DEVELOPMENT AND IMPLEMENTATION OF E-FILING SYSTEM

BY

MD. BADRUL ALAM ID: 152-15-6156

SHARMIN AKTER SHILA ID: 152-15-6196

This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering.

Supervised By

Anup Majumder

Lecturer
Department of CSE
Daffodil International University

Co-Supervised By

Shah Md. Tanvir Siddiquee

Senior Lecturer
Department of CSE
DaffodilInternational University



DAFFODIL INTERNATIONAL UNIVERSITY DHAKA, BANGLADESH May 2018

APPROVAL

The Project titled "E-Filling System" submitted by Md. Badrul Alam and Sharmin Akter Shila to the Department of Computer Science and Engineering, Daffodil International University, Bangladesh, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering approved as to its style and contents. The presentation has been held on 06th may 2018.

BOARD OF EXAMINERS

Dr. Syed Akhter Hossain Professor and Head

Chairman

Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

Dr. Sheak Rashed Haider Noori Associate Professor and Associate Head **Internal Examiner**

Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

Md. Zahid Hasan Assistant Professor **Internal Examiner**

Department of Computer Science and Engineering Faculty of Science & Information Technology Daffodil International University

Dr. Mohammad Shorif Uddin Professor

External Examiner

Department of Computer Science and Engineering Jahangirnagar University

DECLARATION

We hereby declare that, this project has been done by us under the supervision of Anup Majumder, Lecturer, Department of CSE Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

Supervised by:

Anup Majumder

Lecturer
Department of CSE
Daffodil International University

Co-Supervised By:

Shah Md. Tanvir Siddiquee

Senior Lecturer
Department of CSE
Daffodil International University

Submitted by:

Md. Badrul Alam

ID: 151-15-6156
Department of CSE
Daffodil International University

Sharmin Akter Shila

ID: 151-15-6196
Department of CSE
Daffodil International University

ACKNOWLEDGEMENT

This project would not have been possible without the endurance, guidance and kind support of many individuals. We would like to extend heartiest gratitude to all of them.

First, we express our heartiest thanks and gratefulness to almighty Allah for His divine blessing makes us possible to complete this project successfully.

We are grateful to Anup Majumder, Lecturer, Department of CSE, Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of E-filling system development influenced us to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

We would like to like to express our great appreciation to the teachers, academic, technical and support stuffs of our department for their co-operation at time to make this project possible we would like to thank our entire course mate in Daffodil International University, who took part in this discussion while completing the course work.

ABSTRACT

This project is on "E-Filling System". The purpose of the project is faster movement of files and documents through different layers of non-government and government offices. This system used to store and track electronic documents or file. It is very effective because centralized source of information, Import Security, Cost-effectiveness, improved workflow, maximized customer satisfaction, easy retrieval and flexible search. The aim of the Electronic-file System is to execute Paperless Communication system throughout the organization. Paperless Communication helps to accommodate the system smoothly and to ensure quick disposal of proposal. However, the goal of our system is not to become a slave of paper - searching for it, filing it, approved it, storing it and losing it at inconvenient times - but rather to handle paper electronically to lower its intrinsic administrative cost.

TABLE OF CONTENTS

		PAGE
App	roval	ii
Decl	laration	iii
Ack	nowledgements	iv
Abst	tract	v
List	of Tables	viii
List	of Figures	ix
СН	APTER 01: INTRODUCTION	1-2
1.1	Introduction	1
1.2	Motivation	1
1.3	Objective	2
1.4	Summary	2
СН	APTER 02: BACKGROUND	3-4
2.1	Introduction	3
2.2	Related Works	3
2.3	Comparative Studies	3
2.4	Scope of the Problem	4
2.5	Challenges	4
СН	APTER 03: REQUIREMENT SPECIFICATION	5-13
3.1	Business Process Modeling	5
3.2	Requirement Collection and Analysis	5
3.3	Use case Modeling and Description	6
3.4	Narrative Use case	7
3.5	Design Requirements	9
3.6	System Flowchart	10
3.7	Data Flow Diagram (DFD)	11

CH	APTER 04: DESIGN SPECIFICATION	14-22
4.1	Front-end Design	14
4.2	Back-end Design	15
4.3	Implementation Requirements	15
4.4	Entity Relationship Diagram	17
4.6	Dictionary	18
4.7	Database Table	19
CH	APTER 05: IMPLEMENTATION AND TESTING	23-28
5.1	Implementation of Database	23
5.2	Implementation of Front-end Design	23
5.3	Testing Implementation	28
5.4	Test Results and Reports	28
5.5	User Acceptance Testing	28
CH	APTER 06: SYSTEM SECURITY	29
6.1	System Security	29
6.2	Threats to System security	29
6.3	Database Security	29
CH.	APTER 07: CONCLUSION AND FUTURE SCOPE	30
7.1	Discussion and Conclusion	30
7.2	Scope for Further Developments	30
Ref	erences	31

