Accounts Master

PROJECT REPORT

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Chapter 1

Introduction

1.1 Introduction

Accounts receivable and Accounts payable are very important components of any accounting system; without their presence one can't think of a reliable accounting package. The purpose of this project is to develop an Accounts receivable (A/R) and Accounts payable (A/P) Accounting Package "The Accounts Master". The system will be able to perform the functions of a reliable A/R and A/P system.

The package is going to be developed for "Gulfnet Pakistan Private (Ltd.)" one of the leading software development organizations in Pakistan, especially in databases. The software will fulfill the requirements of Gulfnet as regards A/R, A/P systems, but steps will be taken to ensure that the system would be expandable and accept any modifications if required. Ease of use and efficient performance will be the key factors kept in mind while developing the system.

1.2 System Definition

The basic purpose is to develop a computer based Accounting Package, dealing with all Accounts receivable and Accounts payable activities.

Whenever a business organization sells something to its customer on credit basis, the related information about the money to be received from the customer is kept in the accounts under the head "Accounts Receivable". On the other hand if something is bought from the vendors with due payments, the related information of the payable money to the vendors is kept in the accounts under the head "Accounts Payable". The customers in case of A/R are called "Debtors" and Vendors in case of A/P are called "Creditors".

An "Invoice" is usually prepared for sales on credit. When some thing is sold to the customer or bought from the vendor on credit basis, the company and vendor prepare an Invoice. Similarly when payments are made against a certain Invoice(s), a "Cash Receipt" is prepared.

The project requires knowledge of accounting fundamentals and principles. So along with the normal software development activities, a great deal of attention is required for study of accounting systems.

Chapter 2

Existing System

2.1 Existing System

The existing Accounts receivable and Accounts payable system provides all the basic facilities necessary to carry out transactions relating to Accounts receivable and Accounts payable, but it does not offer any extraordinary features. It is a computerized system developed in Dec Easy.

The main modules of the existing system are

1) Accounts Receivable
2) Accounts Payable

The Accounts Receivable module includes:

- Customer Maintenance
- Terms Of Payment Maintenance
- Customer Invoice Entry
- Customer Invoice Posting
- Receipt Against Customer Invoice
- Customer Statement Of Account
- Customer Receipt History

The Accounts Payable module includes

- Vendor Maintenance
- Payable Invoice Entry
- Payable Invoice Post
- Payment By Customer
- Vendor Payment History

2.1.1 ACCOUNTS RECEIVABLE

Accounts receivable basically deals with the activities related to the payments due from the customer. Whenever a customer buys something from the organization, information like his personal bio data, contact addresses, currency, and shipment locations is stored in the system. In Accounts receivable, the customer maintenance function provides customer definition facility. The terms of payment maintenance function allows user to define the terms of payment in terms of due days and the discount percentage (if there is any). The customer invoice entry function facilitates to input the customer's invoice. The receipt against customer's invoice function facilitates the user to offset a customer's invoice by cash, check or credit card payment against it. The customer statement of account is a reporting function to intimate a customer about the paid and outstanding invoice balance in his/her account.

2.1.2 ACCOUNTS PAYABLE

Accounts Payable deals with the activities related to the payments due to the vendor. In Accounts payable, the vendor maintenance function provides supplier definition facility. The payable invoice entry function facilitates the user to record vendor's invoice and the terms of payment related to them. The invoice amount is distributed, as per C and F (Cost and Freight only) and C I F (Cost, Insurance and Freight) categories and the amount distribution to accounts is made accordingly. The payable invoice post function confirms a vendor's invoice. The module does not permit modification of vendor's invoice after it is posted. The payment to vendor function facilitates the user to make payments against vendor's invoices. The vendor payment history report provides user defined period based history, for a particular vendor, stating all invoices, which are received, and all the payments made against them.

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The existing computerized system provides basic facilities with acceptable user interfaces and functionality. We can generate the fundamental accounting reports and sheets. Some very basic level calculations and checks are also provided in it.

2.2 Problems In The Existing System

Although our existing system is computerized, still it does not fulfill all the requirements of the organization. The problems we face in the existing system are

- Some very important reports of account's receivable are not available in the existing system. e.g. Customer receipt aging, Customer paid invoices
- Some very important reports of account's payable are not available in the existing system. e.g. Vendor invoice aging, Vendor paid invoices and Expected cash flow.
- It does not maintain the information of Company Ship Via's (The sources by which the company makes shipments)
- It does not maintain company trade terms and modes of payment acceptable to the company.
- No information about the Customer's contact persons is available in the existing system.
- In both A/R and A/P, the system does not maintain the information about the banks whose receipts are used for the purpose of payment, also there is no information about the credit cards or their types which may also be used at the time of payment.
- As the source code of the system is not available, no enhancements and improvements are possible.

- The present system faces the Y2K problem. The year field in the date structures of the system is of length two. After the year 1999 the year field will once again start from 00 and hence disturbance in the system is pretty likely.

- In daily business, transactions are possible in more than one currency, but the system does not support any calculations and conversions to allow more than one currency, so it is limited to the concept of a single currency i.e. No multi currency feature.

- Does not provide any reliable security system at all.

- Other existing systems in the organization are based in oracle; it has no interface with them.

- There are a number of divisions working under the umbrella of "Gulfnet," but the present system does not support this feature i.e. no concept of Multi-Company.

- The present system has no facility of taking the data dumps, maintaining logs and back ups, so in case of a system failure data base cannot be recovered.

- The present system does not cope with networking environment.

- The interface is not user friendly, it requires a lot of back and forth jumping in order to get down to details of certain information.

Chapter 3

Proposed System

3.1 Scope of the System

My system will work under the following areas.

- Name of the system is "Accounts Master" and it will be dealing with two major modules of any accounting system, I) Accounts Receivable, II) Accounts Payable

- After the successful completion of the system, it can be integrated with the "General Ledger System".

- The system will allow the user to maintain the static information about its customers and vendors as well as carry out the daily data entry such as Customer and Vendor Invoices, Receipt against Customer and Vendor Invoices and their corresponding postings. Also the user will be facilitated with some Queries and Reports such as Customer and Vendor Balances, Customer and Vendor Statement of Accounts etc.

- The system may be utilized for more than one company (Divisions of the organization) or just a single Company (only one Division), it will support both environments.

- The system can support more than one station against a single company (Division), also more than one department can exist at one station.

3.2 REQUIREMENTS

It is probably the most important part of the system life cycle: the production of a comprehensive statement about just what is expected of a computer system. If the requirement can not be specified, it can not be implemented. In crude terms, it is better to specify first and then implement afterwards, since recognition of an insoluble problem at the outset can save an awful lot of time and money. The requirement specification can become the first agreed document for the project.

In any requirement specification, normally the following are thought to be very important.

- Functional Requirements

- Non Functional Requirements

All of above will be discussed one by one in accordance with the problem out line of the Accounts Receivable and Accounts Payable system **"Accounts Master"**.

3.2.1 Functional Requirements

These are the requirements based upon the required functionality of the system. While keeping the functionality of the existing system, some additional features should be supported by the proposed system, which are explained below.

- MODES OF PAYMENT MAINTENANCE

The new system should facilitate the user with the feature "Modes of payment maintenance". The mode of payment maintenance function should allow the user to define /restrict customer's payment mode. User should be allowed to mention, whether a particular customer is allowed to make the payments in a particular mode (Cash, Check,

and Credit Card) or not. The addition of new terms should be easy and at the same time the modules like Invoice entry should fetch the related information about the Payment mode agreed with the customer from this module.

- ## CREDIT MANAGER AND CONTROL

The credit manager function will let user define a credit manager to define the customer" credit rating. The credit managers would be able to work against certain regions. Only the credit manager will be allowed to release the customer's invoice if it is held through credit limit function.

- ## CREDIT LIMIT MAINTENANCE

The credit limit maintenance function will allow defining the customer's credit limit. Once the credit limit expires, the customer's invoice processing will not be allowed s unless the customer pays off the existing credit or the same is permitted through the credit manager. If the credit manager agrees to give some relaxation to the customer then the invoice will be processed anyway

- ## CUSTOMER INVOICE ADJUSTMENT

The new system should facilitate the user with the feature "Customer Invoice Adjustment". The customer invoice adjustment function will provide help to the user to make adjustments to the posted customer invoice. This function will allow either increasing or reducing an invoice balance because of the adjustment made by the user.

- ## CUSTOMER AGING REPORT

The customer invoice aging report will segregate the customer's open invoices depending upon the user-defined gap of periods. Open invoices mean the invoices with some due payments.

- PAYABLE INVOICE ADJUSTMENT

  The new system should facilitate the user with the feature "Payable Invoice Adjustment". The payable invoice adjustment function will provide help to the user to make adjustments to posted vendor invoices. The adjustments could be any relaxation offered by the vendor or correction in the wrong entries.

- VENDOR PAYMENT AGING

  The new system should facilitate the user with the feature "Vendor Payment Adjustment". The vendor payment aging report will segregate the vendor's open invoices depending upon the user-defined gap of periods.

- VENDOR PAYMENT ANALYSIS

  The new system should facilitate the user with the feature "Vendor Payment Analysis ". The vendor payment analysis function will provide help to the user to analyze all payments made to different vendors during a user-defined period of time.

- RECEIPT OR PAYMENT, THROUGH CHECK AND CREDIT CARD

  The new system should facilitate the user with the feature "Receipt through Check or Credit card" (for accounts receivable) and payment through Check or Credit card (for accounts payable). By this feature the user will be able to carry on transactions with out the restriction of cash only.

The standard input devices for the functions to be implemented are 1) Key board 2) Mouse. The standard output device for the results and reports to be obtained is the monitor screen.

- VALIDATION OF INPUT

  The invalid input of data must be checked in the following ways

  1. The user misses some thing during the input, it should not be allowed.
  2. The user makes wrong input (e.g. A character value instead of a numeric one). Proper error messages along with the possible remedies must be given.
  3. Any illegal duplication of data must be checked at the entry time on a particular field, instead of giving an error message at the end of the transaction.
  4. The case sensitivity should be enforced.
  5. Checks must be implemented to avoid unwanted negative entries by the user, in case of values to be input with in certain limits, the corresponding checks should be implemented. e.g. In any date field the user must not be allowed to enter the year value lesser than 1900.

- CALCULATIONS

  Some important calculations should be performed very accurately. Even a single misconception of a decimal point can result in problems. e.g. the exchange rate of currencies should accurately be multiplied by their corresponding currency values. Also the amounts like Invoice Balance, Receipt Balance and Discount must be calculated accurately.

- MULTI-COMPANY

  ` The new system should provide the feature of multi-company as it is going to be the requirement of the organization in future. The system is being developed keeping the very fact in mind that it would be applicable for the business of group of companies where

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each company has its own integrated accounts, at the same time the objectives are not lost if working in the form of a group. Once you enter in to the system by entering the specific Login Id of a particular company, you may not be allowed to harm the data of others. Presently if we look at the organization requirements, there are a number of different Divisions working under "Gulfnet", their separate and integrated storage and access of information is required.

- ## MULTI-CURRENCY

In contrast to existing system the new system should provide the facility of multi-currency. So a module named Multi-currency must be added to the existing system. This function will provide the facility to define any currency as local and rest of the currencies as foreign for a particular Company. The exchange rates for each of the foreign currencies will be entered daily to support the automatic currency conversion from foreign to local.

- ## CURRENCY-MULTIPLIER

In contrast to the existing system, the new system should support the feature of currency-multiplier. Before actually storing any amount of any transaction it will be multiplied by a factor named currency-multiplier in order to get the digits after the decimal point as significant ones. The same Multiplier will divide the amounts before being shown to the user. Let us take an example: we need to convert 100.50000234 U.S. Dollars into Italian Liras, if the exchange rate of Lear against U.S. Dollar is 5000. Now if we do not make the digits after the decimal point significant, there could be a major problem.

- ## STATIONS AND DEPARTMENT WISE STORAGE AND ACCESS

The information about the company should be stored, against its different stations and departments. So the information about the stations and departments of the company

should be stored in an organized manner, also at the same time, this information might be accessed for different purposes.

3.2.2 Non Functional Requirements

The non-functional requirements in my system are

3.2.2.1 PRODUCT REQUIREMENTS

- **Portability Requirements**

The computers already present in the organization are "COMPAQ" branded and a "LAN" (Local Area Network) connects them. But with in the scope of this project, we need only to develop a stand-alone system, not worrying about the networking requirements. The advancements can be deferred for future enhancements. The only extra ordinary situation possible is of having different versions of the operating system (Windows98, 97,95). So the system should be portable among these versions. For the moment there are no special H/W portability requirements.

- **Usability and Reliability requirements**

The organization is going to implement this system as their main accounting package. The daily business activities are going to be handled by this system. Also decision-making and record keeping of customers is the planned use of the system. So the results, reports, queries and calculations performed by the system should be

consistent. The system should be reliable in the sense that it should be consistent, accurate, facility of maintaining log files and taking regular dumps to avoid any sort of system or hard ware failure should be provided. Talking about the usability requirements, the system should be understandable at least to the corresponding accounting personnel who are going to be the first hand users. They should ~~might~~ not be asked to learn very complex accounting activities. At least on the front end the system should be easy to work in.

3.2.2.2 PROCESS REQUIREMENTS

• Design Method

The data base design method or model to be used is Relational Data Base Model, in which the storage structures for data are called tables, rows (Records) of these tables are called tuples and the fields of the storage structures are called columns.

