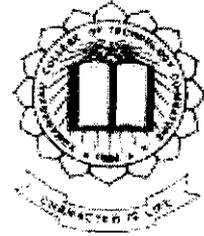


P-2745



CALL LOGGING SYSTEM

By

K.UDHAYAKUMAR

Registration Number: 71206621056

Of

KUMARAGURU COLLEGE OF TECHNOLOGY

COIMBATORE-6

A PROJECT REPORT

Submitted to the



FACULTY OF INFORMATION AND COMMUNICATION ENGINEERING

*In partial fulfillment of the requirements
for the award of the degree
of*

MASTER OF COMPUTER APPLICATIONS

**ANNA UNIVERSITY
CHENNAI 600 025**

June 2009

BONAFIDE CERTIFICATE

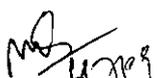
Certified that this project report titled **Call Logging System** is the bonafide work of **Mr. K. Udhayakumar** (Register Number: 71206621056) who carried out the research under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other 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.


Project Guide 30/6/09


Head of the Department

Submitted to Project and Viva Examination held on 06-07-09


Internal Examiner 6/7/09


External Examiner 4/7/09



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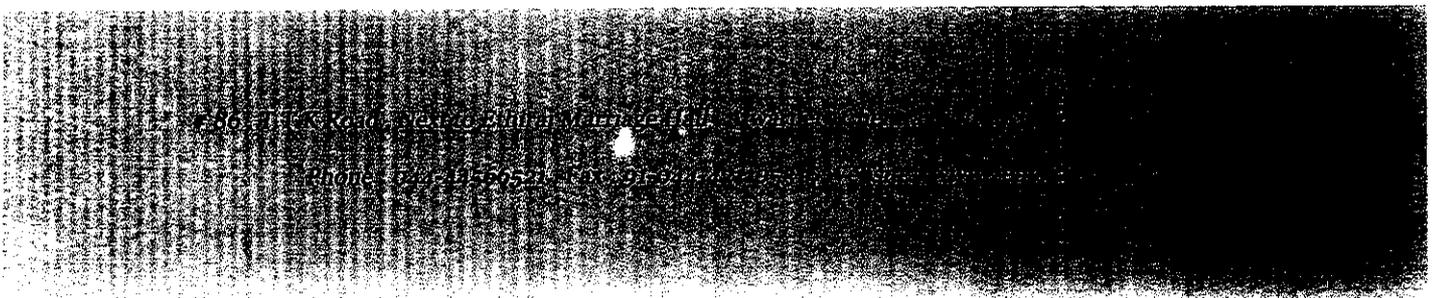
CERTIFICATE

This is to certify that the project titled "CALL LOGGING SYSTEM" submitted by Mr.K.UDHAYAKUMAR (Reg no: 71206621056) from KUMARAGURU COLLEGE OF TECHNOLOGY at Coimbatore, in partial fulfillment of MCA is a bonafide work of original project work done at ZEMOR TECHNOLOGIES between 29-12-2008 to 5-6-2009.

It is seen that a project was successfully completed and complies with all the requirements suggested initially.

Mr. R. VISHNU PRATAP

(Project Manager)



ABSTRACT

The engineering department does preventive maintenance of all the IT equipments periodically. In addition to the regular maintenance of IT equipments, there will be additional calls from the internal customers. An Engineering team looking after all the IT equipments likes computers, telecommunication equipments, printers, scanners, network and some other relevant equipments, when these equipments needs to solve its problem .

The entered requests and faults of the internal customers and their details will be managed in a particular database. After completing the queries, the engineers will enter their response about the problem in a database, which will be handled by the administrator. According to the problem, administrator can take the decision to where the particular engineer should go and solve the problem.

It is difficult to note down all the problems manually. Instead it is decided to develop a Call Logging System to the operation.

The objective of this project is as follows:

- Store all the customer details.
- Log all the customer problems in a database.
- Assign the relevant engineers for the logged jobs.
- Monitor the status of all the calls at any time since the call logged.
- Analyze the Engineer's Capability of work.
- Generate Engineer's Performance Report.

Call Logging System was done by using VB.Net as the front end and Sql Server as the back end successfully.

ACKNOWLEDGEMENT

First and foremost I thank God for His good will and blessings showered on me throughout the project. The success of this project needs cooperation and encouragement from different quarters.

I wish to express my deep unfathomable feeling of gratitude and indebtedness to **Dr. R. Annamalai, Vice Principal, Kumaraguru College of Technology, Coimbatore** for the successful completion of the project work.

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It's always a pleasure and privilege to be associated with a prestigious outstanding esteemed organization "**Zemor Technologies**", **Chennai**.

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CHAPTER 1

INTRODUCTION

1.1 OVERVIEW OF THE PROJECT

The engineering department does preventive maintenance of all the IT equipments periodically. In addition to the regular maintenance of IT equipments, there will be additional calls from the internal customers. An Engineering team looking after all the IT equipments likes computers, telecommunication equipments, printers, scanners, network and some other relevant equipments, when these equipments needs to solve its problem

The entered requests and faults of the internal customers and their details will be managed in a particular database. After completing the queries, the engineers will enter their response about the problem in a database, which will be handled by the administrator. According to the problem, administrator can take the decision to where the particular engineer should go and solve the problem.

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- Monitor the status of all the calls at any time since the call logged.
- Analyze the Engineer's Capability of work.
- Generate Engineer's Performance Report.

1.2 ORGANIZATION PROFILE

ABOUT US:

Zemor Technologies is the Software and IT services providing company which gathers the industry needs by representing major Technologies in the development and services in the National level as well as in software, hardware, voice and non-voice support. **Zemor Technologies** deliver software products, ranging from enterprise project to Internet applications with enabled security.

OUR FOCUS ON:

We offer wide range of significant solutions for our clients based on their requirement.

Some among them are:

- Software design and development
- Web Services
- Project management
- Quality assurance and quality control
- System Integration
- Testing Services

OUR FACE:

There is a trend among software engineers to move an organization to another, never staying for the lifetime of a product, never caring about what happens after they leave. Then software projects fail and the money invested disappear in a pit.

This is not the case with Zemor Technologies. The company is here to stay, and the employee turnover is zero based.

We believe that excellent products are delivered by people who care about their work. We aim to deliver the best possible software and be proud of it. We favor technical

decisions as opposed to political ones. Our relationship with the customer grows naturally with the successful delivery of each new product.

OUR PROCESS:

Our engineers worked in the software industry's best practices of managed software development. With each project our internal coherence is growing. We are developing and introducing best practices, all the time, in a controlled way.

Every development practice must be supported by the appropriate tools. We use:

- A centralized bug database to keep track of tasks and defects.
- Subversion source control repository, hosted on a RAID server
- Standard internal code style, consistent across languages
- Standard internal naming style specialized for programming constructs, file names and path.
- Standard projects organization, deliverables, version naming.
- Standard internal code versioning management, ranging from patch management, code branches management, database structure versioning and releases of the organization.
- Standard software tools, available on every machine.