LIST OF TABLES

Table 3.1:	Use case of User Registration	7
Table 3.2:	Use case of login user	7
Table 3.3:	Use case of view file information	7
Table 3.4:	Use case of create file	8
Table 3.5:	Use case of create file note detail	8
Table 3.6:	Use case of create note comment	8
Table 3.7:	Use case of create Application	9
Table 3.8:	Use case of check application status	9
Table 4.1:	Database table of department	19
Table 4.2:	Database table of Designation	19
Table 4.3:	Database table of Employee	19
Table 4.4:	Database table of File_info	20
Table 4.5:	Database table of File_info	21
Table 4.6:	Database table of File_note_master	21
Table 4.7:	Database table of File_note_detail	21
Table 4.8:	Database table of File_note_comments	22
Table 4.9:	Database table of Application	22
Table 5.1:	System Testing Table	28
Table 5.2:	User Acceptance Testing	28

LIST OF FIGURES

Figure 3.1:	Use case Diagram of E-filing System	6
Figure 3.2:	Flowchart of E-filing System	10
Figure 3.3:	Level zero DFD of E-filling system	11
Figure 3.4:	Level one DFD of E-filling system	12
Figure 3.5:	Class Diagrams of Report Module	13
Figure 4.1:	E-R Diagram of E-File System module	18
Figure 5.1:	Dashboard Screen	23
Figure 5.2:	Department Screen	24
Figure 5.3:	Designation Screen	24
Figure 5.4:	File Information Screen	25
Figure 5.5:	File Note Details Screen	25
Figure 5.6:	File Comments Screen	26
Figure 5.7:	File Comments Report Screen	26
Figure 5.8:	File Application Screen	27
Figure 5.9:	File Application Report Screen	27

CHAPTER 1

INTRODUCTION

1.1 Project Introduction

To eliminate the physical movement of files and reduce paper work a need-based and conceptualized Online/Offline Application outline the procedures for efficient and effective management of E-file system is design. The faster movement of files and documents through different layers of non-government and government offices, improving service delivery and saves a huge amount of time and money required previously to obtain a service from non-government and government offices. E-filing system is an important part for each and every individual, business companies for securing their valuable data, file and documents.

With this in view, we the students of CSE aimed to develop a system to meet the aspects mentioned above titled "E-file System". There are a lot of approaches to achieve the goal however we have chosen the best believed according to the learning of our CSE course.

We tried to doing well all tasks correctly. But we know there might be some mistakes in the project because we are totally new with this technique and Oracle Database. But we have learned many things from this.

1.2 Motivation for under taking this project

Behind building this system many things motivated us. There were several reasons we stepped forward and thought to go ahead solve this problem. They are show below:

1.2.1 Organization file processing system:

Many government and non-government organization need to create new file, store file record, send file, need signature files from authority persons and etc.

1.2.2 Traditional file processing system:

Many organizations processing their files according old file processing systems. Create files manually and they are moving their file physically from desk to desk. And finally, processed files are stored into file cabinet.

1.3 Objective

Our main objective of this project is to avoid this and others problem. We will develop 'E-File' system. Since reduced long time process, no need to physically hard work and we easily transfer file or application one stage to another stage. This system will save time of both authority persons.

- Easy to manage file operation
- Reduce file processing and approval time
- Stored file for long time
- Providing security for all functionality

1.4 Summary

The main objective is to provide a user-friendly software interface for E-filing system by which users will be able to easily use it. Trustees must follow proper procedures for filing and uploading documents. We strongly hope and believe that this will make the life of the users easier whenever file storing is concern.

CHAPTER 2

BACKGROUND

2.1 Introduction

Electronic File or E-file is a desktop-based Application. It also a web-based application. Oracle development software supports both desktop and web base application in one development platform. Oracle corporation provides database, scripting language, query language, forms and reports design.

In our project back-end side we used Oracle database for stored and maintenance our most important data. Oracle database is the world's first most widely used relational database management system (RDBMS) and most widely used open-source RDBMS. Oracle database is a popular choice of database for use in bank, garments, etc. and big organization. And used Oracle developer suite for front-end design.

2.2 Related Works

In our work like designing GUI we have used the Oracle SQL *Plus and PL/SQL, Forms and Reports builders. We did our projecting Oracle development platform. Oracle SQL *Plus and PL/SQL used for query and conditional statements. Used Oracle forms builder for design forms/screen also called GUI. And oracle reports builder used for reports design (i.e. converting pdf file document).

So, in the expected outcome will be like a software their employees can create, sends files, make application and etc.

2.3 Comparative Studies

There were two parts to study in our project one of them is employee generate files in database and another one is make application and find state of files or application. So, we are describing those following:

After registration the employees will log in the software. They able to create files, sends one to others. Register make sure privileges of employees according to their designation. Register also must registration in the system by admin.

They can create dashboard and here they can update their time schedule and activities. They will be able delete, edit or add the data. If employees want to get files they can search the data. Employees will allow, deny or reject files application.

Suppose, sends a file to a department head, if department head faces any wrong in this form then department head returns this file with remarks to sender. Otherwise do will approve this file with comments or attach signature or both. Then send again this file to dean office then dean office applies same steps as like department head. Then file return back to register office or dedicated. And finally print out this copy.

2.4 Scope of the Problem

Scope of the Problems in our project was based on the time scheduling, our e-filling system targets and features in our system.

