DAIRYSOFT

PROJECT WORK DONE AT
SMARTWARES
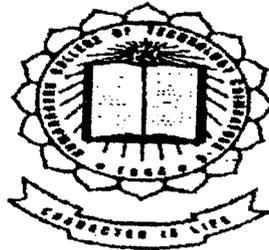### COIMBATORE   P-1248

PROJECT REPORT

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

SUBMITTED BY
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REG NO. 0137S0052

UNDER THE GUIDANCE OF

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Internal Guide
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Estd. 1984

Department of Computer Science And Engineering
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(JUNE-2004 TO OCTOBER-2004)

Department of Computer Science and Engineering
KUMARAGURU COLLEGE OF TECHNOLOGY
(Affiliated to Bharathiyar University)
Coimbatore-641006.

(JUNE-2004 TO OCTOBER –2004)

CERTIFICATE

This is to certify that the project entitled
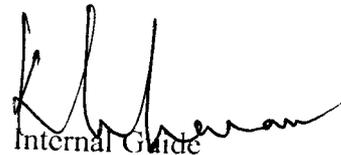
DAIRYSOFT

Done By

R.RUPA
0137S0052

Submitted in partial fulfillment of the requirements for the award of
the degree of M.Sc. (Applied Science) Software Engineering of
Bharathiyar University.

Professor and HOD

Internal Guide

Submitted to University examination held on

Internal Examiner

External Examiner

Smartwares

15th September, 2004

CERTIFICATE

This is to certify that **Ms. R. RUPA** (Reg. No. 0137S0052) who is undergoing M.Sc – Software Engineering in Kumaraguru College of Technology has carried out a Project in our organization titled **"DAIRY SOFT"** as a part of her curriculum from June 2004 to September 2004 and has completed successfully. As per the company's rules, the Source Code of the Project cannot be given to the student.

She had demonstrated good competency in her work. We observed that during her training period she was highly enthusiastic and took a lot of initiative in accomplishing whatever task assigned to her.

We wish her all the best for her future endeavors.

For SmartWares

Dr. A. Selvakumar
Director.

DECLARATION

I hereby declare that the project entitled "DAIRY SOFT" submitted to Bharathiar University, Coimbatore as the project work of Master of Science Degree in Software Engineering, is a record of original work done by me under the supervision and guidance of Mr.S.Murali, Smartwares, Prof. K.R.Baskaran – Asst. Professor and Course Coordinator (Software Engineering), Department of Computer Science and Engineering, Kumaraguru College of Technology, Coimbatore. This project work has not found the basis of the award of any Degree / Diploma / Fellowship or similar title to any candidate of any University.

Place : COIMBATORE
Date : 23 - 9 - 2004

R.Rupa
(Signature of the student)

ACKNOWLEDGEMENT

ACKNOWLEDGEMENT

I would like to express my sincere and heartfelt gratitude to our esteemed **Dr.K.K.Padmanabhan, B.Sc. (Engg.,), M.Tech., PhD.,** Principal of Kumaraguru College of Technology, Coimbatore, for his constant encouragement throughout my project.

I wish to thank Prof. **Dr.S.Thangasamy, B.E(Hons), Ph.D.,** Head of the Department, Computer Science and Engineering, Kumaraguru College of Technology, Coimbatore, for his invaluable suggestions that encouraged me to complete this project successfully.

I admit my heartfelt thanks to my Internal Project Guide, **Prof. K.R.Baskaran,** Assistant Professor and Course Coordinator [Software Engineering], Department of Computer Science and Engineering, Kumaraguru College of Technology, Coimbatore, for his invaluable suggestions and being supportive throughout the tenure of my project.

I am bound to express my heartfelt thanks and gratitude to **Dr.A.Selvakumar, Director, Smartwares,** for his support and motivation throughout the project work. I also wish to extend my sincere gratitude to my External Project Guide, **Mr.S.Murali, M.C.A., Project Leader,** Smartwares, for his guidance and cooperation rendered throughout my project.

I also thank my parents and friends who have extended their encouragement and help physically and mentally to complete and bring out this project successfully.

SYNOPSIS

SYNOPSIS

The project entitled **"Dairy Soft"** is a software developed in Smartwares for their client ABT Industries Limited, Dairy Division. This project is a web-based application. It is designed to assist the management team (head office) in terms of milk procurement and payment to farmers through franchisees. It also deals with distribution and stock details. It gives an easier access on the day-to-day activities of the Franchisees and the Plant.

ACTIVITIES

Initially the collection centers store the milk from the farmers. The centers then send the sample to the Franchisees where they are tested for their fat content, Lactometer Reading and Temperature. The payment depends on the fat, solid non-fat, quantity of the milk. The franchisee thus calculates the payment to each farmer. Payment is given on a weekly basis. The franchisee receives the cash from the head office and then distributes it to the farmers. Loan details, repayment details and feed details are stored in this system. The franchisee deducts the loan amount and the feed amount from their weekly payment.

The stock details of the processed products and the distributor details are also maintained here. An approximate amount is also calculated for each distributor's order. The spoilt quantity is returned by the distributor and is updated in the database.

Reports are generated at various stages for the management and the franchisees. Reports are generated using Crystal Reports. ASP.Net is used as the front-end tool and Oracle 9i is used as the back-end tool.

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CONTENTS

INTRODUCTION

1. INTRODUCTION

1.1 OVERVIEW OF PROJECT

'DairySoft' is software developed in Smartwares for their client ABT Industries Ltd., Dairy Division to manage their procurement and stock details. The Automation consists of the following modules

- Admin
- Franchisee
- Stock

The first module is the Admin module. It deals with the Franchisee details, price changes and vehicle details. Only the administrator has the rights to register the franchisees. He is also responsible for setting the user access. Various reports are generated here.

The second module of the project is the Procurement module that deals with activities of the Franchisees. It basically deals with keeping track of milk procured from the farmers at the various collection centers. Records for the various factors such as Lactometer Reading, Fat content, SNF, etc are maintained and payments are calculated based on those values. This module also keeps track of the weekly payments, loan details and feed details. It also maintains the quantity of the milk received at the plant from the various franchisees.

The third module deals with the stock details at the warehouse. It keeps track of the processed products received from the plant and the quantity sent to the distributors. The products are sent from here to the various distribution centers. An approximate amount is calculated when an order is dispatched to the distributor and the amount for the spoilt quantity will be deducted from payment. It also has a record of all the distributors.

Apart from this, the officials at the Head Office and the plant also have access to the system. The head office has access to view the reports from the various departments. The details of the milk collected at the plant will be entered in the system.

Reports are generated at various stages to display the essential information. Some of the reports that have been generated are

- Franchisee Report
- Loan Details Report
- Daily Procurement
- Weekly Payment
- Monthly Procurement
- Current stock

These reports can be had as hard copies also. The sample forms and reports are shown in the appendix.

1.2 ORGANIZATION PROFILE

Smartwares was established in 1993 in Canada by a group of technocrats to provide solutions and services in the Information Technology area to the small and medium business segments. Subsequently, in 1995, an offshore development and support facility was established in India.

It has excellent infrastructure, strong financial backup, expert managerial and technical human resources along with strong strategic partnership with industry leaders. The mission is to provide complete, integrated, reliable, high quality, value added solutions to enterprises at affordable cost.