CHAPTER 2

SYSTEM REQUIREMENT SPECIFICATION

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

2.1 HARDWARE ENVIRONMENT

The hardware support required for deploying the application

- Processor : Intel Pentium IV 1.7 GHz
- RAM : 256 MB
- Hard Disk Capacity : 80 GB
- Keyboard : 102 keys

2.2 SOFTWARE ENVIRONMENT

The software support required for deployment

- Operating System : Windows 98/2000/XP/NT
- Back-End Tool : VB.Net
- Back-End Tool : Sql Server

2.3 SOFTWARE OVERVIEW

2.3.1 VB.Net Framework

VB.Net is a simple, type-safe, object-oriented, general-purpose programming language. It provides code-focused developers with powerful tools and language support to build rich, connected Web and client applications on the .NET Framework.

2.3.1.1 VB.Net overview

- Visual basic .Net 2005 is the modern, innovative programming language and tool for building .NET-connected software for Microsoft Windows, the Web, and a wide range of devices.
- It is a flexible integrated development environment (IDE), and the capability to build solutions across a variety of platforms and devices, Visual basic .Net 2005 significantly eases the development of .NET-connected software.

2.3.1.2 Features of VB.Net

- VB .Net is a modern and intuitive object-oriented programming language that offers significant improvements, including a unified type system, "unsafe" code for maximum developer control, and powerful new language constructs easily understood by most developers.
- .NET Framework class library to gain powerful built-in functionality, including a rich set of collection classes, networking support, multithreading support, string and regular expression classes, and broad support for XML, XML schemas, XML namespaces, XSLT, XPath, and SOAP.
- Using Visual Basic.Net 2005, developers can construct powerful Web services that encapsulate business processes and make them available to applications running on any platform.

- Visual Basic.Net 2005 also enables developers to build the next generation of Windows-based applications. With visual inheritance, developers can greatly simplify the creation of Windows-based applications by centralizing in parent forms the common logic and user interface for their entire solution.
- With native support for the .NET Compact Framework, mobile Web devices, and embedded applications available as part of Visual Studio 2005 Professional Edition, VB.Net developers can now target a wide variety of mobile devices, including Pocket PCs, mobile phones, and devices powered by the Windows CE operating system. Programmers can become immediately productive by using the same programming model and tools for creating powerful device-based software as they use for building robust Windows- and Web-based solutions.

2.3.2 SQL SERVER 2000

Microsoft SQL Server 2000 provides a new Management Studio, integration with Visual Studio 2005, and the Microsoft .NET common language runtime - all of which help you build, debug, and operate applications faster and more efficiently. SQL Server 2000 Management Studio Express, for easily managing your database. Best of all, as your needs grow; your applications will seamlessly work with the rest of the SQL Server product family.

2.3.2.1 Overview of SQL Server 2000

Extending the strengths of SQL Server 2000, SQL Server 2000 provides an integrated database management and analysis solution that can help developers to do the following

- Build, deploy, and manage enterprise applications that are more secure, scalable, and reliable.
- Maximize IT productivity by reducing the complexity of developing and supporting database applications.
- Share data across multiple platforms, applications, and devices to make it easier to connect internal and external systems.

- Control costs without sacrificing performance, availability, scalability, or security.

2.3.2.2 Features of SQL Server 2000

SQL SERVER 2005 provides statements for a variety of tasks, including

- Querying data
- Inserting, updating, and deleting rows in a table
- Creating, replacing, altering, and dropping objects
- Controlling access to the database and its objects
- Guaranteeing database consistency and integrity
- Supports PL/SQL

CHAPTER 3

SYSTEM ANALYSIS

System Analysis is the process of understanding a problem domain and the user requirements for the purpose of developing a computer application system to serve the users.

3.1 EXISTING SYSTEM

The existing system was developed using FOXPRO language, which may not support the system because it is not user friendly and interactive. The linking between several tables is not very easy. CALL LOGGING SYSTEM, which was done using FOXPRO language, is run only on the DOS mode and is not user interactive.

3.1.1 Limitations of existing system

The following drawbacks in the existing system are...

- Less user-friendly.
- Using FOXPRO, modules can't be connected with the tables and does not make a relationship.
- User interface is not more effective.
- Chart facility is not provided.

3.2 PROPOSED SYSTEM

The existing system was carried out manually. There are lot of difficulties available in the existing system, the drawbacks of the existing system such that checking for the backup of particular date is taken in consideration. So there rise the need for a proposed system to rectify the drawbacks of the existing system and so it is computerized.

The objectives of the proposed system are:

- Accuracy and error free transaction process
- Efficient automatic transaction.
- Provision to change the backup path.
- Provision to change the number of copies.
- Updating is very easy
- Accurate information is needed whenever the information is needed.
- Restoration of appropriate backup data is possible.

3.2.1 Advantages of proposed system

- Easy to maintain and manipulate records
- Preparing log events.
- Controls the data redundancy.
- More reliability
- More maintainability
- Quick response time

CHAPTER 4

SYSTEM DESIGN

System design is the most creative and challenging phase in the life cycle of system development. The first step to determine is what input data is needed to form the system and the database that has to be designed should meet the requirement of the proposed system. The next step is to determine how the output is produced and in what format.

4.1 DATABASE DESIGN

Database design is the process of producing a detailed data model of a database. This logical data model contains all the needed logical and physical design choices and physical storage parameters needed to generate a design in a Data Definition Language, which can then be used to create a database.

Table name : Admin User

Column Name	Data Type	Length	Description
Username	Varchar	25	Name of the user
Password	Varchar	25	Password of the user

Table 4.1.1

Description : This table holds the details of the administrator who have registered and managed this site.

**Table name : Call Log Entry**

Column Name	Data Type	Length	Description
Log Id	Varchar	2	Generated Serial number of the system
Employee name	Varchar	25	Name of the employee
Emp Id	Varchar	10	Unique identification of the employee
Problem Description	Varchar	50	Details of the system problem
Problem status	Varchar	25	Current position about the problem
Date of Entry	Numeric	50	Time of problem occurred
Email Id	Varchar	50	Email address of the employee

Table 4.1.2

Description : This table holds the details of the customer and the problem associated with his work such as network, database, os etc.,

Table name : Employee Entry

Column Name	Data Type	Length	Description
Log Id	Varchar	2	Generated serial number of the System
Emp Id	Varchar	10	Unique identification of the employee
Emp Designation	Varchar	25	Designation of the employee
Emp status	Varchar	25	Whether the employee at work or not
Problem Description	Varchar	50	Details of the system problem
Email Id	Varchar	50	Email address of the employee

Table 4.1.3

Description : This table holds the details of the employee and the error has occurred in his system.

Table name : Engineer Login

Column Name	Data Type	Length	Description
Username	Varchar	25	Name of the user
Password	Varchar	25	Password of the user

Table 4.1.4

Description : This table holds the details of the engineer who have registered with this site.

Table name : Service Engineer Entry

Column Name	Data Type	Length	Description
Engineer name	Varchar	25	Name of the service engineer
Engineer Id	Varchar	5	Unique Identification of the engineer
Employee Id	Varchar	50	Unique Identification of the employee
Date of Entry	Numeric	25	Time of Problem occurred
Problem Occured	Varchar	50	The place where the problem is occured
Problem remarks	Varchar	50	Remarks about the problem
Engg Email Id	Varchar	50	Email address of the engineer
Engg preferance	Varchar	2	Priority of the solution to a problem
Emp mail Id	Varchar	50	Email address of the engineer

Table 4.1.5

Description : This table holds the details of the engineer who will have rectify the problem and entered the status of the problem in a database.