Time scheduling was the one of the difficult part cause it the main thing in which our project will be completed. If we were unable to complete on time it would be great danger for us. So, we just divide our time to complete each one of the task to complete the whole project. The time limit is given to the page:

Time scheduling: Analysis 2 Month
Design of modules 1 Month
Coding 3 Months
Testing and Implementing 2 Weeks

Total 6 Months and 14 days

2.5 Challenges

- We have to provide proper knowledge to the authority and convinces them
- We have to manage dishonest people. Cause they are often occurring illegal work
- Preform all functions are most securely
- Ensure performance and security of database

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

Many organizations need to manage their file document properly. For and organization A register office has many desks. Everyday need to approve file from any others department. Suppose, register office sends a file to a department head, if department head faces any wrong in this form then department head returns this file with remarks to register office. Otherwise do will approve this file with attach signature. Then send again this file to dean office then dean office applies same steps as like department head. Then file return back to register office. And finally register office print out this copy.

3.2 Requirement Collection and Analysis

Necessity investigation is a critical part of undertaking management. Prerequisites examination, likewise called necessity building, is the way toward deciding client desires for another or adjusted item. These highlights, called necessities, must quantifiable, applicable and definite in programming designing, such prerequisites are open called useful determinations.

Requirement list

- Login into the system
- Users can Make application
- Generate application file on pdf format
- Application approval
- Create new file from a department
- Add notes on specific files
- Add comments on files and send to another person
- Generate a file document from all related information of a file on pdf format

3.3 Use Case Modeling and Description

3.2.1 Use Case Diagram of E-Filing System

A use case diagram is a graphic depiction of the interactions among the elements of a system. A use case is a methodology used in system analysis to identify, clarify, and organize system requirements. The use cases, which are the specific roles played by the actors within and around the system. [1]

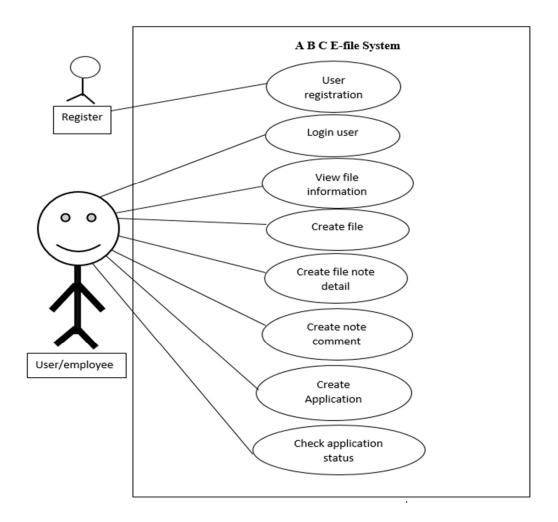


Fig-3.1: Use Case Diagram of E-filing System

3.4 Narrative Use Case

Table-3.1: Use case of User Registration

Primary Actor	:	Register
File Recorder	:	- Setup employees
Preconditions	:	Register can identity valid information
Success Guarantee (Post	:	System record all information
condition)		

Table-3.2: Use case of login user

Primary Actor	:	User
File Recorder	:	User enters valid user IDUser enter valid password
Preconditions	:	User have to a valid account
Success Guarantee (Post condition)	:	The system displays the relevant homepage

Table-3.3: Use case of view file information

Primary Actor	:	Employee user
File Recorder	:	 Employee show inbox and outbox panel Search any file Preview all file
Precondition	:	User can identify and take necessary step
Success Guarantee (post condition)	:	System record all information

Table-3.4.: Use case of create file

Primary Actor	:	Employee user

File Recorder	:	- Write file subject
		- Write file section
		- Add file date
		- Add previous file
		- Select department
		- Save file
		- Preview file
		- Store all information into database
Precondition	:	User want to create file
Success Guarantee (post condition)	:	System record all information

Table-3.5: Use case of create file note detail

Primary Actor	:	Employee user
File Recorder	:	 Search file by file no. Add note subject Add note detail Save file note Preview all file note
Precondition	:	Employee want to add note
Success Guarantee (post condition)	:	System record all information

Table-3.6: Use case of create note comment

Primary Actor	:	Employee user
File Recorder	:	- Search file
		- Select file note
		- Write note subject
		- Write comment
		- Select receiver user
		- Select note status
		- Save and send file
		- Preview all note file
Precondition	:	Employee want to note comment
Success Guarantee (post	:	System store all information
condition)		

Table-3.7: Use case of create Application

Primary Actor	:	Employee user
File Recorder	:	 Write application details Select receiver Save and send Preview application
Precondition	:	User want to send application
Success Guarantee (post condition)	:	System record all information

Table-3.8:Use case of check application status

Primary Actor	:	Employee user
File Recorder	:	- Preview application
Precondition	:	User want to check application
Success Guarantee (post	:	System record all information
condition)		•

3.5 Design Requirements

Based on the user requirements and the detailed analysis of a system, the new system is designed. This is the phase of system designing. It is a crucial phase in the development of a system. Normally the design proceeds in two stages:

1. Preliminary or general design: Our primary goal was to create system "Electronic Filing System" We needed to build a system with features of user online/offline sending file one to another stage.

