

Chandana Apparels



Payroll System

DCSD 12.2

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Preface

A payroll system involves everything that has to be done with the payment of employees and filling of employee taxes and keeping tracks of hours, calculating wages, withholding taxes and other deductions, printing and delivering checks and paying employee taxes to the GVT and etc.

Considering all those above facts and the requirements of **Chandana Apparels**, we have successfully completed payroll software for their existing manual payroll system.

This is our DCSD 12.2 final group project for the Diploma in Computer System Designing at National Institute of Business Management Kurunegala. This project refers how we have done it step by step.

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Acknowledgement

We have taken efforts in this project. However, it would not have been possible without the kind support and help of many individuals and the organization. I would like to extend my sincere thanks to all of them.

We are highly indebted to **Chandana Apparels** and for their guidance and constant supervision as well as for providing necessary information regarding the project & also for their support in completing the project & employees of Chandana **Apparels** for their kind co-operation and encouragement which help me in completion of this project.

Special thanks go to Mr. Chandana Pathirana Kumara who is former manager of **Chandana Apparels**.

I would like to express my gratitude towards our course director of DCSD of NIBM Mr. Shafraz sir giving such a big opportunity to complete this project.

I would like to express my special gratitude and thanks to industry persons for giving me such attention and time including clerks, accountants, and employees too.

Our thanks and appreciations also go to my colleague in developing the project and people who have willingly helped me out with their abilities.

Summary of the Project

This Project is about the payroll system of the **Chandana Apparels.** And first we have discussed about the existing manual payroll system by dividing it in to 4 main processes. There we try to emphasize its drawbacks and difficulties they would face and the importance of a computerized payroll system.

Including all the information of an employee which is taken through the HRM Department and considering other necessary entities we have drawn dataflow diagrams. By drawing these diagrams we got the general structure of the payroll system. We have included many data stores to keep data separately so any one can get the idea easily. (Dataflow diagrams designed by MS Visio 2010)

Reading the company's reports and bills etc, we have designed files and the interfaces. (Interfaces designed by Visual Studio 2010) After that according to the interfaces we wrote pseudo codes. Also we included real coding to some of our interfaces. And to get outputs we added a function to generate several reports as given below

- EPF and
- ETF Report
- OT Report
- No pay Report
- Pay Sheet
- Remittance Report

By considering these reports it is easy to find the needed details accurately and in efficient manner. Some of the reports have to send to central bank and also some are sent to the accountant and employee too. We successfully completed the project in this manner.

Finally we talked to the manager **Mr. Chandana Pathirana Kumara** and got his idea and we analyzed the benefits of the proposed system. And we included that one also

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Chapter 1

Introduction

Terms of Reference

We got the legal permission from the **Chandana Apparels**. Then we proposed a new computerized payroll system for the manual system of their garment by considering their needs. Our main aim was to give the best way to accomplish their requirements.

Efficiency and accuracy is highly improved by this system. Inserting, Updating, Deleting, Searching processes can be done correctly and quickly. To implement this project we need hardware and software too. And also a trained employee is needed to handle this because money transaction is directly done through this system.

Via internet we got lot of information to succeed this project from the sites below.

- <http://en.wikipedia.org/wiki/Payroll>
- <http://www.ask.com/question/meaning-of-payroll-system>
- <http://www.sba.gov/content/10-steps-setting-payroll-system>
- <https://itservices.uchicago.edu/services/payroll-system-payrollpersonnel-system>
- <http://www.bestprojectsidea.com/vb-6-0-synopsis/employee-and-payroll-system/>

And also NIBM library was also very useful to use to gather data. Referring earlier projects and e-books we got the rough idea to make a good project. Here are the names of books we followed.

- Essentials of Payroll: Management and accounting by Steven M. Bragg John Wiley & Sons, Apr 21, 2003.
- Payroll and Accounting by Frank C. Giove.
- Payroll by Vicki M. Lambert, IOMA

Some PowerPoint presentations were also referred by us on account of gathering information

Feasibility Study

We have categorized this into several fields as given below.

- Technical Feasibility
- Legal Feasibility
- Economic Feasibility
- Operational Feasibility

Feasibility study was done by various methods such as interviewing, observing, record reading, reviving past records and etc. That was the first step we took to start our project. We interviewed manager, accountant, clerks, peon, other employees and etc. We spent more than 2 weeks to collect them and study them well together. We took such a long time because it was very important to see what they are looking for. Also we wanted to determine whether the company has the technical expertise to handle the software.

Then we proposed a new computerized payroll system to the above garment. The facts we considered were mainly accuracy and efficiency, way to get reports etc. Actually we studied the history of the garment too.

We determined whether the proposed system conflicts with legal requirements and focused on the technical resources of the garment and also we got a rough idea about the cost for our software and what they hope from us. Then we moved in to our next step.

The main purpose of the economic feasibility assessment is to determine the positive economic benefits to the organization that the proposed system will provide. It includes quantification and identification of all the benefits expected. This assessment typically involves a cost/ benefits analysis.