The company's services cover the entire range of IT industry requirements from conducting feasibility studies to project formulation to resource planning to project management to implementation to documentation and finally training. The company is internally organized, as follows:

- Software Projects Division
- Professional and IT Services Division
- Education and Training Division

The current activities of the company are,
- Customized Application Development
- Client-Server Technology Extension to Web Environment
- Conversion and Migration from one platform to another
- Industrial Automation Solutions
  Data Acquisition Packages
  Process Monitoring Packages
  Process Control Applications
- Geographic Information System (GIS) Solutions

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SYSTEM STUDY AND ANALYSIS

2. SYSTEM STUDY AND ANALYSIS

2.1 EXISTING SYSTEM

The existing system is a stand-alone system. It uses Visual Basic 6.0 as the front end and Personal Oracle 8.0 as the back end. The existing system involves a lot of paperwork. The management is not able to get information regarding Procurement, Production and Distribution in time. So, the decisions are delayed and loss occurs. The reports are sent to the management as hardcopies once a week. The backups for the data's are taken only once a month for the use in head office by the franchisees. The stock details and distributor details are maintained manually. Hence this involves the maintenance of bulk records in paper.

DRAWBACKS OF EXISTING SYSTEM

The drawbacks of the existing system are

- The payment to the franchisees is delayed due to the non existence of the management in the system

- The management is not able to assess the current position of the milk procured by the franchisees.

- The price structure cannot be decided immediately due to the delayed arrival of reports.

- Even after the price structure is decided it is not possible to implement within a day.

- Forms for price validation is not available. Price validations are done through the coding.

- Loan details and feed details for the farmers are not available in this system.
- The management cannot keep track of the processed products on daily basis.
- Searching for a particular record in the stock is very difficult.

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2.2 PROPOSED SYSTEM

The proposed system is user-friendly and can be accessed from any where without any hurdles. This makes it easier for the management to view the information regarding procurement, production and distribution. The system is developed as a web-application using ASP.Net as the front-end and Oracle 9i as the back end tool. All reports are made available to the management in the system on time. Stock and distribution details are also maintained in this system.

ADVANTAGES OF THE SYSTEM

The advantages of the proposed system are

- Reports can be viewed online.
- Management can make changes in the price structure very easily.
- A separate form is available for price change. We need not do it individually for each franchisee.
- The farmer's loan details and their repayments are tracked in this system.
- Payment details of the Franchisees are also included in this system and payment can be done immediately.
- The stock details can be viewed in the form of daily or shift-wise reports by the management.
- The raw stock that is input to the plant and output of processed milk and other products are also fed into the system.
- Paperwork is reduced in some areas and removed in most area of operations.

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PROGRAMMING ENVIRONMENT

3. PROGRAMMING ENVIRONMENT

3.1 HARDWARE SPECIFICATION

Processor   :   Pentium III and above
Memory   :   128 MB and above
Hard disk   :   10GB and above

3.2 SOFTWARE SPECIFICATION

Operating system   :   Windows 2000 and above
Programming Language   :   ASP.NET
Web server   :   IIS 5.0
Backend   :   Oracle 9i

3.3 ABOUT THE SOFTWARE

.NET

.NET is a new environment for developing and running software applications, featuring ease of development of web-based services, rich standard run-time services available to components written in a variety of programming languages, and inter-language and inter-machine interoperability. There are many different languages that support . NET. We have VB .NET, C# .NET, C++ .NET, J++ .NET, and many more coming out everyday. Microsoft's Visual Studio.NET is a common development environment of the .NET Framework.

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.NET Framework

The .NET Framework is Microsoft's new computing platform that simplifies the design, development, and deployment of computer applications. Developed particularly to facilitate the creation of internet applications and distributed internet framework applications, the .NET Framework features the .NET Framework Class Library (FCL), a systematic class framework to be used for the development of system tools and utilities as well as application software.

The Framework Class Library (FCL) is a vast collection of classes, interfaces, structures, delegates and enumerations, that aim at encapsulating the functionality of core system and application service in order to make application programming easier and faster. There are classes that can be used to manipulate the file system, access databases, serialize objects, and launch and synchronize multiple threads of execution.

Visual C++.NET	Visual C#.NET	JScript.NET	Visual Basic.NET	
ASP. NET		**Windows Forms**		
Web Services	Web Forms			
. NET Class Library				
System	Data	I/O	Security	
Common Language Runtime				Visual Studio.Net
Common Type System				
Operating System				
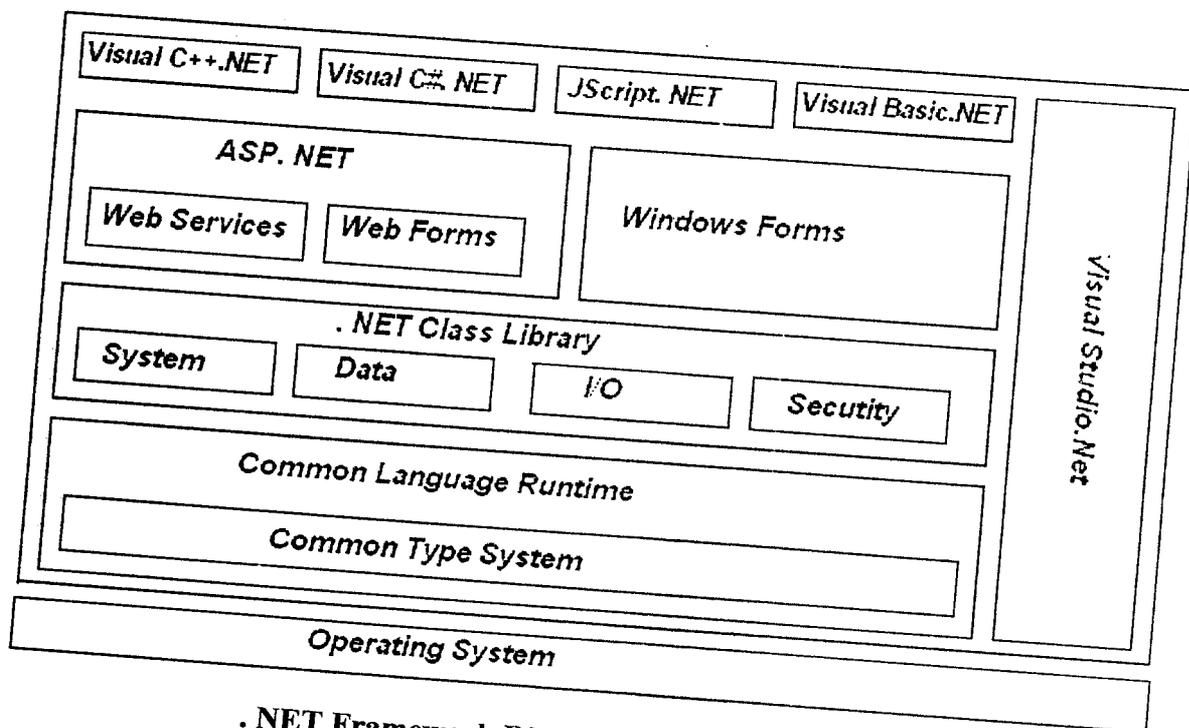
. NET Framework Diagram

ASP.NET

ASP.NET is the name Microsoft has given to the combination of its two web development technologies: Web Forms and Web Services. Using ASP.NET, it is easier than ever to create web applications that are dynamic and data-driven, that scale well, and that work well across a broad range of browsers without any custom coding by the developer.