- **2.** Structure or detailed design: In the detailed planning phase we did the following:
 - Oracle Database
 - Oracle Developer Suite
 - SQL, PL/SQL
 - Analyzed the System
 - Planned which tools and Forms to be used for providing treatment
 - System creation started

3.6 System Flowchart

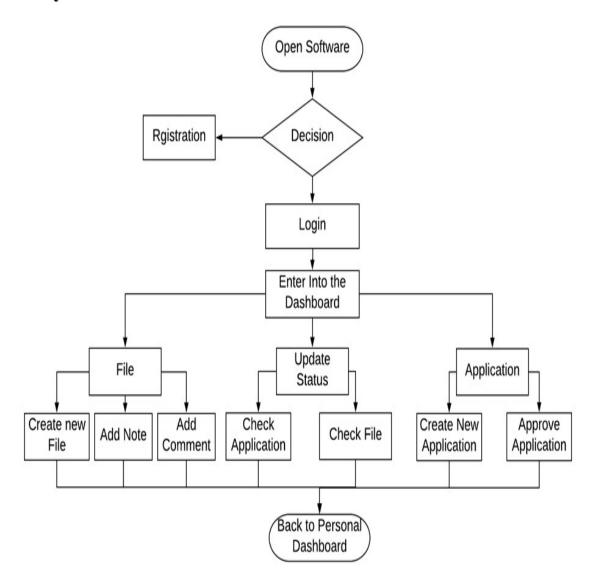


Fig-3.2: Flowchart of E-filing system

This is the system flowchart of E-Filling system. From first step open the software then login into the system. After login user can make application and create application. User can also check application and file status.

3.7 Data Flow Diagram (DFD)

A data flow diagram (DFD) maps out the flow of information for any process or system. It uses defined symbols like rectangles, circles and arrows, plus short text labels, to show data inputs, outputs, storage points and the routes between each destination. [2] DFD of e-filling system:

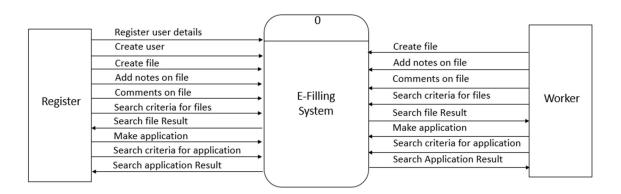


Fig- 3.3: Level zero DFD of E-Filling system

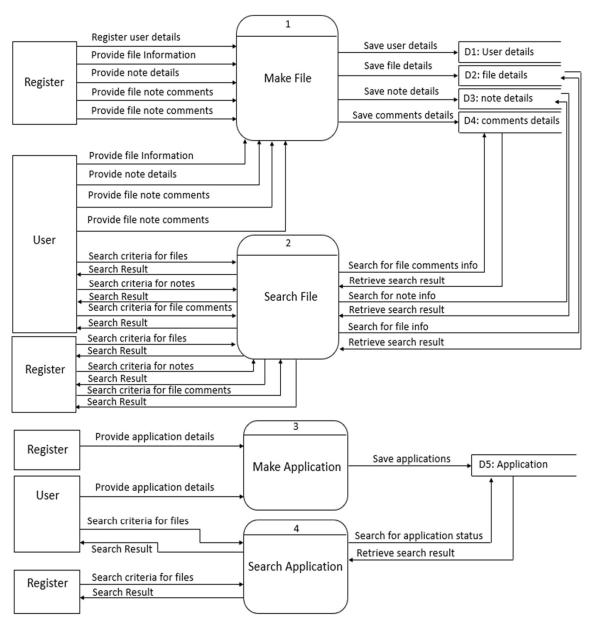


Fig- 3.4: Level One DFD of E-filling system

3.8 CLASS Diagrams of Report Module

In software engineering, a class diagram in the Unified Modeling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's classes, their attributes, operations (or methods), and the relationships among objects. [3]

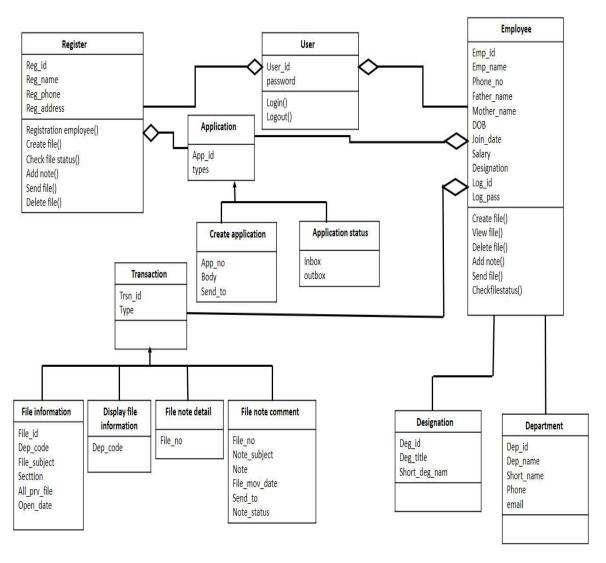


Figure-3.5: Class Diagrams of Report Module

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end Design

An essential issue for the improvement of a task is the determination of reasonable frontend and back-end. When I chose to build up the undertaking, I experienced a broad investigation to decide the most reasonable stage that suits the necessities of the association and in addition helps being developed of the task.

I have actualized Form. It is intended to live inside Oracle Form Builder and guarantee they run legitimately. It is question based, occasion driven, stage autonomous. These are essential parts of any Desktop application to execute User Validations and the invalid information isn't submitted. The shape isn't submitted until the point when client fills in redress information. It is to a great degree helpful to limit botches by client. [4]

Front-end selection

It must have a graphical UI that helps workers that are not from IT foundation.

