gratitude to **Prof .P.Shanmugham, M.Sc., (Engg.), M.S.(Hawai), S.M.I.E.E.E., M.I.S.T.E.,** Head of the Department of Computer Science and Engineering who has inspired me throughout this endeavour.

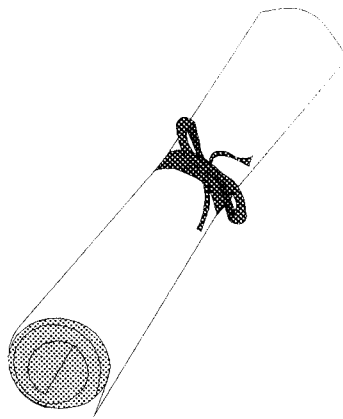
I take this opportunity to express my sincere gratitude to my project guide **Mr.S.Udaya Kumar, M.E.,** Lecturer of the Department of Computer Science and Engineering for his creative support and suggestions in completing this project.

I would like to thank **Mr.A.P.Chandrasekar, M.B.A.,** Managing Director of Ravichandra Systems and Computer Services Ltd., for allowing me to do the project in his esteemed organization.

I express my sincere gratitude to **Mr.A.P.Ramachandran M.E.,** Technical Director of Ravichandra Systems and Computer Services Ltd., without whose able guidance this project would have been incomplete.

I would like to extend my gratitude to **Mr.A.P.Ravichandran D.M.E.** of Ravichandra Systems and Computer Services Ltd., for his cooperation in my endeavour.

Finally, I would like to thank **Mr. Maran,** Senior programmer of Ravichandra Systems and Computer Services Ltd., for his valuable suggestions and moral support.



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## Synopsis

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## SYNOPSIS

The Accounts Payable and Receivable system is one of the important part of any Commercial business house. It deals with the major part of the business and helps in determining the profit or loss of a business. Proper maintenance of the system results in good cash management, good relations with the suppliers and customers and finally it helps to lead the company in a profitable way.

The accounts payable and Receivable computer application system was developed keeping in mind the above facts. The application system maintains all the necessary details about the suppliers, customers and products in the respective master files. It also registers each and every transaction made, into the respective transactions files. It thus ensures good management of cash flow and allows for the projection of growth or problems in the business.

The reports generated by the system can be categorised as Financial statement reports and Management Information Systems (MIS) reports. The Financial statement reports are so designed to give a clear and in-depth view of the business transactions. The MIS reports give a detailed report of the needed facts and figures for aiding in good decision making by the management.

The accounts payable and Receivable computer application system has been developed on the IBM AS/400 platform using the RPG/400, CL/400 programming languages.

The systems is menu driven and is very user friendly. The system has been tested with varied sets of input data and has been found to be working excellently.



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# 1.0 INTRODUCTION

## 1.1 ORGANIZATION PROFILE

Ravichandra systems & Computer Services Ltd., is a rapidly developing popular software consultancy cum data processing house in south India. The origin of the same, a joint venture company with Electronics Corporation of Tamilnadu Ltd (ELCOT) is currently engaged in software development, hi-tech training and data processing. It can be traced to a medium sized multi disciplined company started in the year 1982 at the industrial city of Coimbatore.

RCS is a joint venture company with ELCOT, the agency of Government of Tamilnadu created with the objective of promoting electronic industries in the state. Realising the strength of Tamilnadu state, special priority for establishment of software projects was pursued.

Conscious of the pressing need of the hour, RCS, committed to computer and software needs constantly endeavour to see how all of them can evolve better. Therefore they continuously research and employ better methodology and tools. They strongly believe that there is always way of doing anything.

RCS has its marketing divisions in Madras, Bangalore, Calcutta, and Mumbai and they have been accomplishing their operations successfully.

Also RCS has tuned for its sister concerns in Mauritius and South Africa for Software Development on IBM AS/400.

RCS comprises of a group of professionals with varied experience in the fields of information Technology, Education, Engineering, Finance & Management, and System Managers with an average post educational work experience of 15000 man hours.

The company has hardware and software facilities of IBM AS/400 with OS/400, COBOL/400, RPG/400, Application Development Tools, SQL/400, CICS, ILEC/400, PC SUPPORT /400, PS/2 with OS/2 & AIX and 80x86 systems with terminals under UNIX & LAN Environment and with RDBMS, WINDOWS and OOPS experience supported by a host of off-line and on-line data entry machines.

The company will further forge ahead with ISO 9001 certification by 1997-'98.



## **1.2 ABOUT ACCOUNTS RECEIVABLE AND PAYABLE SYSTEM**

### ***1.2.1 About Accounting***

A business house must necessarily keep a systematic record of what happens from day-to-day so that it can know where it stand at any given time. A systematic record of the daily events of a business leading to presentation of a complete financial picture is known as accounting.

### ***1.2.2 Accounts Payable System***

The objective of the accounts payable system is to keep track of a company's incoming bills and credit memos and ultimately, to generate vendor payment cheques. A secondary objective is good cash management and maintenance of good credit vendors.

### ***1.2.3 Accounts Receivable System***

The customer accounts receivable system is very critical since it keeps track of one of the major assets of the business, namely, the amounts owed to the business by its customers and the payments made to the company by its customers. This system assists the manager in the management of cash flow and allows for projection of growth or problems in the business. This application is also used by the credit department of the business to analyze, track, grant or withdraw customer credit.

## **1.3 NEED FOR COMPUTERISATION**

The benefits of computerization over the manual system is many folds. The benefits can be stated as below

- SPEED - Computers enable us to do arithmetical calculations with fantastic speed and ease. it is possible to do things which so far no one could think of attempting, in a manual system. Tasks involving large voluminous data processing are thus done with much accuracy and speed by the computers than by manual system.
  
- ACCURACY- One of the greatest benefits which computers can give us is that of accuracy. Practical experience has already shown that these machines are capable of achieving the degree of accuracy which hitherto has been unattainable in certain accounting processes into which the human brain enters at so many stages of the complete cycle of operations.
  
- FLEXIBILITY - Flexibility in use is another important advantage of computers. Output can be obtained almost in whatever form it is most suitable.
  
- MISCELLANEOUS -These include economies resulting from better managerial control, saving in labour because it is fully automatic.

In the Accounts Receivable and Payable system, the computerisation speeds up the entry of the transactions into the respective books of account. Moreover, all the books of account are kept upto date. This ensure that important reports like ageing reports and also adhoc reports can be generated at any moment of time, thereby helping the management to make quick decisions. Overall, the computerisation of the manual system results in better maintenance and increases the profitability of the system using it.

## **1.4 HARDWARE ENVIRONMENT**

### ***MAINFRAMES, MIDRANGES & DESKTOPS***

Mainframe systems are large, multi-user systems that historically have required a controlled environment. Environment factors included are conditioning special power hookups, under floor cabling etc. Mainframe systems require dedicated operations and systems support staff and often involve duplicated hardware. Mainframe systems have a high overhead costs. Software is of comparable complexity regardless of execution platform.

Midrange systems are multi-user systems. They also have capacity comparable to mainframe systems. The principle factors separating modern midrange systems from mainframe systems are the environmental and staff requirements. Also, where mainframes usually service the entire company, midrange systems are frequently dedicated to a single division or department. Midrange systems usually involve a much smaller support staff than mainframe systems. This is a result of more modern and simpler operating systems software. The operating systems of midrange computers are designed to run less work at the same time than mainframe operating systems, which are simpler to install plus configure, and are also easier to operate.

Desktop systems are usually single-user systems. No special environment is required and these systems are found throughout modern organisations. Desktop systems are also interconnected to share application code. This may be done because of the resource requirements of an application, or because of the applications' data access/update requirements. When data is shared between systems, it is often easier/cheaper to run related applications on the server that manages the shared data rather than on each individual desktop system.



## ***INTRODUCTION TO AS/400***

Application System/400(AS/400) is a family of IBM midrange computers based on a single software architecture. It was launched on June 31, 1988 and is one of the world's most popular multi-user business computing systems. A follow up to the highly successful system/3x lines, it is based on new applications and advanced technology. It provides mid-range users with a growth platform that features integrated database, advanced architecture and a wide range of Connectivity options.