• Process Standards

It includes the following

1. The documentation to be prepared is of particular standard, so that the users will easily understand the system as at least they get the documentation in a familiar style.

2. The Developing Tool to be used is Oracle and its related products because it best addresses the "RDBMS" features, also because other existing systems of the organization are based in oracle. At the same time the organization can not afford to buy any other S/W package in the presence of Oracle.

3. Some specific interfacing standards followed in the existing systems in the organization are to be followed in the Accounts Master.

- **Delivery Requirements**

    The organization wants this system to be delivered with complete functionality and documentation by the mid of July 1999. It will help to implement the system and remove the initial problems in the system and make it ready when the organization practically starts the Internet service by the end of this year.

3.2.2.3 External Requirements

This broad heading covers all requirements, which are neither process nor product requirements.

- **Inter-operability Requirements**

    It can be defined as " The effort required to couple one system with the other. In my system the inter-operability requirement is

    1. Integration with the "General Ledger system"
        There are some other integrations to be made which at the moment are out of the scope of my project, such as
    2. Integration with the "Human Resource Manager System"
    3. Integration of the system with the "Inventory control system of the organization".

3.2.2.4 SECURITY

The system should provide complete data security and restricted accessibility to only authorized people. It should not allow illegal participation of any one.

3.2.2.5 ATTRACTIVE USER INTERFACES

The new system should provide attractive interfaces giving comfort and easement to the user. User must not be confused at any moment. He /She must be guided at every point.

3.2.2.6 Others

- In case of receipt against invoices in A/R, payment would be allowed in two currencies I) The currency of the related invoice II) The local currency of the company.

- In case of invoices involving the currency whose exchange rate is not available on that date, the latest previous date rate would be considered.

- For the company, only one currency will be accepted as "Local", and the rest would be considered as foreign currencies.

Chapter 4

System Design

LocFor	Local or Foreign	Varcahar2(1)	Not Null
Unit	Unit of Currency	Varcahar2(15)	Not Null
Fraction	Fraction of Currency	Varcahar2(15)	Not Null

Exchange Rate Maintenance:

Table Name   : Exchange
Primary Key   : Curr, ExchRate
Purpose   : This table stores Exchange Rates Info with respect to Currencies.

Field Name	Description	Data Type	Status
Curr	Currency Code	Varchar2(5)	Not Null
ExchDate	Exchange Date	Date	Not Null
BuyRate	Buying rate of Currency	Number(15,6)	Not Null
SellRate	Selling rate of Currency	Number(15,6)	Not Null

A/R Region Maintenance:

Table Name   : ArmRegion
Primary Key   : Co, Region
Purpose   : This table stores the information of Company Business Regions.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Region	Region Code	Varchar2(5)	Not Null
Descr	Region Description	Varcahar2(30)	Not Null

A/R Credit Manger Maintenance:

Table Name   : ArmCdtMgr
Primary Key   : Co, CdtMgr
Purpose   : This table is used to store the information of Region wise Company Credit
                      Managers.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
CdtMgr	Credit Manager Code	Varchar2(5)	Not Null
Name	Credit Manager Name	Varcahar2(50)	Not Null

Region	Region Code	Varchar2(5)	Not Null

A/R Terms Of Trade Maintenance:

Table Name	: ArmTermsOfTrade
Primary Key	: Co, TermsOfTrade
Purpose	: This table stores the information of Company Trade Terms.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
TermsOfTrade	Terms Of Trade Code	Varchar2(5)	Not Null
Descr	Terms Of Trade Description	Varcahar2(30)	Not Null

A/R Mode Of Payment Maintenance:

Table Name	: ArmModeOfPayment
Primary Key	: Co, ModeOfPayment
Purpose	: This table stores the information of Company Payment Modes.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
ModeOfPayment	Mode Of Payment Code	Varchar2(5)	Not Null
Descr	Mode Of Payment Description	Varcahar2(30)	Not Null

A/R Terms Of Payment Maintenance:

Table Name	: ArmTermsOfPayment
Primary Key	: Co, TermsOfPayment
Purpose	: This table stores the information of Company Payment Terms for Accounts Receivable.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
TermsOfPayment	Terms Of Payment Code	Varchar2(5)	Not Null
Descr	Terms of Payment Description	Varcahar2(30)	Not Null
DiscPct	Discount Percentage	Number(5,2)	
DiscDays	Discount Days	Number(3)	
DueDays	Total Due Days	Number(3)	Not Null

A/R Ship Via Maintenance:

Table Name   : ArmShipVia
Primary Key   : Co, ShipVia
Purpose   : This table stores the information of Company Ship Vias.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
ShipVia	Ship Via Code	Varchar2(5)	Not Null
Descr	Ship Via Description	Varcahar2(30)	Not Null

A/R Sales Person Maintenance:

Table Name   : ArmSalesPerson
Primary Key   : Co, SalesPerson
Purpose   : This table is used to store the information of Region wise Company Sales Persons.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
SalesPerson	Sales Person Code	Varchar2(5)	Not Null
Name	Sales Person's Name	Varcahar2(50)	Not Null
Region	Region of Sales Person	Varchar2(5)	Not Null
Address1	Address of Sales Person	Varchar2(40)	Not Null
Address2	Address of Sales Person	Varchar2(40)	
City	City of Sales Person	Varchar2(25)	Not Null
Tel	Telephone No of Sales Person	Varchar2(15)	
Fax	Fax No of Sales Person	Varchar2(15)	
Email	Email Address of Sales Person	Varchar2(35)	
State	Country of Sales Person	Varchar2(25)	Not Null

A/R Bank Maintenance:

Table Name   : ArmBank
Primary Key   : Co, ArmBank
Purpose   : This table stores the information of Company A/R Banks (Bank Codes with in the company not actual Banks) information.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
ArmBank	A/R Bank Code	Varchar2(5)	Not Null
Descr	A/R Bank Description	Varcahar2(30)	Not Null
BankAcct	Actual Bank Account No.	Varcahar2(15)	Not Null
Contact	Contact Info of Actual Bank	Varcahar2(50)	Not Null
Address1	Address of Actual Bank	Varcahar2(40)	Not Null
Address2	Address of Actual Bank	Varcahar2(40)	
Tel	Telephone No. of Actual Bank	Varcahar2(15)	Not Null
CashStation	Station of Cash Account	Varcahar2(5)	Not Null
CashDept	Department of Cash Account	Varcahar2(5)	Not Null
CashAcctNum	Cash Account Number.	Varcahar2(15)	Not Null
ReceiveableStation	Station of Receivable Account	Varcahar2(5)	Not Null
ReceiveableDept	Department of Receivable Account	Varcahar2(5)	Not Null
ReceiveableAcctNum	Receivable Account Number	Varcahar2(15)	Not Null
FreightStation	Station of Freight Account	Varcahar2(5)	Not Null
FreightDept	Department of Freight Account	Varcahar2(5)	Not Null
FreightAcctNum	Freight Account Number	Varcahar2(15)	Not Null
DiscountStation	Station of Discount Account	Varcahar2(5)	Not Null
DiscountDept	Department of Discount Account	Varcahar2(5)	Not Null
DiscountAcctNum	Discount Account Number	Varcahar2(15)	Not Null
DutyStation	Station of Duty Account	Varcahar2(5)	Not Null
DutyDept	Department of Duty Account	Varcahar2(5)	Not Null
DutyAcctNum	Duty Account Number	Varcahar2(15)	Not Null
OctrStation	Station of Octrol Account	Varcahar2(5)	Not Null
OctrDept	Department of Octrol Account	Varcahar2(5)	Not Null
OctrAcctNum	Octrol Account Number	Varcahar2(15)	Not Null
MiscStation	Station of Miscellaneous Account	Varcahar2(5)	Not Null
MiscDept	Department of Miscellaneous Account	Varcahar2(5)	Not Null

MiscAcctNum	Miscellaneous Account Number	Varcahar2(15)	Not Null
InsuranceStation	Station of Insurance Account	Varcahar2(5)	Not Null
InsuranceDept	Department of Insurance Account	Varcahar2(5)	Not Null
InsuranceAcctNum	Insurance Account Number.	Varcahar2(15)	Not Null
CEDStation	Station of CED Account	Varcahar2(5)	Not Null
CEDDept	Department of CED Account	Varcahar2(5)	Not Null
CEDAcctNum	CED Account Number.	Varcahar2(15)	Not Null
GSTStation	Station of GST Account	Varcahar2(5)	Not Null
GSTDept	Department of GST Account	Varcahar2(5)	Not Null
GSTAcctNum	GST Account Number.	Varcahar2(15)	Not Null
ExchGainLossStation	Station of ExchGainLoss Account	Varcahar2(5)	Not Null
ExchGainLossDept	Department of ExchGainLoss Account	Varcahar2(5)	Not Null
ExchGainLossAcct	ExchGainLoss Account Number.	Varcahar2(15)	Not Null

Alt A/R Maintenance:

Table Name   : ArmAltAR
Primary Key   : Co, AltAR
Purpose   : This table stores the information of Company Alternative A/R's

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
AltAR	Alternative A/R Code	Varchar2(5)	Not Null
Descr	Description of Alternative A/R	Varchar2(30)	Not Null
Station	Alternative A/R Account Station	Varchar2(5)	Not Null
Dept	Alternative A/R Account Department	Varchar2(5)	Not Null
AltArAcctNum	Alternative A/R Account Number	Varchar2(15)	Not Null

A/R Customer Maintenance:

Table Name   : ArmCustomer
Primary Key   : Co, Customer
Purpose   : This table stores the information of Customers of the Company

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Customer	Customer Code	Varchar2(5)	Not Null
Name	Name of the Customer	Varchar2(50)	Not Null
Address1	Address of the Customer	Varchar2(40)	Not Null
Address2	Address of the Customer	Varchar2(40)	
City	City of the Customer	Varchar2(25)	Not Null
State	Country of the Customer	Varchar2(25)	Not Null
ShipVia	Default ShipVia for Customer	Varchar2(5)	Not Null
ArmBank	-------ArmBank (Inside Company only)	Varchar2(5)	Not Null
ModeOfPayment	-------- Mode Of Payment for Customer	Varchar2(5)	Not Null
TermsOfPayment	------- Terms Of Payment for Customer	Varchar2(5)	Not Null
TermsOfTrade	------- Terms Of Payment for Customer	Varchar2(5)	Not Null
AltAr	--------Alternative A/R for Customer	Varchar2(5)	Not Null
SalesPer	--------Sales Person for Customer	Varchar2(5)	Not Null
CdtMgr	--------Credit Manager for Customer	Varchar2(5)	Not Null
Region	--------Company Region for Customer	Varchar2(5)	Not Null
DefaultCurr	--------Currency for Customer	Varchar2(5)	Not Null
DiscPct	Discount Percentage for the Customer	Number(5,2)	
CdtLimit	Credit Limit for the Customer	Number(15,2)	
Status	(I=Inactive, A=Active) Customer	Varchar2(1)	Not Null

A/R Ship To Location Maintenance:

Table Name : ArmShiptoLoc
Primary Key : Co, Customer, ShipToLoc
Purpose : This table is used to store the information of Customers's Shipment locations.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Customer	Customer Code	Varchar2(5)	Not Null
ShipToLoc	Ship To Location number	Number(3)	Not Null

Address1	Address of the Shipment Location	Varchar2(40)	Not Null
Address2	Address of the Shipment Location	Varchar2(40)	
City	City of the Shipment Location	Varchar2(25)	Not Null
State	Country of the Shipment Location	Varchar2(25)	Not Null

A/R Contact Person Maintenance:

Table Name   : ArmContactPer
Primary Key   : Co, Customer, SeqNum
Purpose   : This table is used to store the information of Customers's Contacts

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Customer	Customer Code	Varchar2(5)	Not Null
SeqNum	Contact Number	Number(3)	Not Null
ContactName	Name of the Contact Person	Varchar2(50)	Not Null
Designation	Designation of the Contact Person	Varchar2(25)	Not Null
Tel	Telephone No. Of Contact Person	Varchar2(15)	
Fax	Fax No. Of the Contact Person	Varchar2(15)	
Email	Email Address Of the Contact Person	Varchar2(35)	

A/R Invoice Batch Maintenance:

Table Name   : ArmInvBatch
Primary Key   : Co, Batch
Purpose   : This table stores the information of Receivable Invoice Batches.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Batch	Batch Number (invoices grouped)	Number(8)	Not Null
Period	Accounting Period No. for the Batch	Number(2)	Not Null
Year	Year For the Batch	Number(4)	Not Null
UserId	User Identification	Varchar2(25)	Not Null
Status	Status of Batch (P=Posted,N=NotPost)	Varchar2(1)	

A/R Invoice Head Maintenance:

