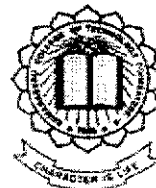




P-2278



E-FILE PROCESSING SYSTEM

By

S.PALANI KUMAR
Registration Number: 71205621029

of

**KUMARAGURU COLLEGE OF TECHNOLOGY
COIMBATORE**

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 APPLICATION

June 2008


KUMARAGURU COLLEGE OF TECHNOLOGY

Coimbatore-641006

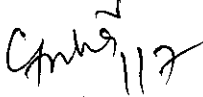
DEPARTMENT OF COMPUTER APPLICATION**BONAFIDE CERTIFICATE**

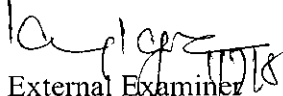
Certified that this project report titled “**E-FILE PROCESSING SYSTEM**” is the bonafide work of **Mr. S.Palani Kumar (Reg No: 71205621029)** who carried out the project under my supervision. Certified further, that to the best of my knowledge the work reported here-in does not form part of any other 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.


Supervisor


Head of the Department

Submitted to Project and Viva Examination held on 01-07-08


Internal Examiner


External Examiner



EVIAN TECHNOLOGIES PVT. LTD

30th May 2008

PROJECT COMPLETION CERTIFICATE

This is certify to that **Mr.S.Palanikumar**, Reg.No:71205621029 doing final year M.C.A in Kumaraguru College of Technology has completed his project entitled "**E-File Processing System**" under the guidance of **Mr.G.Arul Doss, Senior Programmer Analyst**, in our concern during the period of December 2007 to May 2008.

He has Successfully Completed the project as per the requirements.

A handwritten signature in black ink, appearing to read "A.A.Kumar".

A.A.Kumar

Head-Technical

Evian Technologies Pvt Ltd

ABSTRACT

E-File Processing System is designed for organization having a system like DAK(mail section) where the entry for all the letters are made.

Dak section distributes the letters to the concerned officers. An officer has to take necessary action and close the file they file the letter along with action made to the letter. If the officer wants to send a reply to the particular letter, he has to send it through dispatch section.

Dispatch section, receive letters from the different officers and it has to be sent the destination which is written on the cover. Sometimes the same letter has to be dispatched to different destinations.

Dispatch section has to maintain a register of how much amount is spent on the particular letter and particular day, week and so on.

While the process is in place, the management can track the file and know the status of pending files, action files and closed files and their comments on the file.

This project has been developed using VB.NET & ASP.NET 2005 as front end and MS-SQL Server 2005 as back end.

ACKNOWLEDGEMENT

I would like to take this opportunity to say thank you to the people who have helped to make this project.

First I would like to express my heartfelt thanks to our principal Dr. Joseph V. Thanikal, B.E., M.E., Ph.D., PDF., CEPIT., for having given me the opportunity to do this project .

I express my deep sense of gratitude and profound thanks to Dr. M. Gururajan, Ph.D., HOD, Department of Computer Applications, for providing moral support towards this project work.

I sincerely express my humble gratitude to Ms. V. Geetha, M.C.A, M.Phil, Assistance Professor, Department of Computer Applications, who has been my guide with valuable and holistic suggestions and extended kind of operation and encouragement to make this project.

I am grateful to Mr. A. A. Kumar, Head-Technical, Evian Technologies Pvt Limited, Chennai for having permitted me to do the project.

I also thank all the staff of Department of Computer Applications for their moral support towards this project.

I also thank my parents, friends and everyone who was with me supporting me throughout the project.

TABLE OF CONTENTS

ABSTRACT	iii
ACKNOWLEDGEMENT	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
1. INTRODUCTION	
1.1 ABOUT THE PROJECT	1
1.2 ORGANIZATION PROFILE	2
2. SYSTEM STUDY AND ANALYSIS	
2.1 EXISTING SYSTEM	3
2.1.1 DRAWBACK OF EXISTING SYSTEM	3
2.2 PROPOSED SYSTEM	3
2.2.1 ADVANTAGES OF PROPOSED SYSTEM	4
2.3 FEASIBILITY ANALYSIS	4
2.3.1 TECHNICAL FEASIBILITY	5
2.3.2 ECONOMIC FEASIBILITY	5
3. DEVELOPMENT ENVIRONMENT	
3.1 HARDWARE CONFIGURATION	7
3.2 SOFTWARE CONFIGURATION	7
3.3 PROGRAMMING ENVIRONMENT	8

4. SYSTEM DESIGN AND DEVELOPMENT	
4.1 INPUT DESIGN	13
4.2 OUTPUT DESIGN	13
4.3 DATABASE DESIGN	14
4.4 DATA FLOW DIAGRAM	23
5. ARCHITECTURAL DESIGN	
5.1 MODULE DESIGN	27
6. SYSTEM TESTING AND IMPLEMENTATION	
6.1 TESTING METHODS	29
6.2 IMPLEMENTATION	31
6.3 MAINTENANCE	32
7. CONCLUSION AND FUTURE ENHANCEMENT	
7.1 CONCLUSION	33
7.2 MERITS OF THE SYSTEM	33
7.3 FUTURE ENHANCEMENT	34
APPENDICES	35
REFERENCES	48

LIST OF TABLES

TABLE NO	TABLE NAME
4.3.1	Login Creation
4.3.2	Department
4.3.3	Designation
4.3.4	Staff details
4.3.5	Client (Address)
4.3.6	Dak (External)
4.3.7	E-Dak (Attachment)
4.3.8	E-Dak (staff)
4.3.9	Dak (Internal)
4.3.10	I-Dak (staff)
4.3.11	I-Dak (Attachment)
4.3.12	Forwarded file
4.3.13	Dispatch

LIST OF FIGURES

FIGURE. NO	FIGURE NAME
4.4.1	Level 0 DFD
4.4.2	Level 1 DFD
4.4.3	Level 2 DFD

CHAPTER 1

INTRODUCTION

1.1 ABOUT THE PROJECT

E-File Processing System is designed for the organization having a system like DAK where the entries for all the letters are made.

The main objective of this E-File Processing System is

- It is used to move file quickly but physically it is not possible to move file fast
- All officers can view the content of the file before arrival of physical letter. So it will be easy for decision making.
- Physical letter is used for only legal purpose in future if needed
- Management can find out the status of file using tracking.
- It will help management to take fast decision.

The incoming DAK's basic information is entered in the E-File Processing System with a marking to the destination officer. Scanning provision is available, for the user to scan and save the document. The saved document can be viewed by the marked officer.

Each Officer can view the details of the file before the physical arrival of the file. This will enable the officer to work immediately. The action taken on a file can also be

1.2 ORGANIZATION PROFILE

Evian Technologies Private Limited is one among the few companies which adopt latest cutting edge technologies in the field of information Technology, dedicated to the cause of designing innovative products, solutions and services and making them easily available to the people throughout the globe. We are a group of highly motivated IT professionals with ability to innovate and a strong desire to excel.

Our ability to accomplish tasks in a timely and cost-effective manner is the key to maximizing value, minimizing cost, improving communication and positively leveraging our clients. Our core strengths have helped us achieve desirable heights of success with clients.