The AS/400 is an entirely new design concept for computer systems. It provides a much higher level of function and much easier access for the user than any other prior system. In 1990 the IBM laboratory in Rochester, Minnesota, that designed and built the AS/400 systems was awarded the U.S. Government's prestigious Malcolm Baldrige quality award for the designing of the usability of this computer system.

## ***AS/400 SYSTEM CONCEPTS***

### ***Layered Machine Architecture***

The AS/400 systems insulates users from hardware characteristics through the Layered Machine Architecture. The layered architecture raises the level of machine interface creating high level machine instruction set that is independent of the underlying implementation. AS/400 is unusual in that the machine is defined by software, not by hardware. The instructions presented to the machine interface undergo a further process of translation before they are "understood" by the hardware characteristics change as the technology changes; the user, however, still "sees" the same machine interface. The licensed internal code preserves this interface. Layered machine architecture means that as new hardware and software

technologies emerge, they can be employed without affecting applications. The high-level machine provides the user with the ability to address 284 trillion bytes of storage.

### ***Objects***

What is an Object on AS/400? All things; programs, Control blocks, data format descriptions, system control block descriptions, space objects to house all of these objects, attribute tables, data system commands (each one is an object), system grouping mechanisms( Queues, chains of pointers, .... etc) to name a few.

For Eg:

Libraries are objects that are collections of objects.

Every object must contain an object description information.

### ***Object orientation***

The system's addressing structure and operations are oriented more towards the objects than towards the byte strings. All data structure in the instruction interface are called objects. There are many types of objects, but they all have the same basic characteristics. The internal details of an object can't be seen by the user.

Specific functionally oriented machine instructions operate on objects. Once data space object has been created, the user can request that records be inserted in to it etc. Machine resource usage is not in the programmer's domain.

Some objects are QBATCH, QINTER, PROGRAM, LIBRARY, SOURCE PHYSICAL FILE, USER PROFILE.

Objects can be of any size. There can be 16 million space segments of 16 MB each at any one time. Virtual addressing translation (VAT) is now actively supported by use of 48 bits of hardware's 64-bit capability. The main memory is like cache. The disk acts like main memory.

### *Space management*

The addressing capability of the AS/400 machine is 64 bits. That means 8 billion bytes worth programming capability is possible.

Each user of the system is allocated a personal, protected 16 MB virtual address space, unreachable by other users.

### *I/O Independence*

The intricacies of the devices, control units, channels, and networks are handled by the AS/400 machine. The device dependent attributes will be described once for all users, in separate objects called Device-Files, stored and managed at run time. All the AS/400 systems have this very highly architected user/system interface.

### *Single-Level Storage*

All system storage(Whether main storage or disk storage) is addressed in the same way. This single, device-independent addressing mechanism means that to run program, a user calls its name. All objects are treated as if they reside in a  $2^{64}$  bits address space.

The AS/400 system's virtual addressing is independent of an object physical location, and the type, capacity and number of disk units on the system i.e., the

application, programs do not require modification in order to take advantage of storage technologies. Users can leave all storage management entirely to the machine.

### ***Hierarchy Of Microprocessors***

There is a range of processors each dedicated to a particular I/O device type. What this means is that when the main system processor encounters a request for data to be written to or read from any I/O device, that request is delegated to the particular microprocessor dedicated to that I/O device. Meanwhile the system processor continues with another application program. This design provides AS/400 with its outstanding performance in the commercial, transaction based environment. It also means that the latest microprocessor technology can be easily utilised at any time without disrupting the rest of the system.

### ***Storage Pools***

A pool is a division of main or auxiliary storage. On the AS/400 system, all main storage can be divided into logical allocations called storage pools. There are two types of pools in the AS/400 system.

- \* Shared Pools
- \* Private Pools

### ***Benefits***

You can control how much work can be done in a subsystem by controlling it, and the size of the pools. The greater the size of the pools in a subsystem, the more work can be done in the subsystem.

Using shared storage pools allows the system to distribute the storage requirements of interactive users across multiple subsystems, still allowing their job to run the same storage pool.

***As/400 Machine Data Limits***

Bytes in a record	32,766
Fields per record	8,000 fields
Key-Fields in a record	120 fields
Key-Size in bytes	256 bytes
Records in a file	16,777,215 records
Bytes in a file	2,147,483,648 bytes
Data base size	size of disk storage
Logical files from one physical file	3,686 files
Physical files used in a logical file	32 files
Maximum files in a Join logical file	32 files
Maximum size of field in bytes	32,766 bytes
Maximum size of a decimal number	31 digits

***OPERATING SYSTEM OS/400***

OS/400 is a single integrated operating system. With the basic operating system further software components needed for providing facilities such as relational database management system, support for various communication environments, support for an interactive environment, software to implement security are also included. OS/400 is designed to support interactive use in multiple national languages for world-wide application. Textual data is stored separately from operational program code, permitting a system to operate concurrently in many languages.

### ***Connectivity***

With continuous technologies updates, the gap between different platforms are being narrowed down. Standardisation of software makes it more portable. Recent developments in communication protocols make access to different system almost transparent to the user as to which system he/she is using or accessing. There are many ways to connect workstations to the AS/400 system to a system/36, a system/370 or a system/390 or another AS/400 system through System Network Architecture (SNA) LU 6.2 protocol. The connections can be made through a local adapter (twinaxial or asynchronous) the Token-ring Network, an Ethernet Network, or a communication line.

### ***Distributed Processing***

The individual strengths and weaknesses of the different platforms are being recognised to strengthen and co-ordinate use of multiple systems in a network. The user friendliness of the lower end computer provides excellent user interface while the larger machines takes care of all high volume transaction processing.

### ***System Application Architecture***

SAA is a collection of selected software interfaces conventions and protocols. It provides a consistent frame work across the system/370, AS/400 and PS/2. The interfaces, conventions and protocols are designed to provide an enhanced level of consistency to the user access, programming interfaces, common support and applications.

## ***Work Management As/400***

A unit of any work on AS/400 can be termed as a job.

Every job uses it's description (an object of type \*JOBDD). A job description defines JOBQ, QUTQ and it's library. There are many types of jobs; Interactive job, Batch job, spool job, Autostart job; communication job etc.

The flow of work parcels on the AS/400 is prescribed by JOB-STEP, ROUTING-STEP, JOB, and program object definitions with in the subsystems. The system comes with two running subsystems: one for interactive jobs and one for batch jobs.

### ***Subsystems***

A Subsystem is a single, predefined operating environment through which system co-ordinates the work flow and resource use.

The run-time characteristics of a subsystem are defined in an object called a subsystem description.

Each subsystem can run unique operations. For instance, you can set up one subsystem to handle only interactive jobs, while another subsystem handles only batch jobs. Subsystems can also be designed to handle many types of work. The system allows you to decide the number of subsystems and what types of work each subsystem will handle.

The system relies on subsystem descriptions when starting subsystems. Therefore, if you want to change the amount of work(no of jobs) coming from a

job queue, for example you need only to change the job queue entry in the subsystem description.

A subsystem description consists of three parts:

- Subsystem attributes (Overall subsystem characteristics),
- Work entries (Sources of work), and
- Routing Entries.

### ***Common User Access(CUA)***

Provides transparent access to any system user in a SAA enterprise.

### ***Graphical User Interface(GUI)***

All user interface is governed by graphic display in total conformance with the latest in windows and point-and-click user interaction.

### ***Expert System Capability***

Geared towards creation and management of database model that allow expert handling of information using artificial intelligence.

## ***MACHINE CONFIGURATION***

IBM AS/400 Advanced Series Consists of:

- AS/400 Advanced System
- AS/400 Advanced Server
- AS/400 Advanced Portable

The entire AS/400 family is managed by the same operating system, thus allowing application programs to be moved, without any changes, from model to model.



AS/400 combines the benefits of both IBM standards and of openness based on industry standards, while still maintaining the highest level of system integrity and data security. Porting of UNIX and POSIX compliant applications is greatly simplified through the enhanced ILE/C (Integrated Language Environment/C language).