Table Name : ArmInvHead
Primary Key : Co, Batch, Customer, InvType, Invoice
Purpose : This table stores the Static information of Customer's Invoice.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Batch	Batch Number for the Invoice	Number(8)	Not Null
Customer	Customer Code against the Invoice.	Varchar2(5)	Not Null
Period	Accounting Period No. for the Batch	Number(2)	Not Null
Year	Year For the Invoice	Number(4)	Not Null
ModeOfPayment	Mode Of Payment for the Invoice	Varchar2(5)	Not Null
TermsOfPayment	Terms Of Payment for the Invoice	Varchar2(5)	Not Null
TermsOfTrade	Terms Of Payment for the Invoice	Varchar2(5)	Not Null
ShipVia	Ship Via for the Invoice	Varchar2(5)	Not Null
SalesPer	Sales Person against the Invoice	Varchar2(5)	Not Null
ArmBank	Receivable Bank Code(inside Company)	Varchar2(5)	Not Null
Curr	Currency for the Invoice	Varchar2(5)	Not Null
ExchRate	Exchange Rate Of the Currency	Number(5,2)	Not Null
InvDate	Date of the Invoice	Date	Not Null
DiscPct	Discount Percentage	Number(5,2)	
DiscDate	Discount Date of the Invoice	Date	Not Null
DueDate	Due Date of the Invoice	Date	Not Null
InvType	(Invoice, Adjustment, Credit) Type	Varchar2(1)	Not Null
ApplyTo	(In case of Credit Invoice) Invoice No.	Varchar2(20)	
Invoice	The Invoice Number	Varchar2(20)	Not Null
Ref	Any Reference to the Invoice	Varchar2(50)	
Descr	Description about the Invoice	Varchar2(30)	
InvAmount	Total Invoice Amount (In foreign Curr)	Number(22,2)	Not Null
LcInvAmount	Invoice Amount (In Local Currency)	Number(22,2)	Not Null
FrtAmount	Freight Amount (In foreign Curr)	Number(22,2)	Not Null

LcFrtAmount	Freight Amount (In Local Currency)	Number(22,2)	Not Null
DutyAmount	Duty Amount (In foreign Curr)	Number(22,2)	Not Null
LcDutyAmount	Duty Amount (In Local Currency)	Number(22,2)	Not Null
OctrAmount	Octrol Amount (In foreign Curr)	Number(22,2)	Not Null
LcOctrAmount	Octrol Amount (In Local Currency)	Number(22,2)	Not Null
InsAmount	Insurance Amount (In foreign Curr)	Number(22,2)	Not Null
LcInsAmount	Insurance Amount (In Local Currency)	Number(22,2)	Not Null
DiscAmount	Discount Amount (In foreign Curr)	Number(22,2)	Not Null
LcDiscAmount	Discount Amount (In Local Currency)	Number(22,2)	Not Null
MiscAmount	Miscellaneous Amount (In foreign curr)	Number(22,2)	Not Null
LcMiscAmount	Miscellaneous Amount(In Local Curr)	Number(22,2)	Not Null
CEDAmount	CED Amount (In foreign curr)	Number(22,2)	Not Null
LcCEDAmount	CED Amount (In Local Curr)	Number(22,2)	Not Null
GSTAmount	GST Amount (In foreign curr)	Number(22,2)	Not Null
LcGSTAmount	GST Amount (In Local Curr)	Number(22,2)	Not Null
RemainingDist	Remaining Invoice Amount (in foreign)	Number(22,2)	Not Null
Status	Status of Invoice (P=posted N=Notpos	Varchar2(1)	

A/R Invoice Detail Maintenance:

Table Name   : ArmInvDetail
Primary Key   : Co, Batch, Customer, InvType, Invoice, SeqNum
Purpose   : This table stores the details of Customer's Invoice.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Batch	Batch Number for the Invoice	Number(8)	Not Null
Customer	Customer Code against the Invoice.	Varchar2(5)	Not Null
Invoice	The Invoice Number	Varchar2(20)	Not Null
InvType	(Invoice, Adjustment, Credit) Type	Varchar2(1)	Not Null
Descr	Description about the Invoice	Varchar2(30)	
FcAmount	Amount (In Local Currency)	Number(22,2)	Not Null

LcAmount	Amount (In foreign Currency)	Number(22,2)	Not Null
Station	Company Station for account number	Varchar2(5)	Not Null
Dept	Company department for Account No	Varchar2(5)	Not Null
AcctNum	Account Number against Invoice	Varchar2(15)	Not Null
EntryType	"F" for Freight etc.	Varchar2(1)	Not Null
SeqNum	Sequence No of the detail	Number(3)	Not Null
Status	Status of Detail (P=posted N=Notpos	Varchar2(1)	
Ref	Reference to the Invoice Detail	Varchar2(50)	Not Null

A/R ArmGlm Maintenance:

Table Name : ArmGlm
Primary Key : No Primary key
Purpose : This table stores information of JV's Createion against Receivable Invoices to serve the General Ledger module .

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Batch	Batch Number.	Number(8)	Not Null
Period	Accounting Period No.	Number(2)	Not Null
Year	Year	Number(4)	Not Null
Station	Company Station.	Varchar2(5)	Not Null
Dept	Company Department	Varchar2(5)	Not Null
AcctNum	Account Number.	Varchar2(15)	Not Null
JvNum	Journal Voucher Number	Number(10)	Not Null
Ref	Reference to the JV	Varchar2(50)	
Descr	Description about the JV	Varchar2(30)	
Debit	The Debit amount in the JV	Number(22,2)	Not Null
Credit	The Credit amount in the JV	Number(22,2)	Not Null
Invoice	The Invoice Number against the JV	Varchar2(20)	Not Null
InvType	(Invoice, Adjustment, Credit) Type	Varchar2(1)	Not Null
TransDate	Date of the Transaction	Date	Not Null
Customer	Customer Code against the JV.	Varchar2(5)	Not Null

Status	Status (P=Posted,N=Not Posted) JV	Varchar2(1)	
UserId	User Identification	Varchar2(25)	Not Null

A/R ArmBalance Maintenance:

Table Name   : ArmBalance
Primary Key   : Co, Period, Year, Customer, Invoice, InvType
Purpose   : This table stores the balance information about Customer Invoices

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Period	Accounting Period No. for the Batch	Number(2)	Not Null
Batch	Batch Number.	Number(8)	Not Null
Customer	Customer Code against the Invoice.	Varchar2(5)	Not Null
Invoice	The Invoice Number	Varchar2(20)	Not Null
InvType	(Invoice, Adjustment, Credit) Type	Varchar2(1)	Not Null
RecType	1-Invoice, 2-Receipt, 3-Credit, 4-Adv	Number(2)	Not Null
InvDate	Date of the Invoice	Date	Not Null
ApplyTo	(In case of Credit Invoice) Invoice No.	Varchar2(20)	
Curr	Currency for the Invoice	Varchar2(5)	Not Null
ExchRate	Exchange Rate Of the Currency	Number(5,2)	Not Null
FcAmount	Amount (In Local Currency)	Number(22,2)	Not Null
LcAmount	Amount (In foreign Currency)	Number(22,2)	Not Null
Ref	Reference to the Invoice	Varchar2(50)	
Status	Invoice Status (P=posted, N=Notpos)	Varchar2(1)	
LcDiscount	Discoun against Invoice (Local Curr)	Number(22,2)	Not Null
FcDiscount	Discoun against Invoice (Foreign Curr)	Number(22,2)	Not Null
UserId	User Identification	Varchar2(25)	Not Null

A/R Arm Credit Card Maintenance:

Table Name   : ArmCdtCard
Primary Key   : Co, CdtCardType

Purpose   : This table stores the information about the types of Credit Card's (in Case of A/R.).

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
CdtCardType	Type of the Credit Card	Varchar2(5)	Not Null
Descr	Description of Credit Card	Varcahar2(30)	Not Null

A/R Arm Receipt Bank Maintenance:

Table Name   : ArmReceiptBank
Primary Key   : Co, ReceiptBank
Purpose   : This table stores the information about the Receipt Banks (in Case of A/R.)

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
ReceiptBank	Receipt Bank Code	Varchar2(5)	Not Null
Descr	Description of Receipt Bank	Varcahar2(30)	Not Null

A/R Arm Receipt Batch Maintenance:

Table Name   : ArmReceiptBatch
Primary Key   : Co, Batch
Purpose   : This table stores information Receipt Batches.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Batch	Batch Number.	Number(8)	Not Null
Period	Accounting Period No.	Number(2)	Not Null
Year	Year	Number(4)	Not Null
Status	Batch Status (P=posted, N=Notpos)	Varchar2(1)	
UserId	User Identification	Varchar2(25)	Not Null

A/R Arm Receipt Head Maintenance:

Table Name   : ArmReceiptHead
Primary Key   : Co, Batch, ReceiptNum, Customer.
Purpose   : This table stores information Customer Receipt Head .

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Batch	Batch Number.	Number(8)	Not Null
ReceiptNum	Receipt Number	Varchar2(25)	Not Null
Customer	Customer Code against the Receipt	Varchar2(5)	Not Null
Curr	Currency Code against the Receipt.	Varchar2(5)	Not Null
ExchRate	Exchange Rate of the currency	Number(15,2)	Not Null
Ref	Reference to the Receipt	Varchar2(50)	
ReceiptType	(Cash,Check,Ccard) Type of Receipt.	Varchar2(1)	Not Null
ReceiptBank	Bank Code of Check against Receipt	Varchar2(5)	
CheckNum	Check Number against the Receipt.	Varchar2(25)	
CheckDate	Check Date against the Receipt.	Date	
CdtCardType	Type of the Credit Card	Varchar2(5)	
CdtCardNum	Credit Card Number	Varchar2(25)	
CdtCardValDate	Credit Card Validation Date	Date	
TransDate	Date of Transaction	Date	Not Null
LcAmount	Amount in Local Currency	Number(22,2)	Not Null
FcAmount	Amount in Foreign Currency	Number(22,2)	Not Null
Balance	Balance of the Receipt.	Number(22,2)	Not Null

A/R Arm Receipt Detail Maintenance:

Table Name   : ArmReceiptDetail
Primary Key   : Co, Batch, ReceiptNum, Customer, ApplyTo
Purpose   : This table stores information Customer Receipt Detail.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Batch	Batch Number.	Number(8)	Not Null
ReceiptNum	Receipt Number	Varchar2(25)	Not Null
Customer	Customer Code against the Receipt	Varchar2(5)	Not Null
ApplyTo			

Ref	Reference to the Receipt Detail.	Varchar2(50)	
InvType	(Invoice, Adjustment, Credit) Type	Varchar2(1)	Not Null
ApplyToInvoice	(In case of Credit)Invoice No.	Varchar2(20)	Not Null
InvDate	Date of Invoice	Date	Not Null
InvBalance	Invoice Balance	Number(22,2)	Not Null
IcAppliedAmount	Applied Amount in Local Curency.	Number(22,2)	Not Null
FcAppliedAmount	Applied Amount in Foreign Curency.	Number(22,2)	Not Null
IcAppliedDisc	Applied Discount in Local Curency.	Number(22,2)	Not Null
FcAppliedDisc	Applied Discount in Foreign Curency.	Number(22,2)	Not Null
Status	Receipt Status (P=posted, N=Notpos)	Varchar2(1)	

GLM Chart of Account Maintenance:

Table Name   : GLmCharAcct
Primary Key   : Co, Station, Dept, AcctNum
Purpose   : This table is used to store the information of Accounts in General Ledger.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Station	Station Code	Varchar2(5)	Not Null
Dept	Department Code	Varchar2(5)	Not Null
AcctNum	Account No	Number(15)	Not Null
Descr	Description of Account No	Varchar2(30)	Not Null
Type	Type of Account	Varchar2(1)	Not Null
DebCre	Debit Or Credit	Varchar2(1)	Not Null
SunDet	Summary or Detail Account	Varchar2(1)	Not Null
GlSl	General or Sub Ledger	Varchar2(1)	Not Null
PostToStation	Post to Station	Varchar2(5)	
PostToDept	Post to Department	Varchar2(5)	
PostToAcctNum	Post to Account No	Number(15)	

A/P Terms Of Payment Maintenance:

Table Name   : ApmTermsOfPayment
Primary Key   : Co, TermsOfPayment
Purpose   : This table stores the information of Company Payment Terms for Accounts Payable.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
TermsOfPayment	Terms Of Payment Code	Varchar2(5)	Not Null
Descr	Terms of Payment Description	Varcahar2(30)	Not Null
DiscPct	Discount Percentage	Number(5,2)	
DiscDays	Discount Days	Number(3)	
DueDays	Total Due Days	Number(3)	Not Null

A/P Bank Maintenance:

Table Name   : ApmBank
Primary Key   : Co, ApmBank
Purpose   : This table stores the information of Company A/P Banks (Bank Codes with in the company not actual Banks) information.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
ApmBank	A/P Bank Code	Varchar2(5)	Not Null
Descr	A/P Bank Description	Varcahar2(30)	Not Null
BankAcct	Actual Bank Account No.	Varcahar2(15)	Not Null
Contact	Contact Info of Actual Bank	Varcahar2(50)	Not Null
Address1	Address of Actual Bank	Varcahar2(40)	Not Null
Address2	Address of Actual Bank	Varcahar2(40)	
Tel	Telephone No. of Actual Bank	Varcahar2(15)	Not Null
CashStation	Station of Cash Account	Varcahar2(5)	Not Null
CashDept	Department of Cash Account	Varcahar2(5)	Not Null
CashAcctNum	Cash Account Number.	Varcahar2(15)	Not Null
PayableStation	Station of Payable Account	Varcahar2(5)	Not Null