Used in conjunction with Visual Studio .NET, Web Forms allow you to apply Rapid Application Development techniques to building web applications. Simply drag and drop controls onto your form, double-click on a control, and write the code to respond to the associated event.

Generally speaking, web services are web applications without a user interface that allow you to provide services to other web sites or applications. As you'll see in later chapters, ASP.NET allows you to create web services using a simple text editor or facilitate the process by using Visual Studio .NET

- ASP.NET is much more event-driven, with the event handlers running on the server.
- ASP.NET separates code from HTML.
- The code in ASP.NET is compiled, not interpreted.
- Configuration and deployment are greatly simplified.

There are many other minor differences, but these four are the key changes, and they change everything. The event-driven model in ASP.NET is very powerful and is explored. The separation of HTML from code, and the fact that the code is compiled rather than interpreted, allows for the creation of larger, easier to scale, easier to maintain web sites. The configuration and deployment simplifications make working with ASP.NET web sites, both large and small, much easier.

ORACLE 9i

Oracle was the first company to release a product that used the English based structured Query Language, or SQL. This language allows the end-users to extract information themselves, without using a systems group for every little report. The Oracle server extends the data modeling capabilities to support an object relational database model that brings object-oriented programming, complex data types, complex business objects and full compatibility with the real world.

Oracle 9i is an Object Relational Database Management System (ORDBMS). It offers capabilities of both relational and object-oriented database systems. An object-oriented database whose design is solely based on object oriented analysis and design is known as object-oriented database. The traditional Oracle system is RDBMS. When the relational database is extended to include object oriented structures and components such as abstract data types, nested tables and varying arrays, it is known as Object Relational Database Management System. Oracle9i takes business where it needs to be: meeting and exceeding stringent demands for high-quality service in a service-driven marketplace. Oracle9i is designed to optimize traditional, Internet and intranet applications, and to stimulate the emerging hosted application market on the Internet.

Data warehouse applications will benefit from enhancements such as parallel execution of insert, update, and delete operations; partitioning and parallel aware query optimizations. Oracle9i supports client-server and web-based applications that are distributed and multi-tiered.

The Oracle9i new features expedite delivery of critical performance, scalability, and availability essential to providing hosted service software for anyone, anywhere, anytime. It can handle tens of thousands of concurrent users, and can handle any type of data, including text, image, sound, video, and time series as well as traditional structured data.

Oracle9i focuses on the Internet by providing a series of specific capabilities and product bundles targeted at e-business environments. In addition, Oracle9i continues to add features and capabilities that extent existing investment in mission-critical infrastructure. Oracle9i includes everything needed to develop, deploy, and manage Internet applications. Oracle9i has been designed with focus on certain key development areas. These areas are

- Availability (achieving continuous data availability)
- Reducing half line maintenance requirements with support for more online operations
- Providing fast and precise repair of damaged databases

Oracle9i Features

- Scalability from departments to e-business sites
- Performance
- Robust reliable, available, secure architecture
- Security (Providing an end to end security infrastructure)
- Manageability
- Intelligent database server
- Comprehensive Management Framework

CRYSTAL REPORTS

Crystal Reports helps us to analyze and interpret important information. Crystal Reports makes it easy to create simple reports, and, it also has the comprehensive tools we need to produce complex or specialized reports.

Geographic maps and graphs communicate information visually when words and numbers are simply not enough. Crystal Reports can be published in a variety of formats including Microsoft Word and Excel, email and even over the Web. Advanced Web reporting lets other members of the same workgroup view and update shared reports inside their web browser.

Application and web developers can save time and meet their users needs by integrating the report processing power of Crystal Reports into their database applications. Support for most popular development languages makes it easy to add reporting to any application.

FEATURES
- W can view reports in full presentation quality using report viewers for Netscape and Microsoft browsers.
- We can create reports with links to other related documents including files, web sites or other reports.
- We can also use case statements, looping and dynamic arrays in the crystal reports.
- We can also include the following groups of functions
  - Financial functions
  - Math functions
  - Date and Time functions
  - Percentage functions.

SYSTEM DESIGN

4. SYSTEM DESIGN AND DEVELOPMENT

4.1 INPUT DESIGN

In input design user oriented inputs are converted to computer-based format. Erroneous data entered by the user can be controlled by the input design. The use of inaccurate data will lead to various kinds of flaws during processing. These mistakes commonly occur at data entry level. These flaws if left uncontrolled and unchecked may lead to disastrous catastrophes like data collapse during execution which may prove fatal to the system. Such flaws can be avoided to some extent by accurate design of inputs.

Input design is the link that connects the entities of the database to the real world. Guidelines are as follows:

- Formats of same data in different screen are the same.
- Exception handling is properly provided.
- Screen design should be clear.
- Input, through keyboard should be minimal.
- Proper validations must be done.
- User help must be provided wherever necessary.
- Proper error handlers and display of error messages

The forms that have been generated in this project are

Franchisee Registration form

This form contains the franchisee details i.e. the franchisee name, address and other relevant details.

Centre Registration form

This form contains the collection centre details such as the centre name, address and other relevant details.

Farmer Registration form

This form contains the farmer details such as the farmer name, address along with the necessary franchisee and centre details.

Feed Entry form

This form contains the details of feed give to each farmer and their amount details.

Loan form

This form keeps track of the loan issued to the farmers.

Repayment form

This form keeps track of the loan repayments of the farmers.

Procurement form

This form contains the details of the milk procured from each farmer along with their temperature, quantity, etc.

Payment form

This form deals with the weekly payment to farmers based on their loan and feed deductions.

MCP Details form

This form contains the data of the milk collected at the Plant.

Price form

Price changes are implemented using this form.

Inward form

This form deals with the processed stock arriving at the warehouse from the plant.

Distributor Details form

This form contains the details of the distributors such as the distributor name, area, etc.

Outward form

This form deals with the quantity sent to each distributor and their amount.

Returns form

The details of the products returned by the distributors are entered in this form.