AS/400 family comprises of seven models. The smallest processor is the 9401 system unit. The next is the 9402 processor. There are two models of 9402. One model is designed for traditional interactive data processing. The other model is turned to provide excellent performance in client/server computing. The largest processors are the 9406 models. The 9406 models can be easily upgraded and at the top end provide substantial processing power, memory and disk storage.

#### **CONFIGURATION OF THE MACHINE USED IN THE PROJECT**

Model	9402-200
Processor	#2030
Main storage	24 MB
Disk Storage	2 GB
Maximum no of work stations	64
Communication Lines	20
LAN Adapters	2

## **1.5 SOFTWARE ENVIRONMENT**

### ***OPERATING SYSTEM/400***

The AS/400 operating system OS/400 is conceived as a single integrated operating system. Facilities such as relational database, communications and networking facilities on-line education and much are integrated into the operating system.

OS/400 contains more and better hardware failure survivability features than operating system used in mainframe systems. OS/400 uses a single-level memory model. This means that the operating system is responsible for tracking whether data is in memory or in disk. The user simply thinks of all data as residing in a very large virtual storage address space. Actually, the user does not even have to think of addresses, only the name and desired use of a data item is necessary. All storage allocation is done automatically by the OS/400 operating system and all data is immediately available upon request. The OS/400 is more flexible than conventional mainframe operating systems. For example, new communication hardware may be attached without regenerating the system, or even telling the system that the hardware was attached. OS/400 automatically determines many characteristics of its hardware environment.

### ***Productivity Allocation Development Environment***

AS/400 has many functions such as interactive debug, command prompting and cross reference capability to assist in programming the machine. A programmer menu, a data dictionary and the application development tools are integrated with the operating system to form an application development environment. This environment permits the rapid development of new applications and the easy maintenance of existing programs.

### ***DB2/400 Support***

The OS/400 database management system now as DB2/400 is integrated into both the licensed internal code and the operating system.

### ***Electronic Customer Support***

Provides an integrated set of service and support functions to assist user self sufficiency. This is a set of applications that interfaces with standard communication facilities for access to remote support systems.

### ***Support for PCs***

The client Access/400 family is replacing the PC support/400 product. OS/400 provides the platform for the distributed client serving environment.

### ***OS/400 Graphical Operations***

Graphical Operations introduces a graphical user interface for selected functions of OS/400. IT presents an iconic interface using PC's attached to AS/400.

### ***Security***

Comprehensive security to all system resources is provided. AS/400 has most efficient and unbreakable security system.

### ***System Delivered Education***

On-line education is available with AS/400 using either a host dependent terminal or a programmable workstation.

### ***System Availability***

Various recovery functions are supported to assist a user in the case of failure.

### ***Multiple Operating Environments***

In addition to the execution of the native AS/400 application OS/400 allows execution of applications migrated from System/36 or System/38.

### ***Application Programming Interfaces***

These are programs or commands supplied by OS/400 that provide access to specific routines.

### ***Expert Cache***

A disk cache tuner option is provided which allows AS/400 to take additional advantage of available main storage capacity.

### ***Ease of Installation and Use***

The system supplied menus are provided so that the system can be set-up by someone not familiar with the control language.

### ***Integrated Operating System***

The relational database support is integrated into both the machine and the operating system and provides functions that allow for a high degree of both data integrity and programmer productivity. Both physical and logical files are supported and data are stored in physical files or tables, which are similar to traditional files. Access paths are maintained when there is a change in the data. This allows multiple users to be aware of changes in the database and to access the

current information in the required sequence. Description of files can be entered by Data Description specification(DDS), Interactive Data Description utility (IDDU) or by IBM structured Query language/400. DDS supports the capability to define a Field Reference file (a form of data dictionary) which can be used to describe in one place the attributes of all data fields for use by multiple applications.

### ***RPG/400***

IBM introduced the Report Program Generator(RPG) programming language in the early 1960's. RPG fitted a niche for providing a quick solution to common business task generating reports needed within the business. Unlike other procedural languages RPG does not require the programmer to detail each processing step required. The language has got a fixed logic cycle that automatically executes the normal cycle of read, calculate and write.

Another unique characteristic of RPG was its use of a special class of built in variables called Indicators. These indicators could be set on or off in one part of the program to determine what was to occur. It is easier for programmers to develop interactive applications. Structured design is supported. Capability to call other programs is also there. RPG programs consist of different types of lines called specifications. The different specifications is RPG are as following:

### ***File Specification***

'F' in position 6 has to be entered for File specification entries. These entries describe the files being used in a program and defines how the files will be used within a program.

### ***Extension Specifications***

Identified by 'E' in position 6. Extension specifications when used must follow the File specifications. Required entries on Extension specification vary depending upon the complexity and layout of data the user is storing in table format and where the table data values are coming from.

### ***Input Specification***

Identified by 'I' position 6. Input specifications come after the File specifications (and after Extension specifications when used). They describe the records with program described input files and defines the fields within the records. Every program described input files defined on the file specification must be represented by a set of input specification lines.

### ***Calculation specification***

These specifications are identified by 'C' in position 6. They center on operation or processing steps to be accomplished by the computer. Each Calculation specification must include a RPG operation and may include additional entries depending on the specific operation, unless the computer encounter an operation that specifically alters this flow of control.

### ***Output Specification***

'O' should be entered in position 6 for Output entries. These entries details about output of a file or files used in a program. When output is a report, one must use a record identification line and corresponding filed identification entries for each kind of line to appear on the record.

Structured Programming Techniques in RPG/400 makes the programs easy to change and debug. The sequential flow of control is inherent in RPG like any other programming language. In addition to this RPG includes a variety of operations to allow the programmer to express both decision and iteration logic. For these operations it has 6 two letter codes for the relational comparisons involved. All the command selection or decision operations are also supported in RPG/400. This language uses the programmer's tools available on the AS/400 to maintain and debug programs.

External file description is another advantage of RPG. Externally defined files can reduce duplication of data across files. As all programs, using a given file see the same field definitions and names, externally defined files impose a standardization among programmer's efficiency as programmers need not duplicate the file definitions and names and the effort each time needed to refer a file within a program. And, finally if it is necessary to make changes, it needs to be made only at one place.

In Interactive applications, the dialogues between the user and the computer can be mediated through the use of display files on AS/400. These files can be defined in RPG programs and can be used for user input and output. But in the interactive programs, some kind of applications require the use of list panels, in which data from many records need to be displayed on screen for review, selection or update. RPG has a special concept called subfiles to handle these kind of program requirements.

RPG also allows to define table data structures or arrays so that programs can extract data in a way analogous to how tables are being used. Two types of

## **2.0 SYSTEM ANALYSIS**

The accounts Receivable and Payable system deals with all the transactions and enquiries relating to the interactions between the business and its customers vendors.

### **2.1 DESCRIPTION OF THE PRESENT MANUAL SYSTEM**

Before going into the analysis of the Accounts receivable and payable system, let us get to know in brief about business transactions and their Accounting.

#### ***2.1.1 INTRODUCING BUSINESS TRANSACTIONS AND THEIR ACCOUNTING***

##### ***Business transactions***

There are two types of Business transactions. Viz. Cash transactions and credit transactions. Cash transactions involve transfer of money, or money flow from one account to another. Credit transaction on the other hand do not involve any transfer of money, but only money's worth. In other words, they involve flow of money from one account to another. While a credit transaction results in the creation of a debit in favour of the business or a liability against it, a cash transaction results in the payment of debit or liability.

##### ***Accounting***

Transactions of a business are varied in nature and repetitive also. As such it is necessary to collect similar type of transactions so that the effect of each type on the business could be traced. The collecting or pooling device is known as an



account. Obviously an account is a formal record of a particular types of transaction kept in a ledger.

All business transactions are recorded as having the dual aspect i.e., for each debit amount there will be an equal credit amount. The system which records transaction in this method is called as 'Double entry system'. Business transactions involve transfer of money or money's worth or flow of money values. The account system is thus the most convenient device not only in describing the direction of source and destination but also the timing of the flow.

To indicate the direction of flow from the origin to destination, every account is divided into two equal parts, separated by a thick vertical line. The source or the origin is shown on the right hand side of an account language as 'Credit' which means 'to give'. Similarly the destination which can be described by a plus sign is called as 'Debit' which means to 'to receive'. It is this accounting practice, that has given rise to the rule 'debit the account which receives the benefit, and credit the account which gives the benefit'.