CHAPTER 2

SYSTEM ANALYSIS

2.1 Existing System

All the Letters which are generated within the organization and Letters received from outside like circular, official letters, unofficial letters, endorsement and applications to the admin department are sent manually to the appropriate persons. So there is a chance that a letter might be lost during this transition process.

2.1.1 DRAWBACKS OF THE EXISTING SYSTEM

The drawbacks of the existing systems are mentioned below:

- Waste of time and paper
- Updating is not an easy work
- More error prone because of manual entry
- Time Consuming.
- Wastage of Human resources.
- To search a particular domain specialized people is difficult.
- Lack of Security and Data redundancy.
- Generation of reports is difficult

2.2 Proposed System

In the organization they have a system like DAK where the entries for all the letters are made. Dak section distributes the letters to the concern officers. An officer has to

If the officer wants to send a reply to the particular letter, he has to send it through dispatch section where they send all the letters from the different officers and send it to the destination which is written on the cover. Some times officers may need to send same content to the different destinations.

Dispatch section has to maintain the register of how much amount is spent on the particular letter on a particular day, week and so on. While the process is in place, the management can track the file and know the status of pending files, action files and closed files and their comments on file.

2.2.1 ADVANTAGES OF THE PROPOSED SYSTEM

The benefits of the Proposed System are as follows:

- It will help management to take fast decision.
- Management can find out the status of file using tracking.
- Physical letter is used for only legal purpose in future if needed
- It is used to move file quickly but physically it is not possible to move file fast
- Easy to use and simple.
- Flexible and Scalable.
- Retrieval of data and reports will be much simpler.

2.3 Feasibility Analysis

Feasibility analysis is the measure of how beneficial or practical the development of the System will be to the project. Once the problem is explained information is gathered about the system to test whether the system is viable technically, and financially. Thus, feasibility study is carried out in two phases as follows:

Technical Feasibility

A study of function, performance, and constraints that may affect the ability to achieve an acceptable system.

The proposed system is to be developed using VB.NET 2005 and SQL SERVER 2005 which are some of the leading technologies in the market. Microsoft Visual studio .NET 2005 and Microsoft SQL SERVER 2005 are already available with the company. These technologies work well on Microsoft platforms. Future expansion is planned but will not affect this project.

In technical feasibility objectives, functions and performance are somewhat busy, anything seems possible if the “right” assumptions are made. It is essential that the process of analysis and definition be conducted in parallel with an assessment of technical feasibility.

Economic Feasibility

An evaluation of development cost weighted against the ultimate income or benefit derived from the developed system or product. Economic justification is generally the “bottom-line” consideration for most systems. It includes cost-benefit analysis, long-term corporate income strategies, impact on the profit centers or products, cost of resources needed for development and potential market growth.

The proposed benefits of the system will outweigh the costs to be incurred during system development since the system does not require procurement of additional hardware facilities it is economically feasible. It uses VB.Net 2005 and SQL Server 2005 for its development. So it's found that the benefits outweigh costs.

Feasibility Analysis consists of

- Detailed definition of tasks
- Definition of current and future system environments
- Determination of critical success efforts
- Analysis of technical and economical feasibility
- Hardware and software recommendations.

CHAPTER 3

DEVELOPMENT ENVIRONMENT

3.1 HARDWARE CONFIGURATION

This section describes the hardware components with which the application was developed and the minimum hardware configuration with which the system operates best.

PROCESSOR	:	Pentium 4
PROCESSOR SPEED	:	2.6 GHz
RAM	:	512 Mb
HARD DISK	:	80 GB
KEYBOARD	:	Multimedia Keyboard
MOUSE	:	Optical

3.2 SOFTWARE CONFIGURATION

This section describes the software in which the application was developed and using the same software would make it more compatible.

OPERATING SYSTEM	:	Windows XP
FRONT END	:	ASP.NET, VB.NET
FRAME WORK	:	.Net Framework 2.0

BACK END : MS SQL SERVER 2005

3.3 PROGRAMMING ENVIRONMENT

.Net Framework:

Microsoft .NET is a set of Microsoft software technologies for connecting your world of information, people, systems, and devices. It enables an unprecedented level of software integration through the use of XML Web services: small, discrete, building-block applications that connect to each other—as well as to other, larger applications via the Internet. XML Web services link applications, services, and devices together into connected solutions that enable you to act on information anytime, any place, and from any smart device. .NET-connected software delivers what developers need to create and connect XML Web services. The benefit to individuals is seamless, compelling experiences with information sharing.

Just In Time (JIT):

An acronym for "just-in-time," a phrase that describes an action that is taken only when it becomes necessary, such as just-in-time compilation or just-in-time object activation. JIT compilation is the compilation that converts Microsoft intermediate language (MSIL) into machine code at the point when the code is required at run time.

Microsoft Intermediate Language (MSIL):

A language used as the output of a number of compilers and as the input to a just-in-time (JIT) compiler. The common language runtime includes a JIT compiler for converting MSIL to native code.

Base Class Library (BCL):

Consists of program applications, all objects, types and classes.

Common Language Runtime (CLR):

The common language runtime is responsible for run time services such as language integration, security enforcement, memory, process, and thread management. In addition, it has a role at development time when features such as life-cycle management, strong type naming, cross-language exception handling, dynamic binding, and so on, reduce the amount of code that a developer must write to turn business logic into a reusable component.

Framework Class Libraries (FCL):

Base classes provide standard functionality such as input/output, string manipulation, security management, network communications; thread management, text management, user interface design features, and other functions. The Microsoft ADO.NET data classes support persistent data management and include SQL classes for manipulating persistent data stores through a standard SQL interface. XML classes enable XML data manipulation and XML searching and translations. The Microsoft ASP.NET classes support the development of Web-based applications and XML Web services. The Windows Forms classes support the development of Windows-based smart client applications. Together, the class libraries provide a common, consistent development interface across all languages supported by the .NET Framework.

ASP.NET

ASP.NET is the .NET framework layer that handles Web requests for specific types of files, namely those with (.aspx or .ascx) extensions. The ASP.NET engine provides a robust object model for creating dynamic content and is loosely integrated into the .NET framework.

ASP.NET is part of the .NET framework. ASP.NET programs are centralized applications hosted on one or more Web servers that respond dynamically to client requests. The responses are dynamic because ASP.NET intercepts requests for pages with a specific extension (.aspx or .ascx) and hands off the responsibility for answering those requests to just-in-time (JIT) compiled code files that can build a response “on-the-fly.”

In addition to huge increases in speed and power, ASP.NET provides substantial development improvements, like seamless server-to-client debugging, automatic validation of form data.

MAIN FEATURES OF ASP.NET

- Object-oriented
- Event-based
- Rich library of Web Controls
- Separation of layout (HTML) and logic (e.g. C#)
- Compiled languages instead of interpreted languages
- GUI can be composed interactively with Visual Studio .NET
- Better state management

SQL SERVER 2005

Features of SQL Server 2005

Microsoft SQL Server 2005 features include:



P-2278

Internet Integration

The SQL Server 2005 database engine includes integrated XML support. It also has the scalability, availability, and security features required to operate as the data storage component of the largest Web sites.

Scalability and Availability

The same database engine can be used across platforms ranging from laptop computers running Microsoft Windows 98 through large, multiprocessor servers running Microsoft Windows 2000 Data Center Edition. SQL Server 2005 Enterprise Edition supports features such as federated servers, indexed views, and large memory support that allow it to scale to the performance levels required by the largest Web sites.

