





# FOUNDRY MANAGEMENT SYSTEM

Ву

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Of

# KUMARAGURU COLLEGE OF TECHNOLOGY COIMBATORE-641006 (Affiliated to Anna University)

A PROJECT REPORT

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Of

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## KUMARAGURU COLLEGE OF TECHNOLOGY COIMBATORE

**Department of Computer Applications** 

## BONAFIDE CERTIFICATE

Certified that this project report titled FOUNDRY MANAGEMENT SYSTEM is the bonafide work of Mr. R. KARTHIKEYAN (Reg.No: 71203621020) who carried out the research under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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## TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. R. Karthikeyan (03MCA20), Kumaraguru College of Technology, Coimbatore has successfully completed the project titled "FOUNDRY MANAGEMENT SYSTEM" for our concern, under the guidance of Mr. R. Sethuraman (Project Leader). His effort towards successful completion of the project from January 2006 to June 2006 is appreciable.

We wish all the best in his future endeavors.

For Metronet Communications,

Gavathri

Administrator

#### **ABSTRACT**

The Project Titled "FOUNDRY MANAGEMENT SYSTEM" aims at producing a cost effective as well as a paperless environment. This coordinates various departments which help in producing a quality product. The Process Flow through each department is saved for future use and moreover problem tracking is made easy.

The project consist of four modules they are listed below

- 1. Marketing Management Module
- 2. Purchase Order Management Module
- 3. Manufacturing Department Module
- 4. Sales Department Module

Marketing Management Module is the primary module that interacts with the client's request as the marketing person gets the new order for the product through phone calls and executives

Purchase Order Management Module department is responsible for the purchase of the parts/products required by client as per the information provided by the Warehouse Department.

The Manufacturing Department Module will work on the client's request to develop the product needed.

The Sales Department Module is the final module which interacts with client's to provide them the final product as a fulfillment of their requirements with in the stipulated period.

#### **ACKNOWLEDGEMENT**

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## LIST OF SYMBOLS AND ABBREVIATIONS

DFD	-	Data Flow Diagram
SQL	-	Structured Query Language
ODBC	-	Object Database Connectivity
IDE	-	Integrated Development Environment
GUI	-	Graphical User Interface

#### INTRODUCTION

#### 1.1 Overview of the Project

This project **FOUNDRY MANAGEMENT SYSTEM** is purely based on the Management of an effective Organization. It deals with passing information between the departments for interaction between departments.

- Marketing Department
- Purchase Department
- Manufacturing Department
- Sales Department

These are the various departments the main objective of this project is to computerize the activities of these departments and to provide effective communication between departments.

## 1.2 Organization Profile

Metronet Communication was formed in 1999. In response to the following market conditions: Metronet Communication is a Product development company. Metronet Communication has entered in to nanotechnology development products. Metronet Communication products visions are towards Wireless Networking, Embedded systems, DSP, 3G, CDMA areas. Keeping the long term growth objectives in mind, Metronet Communication evolved business relationships with the leading companies in providing software solutions. It plans to address both overseas and the Indian Market.

Metronet Communication has established relationship with clients, both in India and abroad who often contact us for developing projects. Metronet Communication keeps in touch with emerging and growing companies. Metronet Communication presents their abilities and achievements to someone in a position not only to fully appreciate them. Metronet Communication are not part of a network which allows others access to their identity / information, their identity will never be shared with any one except a potential employer. The services offered are: Software Development – Off Shore / On-Site on Java, .Net, Telecom, DSP and Embedded Systems.

- Product on DSP, Micro controller and Embedded Systems
- > IT Enable Services
- Product Related Solutions
- > The Consultancy Service

#### SYSTEM STUDY AND ANALYSIS

#### 2.1 EXISTING SYSTEM

The existing system maintains the records manually. There will be no proper integration between the Departments because the employees will not interact with each other. There will be no proper transfer of records between the Departments. Some records may be lost due to improper maintenance.

#### 2.1.1 Drawbacks of Existing System

The Existing System has the following drawbacks,

- We cannot give the guarantee because data in papers can be erased easily at any time.
- It takes long time to find any employee details.
- There may be a chance of error occurrence at the time of entering the data.
- As it is done manually, it becomes a time consuming process.
- It is difficult to prepare reports.
- It is difficult to find the completed reports.
- And also, Maintenance of reports is tough task because there may be chance for missing data.

#### 2.2 Proposed System

The proposed system is based on computerizing the existing manual system. In this system the department activities are computerized and the information is passed between the departments for effective communication.

## 2.2.1 Need for Proposed System

The proposed system has the following benefits,

- This system does not want a huge number of notebooks and stationeries.
- 2. Searching process is easier.
- 3. Only the Administrator can do the modifications.
- 4. Reports can be easily generated.
- There is no chance of error occurrences during the time of entering the data.
- 6. It will reduce the Time.

## 2.3 Feasibility Analysis

## 2.3.1 Technical Feasibility

Technical feasibility takes care of the technical issues that are to be tested to see whether to see whether the system is feasible. Technical feasibility analysis makes a comparison between the level of technology available and the technology that is needed for the project. The level of technology is determined by factors such as the software tools available, the machine environment, platform etc since, the resource required for the development of the project is already available in the organization, and this project is technically feasible.