## **2.1.2 ACCOUNTS RECEIVABLE AND PAYABLE MANUAL SYSTEM ANALYSIS**

### ***ACCOUNTS RECEIVABLE***

The books maintained in the accounts receivable system with a brief description about each, is given below

#### ***Sale book***

The object of this book is record credit sales. An outward invoice is made out for each credit sale and is checked as to quantity, quality and price of the goods before the latter are sent out to the customer.

#### ***Bills Receivable Book***

The purpose of this book is to keep a detailed record of all the bills receivable or received by a trader, and to afford a convenient medium for posting bill receivable transactions.

A bill receivable is one in respect of which the trader is entitled to receive money at some specific date as shown on the face of the bill.

#### ***Sales Returns Book***

Return inwards, that is returns of goods sold by us, are recorded in this book. Credit notes are sent to those customers who have returned us the goods.

#### ***Customer ledger***

Every transaction, after first being recorded in a book original entry, finds its subsequent destination in the ledger. It is in this book that we get in a properly

arranged, classified and condensed form, all the necessary information regarding the working of our business.

A customer ledger contains all the transactions made by the customer arranged in chronological order.

### ***Cash Book***

Any transaction involving money directly has an entry made into the cash book. The cash book reflects the cash on hand. The cash book gives us an idea of how the business's cash on hand has been spent or received.

### ***Bank Book***

Any transaction involving money through drafts, cheques, etc., has an entry made into the bank book. The bank book reflects the cash at bank. The bank book gives us an idea of how the business's money at bank has been spent or received.

### ***General Ledger***

The General Ledger contains a summarized detail about each head that is maintained by the business. The only accounts exempted from the general ledger are the supplier and customer accounts. These accounts are maintained in separate ledgers.

## ***TRANSACTIONS AND POSTINGS MADE***

The transactions and Postings made in the accounts receivable system is as follows:

### ***Credit Sales***

A credit sales transaction results in the personal account being debited with the respective amount. The sales book gets credited with the respective amount.

The monthly total of the sales book gets posted as a credit entry, into the sales account of the general ledger.

### ***Sales Returns***

When a sales returns transaction occurs, the personal account is credited with the respective amount. The returns inwards book is debited with the respective amount.

The monthly total of the returns inwards book is posted as a debit entry into the returns inwards account of the general ledger.

A credit note gets generated, which is sent to the customer who has returned us the goods.

### ***Bills Receivable***

Whenever a sales bill amount is received, the account of the customer from whom the bill is received, is credited with the amount of that bill. The amount gets debited into the bills receivable book.

The transactions and postings made in the accounts receivable system is as follows :

### ***Credit Sales***

A credit sales transaction results in the personal account being debited with the respective amount. The sales book gets credited with the respective amount.

The monthly total of the sales book gets posted as a credit entry, into the sales account of the general ledger.

### ***Sales Returns***

When a sales transaction occurs, the personal account is created with the respective amount. The returns inwards book is debited with the respective amount.

The monthly total of the returns inwards book is posted as a debit entry into the returns inwards account of the general ledger.

A credit note gets generated, which is sent to the customer who has returned us the goods.

### ***Bills Receivable***

Whenever a sales bill amount is received, the account of the customer from whom the bill is received, is credited with the amount of that bill. The amount gets debited into the bills receivable book.

When a loan or cash credit bill is received, the personal account gets credited with the respective amount. The cash book or bank book depending on the mode of payment, gets debited with the respective amount.

The monthly total of the above two types of bills receivable gets debited into the bills receivable account of the general ledger.

### ***Loans or Cash Credits***

When a loan or cash credit is issued, the personal account gets debited with the respective amount. The cash book or bank book depending on the mode of issue, gets credited with the respective amount.

### ***ACCOUNTS PAYABLE***

The books maintained in the accounts payable system along with a brief description about each, is given below:

#### ***Purchase Book***

This book is kept with the object of recording credit purchases of goods for resale. Each inward invoice, after it has been checked as to calculations and also as to the quantity and price of the goods received, is numbered consecutively and then entered in the purchases book.

#### ***Purchases Returns Book***

This book records returns outwards, that is, return of goods bought. A Debit Note is made and sent to the party to whom the goods are returned.

#### ***Bills Payable Book***

This book is kept to record full details of all bills payable accepted by a trader, and to afford a convenient medium for posting bills payable transactions.

A bill payable is one which has been accepted by a person and the amount of which he is under obligation to pay at some definite future time.

### ***Supplier Ledger***

Every transaction, after first being recorded in a book of original entry, finds its subsequent destination in the ledger. It is in this book that we get in a properly arranged, classified and condensed form of all the necessary information regarding the working of our business.

A supplier ledger contains all the transaction made by the supplier arranged in chronological order.

### ***Cash Book***

Any transaction involving money directly has an entry made into the cash book. The cash book reflects the cash on hand. The cash book gives us an idea of how the business's cash on hand has been spent or received.

### ***Bank Book***

Any transaction involving money through drafts, cheques etc., has an entry made into the bank book. The bank book gives us an idea of how the business's money at bank has been spent or received.

### ***General ledger***

The general ledger contains a summarized detail about each account head that its maintained by the business. The only accounts exempted from the general ledger are the supplier and customer accounts. These accounts are maintained in seperate ledgers.

## ***TRANSACTIONS AND POSTINGS MADE***

The transactions and postings made in the accounts payable system is as follows:

### ***Credit Purchase***

A credit purchase transaction results in the personal account being credited with the respective amount. The purchases book gets debited with the respective amount.

The monthly total of the purchase book gets posted as debt entry, into the purchases account of the general ledger.

### ***Purchases Returns***

When a purchases returns transaction occurs, the personal account is debited with the respective amount. The returns outwards book is credited with the respective amount.

The monthly total of the returns outwards book is posted as a credit entry into the returns outwards account of the general ledger.

A debit note gets generated, which is sent to the supplier to whom the goods have been returned.

### ***Bills Payable***

Whenever a purchase bill amount is paid, the account of the supplier to whom the bill is paid, is debited with the amount of that bill. The amount gets credited in the bills payable book.



When a loan or cash credit bill is paid, the personal account gets debited with the respective amount. The cash book or bank book depending on the mode of payment gets credited with the respective amount.

The monthly total of the above two types of bills payable gets credited into the bills payable account of the general ledger.

## **2.2 FEASIBILITY STUDY**

During the feasibility study, it was found out that in the manual system following problems existed.

- \* The entries made for any particular transaction into the respective books of account took a fairly long duration of time.

- \* The accuracy of the entries made were doubtful. This resulted to problems of balancing ledger accounts, and finally in preparing the Trading account.

- \* Normal reports took to the minimum atleast a day to be prepared. Adhoc reports took more than one day to be prepared. This hindered in the quick decision making by the management. Some times, this led to losing of good profitable opportunities. The effort and time spent in developing a new system is less when compared to the operating of the present manual system.

The results from the feasibility has shown that a computerised system was in the wanting.