Table name : Employee Login

Column Name	Data Type	Length	Description
Username	Varchar	25	Name of the user
Password	Varchar	25	Password of the user

Table 4.1.6

Description : This table holds the details of the employee who have registered with this site.

Table name : User Creation

Column Name	Data Type	Length	Description
Emp Id	Varchar	4	Unique Identification of the employee
User name	Varchar	25	Name of the user
Password	Varchar	10	Password of the user
Emp Designation	Varchar	25	Designation of the employee in the office

Table 4.1.7

Description : This table holds the details of the employee who yet to be registered with this site.

4.2 DATA FLOW DIAGRAM

4.2.1 ADMINISTRATOR

This DFD explains the process that will take place when the existing customers, employee logs on into the system.

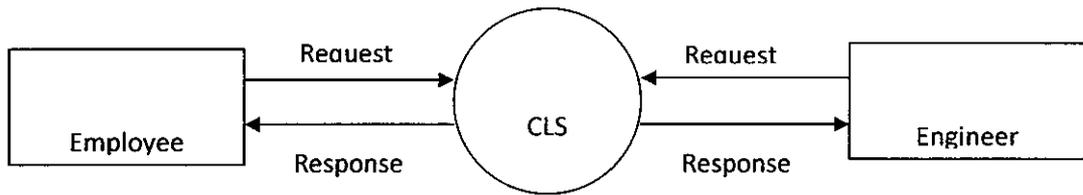


Fig 4.2.1 Administrator

4.2.2 LOGIN

This DFD explains the process that will take place when the existing customers, employee logs on into the system. Only authorized users are allowed to enter into system by ensuring username and password.

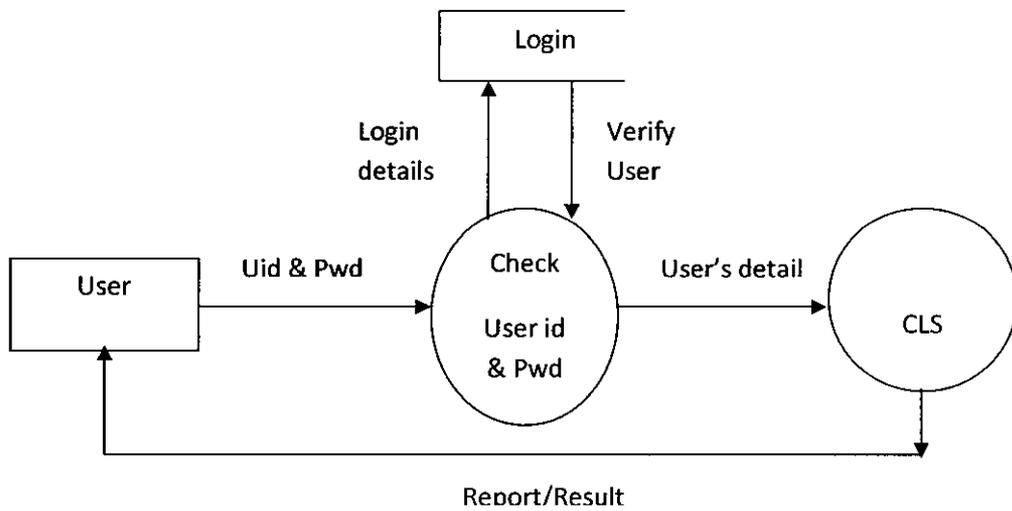


Fig 4.2.2 Login

4.2.3 EMPLOYEE/ REGISTRATION

This DFD explains the process that will take place when the existing customers, who have problem with their systems and they will store it in a database. The allotted engineer will rectify the problem when he gets a signal from the administrator.

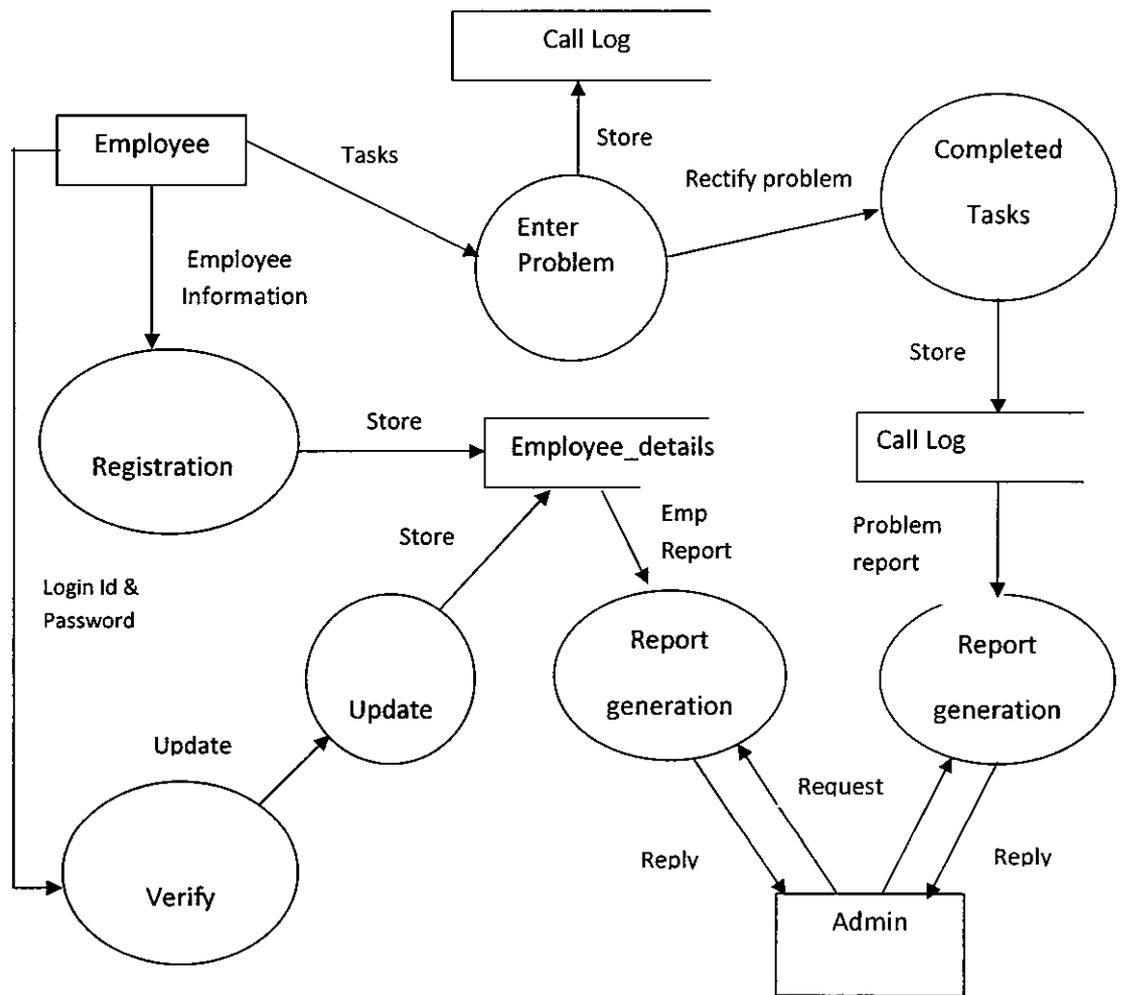


Fig 4.2.3 Employee/ Registration

4.2.2 LOG ISSUES

This DFD explains the process that will take place when the entered problem will rectify and the report to be sent to the administrator.