Enterprise-Level Database Features

The SQL Server 2005 relational database engine supports the features required to support demanding data processing environments. The database engine protects data integrity while minimizing the overhead of managing thousands of users concurrently modifying the database ease of installation, deployment, and use.

SQL Server 2005 includes a set of administrative and development tools that improve upon the process of installing, deploying, managing, and using SQL Server across several sites. SQL Server 2005 also supports a standards-based programming model integrated with the Windows DNA, making the use of SQL Server databases and data warehouses a seamless part of building powerful and scalable systems.

Data warehousing

SQL Server 2005 includes tools for extracting and analyzing summary data for online analytical processing. SQL Server also includes tools for visually designing databases and analyzing data using English-based questions.

Database Architecture

Microsoft SQL Server 2005 data is stored in databases. The data in a database is organized into the logical components visible to users. A database is also physically implemented as two or more files on disk. Each instance of Sql Server has four system databases (master, model, tempdb, and msdb) and one or more user databases.

CHAPTER 4

SYSTEM DESIGN

4.1 Input Design

Input Design is the part or overall system design, which requires very careful attention. Often the collection of input data is the most expensive part of the system. In terms of both the equipment used and the number of people involved in it is the point of most contracts for the user with the computer system and it is prone to error. If data going into system is incorrect, then the processing the output will magnify these errors. Input design is the process of converting an external user oriented description of the input system into a machine-oriented format.

In this input design a valid user name and password is entered for user authentication to login into the system.

4.2 Output Design

Output screens are the tools to convey information to the users since the design of the output screen is very important for attracting the users.

Reports are generated as output for the users to view and take print-outs. Different reports are generated for different criteria.

The output screen formats are shown in figure number: 8.1.1 - 8.1.12

4.3 Database Design

TABLES

Table Name: Login Creation

Description: This table stores all the information about the Login Creation.

FIELD NAME	DATA TYPE	DESCRIPTION
Login_id	Int(Autounumber)	Field to indicate Login id
Login_dept	Int	Staff `s department
Login_staffID	Int	ID of staff
Login_UserID	Varchar(50)	Name of the staffed to Login
Loign_password	Varchar(50)	Password of login
Login_userlevel	Char(2)	Select appropriate role

Table 4.3.1: Login Creation

Table Name: Department

Description: This table holds all the information about the Department details.

FIELD NAME	DATA TYPE	DESCRIPTION
Dept_id	Int (Autounumber)	PK field to indicate Dept id
Dept_Name	Varchar(50)	Department name
Dept_sname	Varchar(50)	Department Short Name

Table Name: Designation

Description: This table contains all the information about the Designation details.

FIELD NAME	DATA TYPE	DESCRIPTION
Desig_id	Int (Autonumber)	PK field to indicate Designation id
Desig_Name	Varchar(50)	Designation name
Desig_Sname	Varchar(50)	Designation Short Name

Table 4.3.3: Designation

Table Name: Staff details

Description: This table describes all the information about the Staff details.

FIELD NAME	DATA TYPE	DESCRIPTION
Staff_id	Int (Autonumber)	PK field to indicate staffid number
Staff_dept	Int	Staff `s department
Staff_name	Varchar(50)	Name of the staff
Staff_desig	Int	Staff `s designation
Staff_dob	Datetime	Date of birth of staff
Staff_gender	Char(10)	Gender of staff
Staff_phone	Varchar(15)	Phone number of staff
Staff_email	Varchar(50)	Email id of staff
Staff_address1	Varchar(50)	Address1 of the staff
Staff_address2	Varchar(50)	Address2 of the staff
Staff_address3	Varchar(50)	Address3 of the staff
Staff_doj	Datetime	Date of joining

Table 4.3.4: Staff details

Table Name: Client (Address)

Description: This table contains all the information about the Client (Address) details.

FIELD NAME	DATA TYPE	DESCRIPTION
Client_id	Int (Autonumber)	Field to indicate clientid number
Client_name	Varchar(20)	Name of the client(company)
Client_cperson	Varchar(20)	Name of the contact person
Client_contno	Int	Contact person number
Client_address1	Varchar(50)	Address1 of the client
Client_address2	Varchar(50)	Address2 of the client
Client_address3	Varchar(50)	Address3 of the client
Client_city	Varchar(20)	City of the client
Client_pincode	Int	Pin code of the client
Client_phone	Int	Phone number of the client
Client_email	Varchar(20)	Email address of the client

Table 4.3.5: Client (Address)

Table Name: Dak (External)

Description: This table stores all the information about the Dak (External) details.

FIELD NAME	DATA TYPE	DESCRIPTION
EDak_ID	Int (Autonumber)	Field to indicate external dak number
EDak_Refno	Char(4)	Letter reference number
EDak_letterby	Varchar(50)	Letter Received through(post,fax,courier....)
EDak_letterfrom	Varchar(50)	Letter received from (Name)
EDak_letterdate	Datetime	Letter's date
EDak_receivedate	Datetime	Letter received date
EDak_subject	Varchar(200)	Subject of the letter
EDak_enclosure	Varchar(50)	Any enclosure with letter(DD,Cheque.....)

Table 4.3.6: Dak (External)

Table Name: External Dak Attachment

Description: This table holds all the information about the External Dak Attachment.

FIELD NAME	DATA TYPE	DESCRIPTION
EDAK_fileid	Int (Autonumber)	Attachment file number
DAKNO	Int	Dak number
Filename	Text	File name of attachment

Table 4.3.7: External Dak Attachment

Table Name: External Dak Staff

Description: This table contains all the information about the External Dak Staff details.

FIELD NAME	DATA TYPE	DESCRIPTION
EDak_id	Int	Forward id number
EDakno	Int	Dak number of the letter
Staff_id	Int	Receiving staff number
Date send	datetime	Date of the letter forwarded

Table 4.3.8: External Dak Staff

Table Name: Dak (Internal)

Description: This table describes all the information about the Dak (Internal) details.

FIELD NAME	DATA TYPE	DESCRIPTION
IDak_ID	Int (Autonumber)	Field to indicate Internal dak number
IDak_refno	Varchar(50)	Internal reference number
IDak_deptid	Int	Letter from Department
IDak_staffid	Int	Letter from staff
IDak_category	Char(2)	Letter is (circular...)
IDak_Rdate	Datetime	Letter received date
IDak_subject	Varchar(50)	Subject of the letter
IDak_Message	text	Detail of the letter

Table 4.3.9: Dak (Internal)

Table Name: Internal Dak Staff

Description: This table holds all the information about the Internal Dak Staff details.

FIELD NAME	DATA TYPE	DESCRIPTION
IDak_id	Int	Forward id number
IDakno	Int	Dak number of the letter
IDak_Staffid	Int	Receiving staff number
IDak_Date	datetime	Date of the letter forwarded

Table Name: Internal Dak Attachment

Description: This table contains all the information about the Internal Dak Attachment.

FIELD NAME	DATA TYPE	DESCRIPTION
IDAK_id	Int (Autonumber)	Attachment file number
IDakno	Int	Dak number
Filename	Text	File name of attachment

Table 4.3.11: Internal Dak Attachment

Table Name: Forward file

Description: This table contains all the information about the Forward file details.