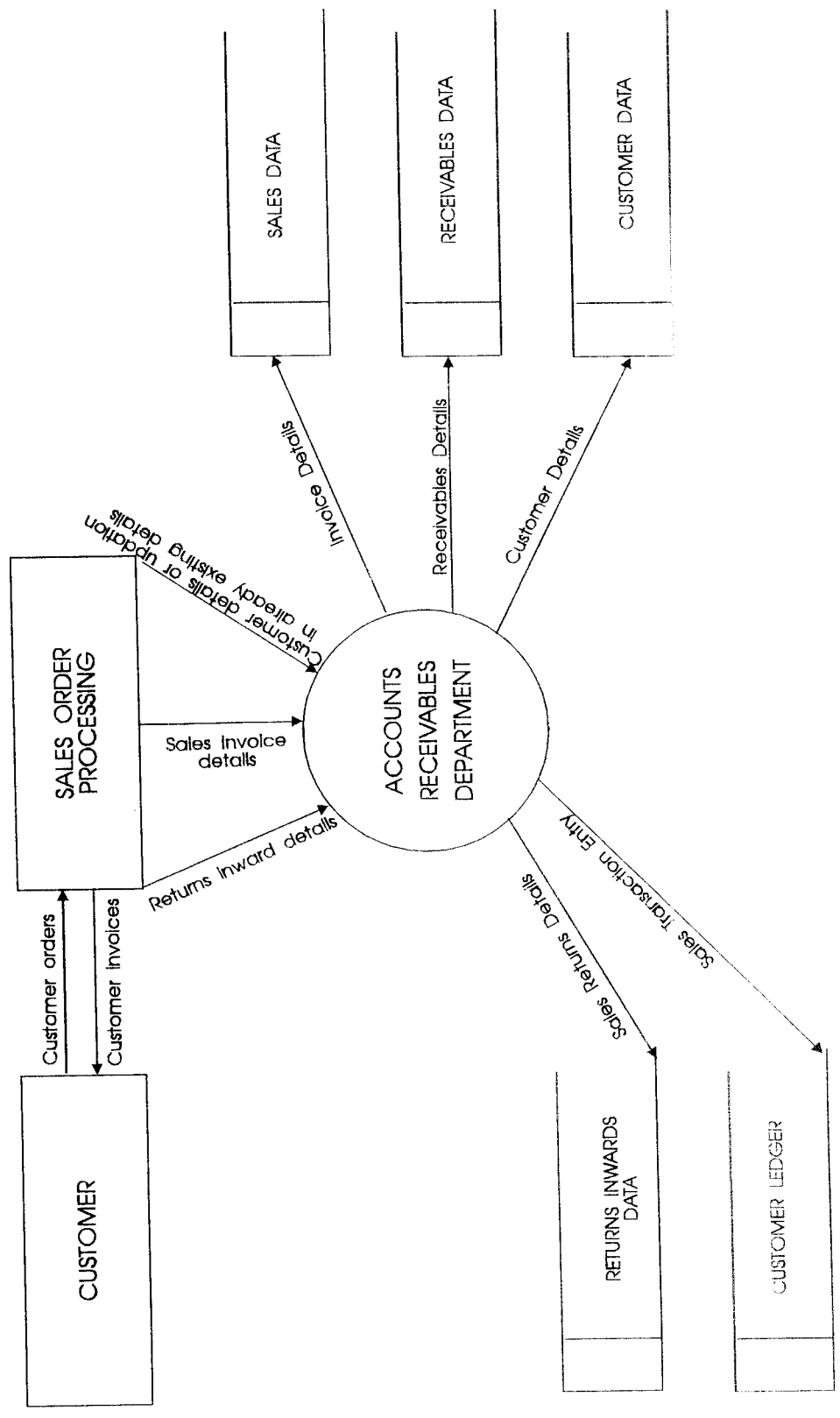
## 2.3 PROPOSED SYSTEM

The proposed system has been developed in such a way as to solve problems faced by the present manual system. It was proposed to be developed in the midrange area, and mostly concentrating on multi-user facilities. For this the ideal environment was the AS/400 environment, as it is the most popular business application oriented multi-user midrange system available today. The programming language chosen was RPG/400, for its flexibility and versatility.

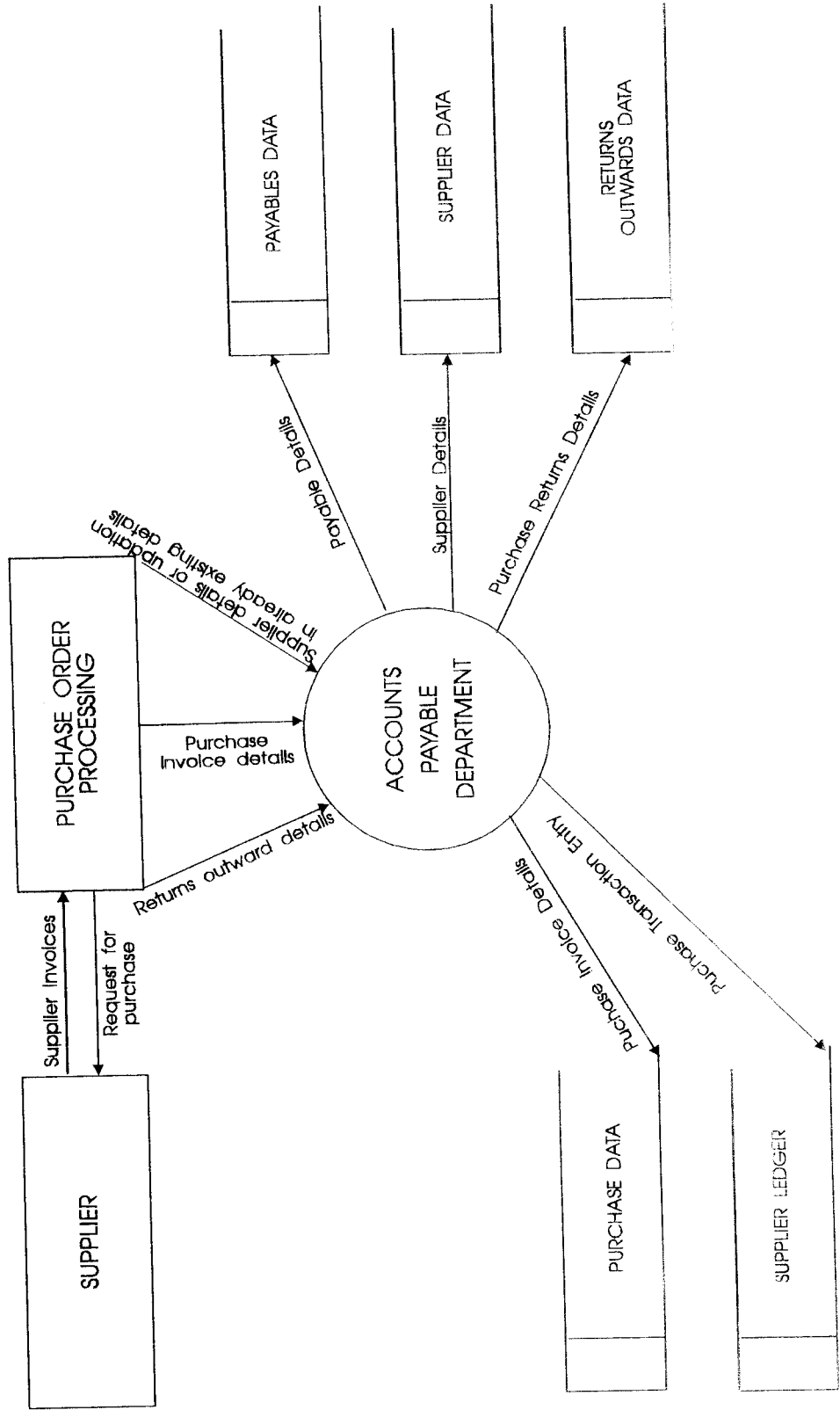
The proposed system uses powerful relational database techniques offered by AS/400 such as powerful querying functions using DB2/400 etc. The system is very user friendly and is menu driven. Enough securities are offered for the database so that only authorized persons can use the system.

The system concentrates a lot on the report generation part. Normal reports as well as adhoc reports can be generated in the matter of minutes. The reports layout have been designed such that the important matters can be grasped quickly.

## 2.4 DATA FLOW DIAGRAM FOR ACCOUNTS RECEIVABLES



# DATA FLOW DIAGRAM FOR ACCOUNTS PAYABLES



## ***DATA FLOW DIAGRAM DESCRIPTION***

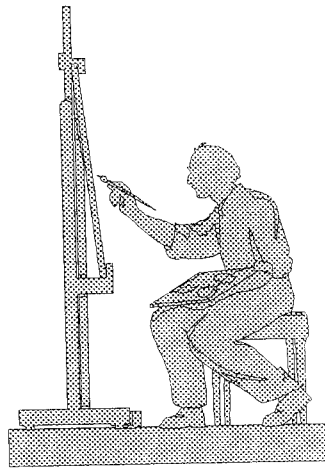
### ***Data Flow Diagram***

Although system flow charts have been and still are widely used in computerized management information systems, they are not the ideal design tool for structured system analysis and design. The flow of the system may not be obvious to the receiver. Most systems analysts do not label the lines that connect the block of the diagram. The receiver has to guess the actions of the transform (ie., the changing of data) and guess what data are moving from block to block. In addition, system flowcharts do not show clearly the separation of various subsystems. To overcome limitations of system flowcharts, several design techniques for representing systems have come into use, one is the data flow diagram (DFD), which comes closest to the system flowchart.