4.2 DATABASE DESIGN

Table Name: login

Fieldname	Data type	Constraints	Description
uname	Varchar(15)		Username
password	Varchar(15)		Password
usergroup	Varchar(15)		User Group

Table Name: Franch

Fieldname	Data type	Constraints	Description
franchid	Varchar(10)	Primary Key	Franchisee ID
area	Varchar(20)		Area Name
franchname	Varchar(10)		Franchisee Name
fraddr	Varchar(100)		Address
phone	Number		Phone Number
mobile	Number		Mobile Number
email	Varchar(20)		Email address

Table Name: Centre

FieldName	Datatype	Constraints	Description
Franchid	Varchar(10)	Foreign key	Franchisee ID
Centreid	Varchar(10)	Primary key	Centre ID
Cname	Varchar(20)		Centre Name
Routeid	Varchar(5)		Route ID
Caddr	Varchar(100)		Address
Phone	Number		Phone number
Contperson	Varchar(20)		Contact Person

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Table Name: Farmer

FieldName	Datatype	Constraints	Description
franchid	Varchar(10)	Foreign key	Franchisee ID
centreid	Varchar(10)	Foreign key	Centre ID
farmerid	Varchar(10)	Primary key	Farmer ID
fname	Varchar(20)		Farmer Name
faddr	Varchar(100)		Address
phone	Number		Phone number
income	Number		Income

Table Name: Procure

FieldName	Datatype	Constraints	Description
franchid	Varchar(10)	Foreign key	Franchisee ID
centreid	Varchar(10)	Foreign key	Centre ID
farmerid	Varchar(10)	Foreign key	Farmer ID
cdate	Date		Date
shift	Varchar(10)		Shift
temp	Number(5,2)		Temperature
type	Varchar(10)		Milk Type
sampleno	Number		Sample No
quantity	Number(5,2)		Quantity
lr	Number(5,2)		Lactometer Reading
fat	Number(5,2)		Fat Content
snf	Number(5,2)		Solid Non Fat
price	Number(5,2)		Price
remarks	Varchar(30)		Remarks

Table Name: Loan

FieldName	Datatype	Constraints	Description
centreid	Varchar(10)	Foreign key	Centre ID
franchid	Varchar(10)	Foreign key	Franchisee ID
farmerid	Varchar(10)	Foreign key	Farmer ID
fname	Varchar(20)		Farmer Name
income	Number		Income
asset	Varchar(10)		Asset
assetval	Number		Value of asset
loanno	Varchar(10)	Primary key	Loan number
ldate	Date		Date
bank	Varchar(30)		Bank Name
term	Varchar(10)		Term Duration
enddate	Date		End Date
loanamt	Number(7,2)		Loan Amount
loanbal	Number(7,2)		Loan balance

Table Name: Repayment

FieldName	Datatype	Constraints	Description
franchid	Varchar(10)	Foreign key	Franchisee ID
centreid	Varchar(10)	Foreign key	Centre ID
farmerid	Varchar(10)	Foreign key	Farmer ID
loanno	Varchar(10)	Foreign key	Loan number
loanbal	Number(7,2)		Loan Balance
repayperiod	Varchar(20)		Repayment Period
rdate	Date		Date
receiptno	Varchar(10)		Receipt Number
repayamt	Number(7,2)		Repayment Amount

Table Name: Farmerpay

FieldName	Datatype	Constraints	Description
franchid	Varchar(10)	Foreign key	Franchisee ID
centreid	Varchar(10)	Foreign key	Centre ID
farmerid	Varchar(10)	Foreign key	Farmer ID
milkqty	Number(5,2)		Milk Quantity
amount	Number(7,2)		Amount
loanded	Number(5,2)		Loan Deductions
feedded	Number(5,2)		Feed Deductions
totalamt	Number(7,2)		Net Amount

Table Name: vehicle

FieldName	Datatype	Constraints	Description
vehicleno	Varchar(15)	Primary key	Vehicle Number
owner	Varchar(15)		Owner Name
addr	Varchar(100)		Address
contactno	Number		Phone Number
capacity	Number		Capacity in litres
cpfrom	Date		Contract Period From
cpto	Date		Contract Period To

Table Name: outward

FieldName	Datatype	Constraints	Description
did	Varchar(10)	Foreign key	Distributor ID
dcno	Varchar(15)		DC Number
odate	Date		Date
shift	Varchar(10)		Shift
product	Varchar(15)		Product Name
type	Varchar(10)		Product Type
qty	Number		Quantity
amt	Number(7,2)		Amount
stockbal	Number		Stock Balance

Table Name: distributor

FieldName	Datatype	Constraints	Description
area	Varchar(10)		Area Name
did	Varchar(10)	Primary key	Distributor ID
name	Varchar(20)		Name
addr	Varchar(50)		Address
state	Varchar(15)		State
Phone	Number		Phone Number
lstno	Varchar(10)		Local sales tax number
cstno	Varchar(10)		Central sales tax number
contractno	Varchar(10)		Contract number
cpfrom	Date		Contract Period from
cpto	Date		Contract Period to