FIELD NAME	DATA TYPE	DESCRIPTION
Dak_forwardid	Int	Forward id number
Dakno	Int	Dak number of the letter
From_staffid	Int	Sending staff id number
Dept_id	Int	Department name
To_staffid	Int	Receiving staff number
Date send	Datetime	Date of the letter forwarded

Table 4.3.12: Forward file

Table Name: Dispatch

Description: This table holds all the information about the Dispatch details.

FIELD NAME	DATA TYPE	DESCRIPTION
Dispatch_id	Int	Dispatch number
Dispatch_dept	Int	Dispatch department name
Dispatch_staff	Int	Dispatch staff name
Dispatch_date	Datetime	Date of dispatch the letter
Dispatch_through	Varchar(50)	Letter dispatch through
Dispatch_amount	Float	Amount spend for dispatch letter
Dispatch_remarks	Text	remarks

Table 4.3.13: Dispatch

4.4 Data Flow Diagram

A data flow diagram is graphical tool used to describe and analyze movement of data through a system. These are the central tool and the basis from which the other components are developed.

The transformation of data from input to output, through processed, may be described logically and independently of physical components associated with the system. These are known as the logical data flow diagrams.

The physical data flow diagrams show the actual implements and movement of data between people, departments and workstations. A full description of a system actually consists of a set of data flow diagrams.