Data flow diagram description for the Accounts payable and receivable system.

In this system major data flows that occur are as follows.

- \* The flow of information from the purchase order processing system to the Accounts payable system.
  
- \* The flow of information from the sales order processing system to the Accounts Receivable system.
  
- \* The flow of data for maintenance of the customer master and supplier master.
  
- \* The flow of data for maintenance of the various other transactions such as payment receipts.



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# System Design

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## **3.0 SYSTEM DESIGN**

Once the system analysis part is over, the detailed design of the physical system can commence. This part deals with the input design, file design and output design phases. Since all these aspects are interrelated they will not be designed in isolation but in an integrated way.

The Design of the system is completely based on the requirements of the user. This software is menu oriented one which helps the user to select the process they want.

### **3.1 INPUT DESIGN**

The inputs to the accounts receivable and payable system mostly revolve around master details and transaction entries. To capture these details, input screens have been designed.

In designing the entry screens, IBM's CUA (Common User Access) was kept in the back of the mind. IBM's CUA suggests that for each and every screen designed, the function key definitions should be the same. This helps in the ease of use. The screens are well laid out without any cramping of input fields. prompts are available wherever possible, so that the user can select input values from these prompts. Thus, the screens are designed to be very user-friendly.

Validation at the screen design level helps in solving a lot of difficult problems in the later stage programming. Keeping this fact in mind the screens have been designed to avoid any erroneous data, and any fraud from entering into the system.

Screens wherever needed, are designed to handle multiple record manipulation, such as addition, deletion etc. This is done with the help of the subfile concept of AS/400.

### ***3.1.1 MASTER ENTRY DESIGN***

#### ***Screen to work with Customer Master details***

This is a multiple record format screen to manipulate the details in the customer master. Options are present to add, delete, view, and edit customer details. Customer details include important inputs such as customer code, customer name, customer address, etc. A sample work with customer master screen is given in Appendix. A.

#### ***Screen to work with Supplier Master Details***

This is a multiple record format screen, to manipulate the details in the supplier master. Options are present to add, delete, view and edit supplier details. Supplier details include important inputs such as supplier code, supplier name, supplier address, etc. A sample work with supplier master screen is given in Appendix A.

#### ***Screen to work with product master details***

This is a multiple record format screen, to manipulate the details in the product master. Options are present to add delete, view and edit, product details. product details include important inputs such as product code, product name, purchase unit, sales unit, Purchase cost, Sales cost and Reference.



### **3.1.2 TRANSACTION ENTRY DESIGN**

#### ***Screen for Sales Transaction Entry***

This screen contains the sales transaction details such as sales invoice number, Customer code, Invoice date. Here by pressing F4 key we can list the product name and select the product. The rate also will automatically be copied from the product master. If we enter the quantity, the amount (rate x quantity) will be calculated. Finally we have fields to enter taxes and deduction amount. Once the rate, quantity, other addition amount and other deduction amount is given the total sales invoice value is calculated automatically. Here there is field to enter the due data of the invoice also. The sales invoice number and the invoice date are generated automatically by the system. The details entered are populated in the sales book and customer ledger. A sample Sales Transaction entry screens is given in Appendix A.

#### ***Screen for purchase transaction entry***

This is similar to the sales transaction entry, except that we have to enter the purchase invoice number, the invoice date, other addition amount and other deduction amount. The total purchase invoice value is calculated automatically.

The details entered are populated into the purchases book and the supplier ledger. A sample purchase transaction entry screen is given in Appendix A.

#### ***Screen for Receipts Transaction Entry***

This screen contains customer code, sales invoice number, receipt number, sales invoice date, receipt date, amount received, and mode of receipt. Prompts are available, from where customer code, sales invoice number, sales invoice data can be selected. receipt number is automatically generated. Also, the present date

is generated as the receipt date, and can be edited as per the requirements. The amount received and mode of Receipt (whether cheque, cash, DD etc., ) has to be entered.

The details entered are populated into the Bills Receivable and the customer ledger. A sample receipts Transaction Entry screen is given in Appendix A.

### ***Screen Payment Transaction Entry***

This screen contains supplier code purchase invoice number, voucher number, purchase invoice date, payment date, amount paid, and mode of payment. Prompts are available, from where customer code, sales invoice number, sales invoice date can be selected. Voucher number is automatically generated. Also, the present date is generated as the payment date, and can be edited as per the requirements. The amount paid and mode of payment (whether cheque, cash, DD, etc.,) has to be entered.

The details entered are populated into the bills Payable book and the supplier ledger. A sample Payment Transaction Entry screen is given in Appendix A.

## ***3.2 FILE DESIGN***

it is very important that the files designed are capable of storing all the information needed. Repetition of fields, that is, storing the same information repetitively, should be kept to the minimum. This ensures us that the databases is consistent.

The following files have been found to be necessary to store all the facts and figures of the accounts receivable and payable system.

### ***Data Dictionary***

MREF - It is the data dictionary, and contains all the fields and their definitions, which are used by the system.

### ***Master files***

CUSMAS - It contains all the information about every customer.

SUPMAS - It contains all the information about every supplier

PROMAS - It contains all the details of the product

### ***Transaction Files***

SALTRN - Contains all fields necessary to store a sales transaction, such as sales invoice

PURTRN - Contains all details about purchase transaction

RECTRN - Contains the details of how much amount is received and mode of payment.

PAYTRN - Contains the details of how much amount is paid and mode of payment.

SALAGE - Join logical file which contains selected fields of customer master and sales ageing file.

PURAGE - Join logical file which contains selected fields of supplier master and purchase ageing file.

CUSLED - This file contains all transaction related to all sales invoice number.

SUPLED - This file contains all transaction related to all purchase invoice number.

REITRN - This file contains all datas about return inwards.

ROTTRN - This file contains all datas about return outwards.

All files and their design are given in *Appendix B*.

### **3.3 OUTPUT DESIGN**

Output designing is a very important phase in the designing of a system. The important objective of any system is in its capability of producing high quality outputs or reports.

This system provides two types of reports, that is, financial statement reports and MIS (Management Information system) reports. The reports can be transferred to the screen, or a disk file or a printer.

The following outputs or reports are produced by the system.

#### ***Sales Report***

This report shows us in detail the amount of sales made during a particular period of time. It displays the sales invoice number, customer code, customer name, sales invoice date, and the total invoice value. A sample Sales Report is given in Appendix C.

#### ***Purchase Report***

This report shows us in detail the amount of purchases made during a particular period of time. It displays the purchase invoice number, supplier code, supplier name, purchase invoice date, and the total purchase invoice value. A sample purchases report is given in Appendix C.

#### ***Receipts Report***

This report shows us all the bills receivable paid to the business by its customers. It displays the receipt date, receipt number, customer name, sales invoice number, and the amount received. A sample Receipts Report is given in Appendix C.

### ***Payment Report***

This report shows us all the bills payable paid by the business to its suppliers. It displays the payment date, voucher number, supplier name, purchases invoice number, and the amount paid. A sample Payment Reports is given in Appendix C.

### ***Receivables Ageing Report***

This report exhibits the details of the customers who have pending sales invoice amounts. The report shows us the sales invoice numbers, and against then amount paid if any, and the balance to be paid. It also shows us the due date and the number of days to the due date from the present date.

There is facility available wherein the user can take the report for either a single customer or for all customers. A sample Receivables Ageing Report is given in Appendix C.

### ***Payables Ageing Report***

This report is similar to the previous one. This will give about each supplier to whom the amount is due by the business. The report will display the total purchase invoice value along with the amount previously paid, the balance to be paid, the due date, and the number of days left for the due date.

Here also the user can take reports about the dues that have to be paid to a particular supplier or all suppliers. A sample Payables Ageing Report is given in Appendix C.