PayableDept	Department of Payable Account	Varcahar2(5)	Not Null
PayableAcctNum	Payable Account Number	Varcahar2(15)	Not Null
FreightStation	Station of Freight Account	Varcahar2(5)	Not Null
FreightDept	Department of Freight Account	Varcahar2(5)	Not Null
FreightAcctNum	Freight Account Number	Varcahar2(15)	Not Null
DiscountStation	Station of Discount Account	Varcahar2(5)	Not Null
DiscountDept	Department of Discount Account	Varcahar2(5)	Not Null
DiscountAcctNum	Discount Account Number	Varcahar2(15)	Not Null
DutyStation	Station of Duty Account	Varcahar2(5)	Not Null
DutyDept	Department of Duty Account	Varcahar2(5)	Not Null
DutyAcctNum	Duty Account Number	Varcahar2(15)	Not Null
OctrStation	Station of Octrol Account	Varcahar2(5)	Not Null
OctrDept	Department of Octrol Account	Varcahar2(5)	Not Null
OctrAcctNum	Octrol Account Number	Varcahar2(15)	Not Null
MiscStation	Station of Miscellaneous Account	Varcahar2(5)	Not Null
MiscDept	Department of Miscellaneous Account	Varcahar2(5)	Not Null
MiscAcctNum	Miscellaneous Account Number	Varcahar2(15)	Not Null
InsuranceStation	Station of Insurance Account	Varcahar2(5)	Not Null
InsuranceDept	Department of Insurance Account	Varcahar2(5)	Not Null
InsuranceAcctNum	Insurance Account Number.	Varcahar2(15)	Not Null
CEDStation	Station of CED Account	Varcahar2(5)	Not Null
CEDDept	Department of CED Account	Varcahar2(5)	Not Null
CEDAcctNum	CED Account Number.	Varcahar2(15)	Not Null
GSTStation	Station of GST Account	Varcahar2(5)	Not Null
GSTDept	Department of GST Account	Varcahar2(5)	Not Null
GSTAcctNum	GST Account Number.	Varcahar2(15)	Not Null
ExchGainLossStation	Station of ExchGainLoss Account	Varcahar2(5)	Not Null
ExchGainLossDept	Department of ExchGainLoss Account	Varcahar2(5)	Not Null
ExchGainLossAcct	ExchGainLoss Account Number.	Varcahar2(15)	Not Null

Alt A/P Maintenance:

Table Name   : ApmAltAP
Primary Key   : Co, AltAP
Purpose   : This table stores the information of Company Alternative A/P's

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
AltAP	Alternative A/P Code	Varchar2(5)	Not Null
Descr	Description of Alternative A/P	Varchar2(30)	Not Null
Station	Alternative A/P Account Station	Varchar2(5)	Not Null
Dept	Alternative A/P Account Department	Varchar2(5)	Not Null
AltApAcctNum	Alternative A/P Account Number	Varchar2(15)	Not Null

A/P Vendor Maintenance:

Table Name   : ApmVendor
Primary Key   : Co, Vendor
Purpose   : This table stores the information of Vendors for the Company

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Vendor	Vendor Code	Varchar2(5)	Not Null
Name	Name of the Vendor	Varchar2(50)	Not Null
Address1	Address of the Vendor	Varchar2(40)	Not Null
Address2	Address of the Vendor	Varchar2(40)	
City	City of the Vendor	Varchar2(25)	Not Null
State	Country of the Vendor	Varchar2(25)	Not Null
Tel	Telephone No. of the Vendor	Varchar2(15)	Not Null
Fax	Fax No. of the Vendor	Varchar2(15)	Not Null
Email	Email Address of the Vendor	Varchar2(35)	Not Null
ContactPer	Contact Person of the Vendor.	Varchar2(50)	Not Null
ApmBank	Def ApmBank (InsideCompany only)	Varchar2(5)	Not Null
AltAp	--------Alternative A/P for Vendor	Varchar2(5)	Not Null

TermsOfPayment	------- Terms Of Payment for Vendor	Varchar2(5)	Not Null
DefaultCurr	--------Currency for Vendor	Varchar2(5)	Not Null
DiscPct	Discount Percentage for the Vendor	Number(5,2)	
CdtLimit	Credit Limit offered by Vendor	Number(15,2)	
Status	(I=Inactive, A=Active) Vendor	Varchar2(1)	Not Null

A/P Invoice Batch Maintenance:

Table Name   : ApmInvBatch
Primary Key   : Co, Batch
Purpose   : This table stores the information of Payable Invoice Batches.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Batch	Batch Number (invoices grouped)	Number(8)	Not Null
Period	Accounting Period No. for the Batch	Number(2)	Not Null
Year	Year For the Batch	Number(4)	Not Null
UserId	User Identification	Varchar2(25)	Not Null
Status	Status of Batch (P=Posted,N=NotPost)	Varchar2(1)	

A/P Invoice Head Maintenance:

Table Name   : ApmInvHead
Primary Key   : Co, Batch, Vendor, InvType, Invoice
Purpose   : This table stores the Static information of Vendor's Invoice.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Batch	Batch Number for the Invoice	Number(8)	Not Null
Vendor	Vendor Code against the Invoice.	Varchar2(5)	Not Null
Period	Accounting Period No. for the Batch	Number(2)	Not Null
Year	Year For the Invoice	Number(4)	Not Null
TermsOfPayment	Terms Of Payment for the Invoice	Varchar2(5)	Not Null
ApmBank	Payable Bank Code(Inside Company)	Varchar2(5)	Not Null
Curr	Currency for the Invoice	Varchar2(5)	Not Null

ExchRate	Exchange Rate Of the Currency	Number(5,2)	Not Null
InvDate	Date of the Invoice	Date	Not Null
DiscPct	Discount Percentage	Number(5,2)	
DiscDate	Discount Date of the Invoice	Date	Not Null
DueDate	Due Date of the Invoice	Date	Not Null
InvType	(Invoice, Adjustment, Debit) Type	Varchar2(1)	Not Null
InvApplyTo	(In case of Debit Invoice) Invoice No.	Varchar2(20)	
Invoice	The Invoice Number	Varchar2(20)	Not Null
Ref	Any Reference to the Invoice	Varchar2(50)	
Descr	Description about the Invoice	Varchar2(30)	
InvAmount	Total Invoice Amount (In foreign Curr)	Number(22,2)	Not Null
LcInvAmount	Invoice Amount (In Local Currency)	Number(22,2)	Not Null
FrtAmount	Freight Amount (In foreign Curr)	Number(22,2)	Not Null
LcFrtAmount	Freight Amount (In Local Currency)	Number(22,2)	Not Null
DutyAmount	Duty Amount (In foreign Curr)	Number(22,2)	Not Null
LcDutyAmount	Duty Amount (In Local Currency)	Number(22,2)	Not Null
OctrAmount	Octrol Amount (In foreign Curr)	Number(22,2)	Not Null
LcOctrAmount	Octrol Amount (In Local Currency)	Number(22,2)	Not Null
InsAmount	Insurance Amount (In foreign Curr)	Number(22,2)	Not Null
LcInsAmount	Insurance Amount (In Local Currency)	Number(22,2)	Not Null
DiscAmount	Discount Amount (In foreign Curr)	Number(22,2)	Not Null
LcDiscAmount	Discount Amount (In Local Currency)	Number(22,2)	Not Null
MiscAmount	Miscellaneous Amount (In foreign curr)	Number(22,2)	Not Null
LcMiscAmount	Miscellaneous Amount(In Local Curr)	Number(22,2)	Not Null
CEDAmount	CED Amount (In foreign curr)	Number(22,2)	Not Null
LcCEDAmount	CED Amount (In Local Curr)	Number(22,2)	Not Null
GSTAmount	GST Amount (In foreign curr)	Number(22,2)	Not Null
LcGSTAmount	GST Amount (In Local Curr)	Number(22,2)	Not Null
RemainingDist	Remaining Invoice Amount (in foreign)	Number(22,2)	Not Null

Status	Status of Invoice (P=posted N=Notpos	Varchar2(1)	

A/P Invoice Detail Maintenance:

Table Name   : ApmInvDetail
Primary Key   : Co, Batch, Vendor, InvType, Invoice, SeqNum
Purpose   : This table stores the details of Vendor's Invoice.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Batch	Batch Number for the Invoice	Number(8)	Not Null
Vendor	Vendor Code against the Invoice.	Varchar2(5)	Not Null
Invoice	The Invoice Number	Varchar2(20)	Not Null
InvType	(Invoice, Adjustment, Debit) Type	Varchar2(1)	Not Null
Descr	Description about the Invoice	Varchar2(30)	
FcAmount	Amount (In Local Currency)	Number(22,2)	Not Null
LcAmount	Amount (In foreign Currency)	Number(22,2)	Not Null
Station	Company Station for Account number	Varchar2(5)	Not Null
Dept	Company department for Account No	Varchar2(5)	Not Null
AcctNum	Account Number against Invoice	Varchar2(15)	Not Null
EntryType	"F" for Freight etc.	Varchar2(1)	Not Null
SeqNum	Sequence No of the detail	Number(3)	Not Null
Status	Status of Detail (P=posted N=Notpos	Varchar2(1)	
Ref	Reference to the Invoice Detail	Varchar2(50)	Not Null

A/P Apm Glm Maintenance:

Table Name   : ApmGlm
Primary Key   : No Primary key
Purpose   : This table stores information of   JV's Createion against Payable Invoices
to serve the General Ledger module .

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Batch	Batch Number.	Number(8)	Not Null

Period	Accounting Period No.	Number(2)	Not Null
Year	Year	Number(4)	Not Null
Station	Company Station.	Varchar2(5)	Not Null
Dept	Company Department	Varchar2(5)	Not Null
AcctNum	Account Number.	Varchar2(15)	Not Null
JvNum	Journal Voucher Number	Number(10)	Not Null
Ref	Reference to the JV	Varchar2(50)	
Descr	Description about the JV	Varchar2(30)	
Debit	The Debit amount in the JV	Number(22,2)	Not Null
Credit	The Credit amount in the JV	Number(22,2)	Not Null
Invoice	The Invoice Number against the JV	Varchar2(20)	Not Null
InvType	(Invoice, Adjustment, Debit) Type	Varchar2(1)	Not Null
TransDate	Date of the Transaction	Date	Not Null
Vendor	Vendor Code against the JV.	Varchar2(5)	Not Null
Status	Status (P=Posted,N=Not Posted) JV	Varchar2(1)	
UserId	User Identification	Varchar2(25)	Not Null

A/P Apm Balance Maintenance:

Table Name : ApmBalance
Primary Key : Co, Period, Year, Vendor, Invoice, InvType
Purpose : This table stores the balance information about Vendor Invoices

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Period	Accounting Period No. for the Batch	Number(2)	Not Null
Batch	Batch Number.	Number(8)	Not Null
Vendor	Vendor Code against the Invoice.	Varchar2(5)	Not Null
Invoice	The Invoice Number	Varchar2(20)	Not Null
InvType	(Invoice, Adjustment, Debit) Type	Varchar2(1)	Not Null
RecType	1-Invoice, 2-Receipt, 3-Debit, 4-Adv	Number(2)	Not Null
InvDate	Date of the Invoice	Date	Not Null

ApplyTo	(In case of Debit Invoice) Invoice No.	Varchar2(20)	
Curr	Currency for the Invoice	Varchar2(5)	Not Null
ExchRate	Exchange Rate Of the Currency	Number(5,2)	Not Null
FcAmount	Amount (In Local Currency)	Number(22,2)	Not Null
LcAmount	Amount (In foreign Currency)	Number(22,2)	Not Null
Ref	Reference to the Invoice	Varchar2(50)	
Status	Invoice Status (P=posted, N=Notpos)	Varchar2(1)	
LcDiscount	Discoun against Invoice (Local Curr)	Number(22,2)	Not Null
FcDiscount	Discoun against Invoice (Foreign Curr)	Number(22,2)	Not Null
UserId	User Identification	Varchar2(25)	Not Null

A/P Apm Credit Card Maintenance:

Table Name   : ApmCdtCard
Primary Key   : Co, CdtCardType
Purpose   : This table stores the information about the types of Credit Card's (in Case of A/P.).

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
CdtCardType	Type of the Credit Card	Varchar2(5)	Not Null
Descr	Description of Credit Card	Varcahar2(30)	Not Null

A/P Apm Receipt Bank Maintenance:

Table Name   : ApmReceiptBank
Primary Key   : Co, ReceiptBank
Purpose   : This table stores the information about the Receipt Banks (in Case of A/P.)

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
ReceiptBank	Receipt Bank Code	Varchar2(5)	Not Null

Descr	Description of Receipt Bank	Varcahar2(30)	Not Null

A/P Apm Receipt Batch Maintenance:

Table Name   : ApmReceiptBatch
Primary Key   : Co, Batch
Purpose   : This table stores information Receipt Batches(In case of A/P).

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Batch	Batch Number.	Number(8)	Not Null
Period	Accounting Period No.	Number(2)	Not Null
Year	Year	Number(4)	Not Null
Status	Batch Status (P=posted, N=Notpos)	Varchar2(1)	
UserId	User Identification	Varchar2(25)	Not Null

A/P Apm Receipt Head Maintenance:

Table Name   : ApmReceiptHead
Primary Key   : Co, Batch, ReceiptNum, Vendor.
Purpose   : This table stores information Vendor Receipt Head .