4.3 DATAFLOW DIAGRAMS

LOGIN

End User

Supply
username,password

User Details

check details

Validate
UserName
and Password

Try again

Invalid User

Valid user

Access Denied

Dairy Soft

Administrator

Franchisee

Plant

Head Office

WareHouse
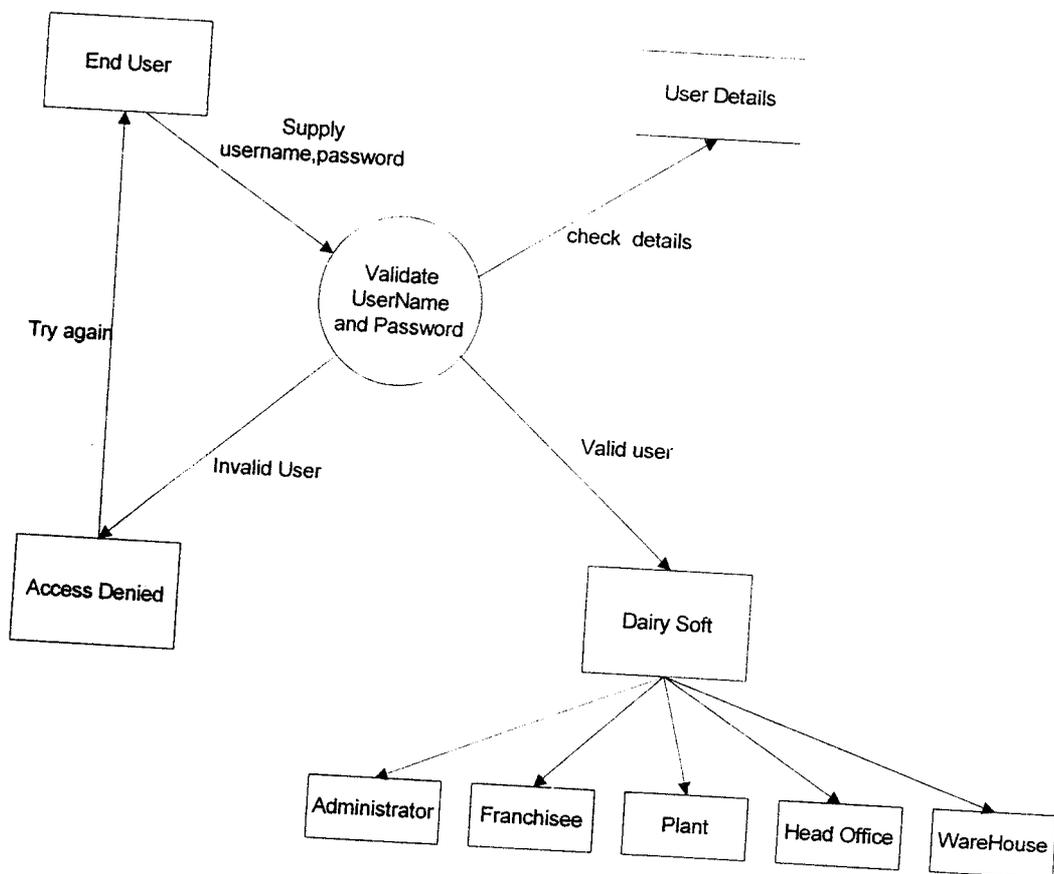
PROCUREMENT AND STOCK
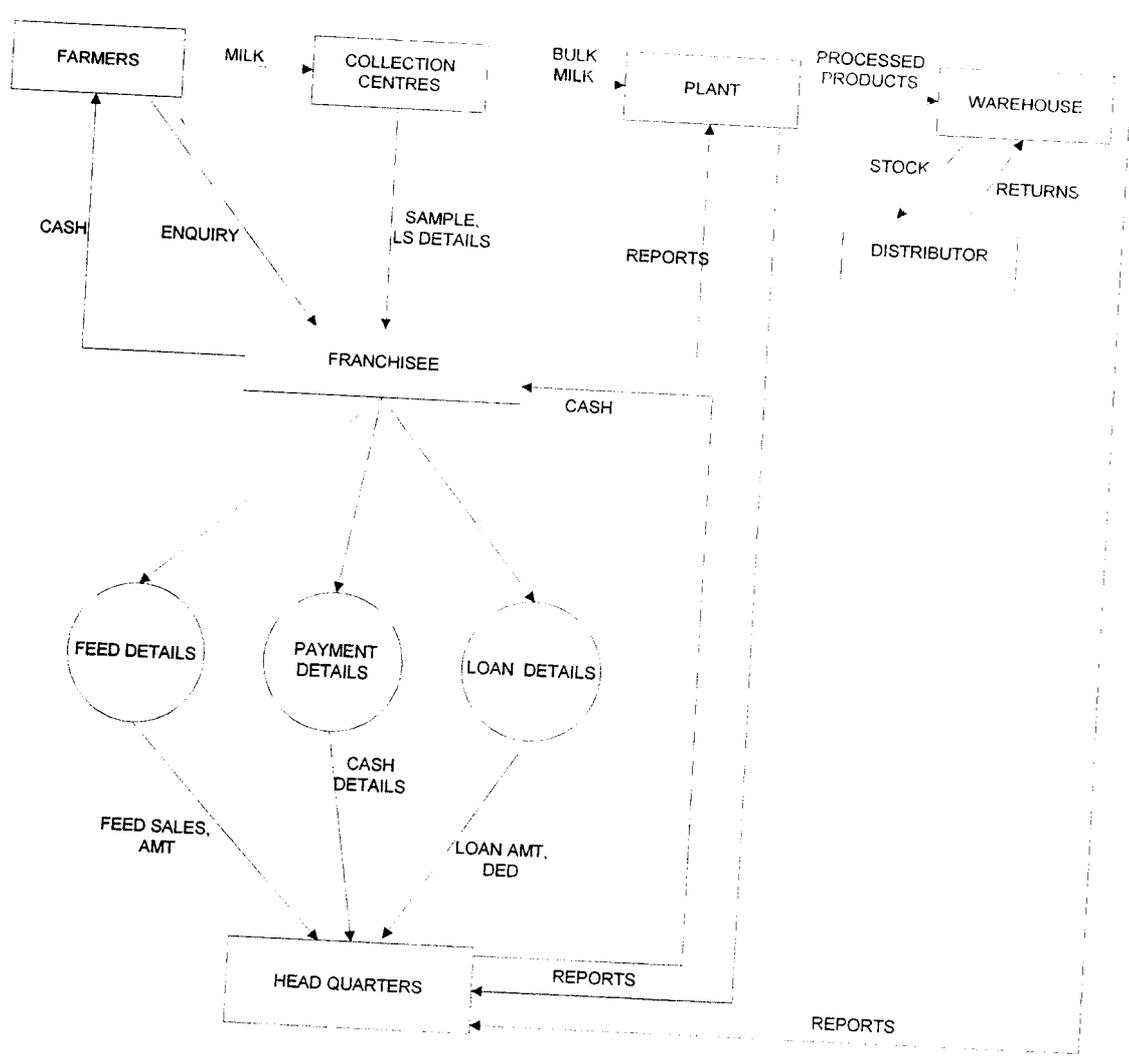
SYSTEM IMPLEMENTATION AND TESTING

5. SYSTEM TESTING AND IMPLEMENTATION

Implementation is the final and very important phase. It involves user training, system testing and successful running of the developed proposed system. The user tests the developed system and changes are made according to their needs. The testing phase involves the testing of developed system using various kinds of data.

An elaborate test data is prepared and the system is tested using that test data. While testing, errors are noted and corrections are made. The corrections are also noted for future use. The users are trained to operate the developed system.

5.1 IMPLEMENTATION

A crucial phase in the systems lifecycle is the successful implementation of the new system design. Implementation is the stage of project when the theoretical design is turned into a working system. Implementation involves creating computer compatible files, training the operating staff, installing hardware before the system is up and running. A critical factor in conversion is not disrupting the functioning of the organization. In this phase the project is tested for its validity and connection at real-time environment. There are three types of implementation. They are,

- Implementation of a computer system to replace a manual system.
- Implementation of a new computer system to replace an existing one.
- Implementation of a modified application to replace an existing one, using the same computer.

The users are given an idea about how the project works and how different it is from the existing one. Sample data were entered and tested for its validity.

5.2 TESTING

System testing is the stage of implementation, which is aimed at ensuring that the system works accurately and efficiently. Each module in the system is tested individually and then these modules are put together to form a subsystem. The subsystem is also tested. Then the subsystems are integrated to form a complete system. Using test data the whole system is tested in order to verify that the programs link together in the way specified to produce the outputs specified. Critical modules are tested as early as possible. Test data is fed to the system and the output obtained is compared with the manually obtained results for verification. The reports are also tested. . A good test case is one that has high probability of finding a yet undiscovered error. Data collected from testing provides a full indication of software reliability and some indication of software quality.

TESTING METHODS

UNIT TESTING

This method focuses on testing the smallest unit of software design. The tests that occur as part of unit testing are illustrated below. The module 'interface' is tested to ensure that information properly flows into and out of the program unit under test. The local data structures are examined to ensure that data stored temporarily maintains integrity during all steps in an algorithms execution.

Boundary conditions are tested to ensure that all modules operate properly at boundaries established to limit to restrict processing. All 'independent paths' through control structures are exercised to ensure that all statements in a module have been executed at least once. Finally all error handling are tested.

INTEGRATING TESTING

Integration testing is a systematic technique for constructing the program structure while at the same time conducting tests to uncover errors associated with interfacing. The objective is to unit-test modules and build a program structure that has been dictated by design. Top-Down Integration is tested finally.

SYSTEM TESTING

System testing is series of different tests whose primary purpose is to fully exercise the computer based system. Although each test has a different purpose, all the system elements have been properly integrated and perform allocated functions

CONCLUSION

6. CONCLUSION

Dairy Soft has been designed according to the current requirements. This gives the user flexibility to maintain the data in a well-organized manner and also to generate reports very easily. The developed system is flexible and changes can be made whenever necessary. Any number of modules can be added to the system if necessary.

The developed system has succeeded in rectifying the problems that are present in the existing system. Reports generated with live data have proved to be informative. Since the system is flexible and extensible, further enhancements can be made to the system if needed, without much difficulty.