## 2.3.2 Economic Feasibility

Economic feasibility is a measure of the cost-effectiveness of a project or solution. The system has been designed to work for any type of system configuration and platform. Since the effort to develop the product was found to be feasible, the development presents a good investment for the organization. Hence the proposed system is economically feasible.

## 2.4 PURPOSE OF THE PROJECT

- To maximize the customer
- To reduce the workload of employee
- To reduce the cost as possible as
- Increase the speed of system execution by retrieves any stored data quickly
- Provide way to generate required reports to know the business status

#### SYSTEM REQUIREMENT AND SPECIFICATION

The Software Requirements Specification is a technical specification of requirements for the software product. The goal of software requirements definition is to completely and consistently specify the technical requirements for the software products in a concise and unambiguous manner.

The Software Requirements Specification is based on the system definition high-level requirements specified during initial planning, are elaborated and more specific in order to characterize the features that the software product will incorporate the requirement specification is primarily concerned with functional and a performance aspect of the software product and emphasis is placed on specifying product characteristics without implying how the product will provide those characteristics.

#### 3.1 HARDWARE SPECIFICATION

The hardware components on which this application is developed are,

PROCESSOR : PENTIUM IV

RAM : 256 MB

POWER SUPPLY : 300 V

HARD DISK DRIVE : 80 GB

KEYBOARD : 108 KEYS MICROSOFT

MONITOR : 17" LG COLOR MONITOR

#### 3.2 SOFTWARE SPECIFICATION

OPERATING SYSTEM

: WINDOWS 2003 SERVER

LANGUAGE

: VB.NET

BACK-END

: SQL SERVER 7.0

#### 3.3 SOFTWARE OVERVIEW

#### Front End Used:

Microsoft Visual Basic .Net used as front end tool. The reason for selecting Visual Basic dot Net as front end tool as follows:

- Visual Basic .Net has flexibility, allowing one or more language to interoperate to provide the solution. This Cross Language Compatibility allows to do project at faster rate.
- Visual Basic .Net has Common Language Runtime, that allows the entire component to converge into one intermediate format and then can interact.
- Visual Basic .Net has provided excellent security when your application is executed in the system.
- Visual Basic .Net has flexibility, allowing us to configure the working environment to best suit our individual style. We can choose between a single and multiple document interfaces, and we can adjust the size and positioning of the various IDE elements.
- Visual Basic .Net has intelligence features that make the coding easy and also Dynamic help provides very less coding time.
- The working environment in Visual Basic .Net is often referred to as Integrated Development Environment because it integrates many different functions such as design, editing,

- compiling and debugging within a common environment. In most traditional development tools, each of separate program, each with its own interface.
- ❖ The Visual Basic .Net language is quite powerful if we can imagine a programming task and accomplished using Visual Basic .Net.
- After creating a Visual Basic .Net application, if we want to distribute it to others we can freely distribute any application to anyone who used Microsoft windows. We can distribute our applications on disk, on CDs, across networks, or over an intranet or the internet.
- ❖ Toolbars provide quick access to commonly used commands in the programming environment. We click a button on the toolbar once to carry out the action represented by that button. By default, the standard toolbar is displayed when we start Visual Basic .Net. Additional toolbars for editing, form design, ad debugging can be toggled on or off from the toolbars command on the view menu.
- ❖ Many parts of Visual Basic .Net are context sensitive. Context sensitive means we can get help on these parts directly without having to go through the help menu. For example, to get help on any keyword in the Visual Basic .Net language, place the insertion point on that keyword in the code window and press F1.
- Visual Basic .Net interprets our code as we enter it, catching and highlighting most syntax or spelling errors on the fly. It's almost like having an expert watching over our shoulder as we enter our code.

#### Features of Visual Basic .Net

- All new, easy-to-use, powerful IDE
- Full set of controls you 'draw' the application
- Response to mouse and keyboard actions
- Clipboard and printer access
- Full array of mathematical, string handling, and graphics functions
- Can easily work with arrays of variables and objects
- Sequential file support
- Useful debugger and structured error handling facilities
- Easy-to-use graphic tools
- Powerful database access tools
- Ability to develop both Windows and internet applications using similar techniques
- New common language runtime module makes distribution of applications a simple task

#### Overview of SQL SERVER 7.0

SQL Server7.0 is the 100% ANSI SQL compatible relational database management system. It is available on the wide range of mainframes, minis, and microcomputers. It offers both relational database and object oriented database facilities. Managing large amount of data could present administrative and performance problem. SQL Server 7.0's data partitioning help to minimize the program. Each of the partition can be managed individually, thereby allowing more efficient management of database. In it all information are stored as simple tables consisting of rows and columns.

## There are three categories of tools provided by the SQL Server 7.0

- To perform the administration of the database
- · For control access to data in the database
- To control the manipulation of the data in the database

#### Features of SQL Server 7.0

- SQL compatibility
- Portability
- Connect ability

#### Advantages of SQL Server 7.0

- It can store hundred million terabytes of data
- It supports 32 bit processors
- It is possible of to execute 16 simultaneous instances of a single SQL server
- It supports replications, transactions, distribution, remote access and much more
- It support both GUI and CUI concepts

#### SYSTEM DESIGN AND DEVELOPMENT

#### 4.1 INPUT DESIGN

Input design is the process of converting user originated inputs to a computer based format. Input design is the part of the System design if it is incorrect then the processing and output will magnify the errors. Inaccurate input data is the most common cause of errors in data processing. The main objective of designing input focus on,

- Controlling the amount of input required.
- Avoiding delayed response.
- · Controlling errors.
- Keeping process simple.
- Avoiding errors.