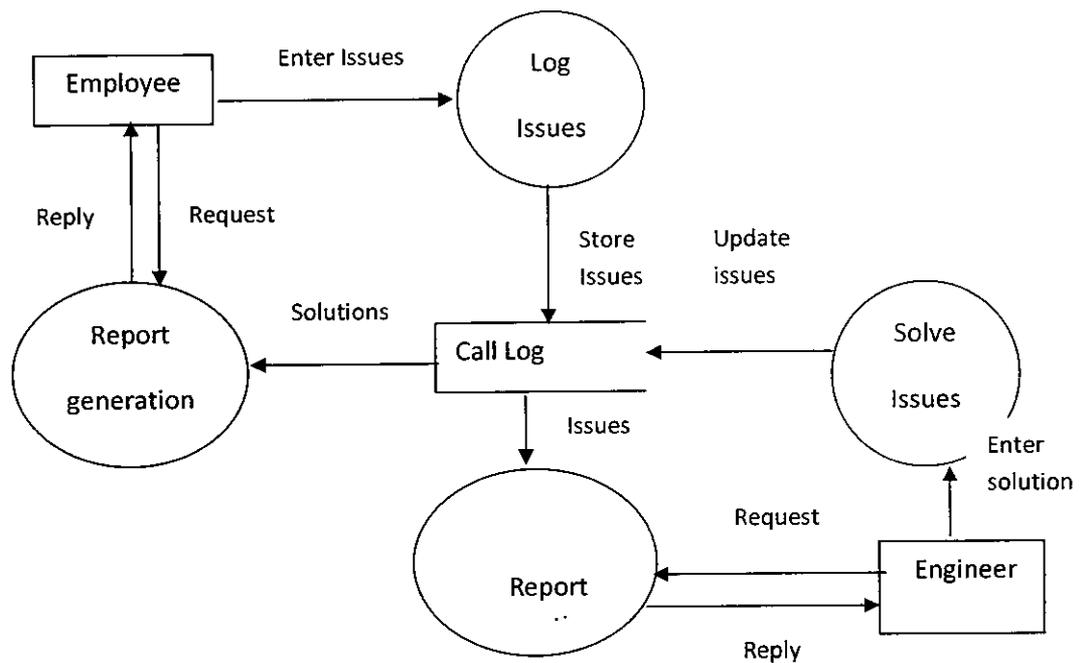


Fig 4.2.4 Log issues

4.3 SYSTEM FLOW DIAGRAM

This SFD shows how the system runs from the beginning and to flow with until identifying the reports.

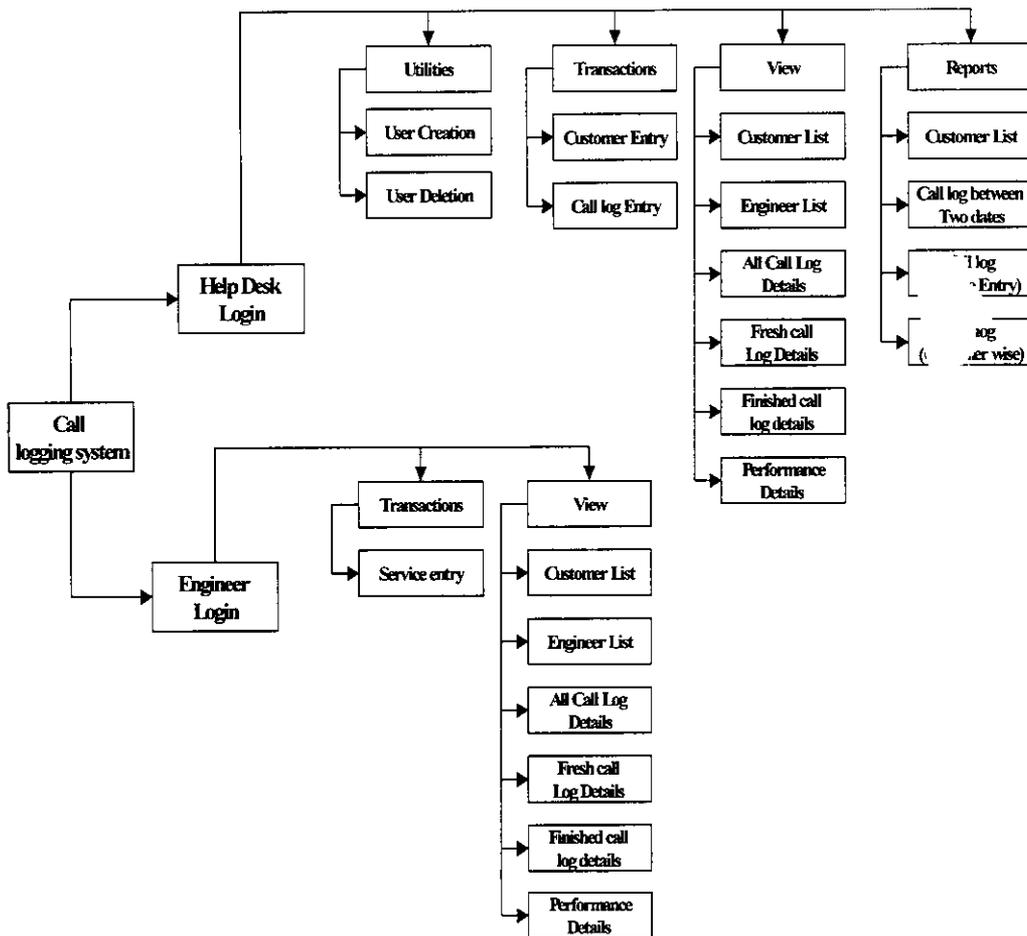


Fig 4.3 System flow diagram

CHARTER 5

PROJECT DESCRIPTION

The **Call Logging System** powers the process of rectifying the internal customer's problem by entering their problem in a database or just dialing a phone call. The entered requests and faults of the internal customers and their details will be managed in a particular database. After completing the queries, the engineers will enter their response about the problem in a database, which will be handled by the administrator. According to the problem, administrator can take the decision to where the particular engineer should go and solve the problem.

Project has two Modules

Administrator

- Utilities
- Transaction
- View
- Reports

Engineer

- Transaction
- View

Administrator

Utilities

a) User creation

- This module specifies a new user creation.

b) User deletion

- This menu allows terminating the Engineer's entry, those, who are unable to continue from this concern.