- Scalability and extensibility
- Flexibility
- Robustness
- According to the association prerequisite and the way of life
- Must furnish brilliant revealing highlights with great printing support
- Platform free
- Easy to investigate and keep up
- Event driven programming office

4.2 Back-end Design

We have used Oracle 11g provides efficient/effective solution for major database tech.

Back-end selection

- Large database and space management.
- Many simultaneous database clients.
- High exchange handling necessity
- High Availability.
- Industry acknowledged benchmarks.
- Manageable security.
- Portability.

As per the above expressed highlights and chose Java as the front-end and backend for building up this undertaking.

4.3 Implementation Requirements

As we design execution of Oracle Projects, we prescribe that you consider the usage issues talked about in this segment. Executing a center system, for example, Oracle Projects is an unpredictable and long assignment. Via precisely arranging your execution, you can spare important time and anticipate blunders.

Data Conversion:

Since information change from your current systems is commonly the most blunder inclined zone of usage, we prescribe that the execution group contribute significant time arranging and testing it. It suggests that we test our information transformation program precisely utilizing test information before you relocate to Oracle Projects. After transformation, you ought to check the usefulness of your information.

User Training:

Plan preparing for all individuals from your organization that will utilize Oracle Projects. Group ought to incorporate workers who associate straightforwardly with the product or who audit the information that is accounted for from the system. The preparation may incorporate strides in how to utilize the system to perform particular assignments and clarifications of any new business arrangements that you may organize as an outcome of executing Oracle Projects.

System Testing:

Plan and execute broad system testing of your venture arrangement - including the Oracle Applications and any systems that interface with the applications. Our system test condition ought to be as like your generation system as would be prudent. After you change over your information for testing, allocate clients to test the capacities that they at present or will perform. Furnish your analyzers with the fitting equipment assets so you can precisely judge execution issues.

Setting up Underlying Oracle Applications Technology:

The setup ventures in this section disclose to you how to actualize the parts of Oracle Applications particular to Oracle Projects.

You have to finish a few other setup steps, including:

- 1. Performing vast setup assignments, for example, arranging simultaneous directors and printers
- 2. Managing information security, which incorporates setting up duties to enable access to a particular arrangement of business information and finish a particular arrangement of exchanges, and doling out individual clients to at least one of these obligations

Oracle Projects Implementation Checklist:

The implementation checklist is made up of several checklists, one for each of the products in the Oracle Projects solution, as listed below:

• Oracle Project Foundation

- Oracle Project Costing
- Oracle Project Billing
- Oracle Project Resource Management
- Oracle Project Management
- Oracle Project Portfolio Analysis
- Oracle Project Collaboration

We can combine each product checklist with others, based on your implementation

4.4 Entity Relationship Diagram

ERD implies substance relationship chart. A substance relationship outline (ERD) is an information displaying strategy that graphically shows a data framework's elements and the connections between those elements. An ERD is an applied and authentic model of information used to speak to the element system framework.

The elements of an ERD are:

- Entities
- Relationships
- Attributes

A database configuration is a gathering of put away information sorted out such that the information necessities are fulfilled by the database. The general target is to influence data to get to simple, brisk, economical and adaptable for the client. There are likewise some particular goals like controlled repetition from disappointment, protection, security and execution.

A collection of relative records makes up a table. Two essential settings for a database are:

- i. Primary key: The field that is unique for all the record occurrences.
- ii. Foreign key: The field used to set relation between tables. Normalization is a technique to avoid redundancy in the tables.

4.5 Entity relationship (E-R)

E-R diagram can express the overall logical structure of a database graphically. Such a diagram consists of the following major components Rectangles which represent entity set, Ellipses which represent attributes, Diamonds which represent relationship sets, Lines which link attributes to entity sets and entity sets to relationship sets. [5]

4.5.1 E-R Diagram of E-File System module

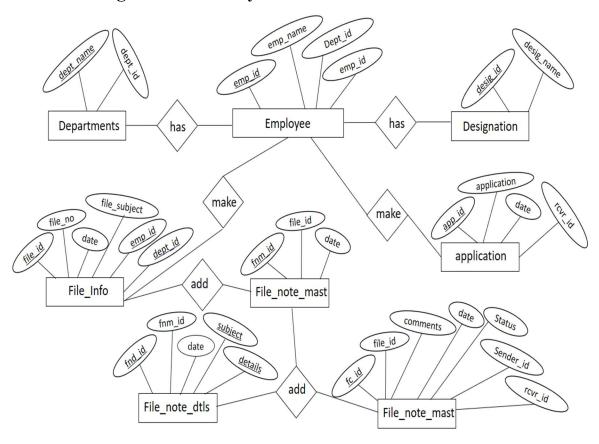


Figure-4.1: E-R Diagram of E-File System module

4.6 DICTIONARY

The logical characteristics of current system data stores including Name, Address, mail id, Inbox, compose Application, Sent Application, Trace repot, Signature, etc. identifies process where the data are used and where immediate access to information required, serves as the basis for identifying database requirements during system design.