The required inputs are stored in the form of tables. They may be numeric and alphanumeric input screen should be user friendly, so that every one can access the options without having the complete system knowledge.

#### **4.2 OUTPUT DESIGN**

The output must be provided in such a format that the people can understand. After analyzing the operations of the systems, output information required for each jobs are determined. In addition to this, these outputs may be in format suitable to input for subsequent processing.

A major form of output is a hard copy from the printer. Printout should be designed around the output requirements of the user. Efficient intelligible output design should improve the system relationship with user. Output design refers to the results generated by the system. The output of a system can take many forms. The most common forms are reports, screen displays, printed form and graphical drawing forms.

The normal procedure in developing a system is to design the output in detail first and then move back to the input. The output will be in the forms of views and reports.

#### 4.3 ARCHITECTURAL DESIGN

Architectural design is concerned with refining the conceptual design of the system, identifying internal processing functions, decomposing high level functions into sub functions, defining internal data streams and data stores and establishing relationships and interconnections among functions, data streams and data stores. The modules are.

- > Marketing Management Module
- > Purchase Order Management Module
- Manufacturing Department Module
- Sales Department Module

### Marketing Management Module

Marketing Management Module is the primary module that interacts with the client's request as the marketing person gets the new order for the product through phone calls and executives. The client's requests are stored in database.

#### **Purchase Order Management Module**

Purchase Order Management Module department is responsible for the purchase of the parts/products required by client as per the information provided by the Warehouse Department. The purchase products are send back to the Warehouse Department.

#### **Manufacturing Department Module**

The Manufacturing Department Module will work on the client's request to develop the product needed. It will develop the remaining products once when the product is approved by the Quality Department.

#### **Sales Department Module**

The Sales Department Module is the final module which interacts with client's to provide them the final product as a fulfillment of their requirements with in the stipulated period.

#### **4.4 DATABASE DESIGN**

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective of database design is to make the data access easy, inexpensive and flexible to the user. The design of the database is one of the most critical parts of design phase. An elegantly database can play as a strong foundation for the whole system. The details about the data relevant for the system are identified first.

According to their relationship, tables are designed by the following standard database design methods. The data types for each data item in the tables are decided. For the optimum design of the database, to have

better response time, to have data integrity, to avoid redundancy and for the security of the database all the tables created are normalized. The database design is done according to the procedure. The database design transforms the information domain model created during the analysis into the data structure that will be required to implement the system software. The database design is made up of two levels,

- Conceptual level
- ❖ Normalization

#### Conceptual Level

The level represents the major data object and relationship between them. Conceptual level describes the essential features of the system data. Just like a DFD for a system, the conceptual level uses symbols for modeling method called Entity Relationship model.

Relationship between entities makes the database structure. Four type of relationship exist among entities. They are, one-to-one, one-to-many, many-to-one, and many-to-many. A one-to-one relationship is an association between two entities. A one-to-many relationship describes an entity that may have two or more entities related to it. Likewise a many-to-many relationship describes entities that have many relationships.

#### Normalization

After the conceptual level, the next level to organize the database to a good shape is called normalization. The normalization simplifies the entities, removes the redundancies from the system data and finally builds a data structure, which is both flexible and adaptable to the system. Normalization offers a systematic step-by-step approach towards this goal. The different normal form applied is given below,

- First normal form (NF)
- ❖ Second normal form (2NF)
- ❖ Third normal form (3NF)

The database is designed sing RDBMS concept there by enabling the sharing of data and was normalized to avoid the redundancy. This will lead to quicker application development with low maintenance cost.

#### **4.5 TABLE STRUCTURE**

#### **BRAND**

FieldName	Data Type	Length	Key	Description
Brandcode	varchar	10	Р	Brand code
Brandname	Varchar	50		Brand name
Isactive	Varchar	20		If it is active or not
Remarks	Varchar	100		Remarks of the brand

Table 4.5.1 BRAND

#### **DRAWING**

FieldName	Data Type	Length	Key	Description
Codeno	Int	10	Р	Code number
Drawingno	Int	10		Drawing number
Drawingname	Varchar	50		Drawing name
Materialspec	Varchar	50		Material specification
Pieceweight	Int	10		Piece weight

**Table 4.5.2 DRAWING** 

#### **PROCESS**

FieldName	Data Type	Length	Key	Description
Proccode	Varchar	10	Р	Process code
Procname	Varchar	50		Process name
Classcode	varchar	10	Р	Class code
Subclasscode	varchar	10	Р	Subclass code

Table 4.5.3 PROCESS

## **CUSTOMER**

FieldName	Data Type	Length	Key	Description
Custcode	varchar	10	Р	Customer code
Custname	varchar	30		Customer name
Addr1	varchar	50		Address1
Addr2	varchar	50		Address2
City	varchar	20		City
State	varchar	20		State
Country	varchar	20		Country
Pincode	Int	10		Pincode
Phone1	Int	10		Phone number1
Phone2	Int	10		Phone number2
Faxno	Long	15		Fax number
Email	varchar	30		E – mail
Tngstno	Int	15		Govt Approved No
Cstno	Int	15		Govt Approved No