Transaction

a) Customer entry

- This form used to enter the details of customers such as name, age, gender, address & Date of Join.
- The customer details updation, deletion and finding are also possible. Customer ID will be generated automatically.

b) Call Log-entry

- The Customer will tell the faults in their equipment to us by Just one phone call.
- Their complaints will be examined here, with specific details from customer in which details such as customer code, address and problem description to be done from our side.
- Service Engineer should be allowed to access that site.
- The details of call, customer updation, modification and deletion are also possible. Log id will be generated automatically.

View

a) Customer List

- We can view the details of customer such as customer ID, name, date of Join and Address.

b) Engineer's List

- Here we can view the details of Engineer's Login User name and Password.

c) All Call Log Details

- We can view the details of all complaints of customers.

d) Fresh Call Log Details

- We can view the pending complaint details, which needs to be attended later.

e) Finished Call Log Details

- After completion of the work, Engineer should be given the feed back to the company by one phone call.

f) Performance details

- We can view details of work done by each and every engineer wise. Particularly two dates of the entry.

Reports

a) Customer list

- This menu gives the details of total customers comes under our service.

b) Call log between two dates

- We can view the customer complaints between two dates (i.e.) starting date to ending date.

c) Call Log [Service Engineer]

- We can view the customer complaints on service engineer basis by using his/her complaint status.

d) Call Log [Customer Wise]

- We can view the customer complaints on customer basis by using customer Id (i.e.) The total number of complaints occurred on particular customer.

Engineer

Transaction

a) Service entry

- In this form, Service Engineer enters entries after finishing his/her allotted work.
- He/She has to give the feed back about that work in this form.
- Those details such as customer code, address, problem attended, service remark's and work is completed (or) not finding these entries are also possible.

View

a) Customer List

- We can view the details of customer such as customer ID, name, date of Join and Address.

b) Engineer's List

- Here we can view the details of Engineer's Login User name and Password.

c) All Call Log Details

- We can view the details of all complaints of customers.

d) Fresh Call Log Details

- We can view the pending complaint details, which needs to be attended later.

e) Finished Call Log Details

- After completion of the work, Engineer should be given the feed back to the company by one phone call.

f) Performance details

- We can view details of work done by each and energy engineer wise, particularly two dates.

CHAPTER 6

SYSTEM TESTING AND IMPLEMENTATION

Software Testing and implementation is the process done in the development stage of the software.

6.1 TEST PLAN

Testing is the process of executing a program with the indent of finding any errors. Testing is vital to the success of the system. Without proper testing, hidden errors will surface after some time of use and perhaps irreversible damage has been doe to valuable data. A successful test is one that uncovers as yet undiscovered errors.

S.NO	TEST CASE	EXPECTED RESULT	ACTUAL RESULT
1.	User id: admin Password:1234	Invalid login	Invalid login
2.	User id: admin Password: admin	Valid login	Valid login
3.	If the customer enters the problem in customer entry form	The particular customer needs should add in the service database	The problem details added in the service database
4.	If the customer click the service button in service request form	New entry id should be generated and that problem status should be visible to the administrator	Problem status is generated and visible to the administrator

6.2 TYPES OF TESTING

6.2.1 Unit Testing

In unit testing, we have to test the program marking up the system. Unit testing focuses first on the modules independently of one another, to locate errors. This enables within that module alone.

In this project, each page was tested separately as a unit. The flow of control and data through that page was tested. Each page is tested with the previously prepared test cases to find errors in the page. After rectifying the errors, Once again it was tested to ensure whether there was no error.

6.2.1 Integration Testing

Data can be lost across any interfaces. Once module can have an adverse effect on another, sub functions when combined, may not produce the desired major functions. Integrations testing for conducting tests to uncover errors associated within the interface. The objective is to take unit-tested module and build a program structure. The entire module are combined and tested as whole.

In Call Logging System, top down integration testing was followed. In this system, for example, first the user should enter the problem, if the problem available it should get added to service database and send the process to the administrator to generate the report. A change of data made in one screen should have reflected in all other screens. This process is continued from the page level to module level ad finally the whole system is tested.

6.2.3 Verification and validation testing

Verification

Verification testing check whether the product development is moving towards the actual product needed by the customer requirements and specification.

Validation is done in a step by step process. When the user confirms the product, check whether the product is obtained.

Validation

Validation testing is done to ensure whether the work steps and deliverables during the project are acceptable. It verifies whether right data is being accessed and performs the functions properly.

In Call Logging System, for example it verifies whether the reports are get generated according to the problem correctly.

6.3 SYSTEM IMPLEMENTATION

Implementation literally means to put into effect or to carry out. The system implementation phase of the software deals with the translation of the design specification into the source code. Coding is done in this stage using an .net framework and programming language. Various types of bugs were discovered while debugging the modules. These were verified, tested and modified.

Once the working application was verified, tested and modified the system could be implemented in the user environment.

Physical System Design

It consists of the attractive to prepare the detailed technical design of the application system. During this designing, the system manager, technical personal and users are participated. The technical personal attempts to identify what information is to be processed, what function and performance are desired, what system behavior can be expected, what interface are to be established, what design constraints exist and what validation criteria are required to define a successful system.

CHAPTER 7

CONCLUSION

In today's world there is a necessity for implementing any system using a computer. Building cost estimate has met its objectives. It has minimized the problem arising due to the existing system. Efforts have been taken to make the system more user's friendly and effective. The system has undergone various tests and the desired results have been achieved. Since, it is a flexible system, future improvements, modifications and expansions can be made on the system.

This project has developed with maximum care. It has been developed with an eye on expansion and flexibility at every stage of all the modules. This is, developed to meet almost all the requirements of the user. This will replace the existing problems. This is more advantageous over the existing system as it takes into account the security and efficiency of the system.

This project is very useful for running IT industry and the products and also maintains the good interaction between the customer and the administrator through email send and phone call.

CHAPTER 8

FUTURE ENHANCEMENT

This system has been designed in such a way that it can be modified with very little effort when such a need arises in the future. In the future the administrator has decided to implement some videos to view the problems clearly. And also for displaying some flash news happening all around the world.

Further this system can be designed with some enhancements like IT Equipments saving system so that customer satisfaction can improve a lot and more number of customer will visit and deal with us.