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Batch	Batch Number.	Number(8)	Not Null
ReceiptNum	Receipt Number	Varchar2(25)	Not Null
Vendor	Vendor Code against the Receipt	Varchar2(5)	Not Null
Curr	Currency Code against the Receipt.	Varchar2(5)	Not Null
ExchRate	Exchange Rate of the currency	Number(15,2)	Not Null
Ref	Reference to the Receipt	Varchar2(50)	
ReceiptType	(Cash,Check,Ccard) Type of Receipt.	Varchar2(1)	Not Null
ReceiptBank	Bank Code of Check against Receipt	Varchar2(5)	
CheckNum	Check Number against the Receipt.	Varchar2(25)	
CheckDate	Check Date against the Receipt.	Date	
CdtCardType	Type of the Credit Card	Varchar2(5)	

CdtCardNum	Credit Card Number	Varchar2(25)	
CdtCardValDate	Credit Card Validation Date	Date	
TransDate	Date of Transaction	Date	Not Null
LcAmount	Amount in Local Currency	Number(22,2)	Not Null
FcAmount	Amount in Foreign Currency	Number(22,2)	Not Null
Balance	Balance of the Receipt.	Number(22,2)	Not Null

A/P Apm Receipt Detail Maintenance:

Table Name : ApmReceiptDetail
Primary Key : Co, Batch, ReceiptNum, Vendor, ApplyTo
Purpose : This table stores information Vendor Receipt Detail.

Field Name	Description	Data Type	Status
Co	Company Code	Varchar2(3)	Not Null
Batch	Batch Number.	Number(8)	Not Null
ReceiptNum	Receipt Number	Varchar2(25)	Not Null
Vendor	Vendor Code against the Receipt	Varchar2(5)	Not Null
ApplyTo			
Ref	Reference to the Receipt Detail.	Varchar2(50)	
InvType	(Invoice, Adjustment, Debit) Type	Varchar2(1)	Not Null
ApplyToInvoice	(In case of Debit) Invoice No..	Varchar2(20)	Not Null
InvDate	Date of Invoice	Date	Not Null
InvBalance	Invoice Balance	Number(22,2)	Not Null
IcAppliedAmount	Applied Amount in Local Curency.	Number(22,2)	Not Null
FcAppliedAmount	Applied Amount in Foreign Curency.	Number(22,2)	Not Null
IcAppliedDisc	Applied Discount in Local Curency.	Number(22,2)	Not Null
FcAppliedDisc	Applied Discount in Foreign Curency.	Number(22,2)	Not Null
Status	Receipt Status (P=posted, N=Notpos)	Varchar2(1)	

4.1.2 Architectural Design

The primary objective of ~~the~~ architectural design is to develop a modular program structure and represent the control relationships between the modules, in addition architectural design melds program structure and data structure, defining interfaces that enable data to flow throughout the program.

In "Accounts Master" the main controlling module is the Menu of the system. it divides the system into two modules named "Accounts Receivable" & "Accounts Payable". These modules call their corresponding sub modules categorized as

- File Maintenance
- Data Entry
- Periodic Procedures
- Queries
- Reports

System Architectural Diagram

```
                          ┌──────────────┐
                          │     Menu     │
                          └──────┬───────┘
                                 │
              ┌──────────────────┴──────────────────┐
              ▼                                      ▼
  ┌─────────────────────┐              ┌─────────────────────┐
  │ Accounts Receivable │              │  Accounts Payable   │
  │       Module        │              │       Module        │
  └──────────┬──────────┘              └──────────┬──────────┘
             │                                    │
          (  1  )                              (  2  )
```

```
                                    ┌───┐
                                    │ 1 │
                                    └─┬─┘
   ┌──────────┬───────────┬──────────┼──────────────┬────────────┬────────────┐
   ▼          ▼           ▼          ▼              ▼            ▼
┌────────┐ ┌──────────┐ ┌────────┐ ┌──────────┐ ┌─────────┐ ┌─────────┐
│ ARM    │ │ File     │ │ Data   │ │ Periodic │ │ Queries │ │ Reports │
│ Control│ │ Maintenance│ Entry  │ │ Procedures│ │         │ │         │
└────────┘ └──────────┘ └────────┘ └──────────┘ └─────────┘ └─────────┘
               │            │           │            │            │
             ( A )        ( B )       ( C )        ( D )        ( F )
```

(A)

| Company Profile | GLM Stationn | GLM Dept | Accounting Periods | Currency Mainten. | Exchange Rates | GLM CharAcct | A/R Region | Credit Manager |

| Trade Terms | Pay Mode | Pay Terms | Company ShipVia | Sales Person | ARM Bank | Alt A/R Mainte | Customer Maintenanc | Receipt Bank | CdtCard Type |

(B)

| Invoice / Credit / Adv. Entry | Cash Receipt Against Invoices | Credit Application | Check Reconciliation |

(C)

| ARM Invoice Posting | ARM Cash Receipt Posting | ARM Check Reversal |

(D)

| Customer Balance | Customer Paid Invoices | Customer Receipt Aging | Customer History |

(F)

| Customer Statement of Account | Customer Payment Trends | Customer Receipt Aging | Customer Sales Analysis |

```
                                    ( 2 )

  ┌──────────┬──────────────┬──────────┬──────────────┬──────────┬──────────┐
  ▼          ▼              ▼          ▼              ▼          ▼

┌────────┐ ┌──────────────┐ ┌────────┐ ┌──────────────┐ ┌────────┐ ┌────────┐
│ APM    │ │ File         │ │ Data   │ │ Periodic     │ │Queries │ │Reports │
│ Control│ │ Maintenance  │ │ Entry  │ │ Procedures   │ │        │ │        │
└────────┘ └──────────────┘ └────────┘ └──────────────┘ └────────┘ └────────┘
                  (A)          (R)          (C)             (D)        (E)
```

(A)

| Company Profile | GLM Stationn | GLM Department | Accounting Periods | Currency Mainten. | Exchange Rates | GLM CharAcct |

| Vendor Pay Terms | APM Bank Maintenance | Alternative A/P Maintenance | Vendor Maintenan | APM Receipt Bank Maintenance | APM CdtCard Type Maintenance |

(R)

| Invoice / Debit / Adv. Entry | APM Cash Receipt Against Invoices | APM Credit Application |

(C)

| APM Invoice Posting | Check Receipt Posting |

(D)

| Vendor Balance | Vendor Paid Invoices | Vendor Invoice Aging | Expected Cash Flow | Vendor History |

(E)

| Vendor Statement of Account | Expected Cash Flow | Vendor Invoice Aging | Vendor Business Analysis |

More over to call the LOV's F9 key is fixed, to give the messages the bottom line is selected and status bar is present at the lowest bottom of the screens.

- ## Canvas Properties
    1. Canvas Size

        1.1 Canvas Height   = '335'

        1.2 Canvas Width   = '594'

    2 Background Color ='Gray 16'

    3 The Y coordinates are 45 for the tabular forms.

    4 In case of tabular forms, The No. of records displayed are 15.

    5 Canvas background style is fixed for all screens, which is shown in the figure

In my system, I have offered the user many facilities while entering the data as well as querying some facts. To input the information into the system there are a number of forms with attractive screens. The input forms in my system are :

- ## Company maintenance form

    It allows the user to define a number of company codes and their descriptions.

- ## Company Stations and Department maintenance.

    These forms will allow the user to define different stations for a company and correspondingly different departments against a particular station of a company.

- ## Period Maintenance

    This will allow the user to define periods against an accounting year. The information to be input includes the period's starting and ending dates, period number and the status of the period (Open, Close, and Current)

- Region maintenance

  The company can have business in more then one region, the user will be allowed to input different regions in this form.

- **Currency and Exchange Rates Maintenance**

  The user will be allowed to maintain more than one currency in the system. These forms will help the user to do so, also the user can enter the daily exchange rates of these currencies.

- **Terms of trade, Payment and payment modes**

  In these forms the user will be able to enter company Trade terms, Payment modes and terms in case of receivables and payment terms only in case of payables.

- **Ship Via , Sales Person and Credit Managers**

  In these forms, the user will be able to enter the information about the company Sales persons, Ship Via's and Credit Managers (in case of receivables) and Credit Managers only in case of payables.

- Arm and Apm Banks

  In these forms the user will be able to define receivable and payable banks (inside the company). Later on, one code will be assigned to one customer or a group of customers. The main purpose of these bank codes is to group the set of accounts of a customer (group of customers) against a single code.

- **Customer and Vendor Maintenance.**

  In these forms, the user can input the information about the Customers in case of receivables and Vendors in case of Payables. The information to be input includes the Customer/Vendor name, address, contacts, terms of payment including the discount allowed, in case of receivable more information will be input like customer's shipment locations his contact personnel etc.

- **Receivable and Payable Invoice entry.**

In these forms the user will be able to enter invoices including the related Customer / Vendor defaults such as currency, Arm / Apm Banks, terms, discount, amounts in foreign currency, other amounts like freight, duty and Octrol. etc. The invoices to be entered can be of three types in case of receivables I) Invoice, II) Advance, III) Credit. Similar is the situation in case of Payables I) Invoice II) Advance, III) Debit.

- **Arm / Apm Credit Card Info.**

These forms will allow the user to input the information about the credit card types both in case of receivables and payables. In case of payment in the form of credit cards the information stored here will work to either accept those credit cards or not depending upon the situation.

- **Arm / Apm Receipt Banks.**

In these forms the user will be able to enter the information about the banks whose receipts are used for the purpose of payments in case of receivables and payables.

- **Arm / Apm Receipt Entry**

These forms will allow the user to get payments against the invoices in the form of cash, bank receipts or credit cards. The information to be input includes the corresponding invoice number related customer / vendor, the batch number, amount being paid, date of payment etc. Besides these few there many other forms and reports which are attached in the appendix. Best efforts have been given to provide the user maximum of ease to perform what ever he/she wants. The user interface guidelines provided by the organization have been given a great care. A prototype of the system was made, the screen designing was finalized for the final implementation and these are some of the important screen features of that prototype. On the forms the user has been offered the following facilities. Toolbar is present on every form has the following buttons and their corresponding functionality. We can see the toolbar from the figure. Now one by one the functionality of every button

will be discussed.

The Save Button

To save the effect of current transaction, the user just needs to click this button

Print Command

To give the print command to get the print of the current form or canvas, the user just needs to click this button.

Print Set Up

To adjust the print set up for the print out to be taken, user can use this button to get different print page settings.

Exit Button

To exit from the current form, the user just needs to click this button and he/she will go back to the menu screen.

Cut Button

To cut any value from anywhere, user can select the particular item and then click this button to get the resulting effect.

Copy Button

To copy some thing the user just needs to select the corresponding item and then click this button.

Paste Button

To paste some thing in the form, the user needs to select that value and then just click this button

Enter Query

To execute the query on some specific field, the user needs to click this button.

Execute Query

To execute a query, the user just needs to click this button.

Move Buttons

To go to the first, previous, next and last record, these buttons will be used.

Add Button

To add the currently entered record into the data base.

Remove Button

To remove the current record, user just needs to click this button.

Help Button

To get some help about the properties of the current item.

Some other very important features of these forms are given below.

- **LOV's (List Of Values)**

    In case of entering some information (value of a field) which has previously been
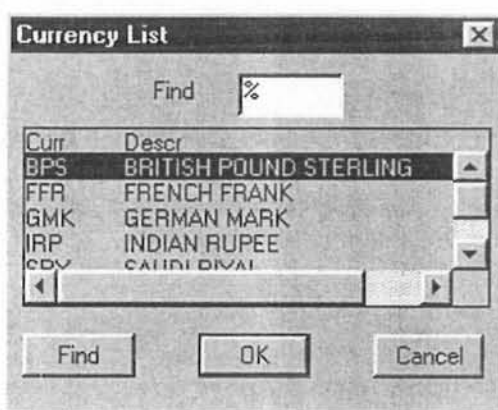
entered some where else, to avoid learning the values by heart, the user is being provided this facility at many places in my system. The LOV's (list of values) will automatically fetch the related values. The user will need to press F9 key only and select his / her related value. In the picture you can see the user can enter any of the currencies already stored in the database. Presently in the picture the user has selected British Pound Sterling.

- **List Items**

    There are certain fields in the database whose values are static i.e. not more than five to seven values but seven is the maximum. To restrict the user to a certain range of values

INV ▼
INV
CRN
ADV

and invalid entries, he/she is being offered the list items at few places. In the picture you can see the user is being restricted to enter one of the values INV (Invoice), CRN (Credit entry) and ADV (Advance).

- **Going From one Canvas to another**
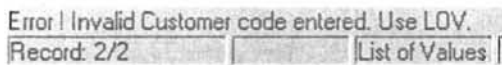
    According to the situation, if the user needs to jump from one screen to another or from one canvas to another, he/she is provided this facility in the related forms as we can see from the fig. To see the open invoices the user just needs to click the button Open

Payment Distribution

Invoice	InvDate	Balance	Applied Amount	Applied Disc

Open Invoices

Invoices and the related canvas will come at the screen automatically.

- ## Help and Error Messages.
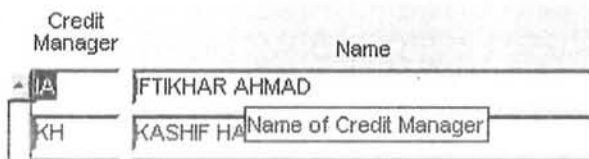
    In case of user making some error while entering some values, the related error and help messages are being given as we can see from the figure. The error and help messages are given at the bottom lines of the forms in order to minimize the use of mouse.

    Error ! Invalid Customer code entered. Use LOV.
    Record: 2/2   List of Values [

- ## ToolTips

    While entering the value of items, a related help message appears on the item. As shown in the figure , while entering the name of credit manager, the related help message has appeared in the form of a ToolTip.