**Table 4.5.4 CUSTOMER** 

## **SUPPLIER**

Fieldname	Data Type	Length	Key	Description
Supcode	varchar	10	P	Supplier code
Supname	varchar	30		Supplier name
Compname	varchar	50		Company name
Compaddr1	varchar	50		Company address1
Compaddr2	varchar	50		Company address2
Compcity	varchar	30		Company city
Comppincode	Int	10		Company pin code
Compphno	Int	10		Company phone number
Compfaxno	Long	15		Company fax number
Compemail	varchar	50		Company E – mail
Compwww	varchar	30		Company Website
Compmobno	Int	10		Company mobile number

Table 4.5.5 SUPPLIER

#### **SUPERVISOR**

Fieldname	Data Type	Length	Key	Description
Supercode	Varchar	10	Р	Supervisor code
Supername	Varchar	30		Supervisor name
Superaddr1	Varchar	50		Supervisor address1
Superaddr2	Varchar	50		Supervisor address2
Supercity	Varchar	30		Supervisor city
Superpincode	Int	10		Supervisor pin code
Superphno	Int	10		Supervisor phone number
Supermobileno	Int	10		Supervisor mobile number

**Table 4.5.6 SUPERVISOR** 

#### SYSTEM FLOW DIAGRAM

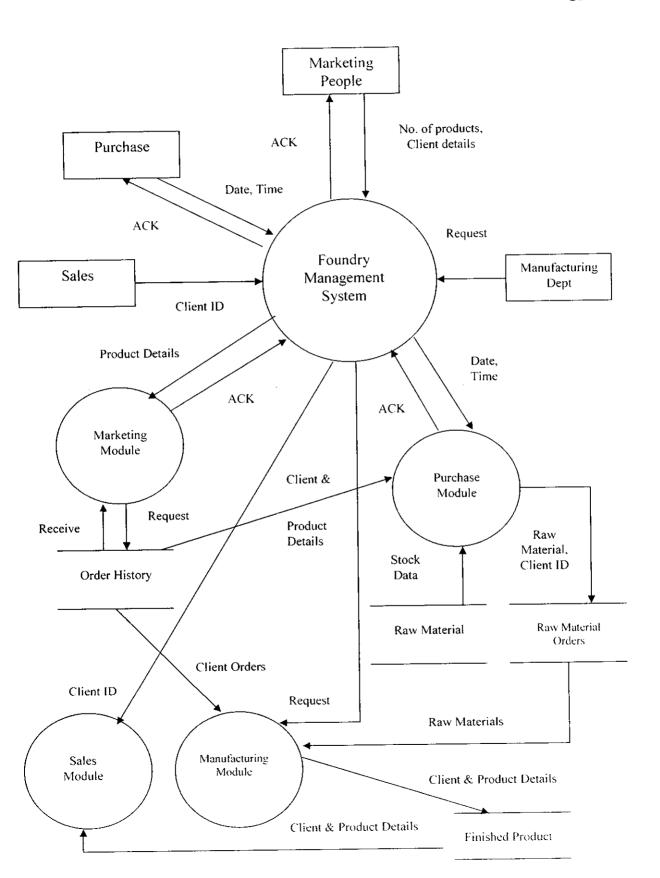
#### 5.1 Data Flow Diagram

The data flow diagram is graphical representation which depicts the information regarding the flow of control and the transformation of data from input to output. The dataflow may be used to represent the system or software at any level of abstraction. In fact dataflow diagram may be partitioned into levels. A level 0 data flow diagram is called the context diagram, which represents the entire software element as single bubble with input and output arrows.

The DFD is a graphical tool for requirement analysis. It depicts the information flow without any explicit representation. In terms of program design the DFD might represent the data flow between individual statement or block of statement.

## **BASIC DFD NOTATION**

Symbols	Descriptions
	Person, hardware and other program
	Process
	Direction of data flow
	Data storage



## SYSTEM TESTING AND IMPLEMENTATION

## 6.1 System Testing

System testing is executing a program to check logic changes made in it and with the intension of finding errors making the program fail. Effective testing does not guarantee reliability. Reliability is a design consideration.

The objective of testing is a process of executing a program with the intent of finding the errors. Testing provides the last option from which quality can be assessed and more programmatically, errors can be uncovered. Testing is an individualistic process and the number of different development approaches. System testing is actually a series of different development approaches. System testing is actually a series of different tests whose primary purpose is to fully exercise the computer-based system. Although each test has a different purpose, all work to verify that all system elements have been properly integrated and perform allocated functions.

Also the system testing is a process of checking whether the developed system is working according to the original objectives and requirements. System should be tested experimentally with the test data so as to ensure that the system works according to the required specification when the system is found working, test it with the actual data and check the performance.

System testing begins by testing program modules separately followed by testing bundled modules as a unit. The total system as a

single unit is tested for recovery and feedback after various failures to ensure that no data are lost during emergency.

There are three major types of system testing they are,

- Unit Testing
- Validation Testing
- Integration Testing

#### 6.1.1 Unit Testing

Unit testing focuses verification effort on the smallest unit of software design that is the module. The unit testing is always whitebox oriented and the step can be conducted in parallel for modules. The module 'interface' is tested to ensure but the information properly flows into and out of the program unit test. The 'local data structures' are examined to ensure that data stored temporarily maintains its integrity during all steps in an execution.

Boundary Conditions' are tested to ensure that module operates properly at boundaries established to limit or restrict processing. All 'independent paths' though the control structure are exercised to ensure that all statements in a module have been executed at least once. Finally, all 'error handling paths' are tested.