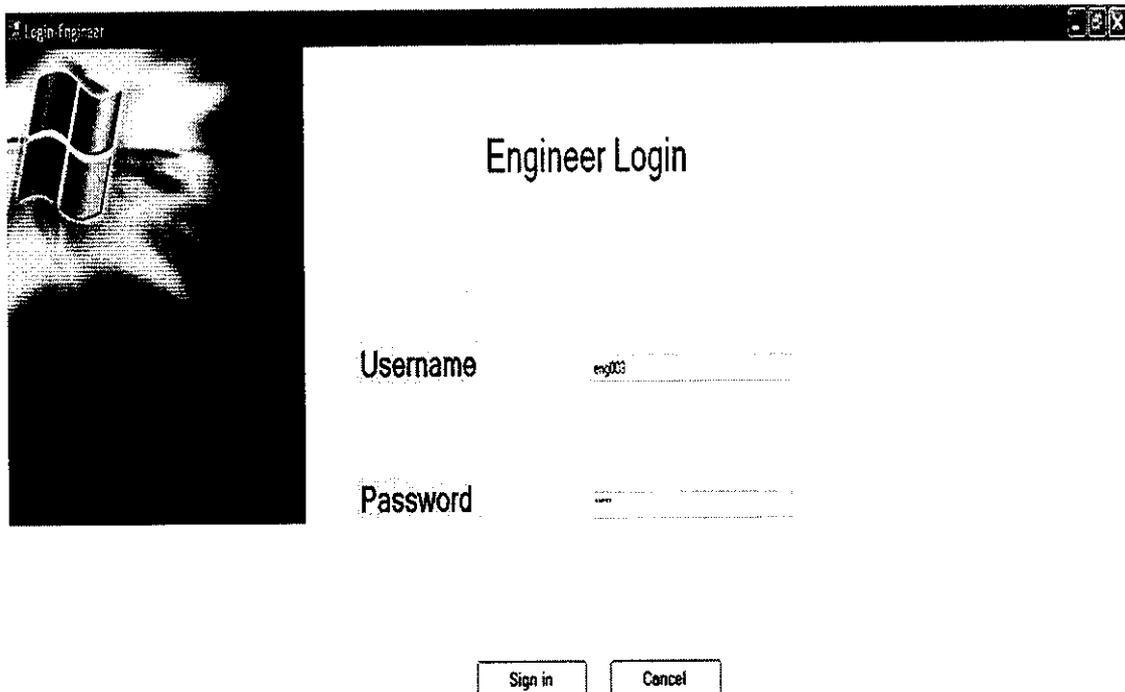
This system has good flexibility of accommodating any more changes that might arise in the future also.

- Any up gradation or change to the existing details can easily be done.
- Can add more modules.
- Can add, design and change various types of reports.
- All the reports that are needed for the future can also be added.
- The entire application can be put in any new system.
- Can be developed to be used in network environment.

APPENDICES

APPENDIX 1: SCREEN SHOTS

Login page of Employee:



The screenshot shows a window titled "Login-Engineer" with a close button in the top right corner. On the left side of the window is a vertical banner image featuring a close-up of a person's face wearing a head-mounted display (HMD) with a visor. The main content area of the window is titled "Engineer Login". Below the title, there are two input fields: "Username" with the text "eng003" entered, and "Password" with several asterisks indicating a masked password. At the bottom of the form, there are two buttons: "Sign in" and "Cancel".

Fig: Login Form

New User Creation:

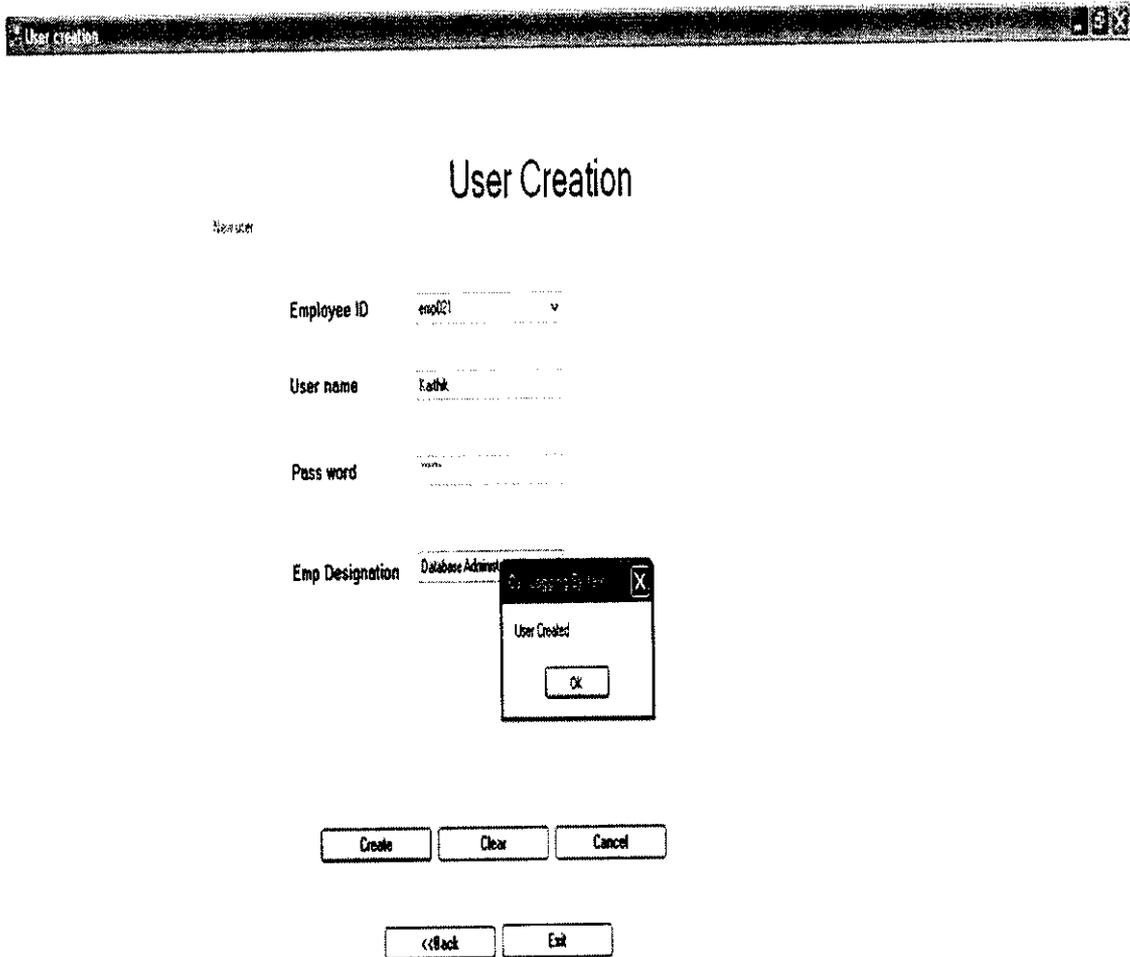


Fig: User registration

User Termination:

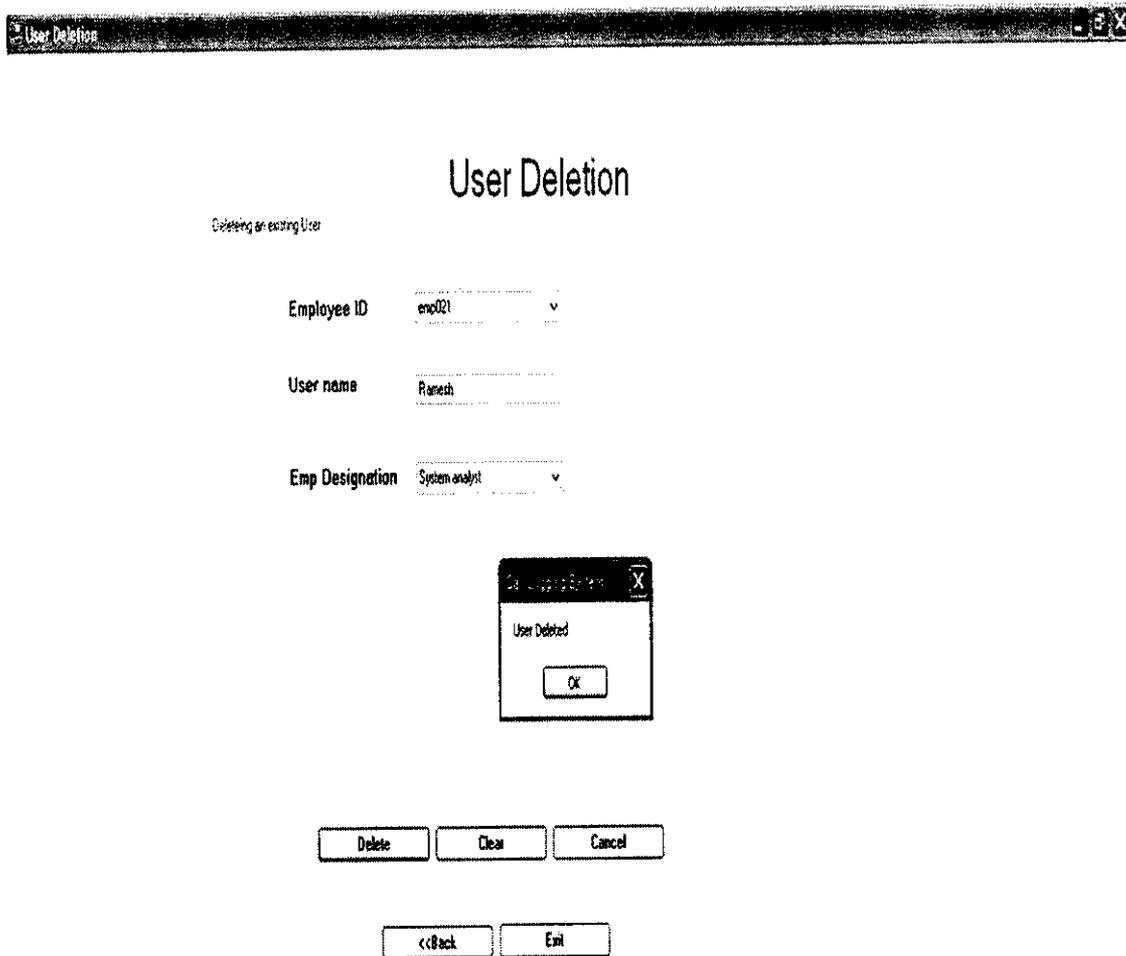


Fig: User Termination

Employee Enters Problem:

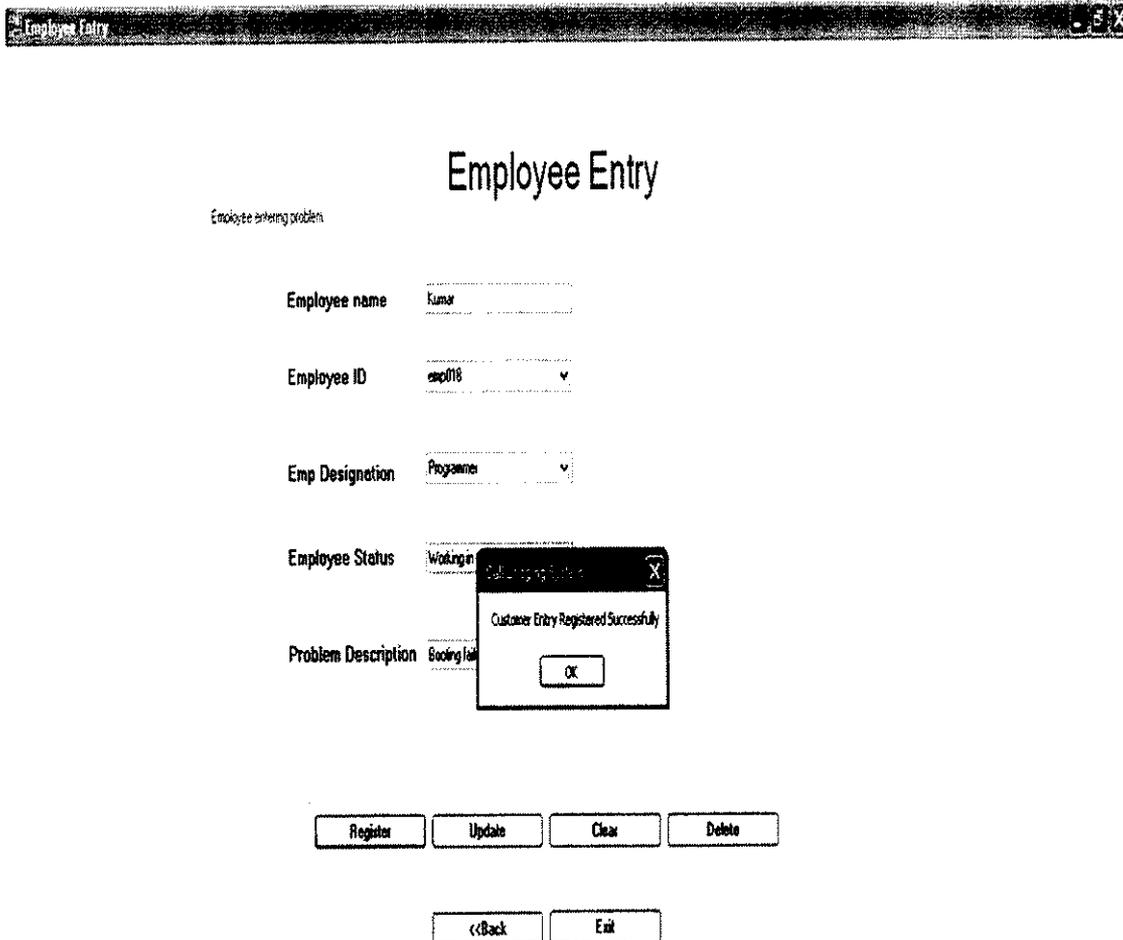


Fig: Employee's problem description

Entry After Logging a call:

The screenshot shows a web browser window titled 'Call log Entry'. The page content includes the following elements:

- Form Title:** Call log Entry
- Text:** Employee entering problem
- Fields:**
 - Employee name: Virek raman
 - Employee ID: emp022
 - Problem Description: Network unavable
 - Problem Status: needs to be
 - Date of Entry: 13/4/2008, 11
 - Emp E-mail: virek.emp022@newancon.com
- Buttons:** Submit, Update, Clear, Delete (in a row); <<Back, Exit (in a row)
- Dialog Box:** A small window titled 'Call logging Success' with the message 'Call log Entry Submitted Successfully' and an 'OK' button.