Credit Manager	Name
IA	FTIKHAR AHMAD
KH	KASHIF HA Name of Credit Manager

4.1.4 Procedural Design

The procedural design describes the functionality of any subprogram in a natural language like English. The code of the programming on the other hand is not understandable for a common reader. All the algorithmic details are specified in the procedural design. This phase of design is carried out after the successful completion of the three earlier design phases i.e. Data design, Architectural design and Interface design.

In the system "Accounts Master" there are four major procedures involved

- **Receivable Invoice Posting**

- **Payable Invoice Posting**

4.1.4.1 Invoice Posting

The invoices are posted in the form of batches (grouped invoices) for individual users. When the invoices in a certain batch are complete and there is no out of balance invoices in it, it is ready for posting. The user just needs to go in to the invoice posting screen click the option post and at the back ground following algorithm will work

Procedure Post_Inv is (For Receivable)

Loop

- -

- - Select all batches which are marked as posted

- -

- -

- - Pick up the first batch to be posted

- -

- -

- - Select all invoices from this batch

- -

If all the invoices in the batch are not out of balance then

Loop

   - -

   - - Get Ar Cash Account from Arm Bank or AltAr as required

   - -

   If (the AltAr against the customer exists) then post the entry in it

    Else

     Post the entry in the cash account against the customer in ArmBank

      - -

      - - Create Invoice Debit entry for ArmGlm (Invoice head info posted).

      - - Create the corresponding effect in ArmBalance.

        If Credit, apply to mentioned invoice in ArmBalance Table.

      - -

      - - Create Invoice Credit entries for ArmGlm. (Invoice detail info posted)

      - -

      - -

      - - Update Invoice head Set Status as Posted

      - - Update Invoice detail Set Status as Posted

      - -

     else

    give a message that could not get cash account & posting terminated.

  end Loop

else

give a message that out of balance invoices exist in the batch, can not post.

end Loop

Following is the procedure which is executed for the poeting of payable invoice posting.

Procedure Post_Inv is (For Payable)

Loop

\- \-

\- \- Select all batches which are marked as posted

\- \-

\- \-

\- \- Pick up the first batch to be posted

\- \-

\- \-

\- \- Select all invoices from this batch

\- \-

If all the invoices in the batch are not out of balance then

Loop

\- \-

\- \- Get Ap Cash Account from Apm Bank or AltAp as required

\- \-

If (the AltAp against the customer exists) then post the entry in it

Else

Post the entry in the cash account against the customer in ApmBank

\- \-

\- \- Create Invoice Credit entry for ApmGlm (Invoice head info posted).

\- \- Create the corresponding effect in ApmBalance against the Vendor.

          If   Debit, applies to mentioned invoice in ApmBalance Table.

--

- -

- - Create Invoice Debit entries for ApmGlm. (Invoice detail info posted)

- -

- -

- - Update Invoice head Set Status as Posted
- - Update Invoice detail Set Status as Posted

- -

else

     give a message that could not get cash account & posting terminated.

   end Loop

else

     give a message that out of balance invoices exist in the batch, can not post.

end Loop

Chapter 5

System Development

5.1 Introduction

After the successful completion of the Design phase, the development phase of the Software starts. The purpose of the development phase is to transfer the design in to executable computer software. In the development process the basic and very important step is the selection of a programming language (Tool).

My system has been developed in Oracle 7.3 with developer 2000 release version 2.

5.2 Why Oracle ... ???

All the existing systems in the organization are Oracle based, it was the requirement of the organization to use Oracle for the development of "Accounts Master".

5.3 Features Of Oracle

- Good security.
- Facility of taking backups.
- Provides powerful procedural language known as PL/SQL.
- Very strong online help.
- Oracle RDBMS is portable on most of the H/W and S/W.
- Provides a number of sophisticated development tools.

5.4 Programming Guidelines

While writing the code for implementing certain checks and triggers, some programming guidelines have been followed. A sample code of a trigger is given below.

```
declare
  cursor c1 is
    select Descr
      from ArmBank
      where Co = :b0.Co
        and ArmBank=:ArmCustomer.ArmBank;
begin
  open c1 ;
    fetch c1 into :ArmCustomer.BankDescr ;
    if c1%notfound then
      message('Error ! Invalid Region code entered. Use LOV.');
      bell ;
          raise form_trigger_failure ;
    end if ;
  close c1 ;
end;
```

You can see a certain format is being followed in the code of the trigger. Even the numbers of spaces in this code are calculated according to the situation. Names of the variables, block and filed names begin with upper case letters. Especially in the table and field names every new word in the name starts with an upper case letter. The indentation of the code has been performed in manner such that it is understandable to the programmer as well as any other viewer.

5.5 Testing

Without testing software, one cannot be sure of its correctness. It is the only positive activity, which is carried out with a negative intent i.e. to find out the errors and mistakes in the software. The testing process of my system is under progress currently.

I have tested the system following the unit testing method. Every module of my system was tested with some dummy data. The result of that testing was positive. Not only the statistics and calculations involved in those modules were correct, but also at the same time the requirements put forward by the organization were met. Now in the next phase Integrated testing will be performed. The system has been handed over to the organization

fort Beta testing (Black Box Testing), and the process of testing the software with real data is under progress. Any problems and modifications due to any errors or mistakes in the software will be corrected as per request.

5.6 Implementation

It is the activity of getting the developed system operational. Different methods are available for this purpose, which are as follows

- Direct Cut Over
- Parallel Conversion
- Pilot approach

After the completion of software testing in this week, the implementation is scheduled to start in the 1st week of July. According to the pre-decided plan, Parallel Conversion approach will be followed. In this approach, both the new and old systems are run side by side. It means that the user continues to use the old system and simultaneously learns to operate the new system. Thus if any problem occurs in using the new system, the organization can still fall back on the old system without loss of any data. During the implementation process, if the user finds some errors or problems, they will be removed as per request of the user within next one month.

5.7 Future Enhancements

- Integration with other existing systems in the organization
- Expansion of some of the modules in system.

Appendix A

Entity Relationship Diagrams

Receivable

Entity-Relationship Diagram containing the following entities and relationships:

Entities: Terms Of Trades, Company, Station, Dept, Payment terms, Mode of Pay, Ship Via, Arm bank, Alt A/R, Credit Manager, Sales Per, Region, Arm Customer, Ship to Loc, Contact Per, Sales Per, Inv detail, Inv head, Curr, Exchange, Inv. batch, Receipt batch, Receipt, Credit card type, Period, Receipt head, Receipt Detail

Relationships: Agrees to, Fervors, Agrees to, offers, Contains, Contains, Appoints, Appoints, Works in, Can Have, Can Have, Is agreed by, Is accepted by, Is chosen by, Is provide to, Is attached to, Is assigned to, Allows credit to, Make sales from, Deals in, Deals in, Serves, Can Have, Can have, Has, Is related to, Is attached to, Has, Can have, Can have, works with, works with, Can have, Deal with, Can have, Can have, works with, Can have, Deal with, Is attached to, Is related to

Payable

Payable payment term —⟨Agrees to⟩— Company —⟨Contains⟩— Station

Payable payment term —⟨Is agreed to⟩

Company —⟨Is attached to⟩— A/P bank

A/P bank —⟨Is attached to⟩— Vendor

Company —⟨Contains⟩— Alt A/P

Alt A/P —⟨Is assigned to⟩— Vendor

Vendor —⟨Can have⟩

Company —⟨Works with⟩— Apm receipt batch

Company —⟨Works with⟩— Apm Inv batch

Station —⟨Contains⟩— Dept

Dept — B   A

Apm Inv batch —⟨Can have⟩— Period —⟨Can have⟩— Apm receipt batch

Apm Inv batch —⟨Contains⟩— Apm invoice head

Apm receipt batch —⟨Contains⟩— Apm receipt head

Apm invoice head —⟨Is attached to⟩— Exchange —⟨Is attached to⟩— Apm receipt head

Apm invoice head —⟨Is related to⟩— Apm invoice detail

Apm receipt head —⟨Is related to⟩— Apm receipt detail

Exchange —⟨Contains⟩— Currency

Apm invoice detail — B

Apm receipt detail — A

Appendix B

Bachman Diagrams

Company

Co	Descr

(A) → Company; Company.Co → (A)

GlmStation

Co	Station	Descr

(A) → GlmStation; GlmStation.Station → (B)
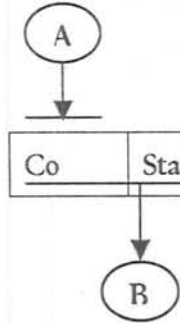
GlmDepartment

Co	Station	Dept	Descr

(B) → GlmDepartment; GlmDepartment.Station → (C)
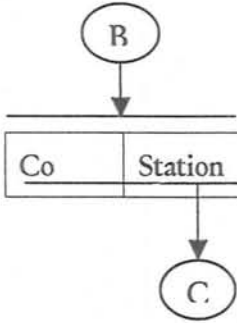
Period

Period	Year	StartDate	EndDate	GlState	ApState	ArState

Period.Period → (D)

(E) → Exchange

Exchange

Curr	Exchrate	BuyRate	SellRate

Exchange.Exchrate → (F)
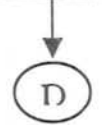
Currency

Curr	Descr	LocFor	Unit	Fraction

Currency.Curr → (E)
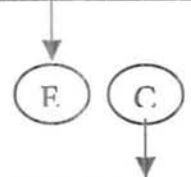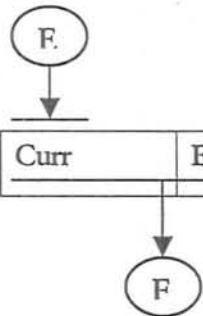
(C) → GlmCharAcct

GlmCharAcct

Co	Station	Dept	AcctNum	Descr	Type	DebCre	SumDet	GlSl	PostToStation	PostToDept	PostToAcctNum

GlmCharAcct.Dept → (G)
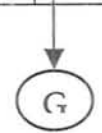
(A) → ArmRegion

ArmRegion

Co	Region	Descr

ArmRegion.Region → (H)
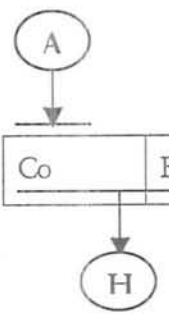
(A) → ArmCdtMgr

ArmCdtMgr

Co	CdtMgr	Name	Region

ArmCdtMgr.CdtMgr → (I)

(A) → ArmShipVia

ArmShipVia

Co	ShipVia	Desr

ArmShipVia.ShipVia → (J)

ArmTermsOfTrades

(A) →

Co	TermsOfTrade	Descr

→ (K)

ArmModeOfPayment

(A) →

Co	ModeOfPayment	Descr

→ (I.)

ArmTermsOfPayment

(A) →

Co	TermsOfPayment	Descr	DistPct	DisceDays	dueDays

→ (M)

Armbank

(A) →

Co	ArmBank	Descr	BankAcct	Contact	Address1	Address2	Tel	Cash Station	Cash Dept	Cash Acctnum	Receivable Station	Recevieable Dept	Receivable Acctnum
		Discount Station	Discount Dept	Discount Account	Duty Station	Duty Dept	Duty AcctNum	Octr Station	Octr Dept	Octr AcctNum	Misc Station	Misc Dept	Misc acctNum
		Freight Station	Freight Dept	Freight Acctnum	Insurance Station	Insurance Dept	Insurance AcctNum	CED Station	CED Dept	CED Acctnum	GST Station	GST Dept	GST AcctNum
		ExchGainLoss Station	ExchGainLoss Dept	ExchGainLoss AcctNum									

→ (N)

(A) →

Co	AltAr	Descr	AltAr AcctNum

→ (O)

ArmSalesPer

(A) → (H) →

Co	SalesPer	Name	Region	Address1	Address2	City	Tel	Fax	Email	State

ArmCustomer

(A) (P) →

arrows from: (J) (N) (K) (O) (I.) (P) (I) (H)

Co	Customer	Name	Address1	Address2	City	State	Ship Via	Arm Bank	Termsof Trades	AltAr	TremsOf Payment	SalesPer	CdtMgr	Region
		CdtLimit	DefaultCurr	Status										

→ (Q)

ArmContactPer

Co	Costomer	Seqnum	Contactname	Designation	Tel	Fax	Email

ArmInvBatch

Co	Batch	Period	Year	UserId	Status

ArmInvHead

Co	Batch	Customer	Invoice	Inctype	Period	Year	ModeOf Payment	Termsof Payment	Terms ofTrade	Ship Via	Sales Per	ArmBank	Curr	Inv date	Disc Pct
Disc Date	Due Dtae	Exch Rate	Descr	Ref	Inv Amount		LcInv Amount		Frt Amount		LcFrt Amount				
Duty Amount	LcDuty Amount	Octr Amount	LcOctr Amount	Ins Amount	LcInc Amount	Disc Amount	LcDisc Amount	Misc amount	LcMisc Amount						
CED Amount	LcCED Amount	GST Amount	LcGST Amount	Remaining Dist											

ArmInvDetail

Co	Batch	Customer	Invoice	Invtype	SeqNum	Descr	LcAmount	FcAmount	Station	Dept	AcctNum	EnteryType	Status	Ref

ArmGlm

Co	Batch	Customer	Invoice	Inv Type	Period	Year	Station	Dept	Acct num	Jv Num	Descr	Ref	Debit	Credit	Trans Date	Status	UserId