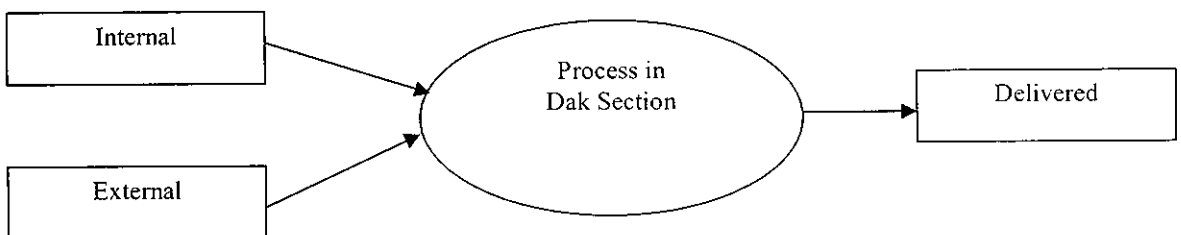


Figure 4.4.1 Level 0 DFD

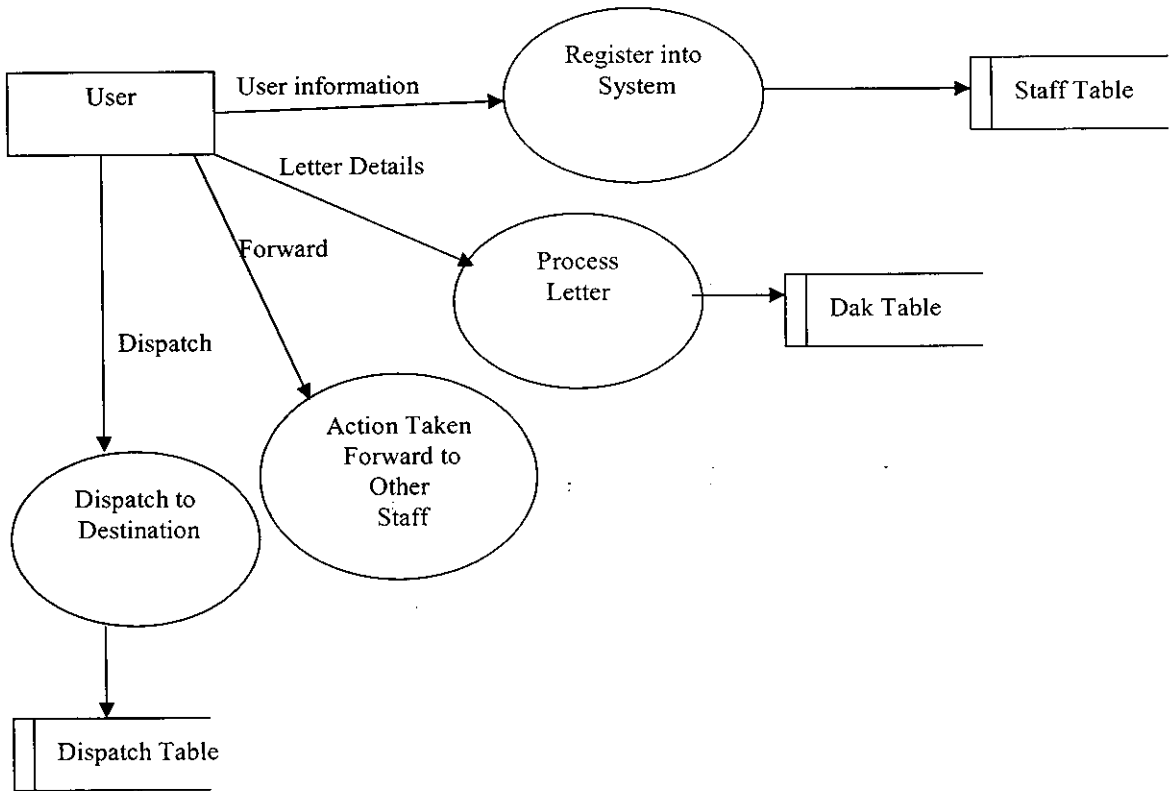


Figure 4.4.2 Level 1 DFD

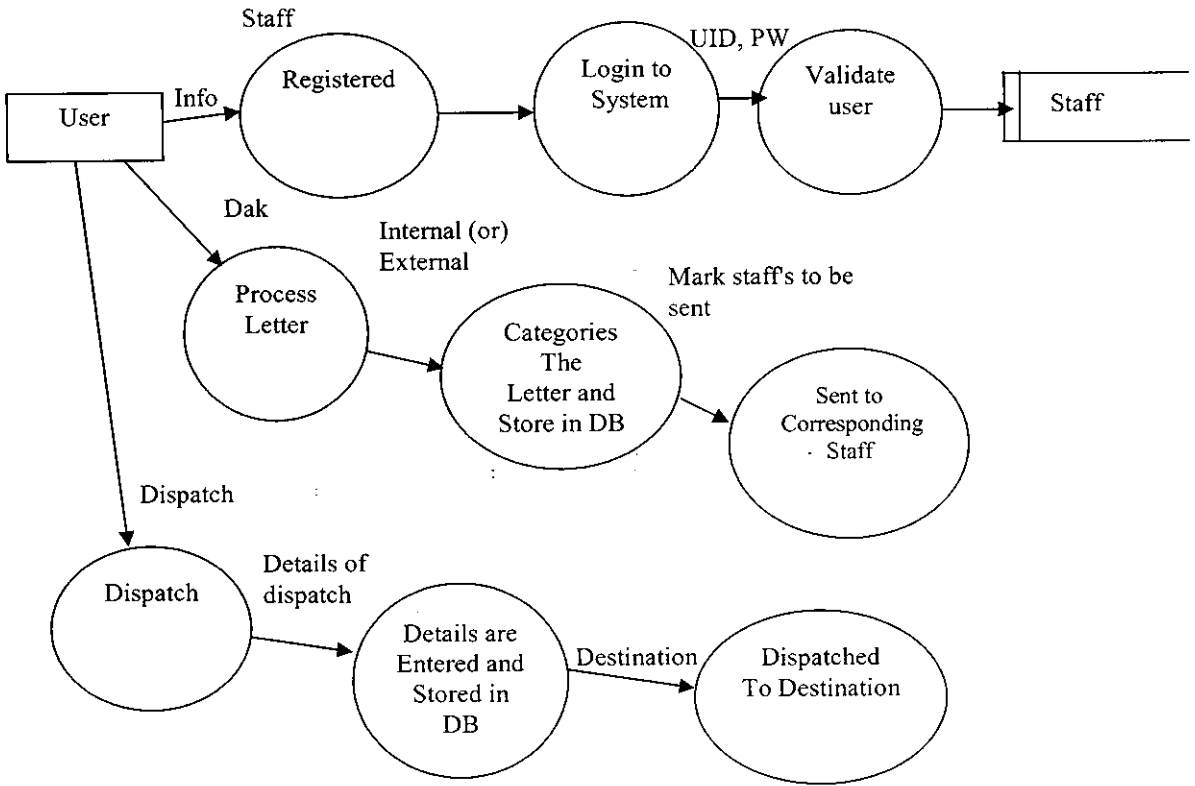


Figure 4.4.3 Level 2 DFD

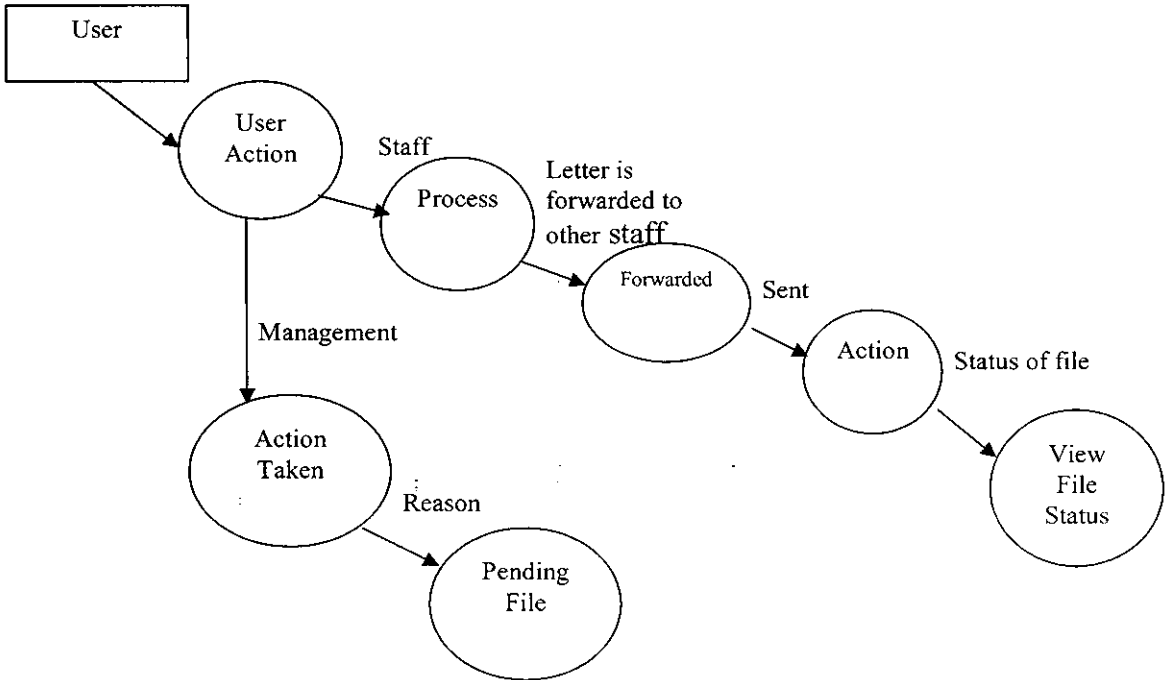


Figure 4.4.3.1 Level 2 Cont DFD

CHAPTER 5

ARCHITECTURAL DESIGN

5.1 MODULE DESIGN

The entire project is mainly divided into three major modules. They are

1 Login module

- Administrator
- User
- Management

2 Dak

- External
- Internal

3 Dispatch

User Login

User those who are working in concern can enter using their corresponding id & password, to login into system.

Administrator Login

The Administrator can login into this system through his corresponding login id and password. When the administrator enter in administrator login mode he can add, modify, view the staff, department, designation, login creation for new persons, can view the status of pending file.

Management Login:

The top level management can login with the login id & password. While the process is in place, the management can track the file and know the status of pending files, action files and closed files and their comments on the file.

Dak

The Dak section distributes the letters to the concern officers. when letters arrive it will be first numbered, and enter the details from, date, subject ,reference number, letter type (by post, courier, fax etc) , specify any enclosure type (DD, Cheque etc..) and staff name is entered to whom it has to be sent. If all the entry are saved and it will send the particular file to the person and receive the acknowledgement of the letter.

External

The external module caters to the need of all the external mails coming from outside. Entry has to be made in Dak section. And the letter is being numbered.

Internal

Internal caters to the mails which are generated inside the organization like circular, unofficial letters, endorsement and applications to the admin department etc. In the internal module Dak section distributes the letters to the concern officers modification can be done before it is been dispatched.

Dispatch

The dispatch section takes care of all the mails that are sent out. All the letters that are dispatched would be numbered and entry has to be made through which it has been dispatched (post, courier, hand etc). The total amount spent for the particular dispatch of letter is saved in database.

CHAPTER 6

TESTING

Testing plays a major part in software development. Once the customer has specified the requirements the system has to be developed so as to satisfy those requirements and this is ensured by means of testing. In E-File Processing System various testing techniques are used to test the modules individually and also the system as a whole to determine the quality of the system.

6.1 Testing Methods

Following are the some of the testing methods applied to this effective project:

Source code testing

This examines the logic of the system. If we are getting the output that is required by the user, then we can say that the logic is perfect.

In E-File Processing System, the application is executed by the user and each of the functionality has been accepted by the user. The system is accepted by the user when it satisfies the requirements.

Unit Testing

Unit testing focuses on verifying the effort on the smallest unit of software-module. The local data structure is examined to ensure that the data stored temporarily maintains its integrity during all steps in the algorithm's execution. Boundary conditions are tested to ensure that the module operates properly at boundaries established to limit or restrict processing.

In E-File Processing System, there are three modules and each of them were tested individually checking for errors. The boundary conditions of the modules are tested to ensure that the module operates properly.

Integration Testing

Data can be tested across an interface. One module can have an inadvertent, adverse effect on the other. Integration testing is a systematic technique for constructing a program structure while conducting tests to uncover errors associated with interring.

In E-File Processing System, Bottom up Integration testing is used where in the modules are combined one by one and tested and finally tested as a whole. The interdependencies between the modules are tested and the bugs are traced and corrected.