Uses of Data Dictionary:

- To manage the details in large systems
- To communicate a common meaning for all system elements
- To document the features of the system
- To facilities analysis of the details in order to evaluate characteristics and determine where system changes should be made

4.7 Database Table

Table-4.1: Database table of department

Column ID	Column Name	Column Data Type	Null?	Constraint Type
1	Dept_id	Number(30)	N	Primary Key
2	Dept_name	Varchar2(150)	N	
3	Shotrt_name	Varchar2(50)	N	
4	Email	Varchar2(50)	Y	
5	Phone	Varchar2(25)	Y	
6	Instt_time	Date	N	

Table-4.2: Database table of Designation

Column	Column Name	Column Data Type	Null?	Constraint
ID				Type
1	Desig_id	Number(30)	N	Primary Key
2	Designation	Varchar2(150)	N	
3	Shotrt_name	Varchar2(50)	N	
4	Inst_time	Date	N	

Table-4.3: Database table of Employee

Column ID	Column Name	Column Data Type	Null?	Constraint Type
1	Emp_id	Number(30)	N	Primary Key

2	Emp_name	Varchar2(150)	N	
3	Dob	Date	N	
4	Email	Varchar2(50)	Y	
5	Phone	Varchar2(25)	Y	
6	Join_date	Date	Y	
7	Dept_dept_id	Number(30)	Y	Foreign Key
8	Desig_desig_id	Number(30)	Y	Foreign Key
9	Inst_time	Date	N	

Table-4.4: Database table of File_info

Column	Column Name	Column Data Type	Null?	Constraint
ID				Type
1	File_id	Number(30)	N	Primary Key
2	File_no	Varchar2(50)		Unique
3	Date	Date	N	
4	File_subject	Varchar2(250)	N	
5	File_section	Varchar2(25)	Y	
6	Emp_emp_id	Number(30)	Y	Foreign Key
7	Inst_time	date	Y	

Table-4.5: Database table of File_info

Column	Column Name	Column Data Type	Null?	Constraint
ID				Type
1	Fnm_id	Number(30)	N	Primary Key
2	Fnm_no	Varchar2(50)	N	Unique
3	Date	Date	N	
4	File_file_id	Number(30)	N	Foreign Key
5	Inst_time	date	Y	

Table-4.6: Database table of File_note_master

Column	Column Name	Column Data Type	Null?	Constraint
ID				Type
1	Fnm_id	Number(30)	N	Primary Key
2	Fnm_no	Varchar2(50)	N	Unique
3	Date	Date	N	
4	File_file_id	Number(30)	N	Foreign Key
5	Inst_time	date	Y	

Table-4.7: Database table of File_note_detail

Column	Column Name	Column Data Type	Null?	Constraint
ID				Type
1	Fnd_id	Number(30)	N	Primary Key
2	Fnm_fnm_no	number(30)	N	Foreign Key
3	Note_no	Varchar2(30)	N	Unique
5	Note_subject	Varchar2(150)	Y	
6	Note_details	Varchar2(300)	Y	
7	Inst_time	Date	N	

Table-4.8: Database table of File_note_comments

Column	Column Name	Column Data Type	Null?	Constraint
ID				Type
1	Fc_id	Number(30)	N	Primary Key
2	File_file_id	number(30)	N	Foreign Key
3	Fnm_fnm_id	number(30)	N	Foreign Key
4	Fnd_fnd_id	Number(30)	N	
5	Sender_id	Varchar2(150)	Y	
6	File_comments	Varchar2(800)	Y	
7	Status	Varchar2(50)	Y	
8	Receiver_id	Number(30)	Y	Foreign Key

Table-4.9: Database table of Application

Column	Column Name	Column Data Type	Null?	Constraint
ID				Type
1	App_id	Number(30)	N	Primary Key
2	App_no	Varchar2(50)	N	Unique
3	Application	Varchar2(800)	N	
4	Sender_id	Number(30)	N	Foreign Key
5	Receiver_id	Number(30)	N	Foreign Key
7	Inst_time	Date	N	

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

In the Oracle database system condition, the database application and the database are isolated into two sections: a front-end or customer divide, and a back-end or server parcel—thus the term customer/server engineering. The customer runs the database application that gets to database data. The server runs the Oracle programming and handles the capacities required for simultaneous, shared information access to an Oracle database. [6]

5.2 Implementation of Front-end Design

Despite the fact that the customer application and Oracle can be keep running on a similar PC, more prominent productivity can regularly be accomplished when diverse PCs associated through a system run the customer parts and server parcel.

5.2.1 Dashboard

This is user dashboard. User can view inbox and outbox file details.