ArmBalance

Labels above: T → Invoice, D → Period, F. → Curr; V below Invoice

Co	Customer	Invoice	InvType	Batch	Period	Year	Ivc Date	Rec Type	Apply To	Curr	Exch Rate	Lc Amount	Fc Amount	ExchGain InLoss
										Ref	Status	LcDisc	FcDisc	UserId

ArmCdtCard

A → Co; W below CdtCardType

Co	CdtCardType	Descr

ArmReceiptBank

A → Co; X below ReceiptBank

Co	ReceiptBank	Descr

ArmReceiptBatch

A → Co, D → Batch; Y below Batch

Co	Batch	Period	Year	Status	UserId

ArmReceiptHead

A → Co, S → Batch, X → ReceiptBank, O → Customer, X → CdtcardType; Z below ReceiptNum; Z below Customer

Co	Batch	ReceiptNum	ReceiptBank	Customer	Curr	ExchRate	Ref	Receipt Type	Check Num	Check Date	Cdtcard Type	Cdtcard Num	CdtCard valDate	Trans Date
											LcAmount	FcAmount	Balance	

ArmReceiptDetail

Z → ReceiptBank; 7.1 below ReceiptNum; O below Customer

Co	Batch	ReceiptNum	ReceiptBank	Customer	ApplyTo	Ref	Invoice	Inv Date	Inv Balance	Inv Type	LcApplied Amount	FcApplied Amount	LcApplied Amount

(below ArmReceiptDetail, linked by O)

Co	Customer	ShipToLoc	Address1	Address2	City	State

7.2 below Customer

(A)

ApmTermsOfPayment

Co	TermsOfPayment	Descr	DistPct	DisceDays	DueDays

(a)

(A)

ApmBank

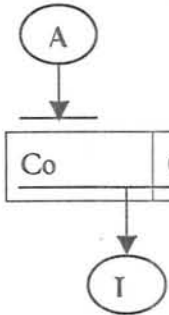| Co	ApmBank	Descr	BankAcct	Contact	Address1	Address2	Tel	Cash Station	Cash Dept	Cash Acctnum	Payable Station	Payable Dept	Payable Acctnum

Discount Station	Discount Dept	Discount Account	Duty Station	Duty Dept	Duty AcctNum	Octr Station	Octr Dept	Octr AcctNum	Misc Station	Misc Dept	Misc acctNum

Freight Station	Freight Dept	Freight Acctnum	Insurance Station	Insurance Dept	Insurance AcctNum	CED Station	CED Dept	CED Acctnum	GST Station	GST Dept	GST AcctNum

ExchGainLoss Station	ExchGainLoss Dept	ExchGainLoss AcctNum

(b)

ApmAltAp

(A) →

Co	AltAp	Descr	AltAp Statation	AltAp Dept	AltAp AcctNum

(c)

(A)   (D)

ApmInvBatch

Co	Batch	Period	Year	UserId	Status

(d)

(A)

(b) (c) (a)

ApmVendor

Co	Vendor	Name	Address1	Address2	City	State	Tel	Fax	Email	Contact Per	Apm Bank	Alt Ap	TremsOf Payment	Default curr	Status

(e)

ApmInvHead

Nodes above: A, d, e, D, d, and f (below Vender)

Co	Batch	Vender	Invoice	Invtype	Period	Year	Termsof Payment	Apm Bank	Curr	Inv date	Disc Pct	Disc Date	Due Dtae	Exch Rate	Descr	Ref

Inv Amount	LcInv Amount	LcInv Amount	Frt Amount	LcFrt Amount	Duty Amount	LcDuty Amount

Octr Amount	LcOctr Amount	Ins Amount	LcInc Amount	Disc Amount	LcDisc Amount	Misc amount	LcMisc Amount

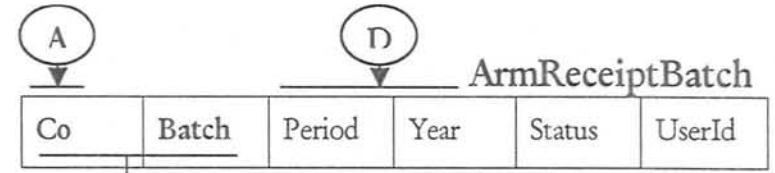| CED Amount	LcCED Amount	GST Amount	LcGST Amount	Remaining Dist

ApmInvDetail

Nodes above: f, C

Co	Batch	Vendor	Invoice	Invtype	SeqNum	Descr	LcAmount	FcAmount	Station	Dept	AcctNum	EnteryType	Status	Ref

Node below Invoice: g

ApmGlm

Nodes above: f, D

Co	Batch	Vendor	Invoice	Inv Type	Period	Year	Station	Dept	Acct num	Jv Num	Descr	Ref	Debit	Credit	Trans Date	Status	UserId

InvDate

ApmBalance

Nodes above: f, D, E

Co	Vendor	Invoice	InvType	Batch	Period	Year	Ivc Date	Rec Type	Apply To	Curr	Exch Rate	Lc Amount	Fc Amount	ExchGain InLoss

Ref	Status	LcDisc	FcDisc	UserId

Node below Invoice: h

ApmCdtCard

(A)

Co	CdtCardType	Descr

(i)

ApmReceiptBank

(A)

Co	ReceiptBank	Descr

(j)

ApmReceiptBatch

(A) (D)

Co	Batch	Period	Year	Status	UserId

(k)

ApmReceiptHead

(A) (k)   (i) (f)   (i)

Co	Batch	ReceiptNum	ReceiptBank	Vendor	Curr	ExchRate	Ref	Receipt Type	Check Num	Check Date	Cdtcard Type	Cdtcard Num	CdtCard valDate	Trans Date

LcAmount	FcAmount	Balance

(l) (l)

ApmReceiptDetail

Co	Batch	ReceiptNum	ReceiptBank	Vendor	ApplyTo	Ref	Invoice	Inv Date	Inv Balance	Inv Type	LcApplied Amount	FcApplied Amount	LcApplied Amount

(m)

Appendix C

Sample Forms

Currency Exchange Rate Maintenance - [arm090]

Accounts Receivable

Currency	Description	Exch Date	Buy Rate	Selling Rate
BPS	BRITISH POUND STERLING	19/10/1999	82.000000	83.000000
BPS	BRITISH POUND STERLING	16/06/1999	80.000000	81.000000
USD	AMERICAN DOLAR	10/06/1999	53.500600	54.500010
USD	AMERICAN DOLAR	10/03/1999	56.006700	57.056780
USD	AMERICAN DOLAR	01/01/1999	64.007600	65.000100

Enter Code for Currency of maximum length 5 charcters. Press Enter or Tab to save.
Record: 1/5   List of Values

Credit Manager Maintenance - [arm110]

Accounts Receivable

Credit Manager	Name	Region	Region Description
IA	FTIKHAR AHMAD	NWFP	N W F P
KH	KASHIF HAIDER	PUN	PUNJAB
MA	MASOOD AHMAD	PUN	PUNJAB
SP	SAULAT RAHMAN	BAL	BALUHISTAN

Enter CreditManager (code valus), maximum of 5 characters
Record: 1/4

Developer/2000 Forms Runtime for Windows 95 / NT

Action Edit Query Block Record Field Window Help

Terms of Payment Maintenance - (arm150)

Accounts Receivable

TermsOf Payment	Description	Discount Percentage	Disc Days	Due Days
10	DUE AFETR 10 DAYS	5	5	10
20	NET 20 DAYS,NO DISC	0	0	20
30	NET 30 DAYS, NO DISC	0	0	30

Enter Terms Of Payment (code value), maximum of 5 characters
Record: 1/3

Developer/2000 Forms Runtime for Windows 95 / NT

Action Edit Query Block Record Field Window Help

Sales Person Maintenance - (arm160)

Accounts Receivable

Sales Person 100
Region PUN

Name FAISAL TAIMUR
Description PUNJAB
Address 100 - RACECOURSE ROAD

State PAKISTAN
City LAHORE

EMail FAISAL@HOTMAIL.COM
Tel 223-7789
Fax 223-7789

Sales Person 200
Region SIN

Name TAHIR QURESHI
Description SINDH
Address 34 - FARE ROAD
NORTH KARACHI - 41002
State PAKISTAN
City KARACHI

EMail TQURESHI@INET.COM
Tel 223-0987
Fax

Sales Person
Region

Name
Description
Address

State
City

EMail
Tel
Fax

Enter Sales Person (code value), maximum of 5 characters
Record: 1/2

ARM Bank Maintenance - [arm170]

Accounts Receivable

Bank	Description
100	COMMON CUSTOMER BANK

Description of ArmBank

Bank Info

Account 12345-6

Contact SALEEM KHAWAJA

Address HABIB BANK LIMITED, AABPARA BRANCH,   Telephone No 123-4567
         SLAMABAD

Account Numbers

	Station	Dept	Acct No	Description
Cash	SL	ADM	11000	ACCOUNTS RECEIVABLE
Freight	SL	ADM	13000	FREIGHT PAYABLE
Duty	SL	ADM	14000	CUSTOMS DUTY PAYABLE
Insurance	SL	ADM	18000	INSURANCE ACCOUNT
Octrol	SL	ADM	16000	GOP OCTROL PAYABLE
Receivable	SL	ADM	11000	ACCOUNTS RECEIVABLE
GS Tax	SL	ADM	20000	GENERAL SALES TAX
CE Duty	SL	ADM	19000	CENTRAL EXCISE DUTY
Misc	SL	ADM	17000	MISC. ACCOUNT
Disc	SL	ADM	15000	CUSTOMER DISCOUNT
Gain/ Loss	SL	ADM	21000	EXCHANE GAIN OR LOSS

Enter Arm Bank (code value), maximum of 5 characters
Record 1/2

Alternative A\R Maintenance - (arm180)

Accounts Receivable

Alt A/R	Description	Station	Dept	Alt A/R Account	Description
ALT1	ALTERNATIVE A/R FOR CUSTOMERS	SL	ADM	21000	EXCHANE GAIN OR LOSS
	Description of Alt A/R				

Enter AltAr (code value), maximum of 5 characters
Record 1/1

Developer/2000 Forms Runtime for Windows 95 / NT

Action Edit Query Block Record Field Window Help

Customer - (arm190)

Accounts Receivable

Customer

ASI	Name	ASIM RANA
	Address	HOUSE NO 34 Name of Customer
	City	ISLAMABAD
	State	PAKISTAN

Status [I]

Defaults

Region	PUN	PUNJAB
Sales Person	200	TAHIR QURESHI
Disc Pct	10.00	
Bank	100	COMMON CUSTOMER BANK
Alt A/R	ALT1	ALTERNATIVE A/R FOR CUSTOMERS
Currency	USD	AMERICAN DOLAR
Terms of Trade	C&F	COST AND FREIGHT ONLY
Payment Terms	20	NET 20 DAYS,NO DISC
Payment Mode	CASH	CASH ON DELIVERY
ShipVia	NLC	NATIONAL LOGISTIC CELL
Credit Manager	MA	MASOOD AHMAD
Credit Lt	100	

Ship to Locations

Loc		
1	Addr	BLUE AREA ISLAMABAD
		ISLAMABAD
	City	ISLAMABAD
Loc	State	PAKISTAN
2	Addr	F-10 MARKAZ ISLAMABD
		ISLAMABAD
	City	ISLAMABAD
	State	PAKISTAN

Contacts

Seq		
1	Name	KALIL AHMAD
	Designation	MANAGER
	E Mail	KHALIL@HOTMAIL.COM
Seq	Tel	12346576 Fax 435645-345
	Name	
	Designation	
	E Mail	
	Tel	Fax

Enter Customer (code value), maximum of 5 characters
Record: 1/?

Developer/2000 Forms Runtime for Windows 95 / NT

Action Edit Query Block Record Field Window Help

ARM Invoice Entry - (arm210)

Accounts Receivable

Batch 200   Period 2   Year 1999

Out of Balance Invoices

Customer	Name	Type	Invoice	Inv Date	Inv Amount	Remain Dist
ASI	ASIM RANA	A	1BC-6000	02/02/1999	7,000.00	3,700.00
ASI	ASIM RANA	I	ABC-5000	01/01/1999	4,000.00	2,400.00

Enter Batch number , maximumlength = (8)
Record: 1/1

Action Edit Query Block Record Field Window Help
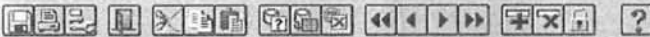
ABM Invoice Entry - (arm210)

Accounts Receivable

Batch	200		Period 2	Year 1999

Customer	ASI	ASIM RANA
Mode	CASH	CASH ON DELIVERY
Terms	20	NET 20 DAYS,NO DISC
Trade Trm	C&F	COST AND FREIGHT ONLY
Ship Via	NLC	NATIONAL LOGISTIC CELL
Salesman	200	TAHIR QURESHI
Bank	100	COMMON CUSTOMER BANK

Type ADV ▼ Inv 1BC-6000 ApplyTo

Inv Date 02/02/1999 Due Date 22/02/1999

Curr USD AMERICAN DOLAR

Exch Rate 64.010000 Disc% .00 Disc Dte 02/02/1999

Ref TEST REFRENCE

Descr TEST DESCRIPTION

Amounts	
Invoice	7,000.00
Freight	400.00
Duty	400.00
Insur	500.00
CED	500.00
Octrol	600.00
GST	600.00
Misc	200.00
Disc	100.00
Remain Dist	3,700.00

Seq	Type	Station	Dept	Acct Num	Description	Amount	Status
9	U	KAR	ADM	1000	ACCOUNTS RECEIVABLE	500.00	N
					Ref TEST REFERENCE		
10	U	ISL	ADM	19000	CENTRAL EXCISE DUTY	300.00	N
					Ref TEST REFERNCE		
11	U	ISL	ADM	23000	TEST ACCOUNT NO 2	700.00	N
					Ref TEST REFERNCE		

FRM-40401: No changes to save.