Performance Testing

Performance Testing is used to test runtime performance of software within the context of an integrated system. Performance test are often coupled with stress testing and require both software instrumentation

In E-File Processing System, runtime performance was tested to find out how the software that is developed is performing. For this performance testing is used

Output Testing

After performing the validation testing, the next step is output testing of the proposed system since no system would be termed as useful until it does produce the required output in the specified format output format is considered in two ways, the screen format and the printer format.

In E-File Processing System, output Testing is done successfully by giving valid input and received valid output in two ways, the screen format and printer format.

User Acceptance Testing

User Acceptance Testing is the key factor for the success of any system. The system under consideration is tested for user acceptance by constantly keeping in touch with prospective system users at the time of developing and making changes whenever required.

In E-File Processing System, the application is executed by the user and each of the functionality has been accepted by the user. The system is accepted by the user when it satisfies the requirements.

6.2 Implementation

Implementation is the state in the project where the theoretical design is turned into a working system. The most crucial stage in achieving a new successful system and giving confidence on the new system for the users that will work efficiently and effectively. The system is implemented only after thorough testing is done and if it is found to work according to the specification.

It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve changeover, and evaluation of the changeover methods apart from planning. Two major tasks for preparing the implementation are educating, training the users and testing the system.

6.2.1 Implementation plan preparation

The implementation process begins with the preparation of plan for implementation. According to this plan other activities are carried out. In this plan discussion has been made regarding the equipment, resources and how to test the activities. Thus a clear planner prepared for the activities.

6.3 Maintenance

Software maintenance invokes keeping software interface simple and standard. Paying attention to troublesome modules, replacing faulty components and generally planning to replace components that are old, obsolete, faulty, or at risk for imminent failure. There are several factors that require to be maintained. They are

- Hardware platforms change or become obsolete.
- Operating system change.
- Language standard's change.
- Graphical user interface change.

Maintenance can be classified into

It deals with adapting software change in the environment. It does not lead to changes in the system functionality.

- Perceptive maintenance
- Preventive maintenance
- Corrective maintenance

CHAPTER 7

CONCLUSION AND FUTURE ENHANCEMENT

7.1 CONCLUSION

This project “E-File Processing System” is user friendly and it reduces manual interaction. The System helps the organization to serve the employees quickly and efficiently.

By using the reference number letter can be tracked and find where it is and the actions taken for the letter.

Letters can be sent out of the organization by sending the letter to the dispatch section. So the letter will be send to destination and intimation given from dispatch section and amount spent on each letter’s dispatched.

7.2 MERITS OF THE SYSTEM

- The incoming DAK’s basic information is entered in the DMS with a marking to the destination officer. Scanning provision is available, for the user to scan and save the document. The saved document can be viewed by the marked officer.
- Officer can view the details of the file before the physical arrival of the file if he wish. This will enable the officer actually to work immediately.

- The action taken on a file can also be attached while marking it to the further

- The administrator can view the status of the file and the pending details.
- The application will reduce the time and minimize the paperwork.
- Mishandling and file missing can be avoided.
- All officers will have username and password to enter the DMS and the number of pending files is flashed in the home screen.

7.3 FUTURE ENHANCEMENTS

E-File Processing System is developed for windows operating system at present and in future a more generic version of the system can be developed by enhancing the current developed system thereby making it suitable for all operating system including Linux, Unix, etc.

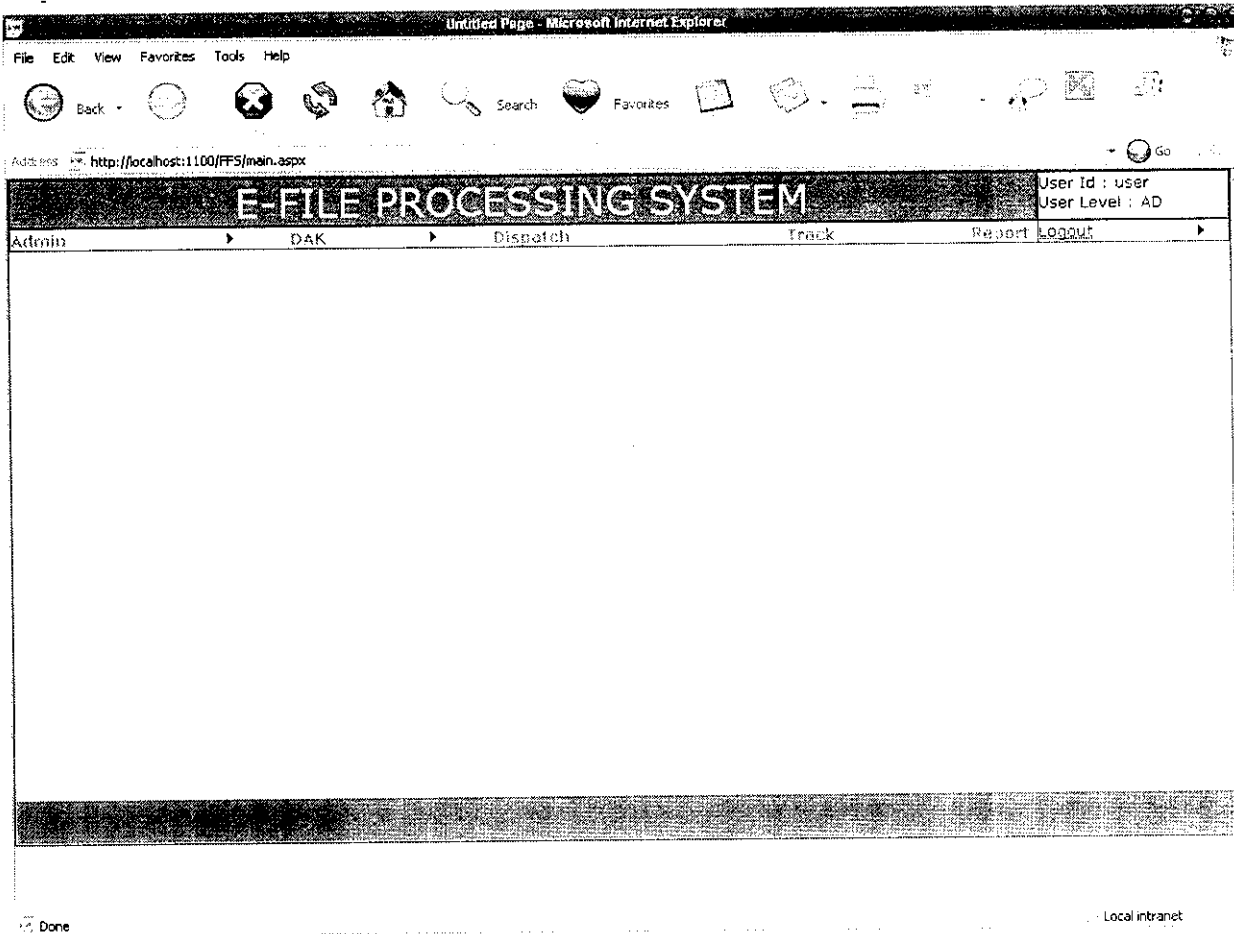
Administrator can further enhancement for E-File Processing System. Add new forms and add users. and assign privileges to them.