SCOPE FOR FURTHER DEVELOPMENT

7. SCOPE FOR FUTURE DEVELOPMENT

'Dairy Soft' helps in easy maintenance of the procurement and stock details. Any number of modules can be added to this system, which can deal with the entire transactions of the company and the database has been designed in such a way that it will be helpful for those future enhancements of the system. In future the order and payment modules can also be included to this system.

BIBLIOGRAPHY

8. BIBLIOGRAPHY

BOOKS

- Bill Evjen, "Professional ASP.Net 1.1 Secrets", Wiley Publishing Inc., 1st Edition, 2004
- Stephen Walter, "ASP.Net Unleashed", Sams, 1st Edition, 2001
- Dave Sussman, "Professional ASP.Net 1.0", Wrox Press Inc., 2nd Edition, 2002

WEB SITES

- www.msdn.microsoft.com/library
- www.oracle.com
- www.asp.net
- www.asp101.com
- www.devasp.net

APPENDIX

SAMPLE SCREENS

LOGIN SCREEN
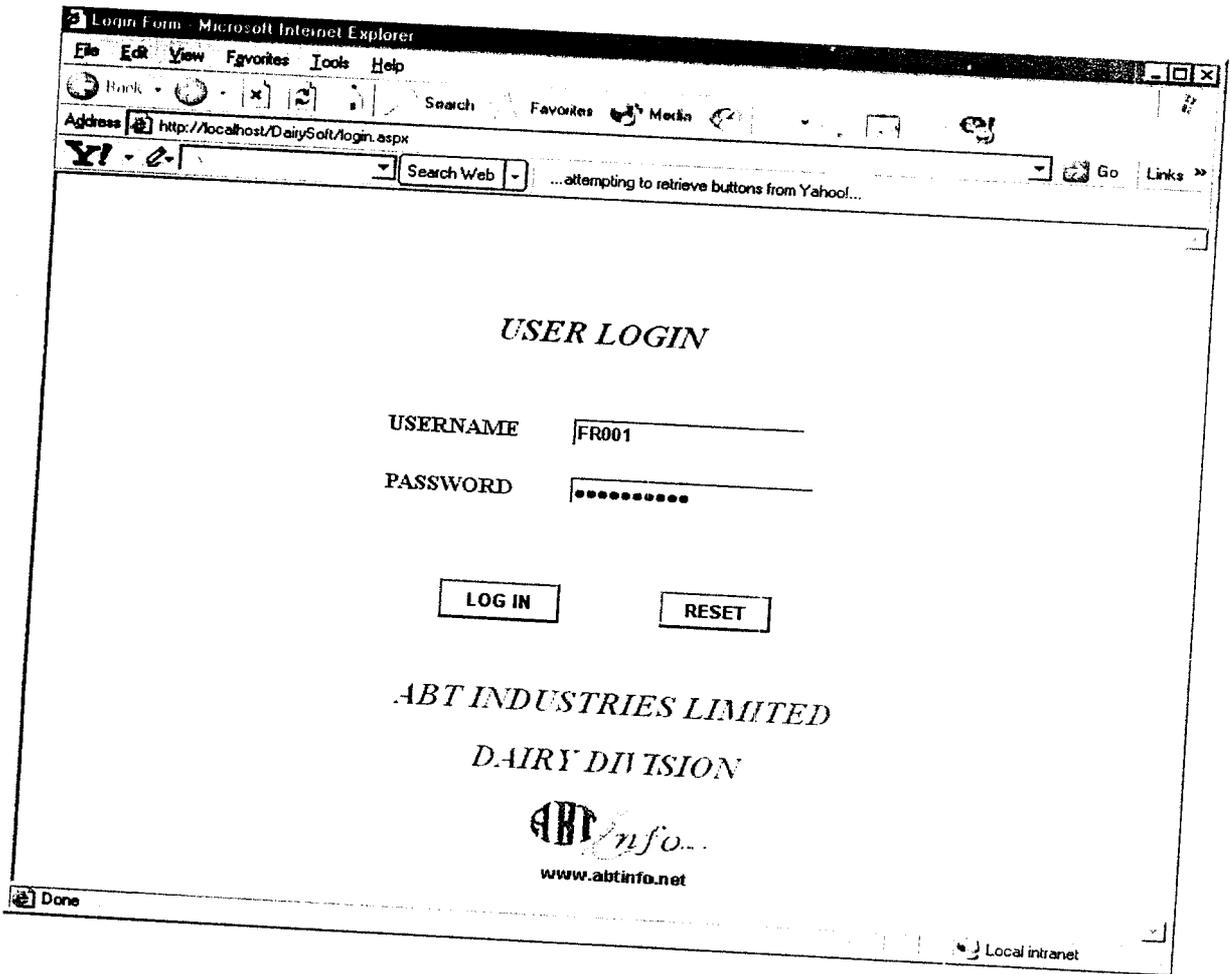
FRANCHISEE SCREEN
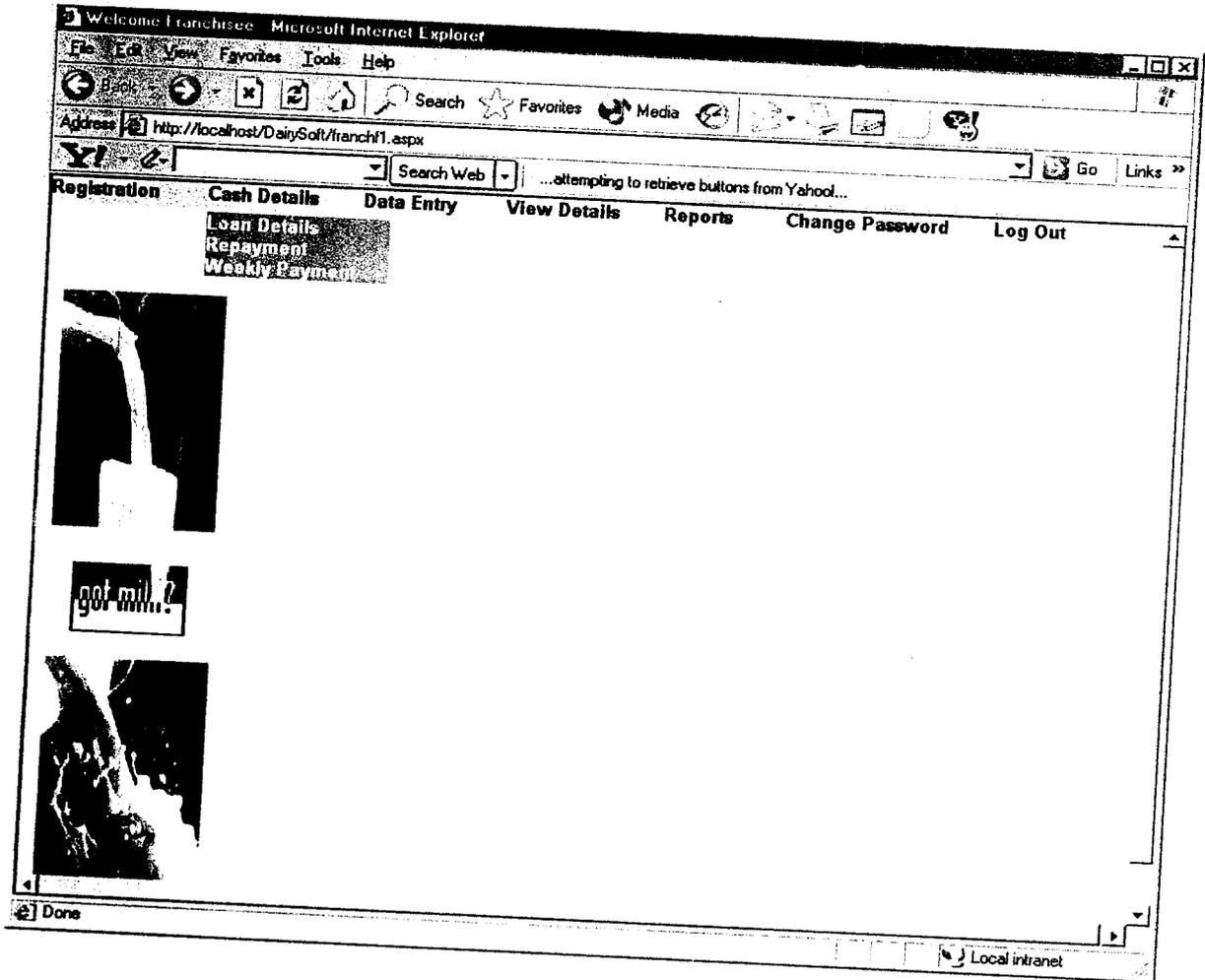
FRANCHISEE REGISTRATION FORM