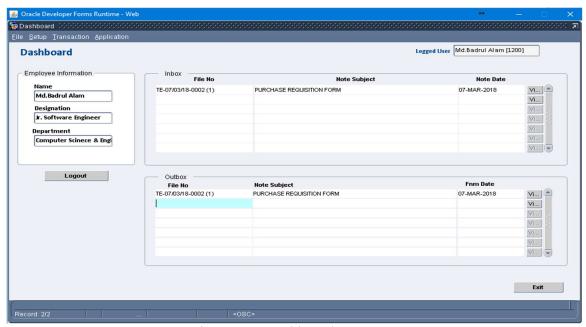


Figure 5.1: Dashboard Screen

5.2.3 Department Information:

This a setup page. In this page user can add/find all departments information

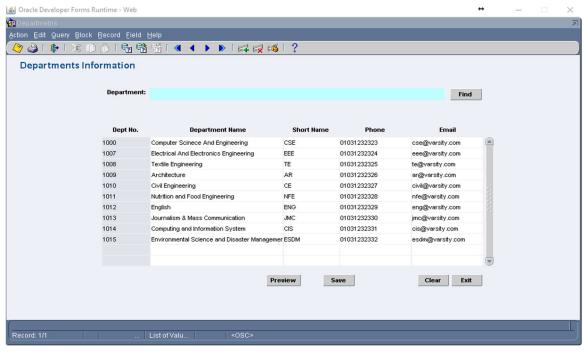


Figure 5.2: Department Screen

5.2.4 Designation Information

This a setup page. In this page user can add/find all designation information

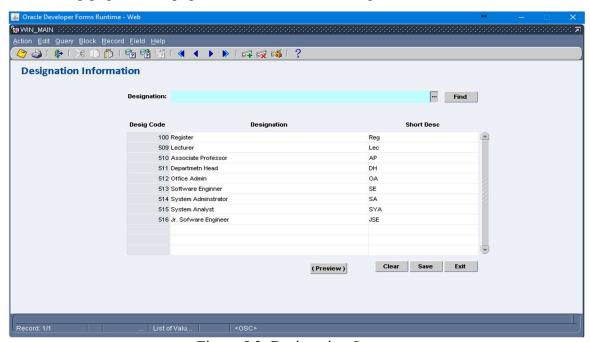


Figure 5.3: Designation Screen

5.2.5 File Information

In this page user can create new file and user can also find files.

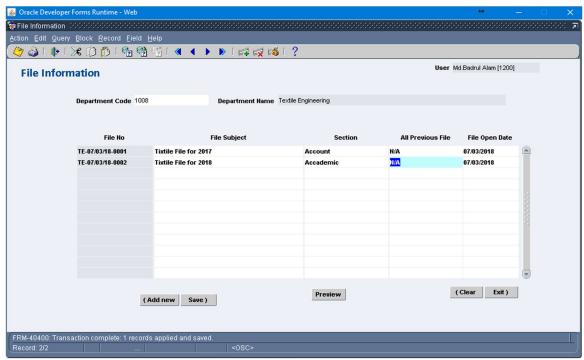


Figure 5.4: File Information Screen

5.2.6 File Note Details

In this page user can add notes on specific files.

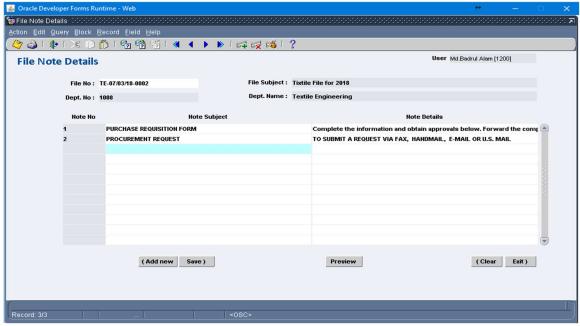


Figure 5.5: File Note Details Screen

5.2.7 File Comments

In this page user can add final note on specific send to another person.

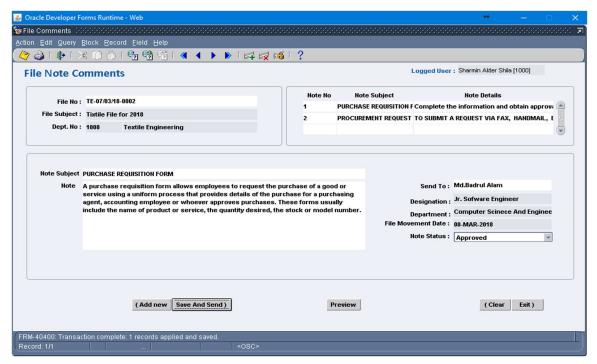


Figure 5.6: File Comments Screen

5.2.8 File Comments Report

This is preview page of showing details of files as pdf format.

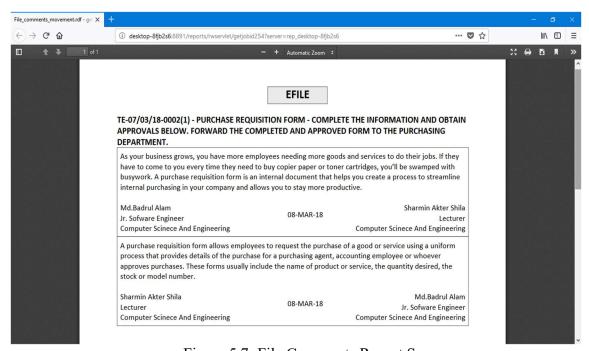


Figure 5.7: File Comments Report Screen

5.2.9 Application

In this page user can make an application and send to another person's.