#### 6.1.2 Integration Testing

Integration testing addresses the issues associated with the dual problems of verification and program construction. After the software has been integrated a set of high-order tests are conducted.

Integration testing is a systematic technique for constructing the program structure while at the same time conducting tests to uncover errors associated with interfacing.

#### 6.1.3 Validation Testing

At the end of the integration testing, software is completely assembled as a package, interfacing errors have been uncovered and correction testing begins.

Software testing and validation is achieved through a series of black box tests that demonstrate conformity with the requirements. A rest plan outlines the classes of tests to be conducted and a test procedure defines specific test cases that will be used to demonstrate conformity with the requirements. Both the plan and the procedure are designed to ensure that all functional requirements are achieved, documentation is correct and other requirements are met.

After each validation test case has been conducted, one of the two possible conditions exists, they are

- 1. The function performance characteristics confirm to specification and are accepted.
- 2. A deviation from the specification uncovered and a deficiency list is created.

The deviation or error discovered at this stage in a project can rarely be corrected prior scheduled completion. It is necessary to negotiate with the customer to establish a method.

#### 6.2 System Implementation

#### 6.2.1 Implementation Procedure

Implementation is the process of converting a new system into an operational one. The designed system is converted to an operational one using a suitable programming language.

Implementation includes all those activities that take place to convert an old system into new. Proper implementation is essential to provide a reliable system to meet the organizational requirement. The most commonly used implementation methods are pilot running and parallel running.

Processing the current data by a single user at a time is called the pilot running process. When one user is accessing the data at one system the system is said to be engaged and cannot be used by the user at another machine connected in network. This process is used in systems where more than one user is restricted.

Processing the current data by more than a single user at a time is called the parallel running process. The same system can be viewed and accessed at the same time on different machines completed in network. This process is useful in systems where multiple users are entertained.

The implementation phase involves careful planning, investigation of the systems and constraints, design of methods to achieve the change over, the training of staffs in the change over phase and finally the evaluation of the change over. The online examination supports running procedures. It has been designed and developed for use by many users at a time. The examination is attended by many candidates at the same date

and time. So more care is to be taken during the implementation of software.

## There are three types of implementation:

- a. Implementation of computer system to replace a manual system. The problems encountered are converting files, training users, creating accurate files and verifying printouts for integrity.
- b. Implementation of a new computer system to replace an existing one. This is usefully a difficult conversion. If not properly planned, there can be many problems. Some large computer systems have taken as long as year to convert.
- c. Implementation of a modified application to replace an existing one, using the same computer. This type of conversion is relatively easy to handle, provided there are no major changes in the files.



## CONCLUSION AND FUTURE ENHANCEMENT

#### 7.1 CONCLUSION

This project 'FOUNDRY MANAGEMENT SYSTEM' has been designed and developed in VISUAL BASIC .NET and SQL SERVER 7.0. It is very user friendly and provides necessary information through queries, which are easily accessible.

The current system drives away the handles of the previous one and meets the needs and provides valuable information to the management. This software can be operated easily. Any one can easily modify or upgrade this project whenever requirements arise from the user for more effective operations.

The project developed at present is efficient and effective, because it is tested repeatedly in all cases and can be implemented successfully at the site of usage. Project is effective because it is developed with standard codes and also we followed good programming rules to develop.

#### 7.2 FUTURE ENHANCEMENT

In this project the enhancements that can be added are,

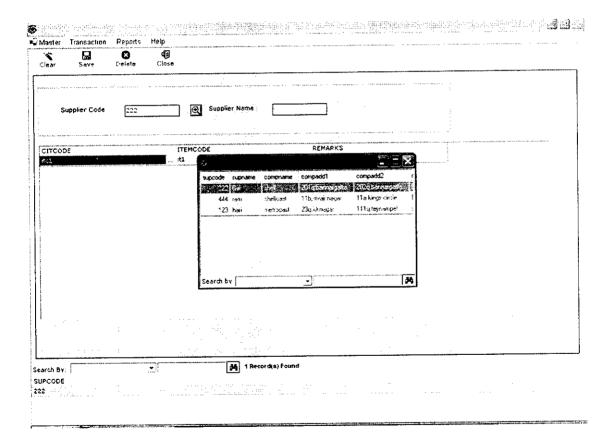
- The branch details of the company can also be added further.
- Many reports can also be added as per the requirement of the company in the future.
- Individual reports can also be generated in future.

## 8. APPENDICES

## **CHART OF ITEMS**

			Chart of Items]					
Master	Transaction	Reports	Help					
Clear	5ave	Delete	Close					
	٠							
			Chart of Item Code:	atc.1				
			Chart of Item Name:	ITNAME1				
			Chart of feel manie.	THANCI				
	:		Item Category Code:	IT1			٠.	
			Item Category Type:	<u>.                                    </u>		•		
			Helli Catedor 1 13be	21				
			Item Category Name	MOULDING				
			Item Status:	S Active / InActive	ė		•	
			Remarks:	SATISFIED				
				: -				
			点 Ax 网络温德		•			
		to salah Lita						
earch By	: Chart Of Ite	m Name	<u>-</u>	5 Record(s) Found				
hart Of I	(tem Code	Chara ITNAME		or, Code Catego	y Type Cobago 11 MOULD	The second secon	Pemarks SATISFIED	
2		ITMOU	LD ITM3		13 MOULD	ING	FAILURE	₩,
:3		ITCAST	rs itcs Ambling itsc4		19 CASTII 29 FILTEP		SATISFIED FAILURE	,