### ***Customer Ledger Report***

This report is a summary of all the transaction made by the customers during a given period of time. It gives us all the transactions made by each and every customer, in a chronological order. A sample Customer Ledger Report is given in Appendix C.

### ***Supplier Ledger Report***

This report is a summary of all the transactions made by the suppliers during a given period of time. It gives us all the transactions made by each and every supplier, in a chronological order. A sample Supplier Ledger Report is given in Appendix C.



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# System Implementation

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## 4.0 SYSTEM IMPLEMENTATION

The system implementation process consists of the system coding, system testing and system conversion activities.

### 4.1 CODING

#### 4.1.1 Utilities Used

The Accounts Receivable and payable systems is developed in the RPG/400 programming language. Utilities used in this system are

- **Program Development Manager (PDM)**
- **Source Entry Utility (SEU)**
- **Screen Design Aid (SDA)**
- **Report Layout Utility (RLU)**
- **Data File Utility (DFU)**

All the above utilities are integrated into a single tool called as the Application Development Tool(ADT).

A small description of all the utilities is given below:

#### ***PDM***

Program Development Manager is a comprehensive development tool which allows the programmer to perform all programming related activities under one single menu driven, easy-to-use and comprehensive environment.

The PDM provides a focal point within the integrated Application Development Environment for using the development tools. PDM works with lists



of items to be developed and maintained. There are three main functional areas of PDM.

These allow the user to :

- \* Work with Libraries on the system,
- \* Work with objects in a library, and
- \* Work with members in a physical file.

### ***SEU***

SEU is a full screen editor that provides syntax checking of source statements and a member list facility for selecting members to work with. SEU can be interactively accessed via PDM lists. Highlights of SEU include:

Online syntax checking is provided thereby eliminating most errors before compilation.

A rich set of line commands is provided, for example, copy, delete, move and insert.

Editor profiles are created for each user for storing parameter values.

A split screen capability allows the user to browse/scan/copy:

- Other source members
- Spooled Compiled listings

### ***SDA***

Using SDA, a programmer or analyst can interactively design and maintain customer application screens and menus. Changes to the attributes, colors, and

fields can be made and immediately displayed via the testing facility of SDA. This can also prove useful when prototyping an application to allow users of the application to participate in the design phase. SDA is interactively accessible from PDM lists.

SDA allows the programmer or analyst to;

- \* Define fields and constants for the screen format.
- \* Select a database file and fields from that file
- \* Change attributes and colors for fields and constants.
- \* Move, Copy and remove a ruler.
- \* Define cursor-sensitive help areas for a screen.

### ***RLU***

The Report Layout utility, a part of the Application Development Tools Package, allows one to create and edit source members on the AS/400 system. RLU source members in source physical files contain the printer file Data Description Specifications (DDS) for a report design that one can "Layout" using RLU. The report design looks like an actual listing, one generates with a high level language (HLL) program. using RLU, one can specify the information required for DDS and RLU creates or changes the source member. One can also print the report design or compile the source members to create a printer file. Then printer file can then be used to print the report in the format designed.

### ***DFU***

DFU is used to manipulate data in a database file, such as insertion, deletion, updatation, etc.

#### ***4.1.2 Description of Coding***

The system has been coded in the RPG/400 programming language. The system utilizes almost all the important facilities and flexibility offered by RPG/400.

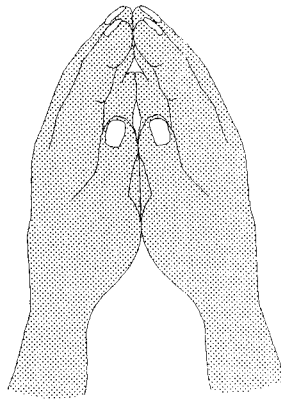
The system contains a well structure and optimized set of programs. Modular subroutines have been used so that all programs can access them, thereby avoiding 'recoding'. The programs are so coded and well commented as to simplify future inclusions and exclusions.

The programs have access to a set of modular error subroutines. This ensures that proper error messages are displayed on the screen, when the system fails due to some erroneous data being entered or some invalid operation having taken place. When the system fails due to the above reasons, the errors routines automatically close all active files, display the cause of the failing, and restart the system. Using the journalling concept, the datas entered upto the failing state can be rollbacked and then committed at a later stage.

#### **4.2 TESTING**

System Testing is the stage of implementation which is aimed at ensuring that the system works accurately and efficiently before live operations commences. In principle, system proving is an on-going activity throughout the project. The logical design and the physical design should be thoroughly and continually examined on paper to ensure that they will work when implemented. Thus the system test in implementation should be a confirmation that all is correct and an opportunity to show the users that the system works.

The Accounts Receivable and Payable computer system has been thoroughly checked with varied sets of data under various conditions. The results were successful. All the validation checks and integrity check performed on the system showed that the system was fit to be implemented. The system reliability was found to be high. The security facilities provided were checked, and found to be satisfying their objectives.



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**Conclusion**

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## **CONCLUSIONS AND SCOPE FOR FUTURE EXPANSION**

The Accounts Receivable and Payable computer application system has met its objective. This can be sensed by seeing that all the problems present in the manual system has been eradicated.

The system has been thoroughly tested with varied test data under various load conditions and was found to be fit for implementation. The system reliability is high and enough securities have been provided in warding off frauds from entering the system.

One of the prime areas, where there is a scope of future expansion is in the final accounting part. The system can be expanded in order to include a trading account., profit and loss account and finally in generating a balance sheet.

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**Appendix A**

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*****  
** MASTERS MAINTENANCE MENU **  
*****  
  