Fig: Call logging entry

Engineer's Entry After Completing the Problem:

Engineer service entry

Service Engineer Entry

Engineer ID: eng04

Employee ID: emp16

Date of Entry: 13/4/2009, 12:13 pm

Problem Occurred: IOS F

Problem Remarks: Finish

Engineer E-mail: shelly.eng04@newnolan.com

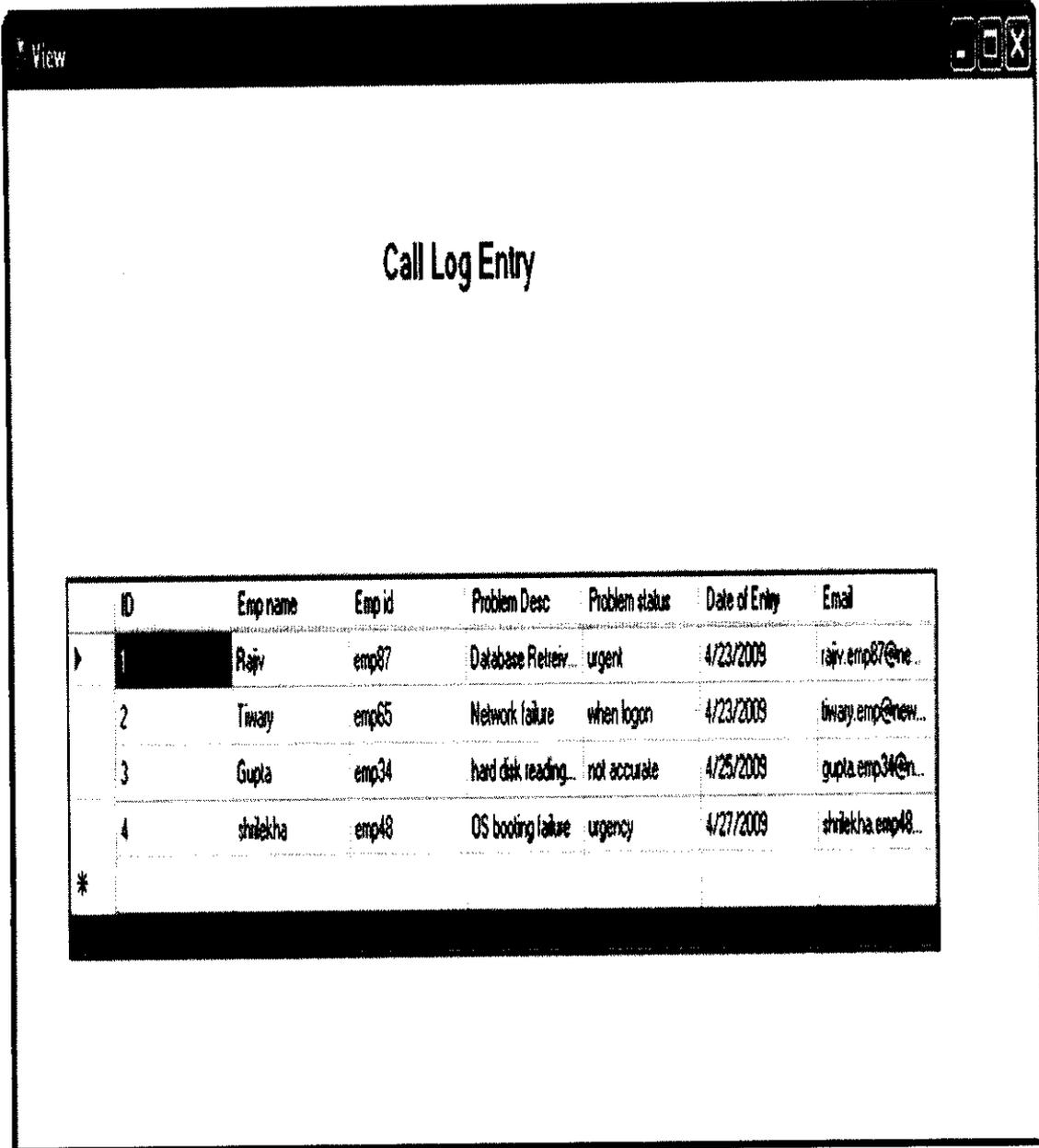
Engineer Preference: By Time By urgency

Employee Email: rajesh.eng014@newnolan.com

Buttons: Submit, Update, Clear, Delete, <<Back, Exit

Dialog Box: Call log Entry Submitted Successfully (OK)

Fig: Completed problem entry

Call Log Entries View:

ID	Emp name	Emp id	Problem Desc	Problem status	Date of Entry	Email
1	Rajiv	emp87	Databass Retrie...	urgent	4/23/2009	rajiv.emp87@ne...
2	Tiway	emp65	Network failure	when logon	4/23/2009	tiway.emp@new...
3	Gupta	emp34	hard disk reading...	not accurate	4/25/2009	gupta.emp34@en...
4	shrikha	emp48	OS booting failure	urgency	4/27/2009	shrikha.emp48...
*						

Fig: Call log view

Service Engineer's Entry View:

Service Engineer Entry									
Engg name	Engg ID	Emp ID	Date of Entry	Problem occurred	Problem Remarks	Engg email	Engg Pref	Emp email	
Prakash	eng022	emp02	4/16/2009	Ds Failure	Finished	prakash.eng022@...	<input checked="" type="checkbox"/>	kumar.emp02@n...	
Gupta	eng016	emp05	4/16/2009	Boot Failure	Finished	gupta.eng016@n...	<input checked="" type="checkbox"/>	stevemp05@n...	
Prakash Khanna	eng013	emp12	4/17/2009	Network Interrupt	Finished	khanna.eng013@...	<input type="checkbox"/>	vadivel.emp12@...	
Gaurav	eng019	emp99	4/18/2009	Database corne...	Finished	gaurav.eng019@...	<input checked="" type="checkbox"/>	kashna.emp99@...	
*							<input type="checkbox"/>		

Fig: View after servicing

Service Engineer's Call Logging Report:



Call Log [Service Engineer]

ID	Engineer Name	Engineer Report	Problem
2	Saurav	Finished	Dt Failure
6	Swagata	Finished	Foot lock
7	Rachshankar	Finished	Authentication
8	rajat kumar	Not finished	PAIN Taker
9	Indrajit	Finished	Router Connection
10	Vignesh	Finished	Mouse
11	Pranshu	Finished	Disk copying error
12	Sakshi	Finished	Key
3	Durga	Partially finished	Database corrupt
4	Pratik	Finished	External problem
5	Rohit Sharma	Finished	Scanner Cable

Fig: Call log report of service engineer wise

Performance Report Details:



Performance[Service Engineer]

ID	EmpID	Emp name	Performance	Availability
0	eng009	Euna	Excellent	OK
1	eng008	Steve	Good	PI
2	eng006	Carol	Satisfactory	PI
4	eng003	Ezra	Very good	Night
5	eng007	Burghard	poor	Evening
6	eng007	Ramiah	Free	AK
7	eng008	Suzah	Free	PI
8	eng022	Van	Need to improve	Night
9	eng001	Rajathara	Good	Night
10	eng009	Intahit	Satisfactory	PI
11	eng004	Vijithara	Very good	PI
12	eng003	Free	Free	Evening
13	eng022	Rajeev	OK	AK
14	eng009	Hemanya	Excellent	Night
15	eng011	Manika	Good	Evening
16	eng009	Shobha	Good	Medium

Fig: Service Engineer's Performance Report

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