FRANCHISEE DETAILS

Franchisee ID   FR006

Area Name   TIRUPUR

Franchisee Name   VASANTH

Address   24, NEHRU COLONY, SOUTH STREET, TIRUPUR-12

Phone Number   2454526

Mobile Number   98425 23423

E-Mail   vasan@sify.com

ADD   UPDATE   DELETE   RESET

DATA ENTRY FORM

Data Entry - Microsoft Internet Explorer

File   Edit   View   Favorites   Tools   Help

Back

Address http://localhost/DairySoft/procurement.aspx

Search Web   ...attempting to retrieve buttons from Yahoo!...

Registration   Cash Details   Data Entry   View Details   Reports   Change Password   Log Out

CENTRE DETAILS ENTRY

Franchisee ID   FR001

Date   10/9/2004

Shift   ● AM   ○ PM

Centre ID   C007   A K G NAGAR

Bulk Test/Local Sales Details

Local Sales Quantity   0

Bulk LR   32

Bulk Fat   4.4

Bulk Temperature   83

FARMER DETAILS ENTRY

Temperature   84

Farmer ID   012   JAGAN

Milk Type   ● Cow   ○ Buffalo

Sample No   012

Quantity   25

LR Reading   24.8

Fat   4.3

Remarks   -

SAVE   UPDATE   DELETE   RESET   EXIT

Done   Local intranet

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FEED DETAILS FORM

File Edit View Favorites Tools Help

Back ▾ | Search Favorites Media

Address http://localhost/DairySoft/feedentry.aspx

Go   Links »

...attempting to retrieve buttons from Yahoo!...

| Registration | Cash Details | Data Entry | View Details | Reports | Change Password | Log Out |

FEED ENTRY

September 2004

S	M	T	W	T	F	S
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Franchisee ID   FR001

Centre ID   C001   KURUMPAPALAYAM

Farmer ID   006   SELVARAJ

Week From   8/29/2004   To   9/4/2004

Receipt No   FD001

No of Bags   23

Rate/Bag   40.00

Amount   920.00

got milk?

SAVE | UPDATE | DELETE | RESET

Done   Local intranet

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PRICE CHANGES FORM

Registration   **Access Details**   **Details**   **Reports**   **LogOut**
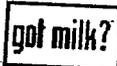
PENALTY STRUCTURE

Effective Date   12/9/2004

COW MILK

SNF	Penalty
< 7.1	2.60
7.1 - 7.4	2.45
7.5	2.20
7.6	2.20
7.7	2.00
7.8	1.80
7.9	1.50

Raise for each 0.1
increase in SNF

1.20

got milk?

Done   Local intranet

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LOAN REPAYMENT FORM

REPAYMENTS FORM

Franchisee ID	FR001
Centre ID	C002 ▾ KALIYAPURAM
Farmer ID	001 ▾ N.RAJA
Loan Number	L001
Loan Amount	10000
Repayment Period	1 YEAR
Date	9/9/2004
Receipt No	AC001
Repayment Amount	2500

DISTRIBUTOR REGISTRATION FORM

DISTRIBUTOR DETAILS

Distributor ID	D007
Area	Trichur
Name	F.Farook
Address	23, Gandhi Nagar, South Phase,
State	Kerala
Phone	0487-2316455
LST No	7844
CST No	5675
Contract No	ABT/007/03
Contract Period From	12/8/2003 To 12/8/2005

STOCK OUT FORM

File Edit View Favorites Tools Help

Back

Address http://localhost/marketing/outwarddl.aspx Go Links »

Search Web ...attempting to retrieve buttons from Yahoo!...

OUTWARD STOCK DETAILS

DC No   DC012   Date   10/9/2004

Shift   ⊙ AM   ○ PM

Distributor ID   D006   ▼ S. Joe

Product   Milk   ▼

Type   Spl500   ▼

No of Packets 35

Total Amount   4500

Product	Type	Quantity
Milk	Sel250	40
Milk	Sel500	25
Milk	Sell1000	20
Milk	Spl250	20
Milk	Spl500	35

Done   Local intranet

SAMPLE REPORTS

FRANCHISEE REPORT

ABT INDUSTRIES LTD, Dairy Division
Franchisee Report

Date : 10/09/2004

Sno	Code	Name	Area	Phone
01	FR001	A.Shankar	Sungam	0422-2254887
02	FR002	D. Raja	Pollachi	04259 275668
03	FR003	H. Varadhan	Palladam	04255-267259
04	FR004	S. Velu	Udumalpet	04252-235958
05	FR005	G. Hari	Ottanchathram	04253-287953

1 of 1 Cancel Close   5 of 5   Total: 5   100%

DAILY PROCUREMENT REPORT

ABT INDUSTRIES LTD, Dairy Division
Daily Procurement Report

Date   : 08/09/2004   SHIFT   :   AM
CCentre Name   : KURUMPAPALAYAM   CENTRE   :   C001   ROUTE   :   E

T. Qty. Purchased   :   95.80   L.S. (Qty)   :   0.00
Avg Pur Price   :   8.31   L.S. (Price) :
Sent to MCP   :   95.80   Temp in °F   :   82.00