Select Option, Press Enter  
  
1 => Customer Master  
2 => Supplier Master  
3 => Product Master  
  
Enter your option _  
  
-----  
F3=Exit      F12=Cancel      F5=Refresh      F1=Help  
*****
```





\*\*\*\*\*  
REGISTER REPORTS MENU  
\*\*\*\*\*

Select Option, Press Enter

1 => Sales Register

2 => Purchase Register

3 => Receipts Register

4 => Payment Register

Enter your option -

F1=Help

F5=Refresh

F12=Cancel

F3=Exit





















PURCHASE INVOICE

Invoice Number : PU000000003

Supplier Name : \_\_\_\_\_ (f4 for list)

Invoice Date: 12/02/1997

<u>Product Name</u> (f4 for list)	<u>Quantity</u>	<u>Rate</u>	<u>Amount</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	More...

Other Addition : \_\_\_\_\_ Invoice Amount : \_\_\_\_\_

Other Deduction : \_\_\_\_\_ Due Date : \_\_\_\_\_

F3=Exit

F12=Cancel

F6=Insert

F5=Refresh







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**Appendix B**

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## Field name Length and Data types Used

### *Customer Details*

CUSNAM	40A
CUSCOD	10A
CUSAD1	40A
CUSAD2	40A
CUSAD3	40A
CUSPHN	10P
CUSFAX	10A
CUSZIP	6P
CUSCON	40A

### *Supplier Details*

SUPNAM	40A
SUPCOD	10A
SUPAD1	40A
SUPAD2	40A
SUPAD3	40A
SUPPHN	10P
SUPFAX	10A
CUSZIP	6P
SUPCON	40A

*Product Details*

PROCOD	10A
PRONAM	40A
PURUNT	10A
SALUNT	10A
PURCOS	12P2
SALCOS	12P2
PROREF	40A

*Sales Invoice*

SALINN	10A
SALIND	8P0
CUSCOD	10A
SALNAM	10A
SALQTY	10P2
SALRAT	12P2
SALAMT	12P2
SALADD	10P2
SALDID	10P2
SALTOT	10P2
SALDUE	8P0

*Purchase Invoice*

PURINN	10A
PURIND	8P0
SUPCOD	10A
PURNAM	10A
PURQTY	10P2
PURRAT	12P2
PURAMT	12P2
PURADD	10P2
PUDDID	10P2
PURTOT	12P2
PURDUE	8P0

*Receipts*

RECNUM	10A
RECCOD	10A
RECDAT	8P0
RECINV	10A
INVDAT	8P0
RECAMT	12P2
RECDET	6A

***Payments***

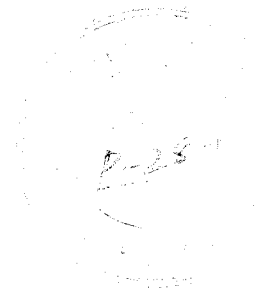
PAYNUM	10A
PAYCOD	10A
PAYDAT	8P0
PAYINV	10A
VOCDAT	8P0
PAYAMT	12P2
PAYDET	6A

***Returns Inwards***

RINVNO	10A
RCVCOD	10A
RCVCOD	12P2

***Returns Outwards***

ROUTNO	10A
RSUCOD	10A
REOAMT	12P2



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**Appendix C**

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SALES REGISTER

Date: 06/04/1997

S.NO.	CUST.CODE	CUST.NAME	INV.NO	INV.DT.	INV.AMT.
1	CU00000001	M/S Gupta	IN00000001	12/01/1997	45000.00
2	CU00000002	M/S Aboo Backer	IN00000002	23/01/1997	60000.00
3	CU00000003	M/S Rajeev	IN00000003	01/02/1997	50050.00
4	CU00000004	M/S Rajan & Brothers	IN00000004	15/02/1997	80000.00
5	CU00000002	M/S Aboo Backer	IN00000005	16/02/1997	40000.00
6	CU00000004	M/S Rajan & Brothers	IN00000006	22/02/1997	34500.00
7	CU00000001	M/S Gupta	IN00000007	23/02/1997	4500.00
8	CU00000002	M/S Aboo Backer	IN00000008	28/02/1997	34567.00
9	CU00000004	M/S Rajan & Brothers	IN00000009	05/03/1997	30000.00
10	CU00000001	M/S Gupta	IN00000010	10/03/1997	70000.00
Total Sales Amount till the above date :					448617.00

PURCHASE REGISTER

Date: 03/04/1997

S.NO.	SUPP.CODE	SUPP.NAME	INV.NO	INV.DT	INV.AMT
1	SU000000001	M/S Wipro	PU000000001	06/01/1997	45500.00
2	SU000000002	M/S Axcel	PU000000002	08/01/1997	60550.00
3	SU000000003	M/S Zenith	PU000000003	12/02/1997	60250.00
4	SU000000004	M/S HCL	PU000000004	25/02/1997	74653.00
5	SU000000001	M/S Wipro	PU000000005	27/02/1997	30000.00
6	SU000000002	M/S Axcel	PU000000006	03/03/1997	34234.00
7	SU000000004	M/S HCL	PU000000007	05/03/1997	50000.00
8	SU000000001	M/S Wipro	PU000000008	10/03/1997	25000.00
9	SU000000002	M/S Axcel	PU000000009	08/03/1997	80000.00
10	SU000000004	M/S HCL	PU000000010	18/03/1997	50000.00
11	SU000000001	M/S Wipro	PU000000011	25/03/1997	35000.00

Total Sales Amount till the above date : 545187.00



RECEIPTS REGISTER

Date: 03/04/1997

DATE	REC.NO	CUST.NAME	INV.NO	AMOUNT PAID
05/03/1997	RE00000001	M/s Gupta	IN00000001	25000.00
06/03/1997	RE00000002	M/s Aboo Backer	IN00000002	30000.00
06/03/1997	RE00000003	M/s Rajeev	IN00000003	20050.00
15/03/1997	RE00000004	M/s Aboo Backer	IN00000005	20000.00
16/03/1997	RE00000005	M/s Rajan & Brothers	IN00000004	45000.00
20/03/1997	RE00000006	M/s Gupta	IN00000001	20000.00
20/03/1997	RE00000007	M/s Gupta	IN00000007	2000.00
21/03/1997	RE00000008	M/s Aboo Backer	IN00000002	20000.00
21/03/1997	RE00000009	M/s Rajan & Brothers	IN00000006	10000.00
21/03/1997	RE00000010	M/s Rajan & Brothers	IN00000004	15000.00

Amount Received till the above date : 207050.00

## PAYMENT REGISTER

Date: 03/04/1997

DATE	REC.NO	SUPP.NAME	INV.NO	AMOUNT PAID
06/03/1997	VC00000001	M/s Wipro	PU00000001	25000.00
06/03/1997	VC00000002	M/s Axcel	PU00000002	20050.00
06/03/1997	VC00000003	M/s HCL	PU00000004	44653.00
15/03/1997	VC00000004	M/s Wipro	PU00000001	20500.00
15/03/1997	VC00000005	M/s Wipro	PU00000005	20000.00
15/03/1997	VC00000006	M/s Axcel	PU00000006	30000.00
15/03/1997	VC00000007	M/s Axcel	PU00000009	4234.00
19/03/1997	VC00000008	M/s HCL	PU00000007	40000.00

Amount paid till the above date : 204937.00

CUSTOMER LEDGER REPORT

Code	Name	Date	Particulars	Debit	Credit
CU00000001	M/s Gupta	12/01/1997	To invoice No. IN00000001	45000.00	
		23/02/1997	To invoice No. IN00000007	4500.00	
		05/03/1997	By invoice No. IN00000001		25000.00
		10/03/1997	To invoice No. IN00000010	70000.00	
		20/03/1997	By invoice No. IN00000001		20000.00
		20/03/1997	By invoice No. IN00000007		2000.00
CU00000002	M/s Aboo Backer	23/01/1997	To invoice No. IN00000002	60000.00	
		16/02/1997	To invoice No. IN00000005	40000.00	
		28/02/1997	To invoice No. IN00000008	34657.00	
		06/03/1997	By invoice No. IN00000002		30000.00
		15/03/1997	By invoice No. IN00000004		20000.00
		21/03/1997	By invoice No. IN00000002		20000.00

More...

CUSTOMER LEDGER REPORT

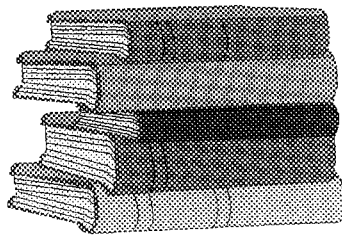
Code	Name	Date	Particulars	Debit	Credit
CU00000003	M/s Rajeev	01/02/1997	To invoice No. IN00000003	50050.00	20050.00
		06/03/1997	By invoice No. IN00000003		
		15/02/1997	To invoice No. IN00000004	30000.00	
		22/02/1997	To invoice No. IN00000006	34500.00	
		05/03/1997	To invoice No. IN00000009	30000.00	
		16/03/1997	By invoice No. IN00000004		20000.00
		21/03/1997	By invoice No. IN00000006		10000.00
		21/03/1997	By invoice No. IN00000004		15000.00
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SUPPLIER LEDGER REPORT

Code	Name	Date	Particulars		Debit	Credit
SU00000001	M/s Wipro	06/01/1997	By	invoice No. PU000000001		45500.00
		27/02/1997	By	invoice No. PU000000005		30000.00
		06/03/1997	To	invoice No. PU000000001	25000.00	
		10/03/1997	By	invoice No. PU000000008		25000.00
		15/03/1997	To	invoice No. PU000000001	20500.00	
		15/03/1997	To	invoice No. PU000000005	30000.00	
		23/03/1997	By	invoice No. PU000000011		35000.00
		08/01/1997	By	invoice No. PU000000002		60550.00
		03/03/1997	By	invoice No. PU000000006		34234.00
SU00000002	M/s Axcel	06/03/1997	To	invoice No. PU000000002	20550.00	
		15/03/1997	By	invoice No. PU000000009		80000.00
		15/03/1997	To	invoice No. PU000000002	40000.00	
		15/03/1997	To	invoice No. PU000000006	4234.00	

SUPPLIER LEDGER REPORT

Code	Name	Date	Particulars	Debit	Credit
SU000000003	M/s Zenith	12/02/1997	By invoice No. PU000000003		60250.00
		25/02/1997	By invoice No. PU000000004	74653.00	
		05/03/1997	By invoice No. PU000000007	50000.00	
		06/03/1997	To invoice No. PU000000004	44653.00	
		18/03/1997	By invoice No. PU000000010		50000.00
		19/03/1997	To invoice No. PU000000007	50000.00	
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## **Bibliography**

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