CHAPTER 8

APPENDICES

8.1 SCREEN SHOTS

8.1.1 HOME PAGE:



8.1.2 DEPARTMENT MASTER:

The screenshot shows a web browser window titled "Department Master - Microsoft Internet Explorer". The address bar contains "http://localhost:1100/FFS/DepartmentMaster.aspx". The browser's menu bar includes "File", "Edit", "View", "Favorites", "Tools", and "Help". The toolbar contains icons for Back, Forward, Home, Search, Favorites, Print, and other functions. The main content area is titled "E-FILE PROCESSING SYSTEM" and includes a navigation menu with "Admin", "DAK", "Dispatch", "Track", "Report", and "Logout". The "Admin" menu item is selected. Below the navigation menu, the text "You are in Master :: Department Master" is displayed. The main form area contains two input fields: "Department Name *" with the value "Accounts" and "Department Short Name" with the value "ACC". Below these fields are "Save" and "Edit" buttons. The status bar at the bottom of the browser shows "Done" and "Local intranet".

Department Master - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Home Search Favorites Print

Address http://localhost:1100/FFS/DepartmentMaster.aspx

E-FILE PROCESSING SYSTEM User Id : user
User Level : AD

Admin DAK Dispatch Track Report Logout

You are in Master :: Department Master

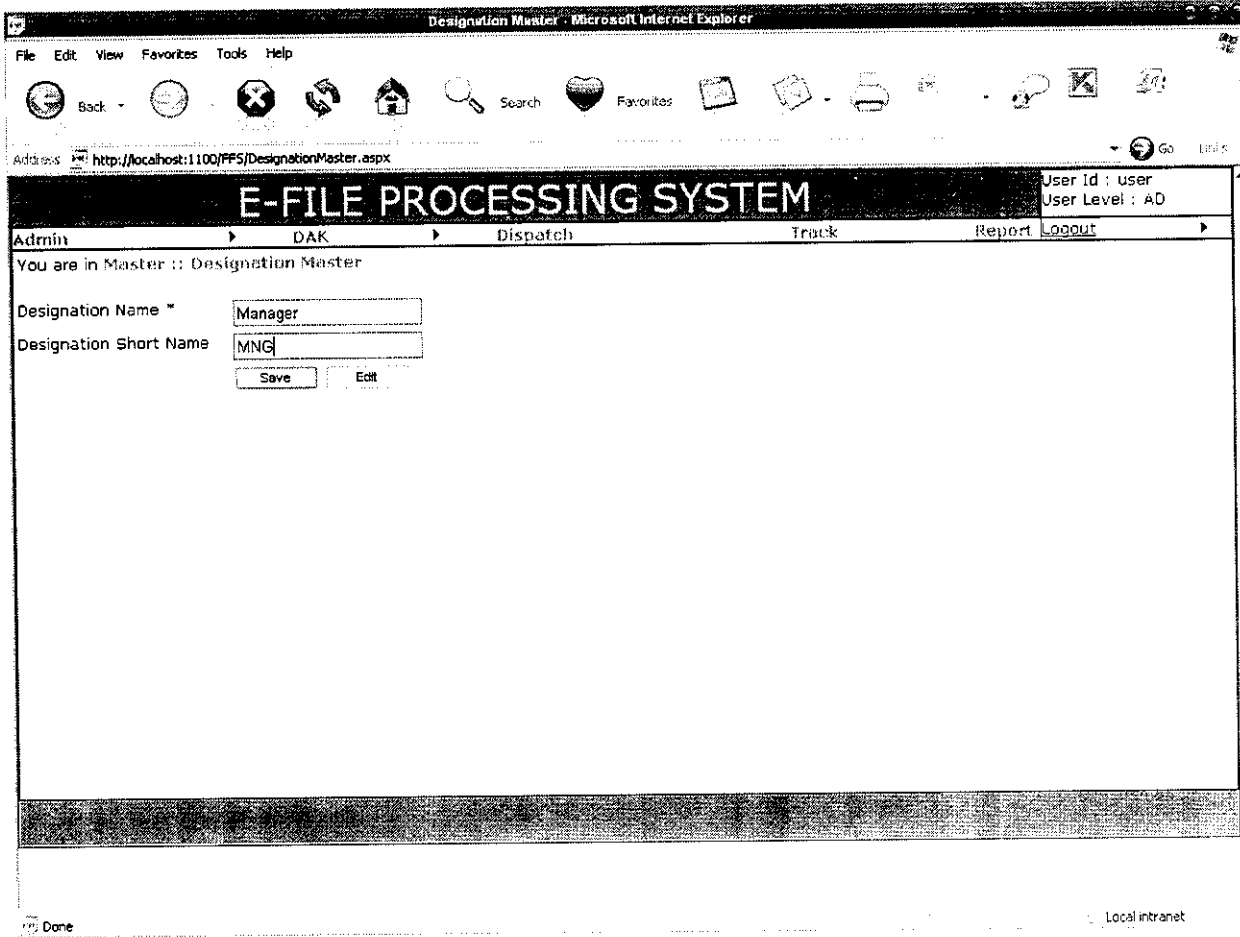
Department Name * Accounts

Department Short Name ACC

Save Edit

Done Local intranet

8.1.3 DESIGNATION MASTER:



8.1.4 STAFF DETAILS:

Staff Master - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Home Search Favorites

Address http://localhost:1100/FF5/staffmaster.aspx

User Id : user
User Level : AD

E-FILE PROCESSING SYSTEM

Admin DAK Dispatch Track Report Logout

You are in Master :: Staff Master

Department Account
Staff Name Raja Designation Supervisor

PERSONAL DETAILS

DOB 01/01/1972 Gender Male
Address NO 7 Ram Nagar Phone 0422-2389103
GandhiPuram DOJ 01/05/2000
Coimbatore
Email ID raja@gmail.com

Save Edit

Done Local intranet

8.1.5 LOGIN CREATION:

Login Creation - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Home Search Favorites Print

Address: http://localhost:1100/FFS/logincreation.aspx

E-FILE PROCESSING SYSTEM

User Id : user
User Level : AD

Admin DAK Dispatch Track Report Logout

You are in Master :: Login Creation

Admin General User DAK Management Dispatch

Department: Account

Staff Name: Raja

User ID: user

Password: user

Save Edit

Done Local intranet

8.1.6 CLIENT DETAILS:

Client Master - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://localhost:1100/FFS/ClientMaster.aspx> Go

E-FILE PROCESSING SYSTEM

User Id : user
User Level : AD

Admin ▶ DAK ▶ Dispatch ▶ Track ▶ Report ▶ Logout

You are in Master :: Customer Master

Client Name	Siva Traders Private Ltd		
Contact Person	Mr.Siva	Contact No	9842251522
Address	Siva Traders Private Ltd	Phone	0422-309929
	D.B.Road	City	Coimbatore
	R.S.Puram	PinCode	641012
Email ID	siva@rediffmail.com		
	<input type="button" value="Save"/>	<input type="button" value="Edit"/>	

Done Local intranet

8.1.7 EXTERNAL DAK:

Unfitted Page - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Stop Refresh Home Search Favorites Print Mail

Address http://localhost:1100/FFS/ExternalDAK.aspx Go

E-FILE PROCESSING SYSTEM User Id : user
User Level : AD

Admin DAK Dispatch Track Report Logout

EXTERNAL DAK

FROM

DAK No: 1 Reference No: EXT-0001 Letter By: Courier
Letter From: ABT Letter Date: 05/04/2008 Enclosure: Cheque
Subject: Bill Recieved Date: 06/04/2008