ID	Name	S.No	Qty	CLR	FAT	SNF	P/Lt	T.Price
001	RAVI	16	18.0	26.2	4.4	7.8	8.18	147.24
002	RAJESH	8	1.7	26.7	4.1	7.9	8.28	14.08
004	KANAGARAJ	17	20.0	27.7	3.9	8.1	8.40	168.00
006	SELVARAJ	14	8.4	27.7	4.0	8.1	8.47	71.15
007	RAMU	2	3.4	27.7	4.0	8.1	8.47	28.80
009	HARISH	13	1.0	26.7	4.2	7.9	8.35	8.35
010	SOUNDAR	4	2.0	26.2	4.5	7.8	8.25	16.50
011	KUMAR	1	2.9	27.7	4.0	8.1	8.47	24.56
012	PRAKASH	9	1.8	26.7	4.2	7.9	8.35	15.03
014	MURALI	7	4.0	26.2	4.2	7.8	8.04	32.16
016	JOSEPH	12	3.5	27.7	3.8	8.0	8.26	28.91
017	KARTHIK	15	7.0	26.2	4.6	7.8	8.32	58.24
020	RAMESH	11	1.8	28.7	3.5	8.2	8.19	14.74
021	VARATHARAJ	3	7.8	26.2	4.6	7.8	8.32	64.90
023	MICHEAL	6	8.5	26.7	4.2	7.9	8.35	70.98
026	VIGNESH	10	2.0	26.2	4.3	7.8	8.11	16.22
032	PRASAD	5	2.0	26.2	4.2	7.8	8.04	16.08

Total No of Samples: 17   95.8   795.94
BULK: 26.2   4.2   7.8

1 of 2   Cancel   Close   33 of 33   Total:33   100%

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MONTLY PROCUREMENT REPORT

ABT INDUSTRIES LTD, Dairy Division
MONTHLY PROC. ABSTRACT (C.LAB)

FRANCHISEE : SUNGAM
Month of   : August , 2004

S.NO	C.C. Name	NO.OF SAMPLE	QTY PRCD	WEIGTD AVG. FAT	SNF	Pr/Lt	TOTAL VALUE	L.SALES QTY	HCP QTY	FAT KGS
C001	GANGAMPALA	20	2081.1	4.1	8.0	8.22	17101.42	4.0	2049.2	85.325
SUBTOTAL		20	2081.1	4.1	8.0	8.22	17101.42	4.0	2049.2	85.325
C002	KALIYAPURA	20	1843.8	4.1	8.0	8.30	15307.10	10.0	1812.0	75.596
C003	ETTITHURAI	13	4163.0	4.3	8.2	8.62	35889.04	0.0	4141.3	179.009
C004	PONNALAMMA	21	4173.1	4.1	8.1	8.40	35071.41	7.5	4124.9	171.097
C005	NARIKALPAT	13	2141.2	4.1	8.0	8.31	17788.47	737.8	1377.1	87.789
C006	THENGAPARA	23	4808.8	4.2	8.0	8.36	40199.95	0.0	4774.7	201.970
C007	A K G NAGA	48	1922.4	4.1	8.0	8.34	16037.10	0.0	1908.8	78.818
C008	MAYLADUTHU	13	5571.6	4.2	8.0	8.36	46576.99	0.0	5511.0	234.007
C009	PONGALIYUR	20	2254.2	4.3	7.9	8.23	18541.12	335.6	1886.8	96.931
C010	PETHENAIKA	23	3147.8	4.1	7.9	8.10	25490.52	0.0	3113.0	129.060
C011	SOMANDURAI	25	6636.7	4.2	7.9	8.09	53684.11	369.3	6209.1	278.741
C012	PALANIYUR	23	3066.2	4.1	7.9	8.05	24694.53	0.0	3034.1	125.714
C013	SENNIYUR	13	3841.3	4.1	8.0	8.25	31696.10	122.1	3676.4	85.325
C014	S.G.PALAYA	23	1504.3	4.1	8.0	8.32	12520.98	0.0	1479.6	157.493
C015	D.KALIPALA	63	3007.1	4.2	8.0	8.36	25145.45	538.0	2434.0	61.676
C016	VEERAPPAGO	20	5150.0	4.1	8.0	8.38	43152.27	196.9	4916.0	126.298
C017	NACHIPALAY	23	475.6	4.0	8.0	8.19	3895.94	0.0	463.5	211.150
SUBTOTAL		384	39728.8	4.20	8.00	8.29	329280.34	1460.2	37892.8	1658.732

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WEEKLY PAYMENT REPORT

ABT INDUSTRIES LTD, Dairy Division
Weekly Payment Acquintance

WEEK From : 05/09/2004   TO   11/09/2004
C.C.NAME : KURUMPAPALAYAM   ROUTE :   E   CENTRE :   C001

ID	NAME	FAT	SNF	RATE	QTY	TOT.AMT	FEED	LOAN	NET AMT
001	RAVI	5.0	8.2	9.24	10.9	100.68			100.68
002	RAJESH	4.3	7.9	8.34	13.0	108.37			108.37
003	SAKTHI	5.0	8.0	9.10	2.0	18.20			18.20
004	KANAGARAJ	3.8	8.2	8.24	125.6	1035.20		100.00	935.20
005	MAHESH	3.8	8.2	8.32	68.5	570.04			570.04
006	SELVARAJ	4.1	8.2	8.45	65.2	550.69	50.00		500.69
007	RAMU	4.7	7.9	8.58	6.7	57.46			57.46
008	VINOD	4.9	7.9	8.84	2.5	22.10			22.10
009	HARISH	4.9	8.1	9.07	3.9	35.36			35.36
010	SOUNDAR	3.9	8.3	8.53	68.4	583.42			583.42
011	KUMAR	7.6	9.3	13.72	1.7	23.32			23.32

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DISTRIBUTOR REPORT

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                    ABT INDUSTRIES LTD, Dairy Division
                             Distributor Report
-----------------------------------------------------------------------------
   ID        Name        Area       State     Phone No.    Contract No.
-----------------------------------------------------------------------------
   D001    S. Lakshman   Coimbatore TamilNadu  0422-2648579  ABT/001/00

   D002    G. Suresh     Coimbatore TamilNadu  0422-2584796  ABT/002/01

   D003    T. Karthik    Tirupur    TamilNadu  0421-2639685  ABT/003/01

   D004    D. Rani       Ooty       TamilNadu  0423-2589475  ABT/004/02

   D005    R. Ravi       Mettupalay TamilNadu  0425-2457896  ABT/005/02

   D006    S. Joe        Palghat    Kerala     0491-2456598  ABT/006/03

   D007    F. Farook     Trichur    Kerala     0487-2316455  ABT/007/03

   D008    T. Rajesh     Shoranur   Kerala     0492-2145789  ABT/008/03

   D009    D. Raja       Cochin     Kerala     0484-2487978  ABT/009/03

   D010    S. Prakash    Palghat    Kerala     0491-2634598  ABT/010/04
-----------------------------------------------------------------------------
```

1 of 1   Cancel   Close   10 of 10   Total 10   100%

CURRENT STOCK REPORT

ABT INDUSTRIES LTD., Dairy Division
Stock Report

Date : 10/09/2004

Product	Qty Recd.	Qty Sent	Returns	Carried Fwd.	In Stock
Sel250	100	80	0	56	76
Sel500	120	90	0	33	63
Sel1000	130	95	3	25	57
Sup250	150	140	0	26	36
Sup500	125	106	2	10	27
Sup1000	140	150	0	10	0
Spl250	200	242	0	42	0
Spl500	250	240	0	5	15
Spl1000	180	155	5	24	44
Slm250	160	195	0	35	0
Slm500	150	140	0	8	18
Slm1000	90	106	0	16	0
Curd	300	300	0	0	0
Butter Milk	200	250	0	50	0