Record: 1/? List of Values

Action Edit Query Block Record Field Window Help

Vendor Maontenance - (apm140)

Accounts Receivable

Vendor ASI Status I

Name ASIF MIAN & SONS

Address ALGHANI PLAZA BLUE AREA

MAIN BLUE

City ISLAMABAD

State PAKISTAN

Telephone 1423467 Fax 7675845845

Email AIS_MIAN@HOTMAIL.COM

Contact Person BADAR-U-DIN AHMAD SHEIKH

Defaults

Bank	1000	PAYABLE BANK
Alt A/P	ALTAP	ALTERNAIVE A/P AHMAD FOODS
Currency	PRS	PAKISTANI RUPEES
Payment Terms	10	DISCOUNT ALLOWED

Enter Vendor (code value), maximum of 5 characters

Record: 1/?

Action Edit Query Block Record Field Window Help

APM Invoice Entry - (apm210)

Accounts Receivable

						Amounts
Batch	100		Period 1	Year 1999	Invoice	1,000.00
Vendor	ASI	ASIF MIAN & SONS			Freight	100.00
Terms	10	DUE AFETR 10 DAYS			Duty	100.00
Bank	1000	PAYABLE BANK			Insur	100.00
Type	INV	Inv ABC-1000	Apply To		CED	100.00
Inv Date	10/11/1999	Due Date 20/11/1999			Octrol	100.00
Disc%	5.00	Disc Dte 15/11/1999			GST	100.00
Curr	PRS	PAKISTANI RUPEES			Misc	100.00
Exch Rate		1.000000			Disc	100.00
Ref						
Descr					Remain Dist	100.00

Seq	Type	Station	Dept	Acct Num	Description	Amount	Status
9	U	SL	ADM	11000	ACCOUNTS RECEIVABLE	100.00	N
				Ref			
				Ref			
				Ref			

Enter Customer (code value), maximum of 5 characters
Record: 1/1   List of Values

Start | Microsoft Word - Screens | Developer/2000 Form...   5:15 PM

Action Edit Query Block Record Field Window Help

APM Bank Maintenance - (apm120)

Accounts Payable

Bank   Description
1000   PAYABLE BANK

		Bank Info
Account	9999-8	
Contact	HABIB BANK LIMITED	
Address	MAIN BRANCH AAB PARA	Telephone No 123123

	Station	Dept	Acct No	Description	Account Numbers
Cash	SL	ADM	12000	CASH IN BANK	
Freight	SL	ADM	13000	FREIGHT PAYABLE	
Duty	SL	ADM	14000	CUSTOMS DUTY PAYABLE	
Insurance	SL	ADM	18000	INSURANCE ACCOUNT	
Octrol	SL	ADM	16000	GOP OCTROL PAYABLE	
Payable	SL	ADM	11000	ACCOUNTS RECEIVABLE	
GS Tax	SL	ADM	20000	GENERAL SALES TAX	
CE Duty	SL	ADM	19000	CENTRAL EXCISE DUTY	
Misc	SL	ADM	17000	MISC. ACCOUNT	
Disc	SL	ADM	15000	CUSTOMER DISCOUNT	
Gain/ Loss	SL	ADM	21000	EXCHANE GAIN OR LOSS	

Enter Apm Bank (code value), maximum of 5 characters
Record: 1/1

Start | Microsoft Word - Screens | Developer/2000 Form...   5:16 PM

Developer/2000 Forms Runtime for Windows 95 / NT

Action Edit Query Block Record Field Window Help

Receipt Entry - [arm220]

Accounts Receivable

Batch	100				
Customer	NAV	NAVEED ILYAS		Rcpt Amount	100
Type	Chec ▾	Reciept No 123	Rcpt Date 24/06/1999	Bal	0
Curr	PRS	PAKISTANI RUPEES	ExchRate 1.000000		
Rcpt Bank	HBI	HABIB BANK	Check No 12312	Check Date 01/01/1999	
Card Type			Card No		
Ref	QWEQWE		Val Date		

Payment Distribution

Invoice	InvDate	Balance	Applied Amount	Applied Disc

Open Invoices

Record: 1/1

Start | Microsoft Word - Screens | Developer/2000 Form... | 5:21 PM

Developer/2000 Forms Runtime for Windows 95 / NT

Action Edit Query Block Record Field Window Help

Payable Receipt Entry - [apm220]

Accounts Payable

Batch	100				
Vendor				Rcpt Amount	
Type	Cash ▾	Reciept No	Rcpt Date	Bal	
Curr			ExchRate		
Rcpt Bank			Check No	Date	
Card Type			Card No		
Ref			Val Date		

Open Invoices

Invoice	Inv Date	Curr	FC Amount	LC Amount	FcDisc	LcDisc

Select | Cancel

Record: 1/1

Action Edit Query Block Record Field Window Help

Receivable Accounts Post - (arm410)

Accounts Receivable
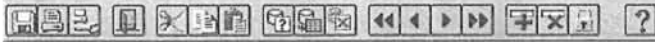
					Post	Status
Batch 100	Period 1	Year 1999			☑	Ready to Post

Type	Invoice	Inv Date	Due Date	Inv Amount (FC)	Customer	Curr	Reference
I	ABC-2000	11-FEB-1999	03-MAR-1999	300,00	NAV	PRS	TEST1

Customer
Currency

Post

Record: 1/?

Appendix D

Sample Reports

Kashif Enterprise

CUSTOMER LIST

Selection [From: Dnop   To: Rafhn   ]

Customer	Name	Address	City/State	Region	Sales Person	Disc %	Default Currency
DNOP	DATA NETWORK OPERATORS	14 - Marine Drive Road, Eastern Hill Avenue	Ca U S A	International Customer	Razzaq Ali	2.00	American Dollar
HAROD	HARODS STORES	45 - Wembley Shopping Blvd,	London East, U K	International Customer	Iftikhar Ahmad	1.75	British Pound Sterling
KHURR	KHURRAM COMPUTER ENGINE	44-Main Blue, Sehgal Street, Nisha Tow Servis Road	Karachi Pakistan	Sindh	Razzaq Ali	10.00	Pakistani Rupee
LEVER	LEVER BROTHERS PAKSTAN	41- Avari Hotel Plaza Shahra-E-Faisal	Karachi, Cantt. Pakistan	Sindh	Razzaq Ali	3.50	Pakistani Rupee
PCC	PAKISTAN CABLES	103 - Factory Area	Lahore Pakistan	Punjab	Iftikhar Ahmad	2.50	Pakistani Rupee
RAFHN	RAFHAN FOOD FACTORY	93 - Industrial Area, I - 9/2	Islamabad Pakistan	Punjab	Iftikhar Ahmad	0.00	Pakistani Rupee

Customer Statement of Account

As of : 02/08/1999

Customer   DNOP   DATA NETWORK OPERATORS

Type	Invoice	Invoice Date	Due Date	Reference	Currency	Invoice Amount (FC)	Applied Disc. (FC)	Invoice Amount (LC)	Applied Disc. (LC)	Balance (LC)
Invoice	INV-101	17/06/1999	02/07/1999	DNOP/TF-101	American Dollar	1,200.00		61,202.81		25,501.1
Invoice	INV-100	04/07/1999	19/07/1999	DNOP/TF-100	American Dollar	1,000.00		50,324.32		0.0
Invoice	INV-103	17/04/1999	02/05/1999	DNOP/TF-103	American Dollar	1,800.00		96,820.38		96,820.3
Invoice	INV-105	05/03/1999	20/03/1999	DNOP/TF-104	American Dollar	450.00		24,300.43		24,300.4
Invoice	INV-106	02/02/1999	17/02/1999	DNOP/TF-106	American Dollar	850.00		45,900.82		45,900.8
Invoice	INV-104	21/03/1999	05/04/1999	DNOP/TF-104	American Dollar	560.00		30,240.54		30,240.5
Invoice	INV-102	04/05/1999	19/05/1999	DNOP/TF-102	American Dollar	1,200.00		64,546.92		64,546.9

Net Receiveable   287,310.2

Local Currency   Pakistani Rupe

Receivable Aging

Below 30	Over 30	Over 60	Over 90	Over 120
0.00	25,501.17	64,546.92	127,060.92	70,201.25

Kashif Enterprise
Customer Invoice Aging

Selection [From: Dnop   To: Rafhn   ]

Customer	Name	Total A/R (LC)	Below 30 Days	Over 30 Days	Over 60 Days	Over 90 Days	Over 120 Days
DNOP	DATA NETWORK OPERATORS	287,310.26		25,501.17	64,546.92	96,820.38	70,201.25
HAROD	HARODS STORES	484,449.47	84,000.11	144,674.79		54,040.52	201,734.05
KHURR	KHURRAM COMPUTER ENGINEER						
LEVER	LEVER BROTHERS PAKSTAN	13,147.00			9,247.00		10,400.00
PCC	PAKISTAN CABLES	10,439.04	1,600.00	8,839.04	14,000.00	1,000.00	
RAFHN	RAFHAN FOOD FACTORY	90,044.90	34,000.00	12,050.00	22,478.25		29,567.25
	Grand Total:	885,390.67	119,600.11	191,065.00	110,272.17	151,860.90	311,902.55

Kashif Enterprise

Vendor List

Selection [From: Apolo   To: Zahim   ]

Vendor	Name	Address	City/State	Sales Person	Default Currency	Status
APOLO	APOLO ENGINEERING ASSOCIATES	508 - Emrald Plaze, St Louis Road Velly Blvd,	Berlin Germany	Mr. Kjell Larsson	German Mark	Active
NORTL	NORTEL - NORTHERN TELECO	17 - Lafayet Plaza, Palace Square	Buffalo, Ny, Usa	Ms. Mayerna Jervosso	American Dollar	Active
PTCL	PAKISTAN TELECOMMUNICATI PVT LTD	34 - Taimur Plaza, Melody Market	Islamabad Pakistan	Mr. Shahid Alvi (Product Manager)	Pakistani Rupee	Active
SYDEN	SYED ENGINEERS PVT. LTD.	33 - Syed Towers, Main Blvd, Jail Road,	Lahore Pakistan	Mr. Zahid Javed Ch. (Customer Suppo	Pakistani Rupee	Active
ZAHIM	ZAHIM ENTERPROSES	40 - Mahmood Plaza, Bank Road,	Rawalpindi Cantt. Pakistan	Mr. Tanveer Sheikh (Customer Suppor	Pakistani Rupee	Active

Kashif Enterprise

Vendor Statement of Account

As of :   02/08/1999

Vendor   APOLO   APOLO ENGINEERING ASSOCIATES

Type	Invoice	Invoice Date	Due Date	Reference	Currency	Invoice Amount (FC)	Applied Disc. (FC)	Invoice Amount (LC)	Applied Disc. (LC)	Balance (LC)
Advance	ADV/550	12/03/1999	12/03/1999	AP/ADV-550	German Mark	1,300.00		33,800.01		-33,800.0
Debit	DBT-551	15/07/1999	15/07/1999	AP/DBT-551	German Mark	640.00		17,216.49		-17,216.4
Invoice	INV-500	03/07/1999	19/07/1999	AP/INV-500	German Mark	1,000.00		26,900.76		26,900.7
Invoice	INV-501	03/06/1999	19/06/1999	AP/INV-501	German Mark	15,400.00		414,271.72		414,271.7
Invoice	INV-502	05/05/1999	21/05/1999	AP/INV-502	German Mark	700.00		18,830.53		18,830.5
Invoice	INV-504	15/07/1999	31/07/1999	AP/INV-504	German Mark	750.00		20,175.57		20,175.5
Invoice	INV-505	01/02/1999	17/02/1999	AP/INV-504	German Mark	1,000.00		24,654.00		24,654.0
Invoice	INV-503	06/04/1999	22/04/1999	AP/INV-503	German Mark	600.00		15,600.01		15,600.0

Net Payable   469,416.0

Local Currency   Pakistani Rupe

Payable Aging

Below 30	Over 30	Over 60	Over 90	Over 120
47,076.33	414,271.72	18,830.53	15,600.01	24,654.00

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Kashif Enterprise
Vendor Invoice Aging

02/08/1999

04:07:00 P

Selection [From: Apolo   To: Syden   ]

Vendor	Name	Total A/R (LC)	Below 30 Days	Over 30 Days	Over 60 Days	Over 90 Days	Over 120 Days
APOLO	APOLO ENGINEERING ASSOCIAT	486,632.58	47,076.33	414,271.72	18,830.53	15,600.01	24,654.00
NORTL	NORTEL - NORTHERN TELECOM	214,299.73	50,543.54	36,639.01	72,900.01	36,450.01	106,218.36
PTCL	PAKISTAN TELECOMMUNICATION PVT LTD	96,635.00	17,000.00	1,345.00	75,045.00	6,745.00	6,500.00
SYDEN	SYED ENGINEERS PVT. LTD.						
	Grand Total:	797,567.31	114,619.87	452,255.73	166,775.55	58,795.01	137,372.36

Appendix E

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