#### SUPPLIER Vs ITEM



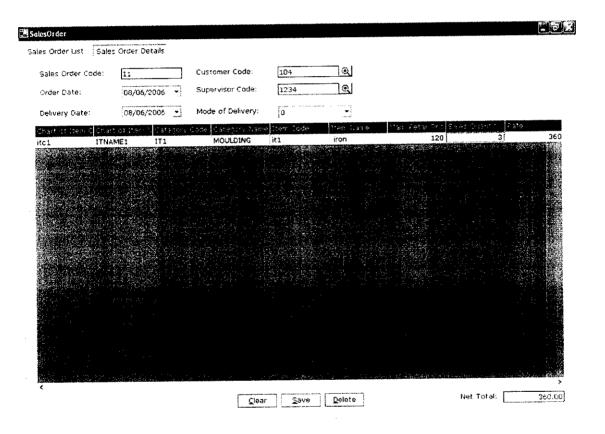
# CHART OF ITEMS SEARCH BY FIELD NAMES

J Feuerica	Маплестеп	System - [C	hart of items]				ك ال ال
⊋ Master	Transaction	Reports					_ = ×
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				: .			
			Chart of Itam Code:	rtc1			
			Chart of Item Name:	ITNAME1			
							-
			Item Category Cods:	IT1			
			Itam Category Type:	11			
			Item Category Name:	MOULDING			
			Item Status:	Active / InActive			
			Remarks:	SATISFIED			
	•					·	
Search By	Chart Of Ite	m Name	. A	5 Record(a) Found			
	Chart Of Ite	The second	171		11 MOULDING	SATISFIED	3,000-00-00-00-00-00-00-00-00-00-00-00-00
itc1 itc2	Category C Category T	ode	ITM3		13 MOUEDING	FAILURE	<b>~</b>
rtc3	Category N	ame	ITCS		19 CASTING	SATISFIED	
i+10	Remerks	TISCAR	meling ITSC4		29 FILTERING	FAILURE	<b>~</b>

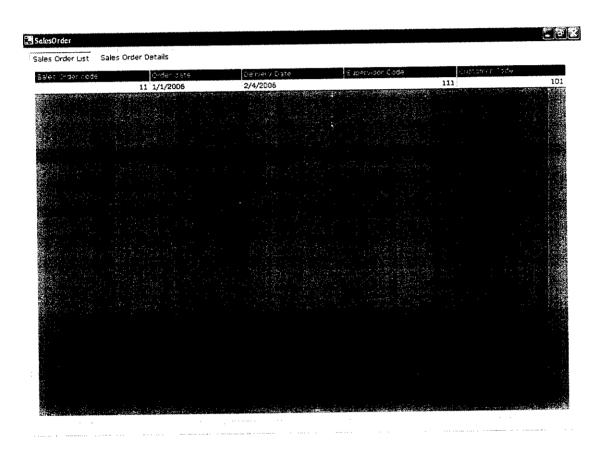
### **BRAND MASTER**

' <b>\</b>  lear	Zo∧e □	<b>(3)</b> <u>D</u> elete	©lose					 		
		:								
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				Orano Name:	br43					
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			br5			v.			GRADE	
			br43	***					GRADE	
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### **SALES ORDER**



### **SALES ORDER**



#### **BRAND MASTER**

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			br3 br3				O GR C GR		
2					T. (		C 30		

### **CUSTOMER DETAILS**

•	Sustamer Code	104		<b>a</b>	Phone 1	47	87909				
1	Customer Name	RAJKUMA	P		Phone 2	98	94243242			]	
	Addressi	53.JALAL	STREET		Fax No	44	11978323			]	
					Email	Kl	UMAROZOYA	M\$3.00H		] !	
	Address2	12/Q,NE	RU NAGAR		TNGST No	T	NG 8006-86			]	
	•				CST No	Ĉ	T543423-75			]	
	City	KANJIPU	RAM		ECC No	E	CC 2963926			]	
	State	TAMILN	ADU		Vendor Code	8	787			]	
	Country	INDIA		_	Schedule No	5	865			]	
	Pincode	625979			Status		C Active	Inactive			
	Finedo	023777									
	***************************************	enus 191	The state of the s								
ch	By:	_	<b>34</b> )	5 Record(s) Foun	1						<u> </u>
1	OJ RAM TR O4 RAJKUMAR 53 O5 UVA 8U	AGAR13 IPLICANE 29/3	TNAGAR 3/5 9),SHRI STREET,TNAGA 12/Q,NERU NAGAR 677,TALL GATE 21E,TOLL GATE	CHENNAI R CHENNAI KANJIPURAM H/DERABAD DARJEELING	TAMILNADU TAMILNADU TAMILNADU ANDRAPRADESH	INDIA INDIA INDIA INDIA INDIA	624791 624788 625979 7866611	2477990 1767867	2334345 4378452 9894243242 57656644 7562372	4490866231 447083332 441978323 807691156 898871212	RAM FUMA