TO

Department: Account Date Sent: 06/04/2008

Staff Name

Raja

Add Attachments

Save Edit

Local intranet

8.1.8 INTERNAL DAK:

Untriled Page - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Stop Refresh Home Search Favorites Print Mail

Address http://localhost:1100/FFS/InternalDAK.aspx Go

E-FILE PROCESSING SYSTEM User Id : user
User Level : AD

Admin > DAK > Dispatch > Track > Report > Logout

INTERNAL DAK

FROM

DAK No: 2 Reference No: INT-0002 Department: Account
From Staff: Raja Category: Letter Recieved Date: 06/04/2008

Subject: Quotation

Message: Bill Sanctioned for Siva Traders

TO

Department: Production Date Sent: 06/04/2008

Staff Name

Mani

Add Attachments

Save Edit

Local intranet

8.1.9 TRACKING (FORWARDED):

Microsoft Internet Explorer - Untitled Page

File Edit View Favorites Tools Help

Address: http://localhost:1100/FFS/track.aspx

User Id : user
User Level : AD

E-FILE PROCESSING SYSTEM

Admin DAK Dispatch Track Report Logout

DAK Type: Internal No of DAK's: 2

Search by: Reference No Date Wise

Enter Reference No:

DAK No	From	To	File Name	Status	View
2	Raja	Mani	Quotation	Forwarded	View

Done Local intranet

8.1.10 VIEWING FORWARDED:

Untitled Page - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Stop Refresh Home Search Favorites Print

Address http://localhost:1100/FFS/track.aspx

E-FILE PROCESSING SYSTEM User Id : user
User Level : AD

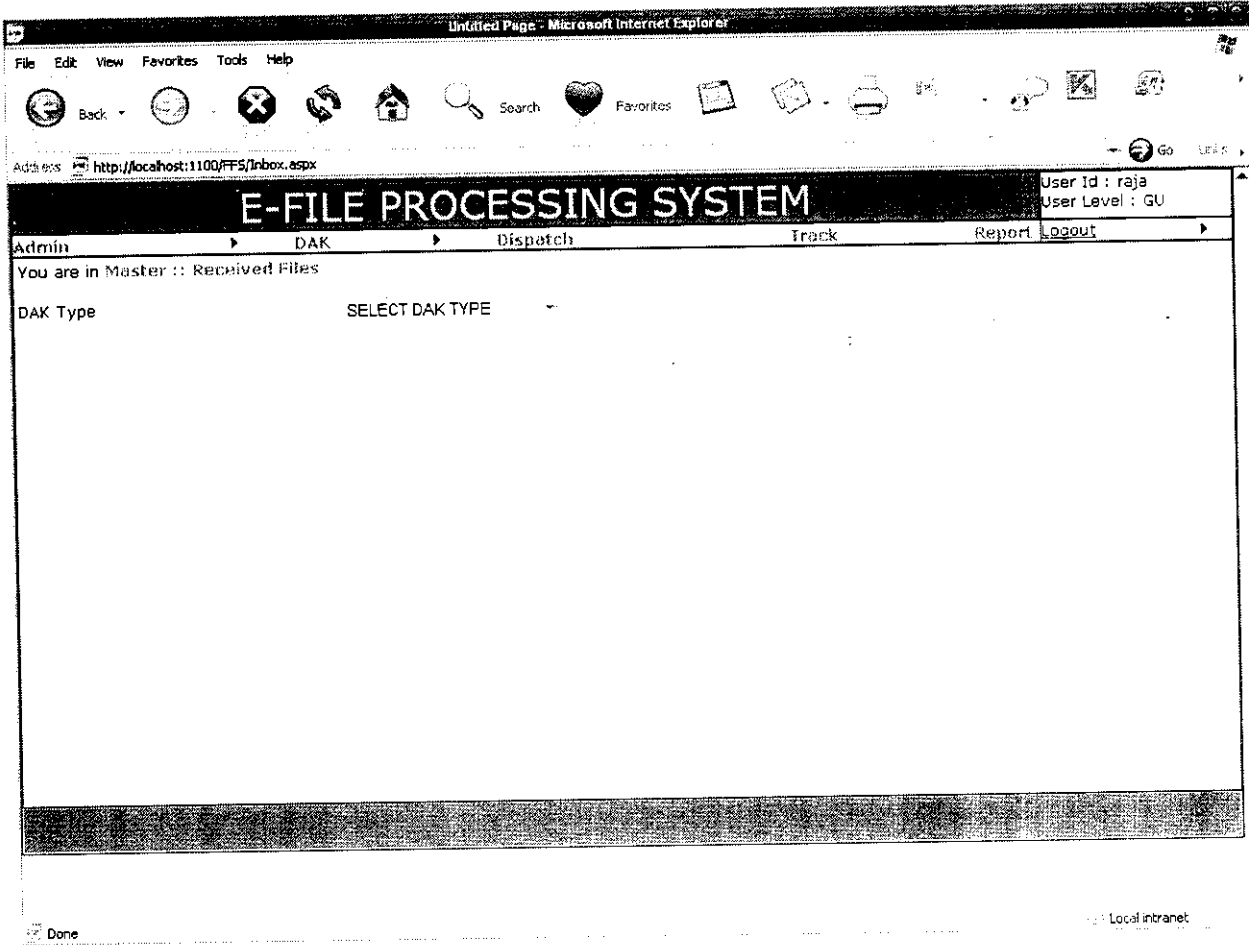
Admin ▶ DAK ▶ Dispatch ▶ Track ▶ Report Logout ▶

From Reference No
 File Name

Department	To	File Name	Action Taken	Status	
Production	Varun	Quotation	Approved & Closed	Closed	View

Done Local intranet

8.1.11 GENERAL USER LOGIN TO SEE RECEIVED FILES:



8.1.12 VIEWING AND FORWARDING TO OTHER STAFF:

Microsoft Internet Explorer - Untitled Page

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Print

Address http://localhost:1100/FF5/Inbox.aspx Go

E-FILE PROCESSING SYSTEM

User Id : raja
User Level : GU

Admin DAK Dispatch Track Report Logout

From:

Subject:

Action Taken: Others

Forwarded:

Done Local intranet

8.1.12 DISPATCH:

Microsoft Internet Explorer - Untitled Page

File Edit View Favorites Tools Help

Back Stop Refresh Home Search Favorites Print

Address http://localhost:1100/FF5/dispatch.aspx

E-FILE PROCESSING SYSTEM

User id : user
User Level : AD

Admin DAK Dispatch Track Report Logout

Department Account
Staff Raja
Send Date 06/04/2008
Letter Through Courier
Amount 500
Remarks Send through Professional Courier

Save Edit

Done Local intranet

REFERENCES

1. Greg Buczek (2000) "ASP DEVELOPERS GUIDE", Second Edition, Tata McGraw Hill, New Delhi.
2. Lex Homer (1999), Dave Sussman and Brian Francis, "ACTIVE SERVER PAGES 3.0", First Edition, Shroff Publishers and Distributors Pvt.Ltd, Mumbai,
3. Roger S pressman, (1987)'Software Engineering', McGraw-Hill