Operational feasibility is a measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development

Under above fields we were able to cover the weaknesses in the existing system and got a good idea about their needed system.

Methodology

We have described this briefly in the Summary of the Project also.

After the Feasibility study we followed the steps of the System Development Life Cycle (SDLC). They were.

- Project Planning.
- Project Analysis.
- System Designing.

Then we used the main analysis technique, data flow diagrams (DFD) to show the processes of the system. We hope to use Microsoft Access to connect the database which includes all the information of Employees.

And we are going to use vb.net and C# languages to implement this software in runtime environment.

Following are steps we followed to give the best performing software.

1. Study the current procedures in the system.
2. Point the weaknesses of the prevailing system.
3. Identify new needs of the employees.
4. Provide simple and best software to the garment.

Show the advantages of the proposed one.

Duration

After we collected enough data we started our project in middle of August month. We drew a rough project plan and share our ideas with our group members. This is how we spent time on the project.

Data Collection	:	2 weeks
Data Analysis	:	3 weeks
System Designing and Report Writing	:	2 months

Chapter 2

Existing System

History of the Organization

The wearing of clothing is exclusively a human characteristic and is a feature of most human societies. It is not known when humans began wearing clothes. Anthropologists believe that animal skins and vegetation were adapted into coverings as protection from cold, heat and rain, especially as humans migrated to new climates; alternatively, covering may have been invented first for other purposes, such as magic, decoration, cult, or prestige, and later found to be practical as well.

Clothing and textiles have been important in human history and reflects the materials available to a civilization as well as the technologies that it has mastered. The social significance of the finished product reflects their culture.

Textile industry is changing rapidly among people with the time. Nowadays people are looking for new fashionable clothing to act different and to keep their place in the society. Not like in early days, people have dozens of clothes and they offer may be half of their salary to shop keepers. This really has helped to widen this business in our country. And for that people have used many strategies to get the attention of people. This was the beginning of intercession of computerized systems in the industry to make them quick and accurate.

In 1999 Father of former manager at **Chandana Apparels** Mr. (name) started this garment at (place) with five workers and two sewing machines. But today this garment has provided more than 100 job opportunities. And they have uprooted their brand name somewhat too.

First this was started in a house and not so far away from the present location. But today it has spread over about 3 hectares with 5 sectors

- Cutting section
- Sawing section
- Stoking section
- Management section
- Security section

This garment provides many types of clothes such as baby, men, women and sport wearing to island wide shops. That the bit about the organization history.

Existing System

Basic Salary

Salary is given to an employee according to their designation and qualifications.

Gross Salary

This is calculated from basic salary after making increments and deductions.

Over Time

This is calculated when an employee has worked more than normal hours.

- OT payment = (basic salary/250)*No of OT Hours*1.5
- OT payment = (basic salary/250)*No of OT Hours*2 (for Poyadays, mercantile holidays....etc.)

No pay

This is considered in two ways.

- If an employee has taken more than medical or annual leave than the limit. Then no payment is given.
- If an employee hasn't exceeded that limit then no pay amount is calculated as follows.

No Pay amount = (Basic Salary/25)*(No Pay days)

Leave

- Annual Leave – 14 days per a annum.
- Casual Leave – 7 days per annum after a year of service.
- Medical Leave – Maximum of 27 days per a annum and a illness should be supported by medical certificate from a registered medical practitioner.

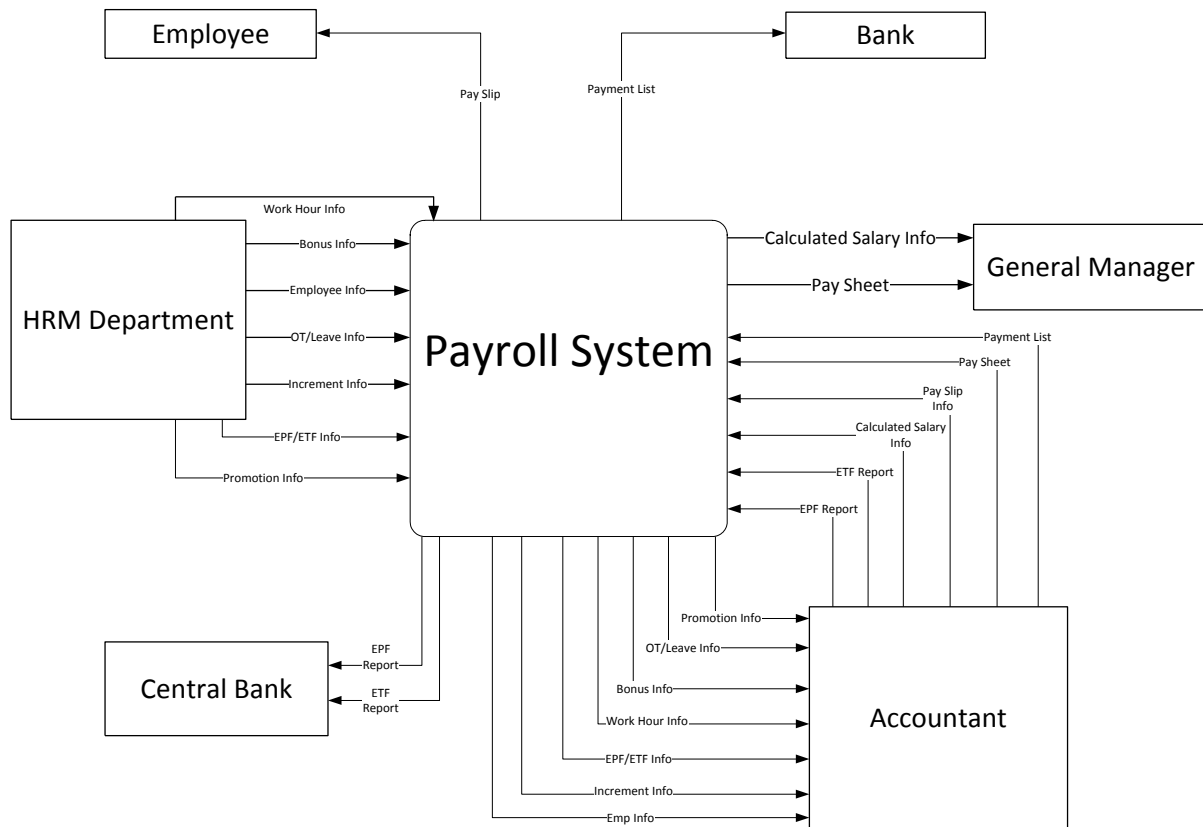
Employee Provident Fund (E.P.F)