### **DRAWING DETAILS**

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				Code No:	12			
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				Drawing No:	1			
				Drawing Name:	METAL-25			
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ah Bu.	CodeNo		-)(	₫ <b>Ą</b> 6 Reco	rd(s) Found			
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		541 562		SDA-		GRAM KG	30 60	
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### **DRAWING DETAILS**

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		•		Drawing Name: METAL-25	
				MaterialSpec: kg	
				PieceWt: 25	
ı By:	Drawing na	me	METAL	3 Record(s) Found	
io.	San All Profits		ravingilo	Brakinghame MaterialSpic Pice Wit METAL-25 kg ZS	5.727
		1 2	12	METAL-30 TONNE 100	
			52	METAL-40 KG 60	

### **CUSTOMER DETAILS**

Customer Code	104	2	Phone 1	4767909	
Customer Name	RAJKUMAP	J	Phone 2	9894243242	
Addr <del>o</del> ss1	53.JALAL STREET	1	- Fax No	441978323	
•			Email	KUMAR02@YAHOO.COM	
Address2	12/Q,NERU NAGAR	7	TNGST No	TNG 8008-86	
			CST No	CT543423-75	
City	KANJIPURAM		ECC No	ECC 2963926	
State	TAMILNADU	<u> </u>	Vendor Code	9787	
Country	INDIA	7 :	Schedule No	\$865	
Pinsode	625979		Status	- Active/Inactive	
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y: CUSTCODE	<b>→</b> 104 <b>M</b> 11	Record(s) Fol	ınd		
7455550 \$560	LAL STREET 12/Q,NERU NAGAR KAND	DIDAM TO	MINADA ASS	66 Sanot San	

### **ITEM MASTER**

Item Code:   Its   Item Name:   Item Code:   Item Code:	. IN
Itam Name:	
Item Name:	
Chart of Item Code:  Rc3  Unit of Measure (UOM) code:  Rg  Active / InActive	
Unit of Measure (UCM) code: kg    Rem Status: Active / InActive	
Item Status:   ✓ Active / InActive	
row	
Item Type:	
Rate: 129	

Search By: Item		<b>A)</b> 5	Record(s) Found			
Stem Code	ten Name	Chart of Item Co	de UCM	Adire/Inactive	Type	Pare
K1	iron	itcI	kg	9	raw	120
itz	pig iros	ıtc2	ko	~	raw	222
it3	steel	rtc3	kg	.✓.	rave	129
it6	aluminium	ito6	tonne	+ 3	raw	200
it10	steel	RelO	torine	✓:	raw	320
Commence of the Commence of th			**************************************			- 100

### **ITEM MASTER**

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			Rem Code: Into	
			Item Name:   aluminium	
			Chart of Irem Code: to6	
			Unit of Measure (UOM) code: tonne	
			Item Status: Active / InActive	
		•	Item Type:	
			Rate: 200	
	Item Name		olumirium 36 1 Record(e) Found	o annua reneral
्रेश्वयः -	A Profession	Item Non aluminium		0

### **MACHINE DETAILS**

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			# ### # P. W		
				Company code :	c12
				Our branch code :	b12
				Division code :	d12
				Machine code :	m12
	٠	:		Machine name :	welding
		•		Machine status :	P Active / Inactive
				Remarks :	Not satisfied
Search B	>>:	****	<u> </u>	6 Recordie	s) Found
cui cui	de		rbranchoode	divesde d11	machinecode machinenant Leading machine
612		; b:		<b>₫12</b>	m12 Welding
c33		. Б	13	<b>d44</b>	m44 drill
044		b:	.4	d18	m18 roving

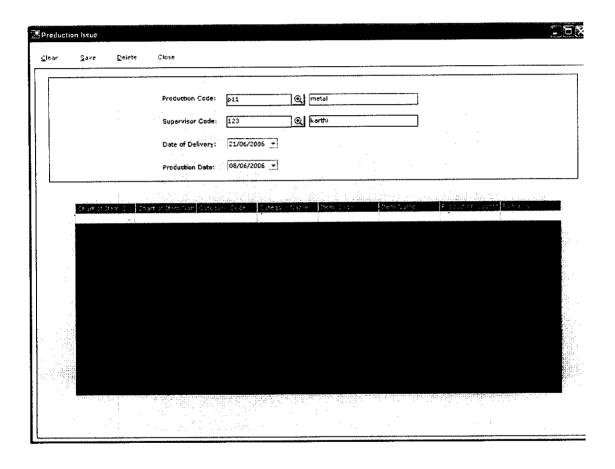
### **MACHINE DETAILS**

Machine	details								×
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				Company code :	¢12				
				Our branch code :	b12				
				Division code :	d12				
				Machine code :	m12				
				Machine name :	welding		•		
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L									
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cti	DIVISION	CODE		<b>đ11</b> <b>đ12</b>		m12		welding	
c12	MACHINE MACHINE	CODE.	1	012 		m44		drill	ي.
c33	IS ACTIVI	E	1	d18		rn18		roving	
044	REMARKS					m19		drill	·
477		t	19	490	**************************************	11117			