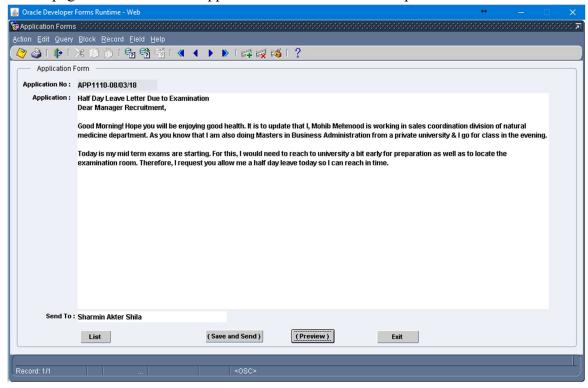


Figure 5.8: File Application Screen

5.2.10 Application Report

This is preview page of application as pdf format.

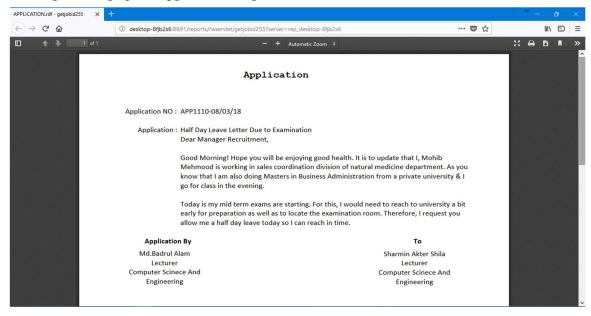


Figure 5.9: File Application Report Screen

5.3 Testing Implementation

When a system is implemented and test some specific function is called test implementation. We have test our system in several times. Login, create file, add note, add comment, check application, check file, create new application, approve application etc. test by us in various time. [6]

5.4 Test Results and Reports

System Testing Table show below abridge the result of system testing:

Table 5.1: System Testing Table

Test Case ID	Date Tested	Tester	Pass/Fail	Severity of defect	Summary of defect	Closed prior to Release?	Comment
1	2/3/2018	Shila	Pass	Bug in 3 places	Bug	<yes></yes>	

5.5 User Acceptance Testing

The table below abridge the test cases for user acceptance testing and the test result obtained each other.

Table 5.2: User Acceptance Testing

Test Case Id	Date tested	Tester	Pass/Fail	Severity of Defect	Summary Of Defect	Closed prior to Release?	Comment
1	4/5/2018	Badrul	Pass	No Defect	No Defect	<yes></yes>	
2	4/5/2018	Shila	Pass	No Defect	No Defect	<yes></yes>	

CHAPTER 6

SYSTEM SECURITY

6.1 System Security

Security isn't just used to forestall unapproved access to information but at the same time is utilized to avoid unplanned annihilation of information. That is the reason in our task the overseer and the individuals made by the chairman have the benefit to peruse, embed, and refresh information. Be that as it may, any sort of significant change in creating venture documentation framework must be made by the super overseer. The general worker/client can read, refresh and alter information. They don't have any sort of access to the database.

6.2 Threats to System security

Research demonstrates that the most harm originates from blunders and oversight individuals committing errors. The treat of outside assault on a need arrangement, one would most likely need to begin from inside the firm and work out.

The list of potential threats is:

- Errors and omissions.
- Disgruntled and dishonest users.
- Fire
- Natural disasters.
- External attack.

6.3 Database Security

The data stored in the database need to be protected from unauthorized access and accidental introductions of inconsistency. Accidental loss of data consistency may result: Crashes during transaction processing.

- Crashes during transaction processing.
- Anomalies caused by concurrent access to the database.
- Anomalies caused by the distribution of data over several computers.

CHAPTER-7

CONCLUSION AND FUTURE SCOPE

7.1 Discussion and Conclusion

E-Filing System is capable to move documentation or organized file one authority to another authority. Our system reduces paper documentation, physical pressure, and gives high security in every data. Our system helpful for every organization. We reduce any kind of illegal work in an organization. Our system totally user friendly.

We worked in Oracle Database, Forms and Reports for the first time in this project. So sometimes we faced some problems at the time of work.

7.2 Scope for Further Developments

The project made here is just to ensure that this project could be valid in today real challenging world. Here all the facilities are made and tested.

- Currently the system works for administrators to work.
- We will add some credential features.
- We will try to run this system in corporate site
- We will also apply this paperless communication to all over the country to digitalized

References

- [1]. Use case. "Use case modeling in software engineering," wikipedia.org [Online]. Available: https://en.wikipedia.org/wiki/Use_case [Accessed: 10-Oct-2107].
- [2]. Data follow diagram. "Data flow diagram in software engineering," wikipedia.org [Online]. Available: https://en.wikipedia.org/wiki/Data_flow_diagram [Accessed: 10-Oct-2107].
- [3]. Class diagram. "Class diagrams in software engineering," wikipedia.org [Online]. Available: https://en.wikipedia.org/wiki/Class diagram [Accessed: 10-Oct-2107].
- [4]. Design. "Front-end and Back-end design of software," wikipedia.org [Online]. Available: https://en.wikipedia.org/wiki/Front_and_back_ends [Accessed: 10-Oct-2107].
- [5]. ERD. "Entity-Relationship Diagram (ERD)," www.smartdraw.com [Online]. Available: https://www.smartdraw.com/entity-relationship-diagram [Accessed: December26, 2014].
- [6]. Implementation. "Database Implementation," www.chegg.com[Online]. Available https://www.chegg.com/homework-help/definitions/database-implementation-3 [Accessed: 20-Jan-2108].