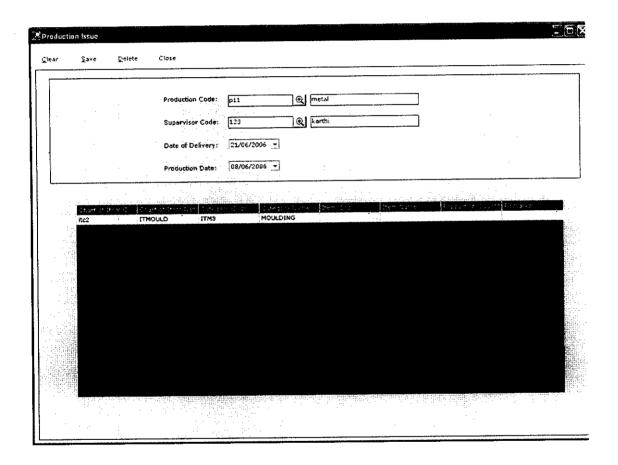
# PROCESS DETAILS

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				* .		
				Process code: 201		
				Process code: 201		
				·		
				Process Name :   welding		
				Class code: 13		
				Cub days andn : 13		
		•		Sub class code : 13		
		÷				
		:		•		
	y: PROCES	e conf	<b>-</b> 201	6 Record(s) Found		
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? •			cnc		14	
5			wel		13 -	
1			wel		69	

#### **PRODUCTION ISSUE**



#### **PRODUCTION ISSUE**



### **QUALITY DETAILS**

Calify				57.35
Company Code		Quality Code		
•	Quality Name	phase1		
•				
!	Measure Type	₩ Measured		
•				
	ts Active	₩ Active		
	Remarks	better	7	
ch By: Quality Code	4 Record(s) Four	<u></u>	· · · · · · · · · · · · · · · · · · ·	
spany Code QualityCode.	QualityName	life ssureYspe and a life A	ctive as	Rémarks better
q11 q13	phase1 phase4	<b>₩</b> <b>₩</b>	. <b></b>	better
qZ3	phase5		T.	to improve good
a q23q	phase7			

### **REASON MASTER**

Reason Ma	2 6	3 🐬				
<u>⊂</u> lear	Save De	icte Class	•			
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			Reason Codo:	RE1		
			1	•		
			Reason Name:	REMACHINE		
			K B B S M 1 1 C M			
				MACHINE FAILURE		
			Reason Category:			
				Ø ACTIVE/INACIVE		
			Reason Status:	N. WC LIPENINACIAE		
				DUE TO MACHINE FAILURE		
			Remarks:			
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	Page 1					
	easonCategory	<b>▼</b> m	A 1 Reco	d(s) Found		
Reason Code		Reblied Name	Category	6c6Ve/I		Remark:
RE1		REMACHINE	MACHINE FA	NURE	<u> </u>	DUE TO MACHINE FAILURE

### **UNIT OF MEASUREMENT**

Unit Of M	eisurment	Form							<u> </u>
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:			Unit of Me	asurement Code:	111				
				asurement name:	Кр			٠	
			Base unit	of measurement code:	bu1				
	- 1		* :						
			Base unit	of measurement name:	Miligram				
			unit of m	easurement status:	iii active inactiv	· •			
			Remarks	:	Rawmaterials				
	-			4					
	1.								
1									
				5 Record(s) Four					
	Unit Of Me	sure Code	feasure name	5 Record(s) Four		se una of Name	Active/II	ecti+8	Remarks
et of Meas	rate Code	111 Kg	Reasons name	bui		ligram	Ľ.		Rawmaterials
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		133 kg		bu3		illigram	 E		Raw materials
		190 tonne 202 height		bu4 bu11		etre	9		scrap materias

# REPORTS - CUSTOMER DETAILS REPORT

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104.00	RAJKU	53.JA LAL STRE ET	KANJIP	TAMIL	INDIA	KUMAR02@ YAHOO.CO	TNG 8006-86	CT5434 23-75	ECC 2963926	8787	5865
105.00	UVA	8UJH ARIN AGA	HYDER	ANDRA PRADE	INDIA	UVA32_12(g; SIFY.COM	TNG 5007-78	CT8781 11-78	ECC 675412	93678	4326

### REPORTS - PACK DETAILS R4EPORT

		Pack Detail:	\$		
	<b>,</b>				
packende	packdisplay	packconvtype	subpackcode	subpackdisplay	remarks :
pl	129/1/	21.00	spi Fext Object	sraw	good
p2	LEW	22.00	sp2	SLEEP.	satisfied
p001	east pack	24.00	990 t	packi	good
p004	raw pack	13,00	5321	sraw2	unsatisfied
p113	raw	81,00	ws12	pack21	good

# REPORTS - PROCESS DETAILS REPORT

_	ргосеняване	ctasscade	subclasscode
processeade	lathe	11.00	12,00
102	unc	14.00	14.00
104	welding	8.00	8.00
105	weiting	13,00	13,00
201	lathe	69.00	69,00
221 >>11 process.processcode (String)	molding	56.00	56.00

# 9. BIBILIOGRAPHY References

### Books Referred

- Steven Holzner, DreamTech Press, 3<sup>rd</sup> edition, 2000, VB.NET Programming Black book.
- 2) P.RadhaGanesan, Sci Tech Publications, 4<sup>th</sup> edition, 2001, VB NFT
- 3) Carsten Thompsen, Apres Newyork, 2001, Database Programming with VB.NET.
- 4) Deitel H.M ,Deitel P.J ,Nieto T.R, Pearson Education, 2<sup>nd</sup> Edition, 2004, VISUAL BASIC.NET HOW TO PROGRAM

#### Websites referred

www.searchvb.com

www.vbwire.com

www.gotdotnet.com

www.w3schools.com/sql/default.asp