This deduction is done for 10% of the basic salary. And company pays 5% of employees basic salary to his E.P.F.

Employee Trust Fund (E.T.F)

This Deduction IS 3% of the basic salary. This is completely paid by the employee.

Context Diagram of the Existing System



Draw Backs

The manual payroll system increases the risk of payroll errors. It is not efficient for larger payrolls because of manual processing. Even for a small payroll, the likelihood of errors exists, due to dependence on human calculations. To reduce errors, the payroll representative must check the payroll multiple times before issuing paychecks, which is time consuming. It also does not enable direct deposit—an electronic and convenient method of paying employees. Paper checks increase the likelihood of stolen and counterfeit checks.

The in-house computerized system requires the employer to buy payroll software and pay an on-site payroll staff, which can be expensive, especially for a large payroll staff. If the software is complex, the employer may have to pay for additional training to the staff.

. Since the payroll service provider operates from an off-site location it may be difficult for the employer to get immediate help when needed. Furthermore, if the payroll service makes payroll tax errors, the employer gets penalized, not the payroll provider.

Draw Backs of the Existing System we have identified and categorized as follow for easy identification.

- More time consuming
- Low accuracy
- High Redundancy.
- Security Problems.
- Wastage of more papers.
- High error rate.

Chapter 3

Proposed System

Application Proposed

We have proposed a computerized payroll system for the existing system of Chandana Apparels to fulfill their requirements.

Our proposed system consists of 13 files. E use them to store employee details, leave info and data those are needed to make the calculation of salary. There must be a trained person to enter those details. Then the salary is calculated automatically by the system.

Once a payroll system is set up, the time taken to process a pay is less. You set up standard pays for people so that all allowances and deductions are processed without one thinking about it. Time is saved preparing pays and running the payroll so the employer saves money. All payroll records are held in one central place on a hard drive although it is still necessary to keep leave requests, printed pay summaries and copies of reports.

The most complicated area of payroll is working out the holiday pays (i.e. annual leave payments). Many get it wrong even using a computerized system Again, provided the set up is correct, processing holiday pays is a walk in the park compared to working them out manually. In Sri Lanka we are required to pay the higher of the average rate over the past 12 months or the normal (current) rate when an employee takes an annual leave day off. Imagine working this out manually.

And also it is easy to backup the payroll file for safe keeping. Paper based systems are not backed up, so if the pay book was lost or destroyed then the firm could face big problems.

This system is easy to use and also accuracy is very high when we compare with the existing manual system. And also we can generate reports quickly after entering those details. Human errors are also can be reduced by this software. And we have managed system to show error messages when we enter invalid data to the system. Therefore no invalid data can be entered. This is brief description about the proposed system.

Security System

A payroll system needs security or controls so as to minimize or reduce the possibility of employees stealing and forging cheques. In addition, the system should have security so as to deny access to unauthorized persons.

Following were done when we designed the software.

Security measures can be implemented.

- Logging off the payroll system before leaving the computer
- Positioning the computer screen so that unauthorized persons cannot view the display
- Ensuring that confidential information cannot be viewed by unauthorized persons and is stored securely at the end of each day
- Not discussing the personal details of staff within hearing of unauthorized persons
- Ensuring that only authorized persons are given information regarding staff pay details
- Ensuring data is used only for the purposes for which it was intended.

We have used a login window in the beginning. Logged user can do these operations.

- Read
- Write
- Modify
- Delete

And also we have used an option to add new users and this can be only done by a logged user. Only administrator can access security system and this provides high security level for the system.

Chapter 4

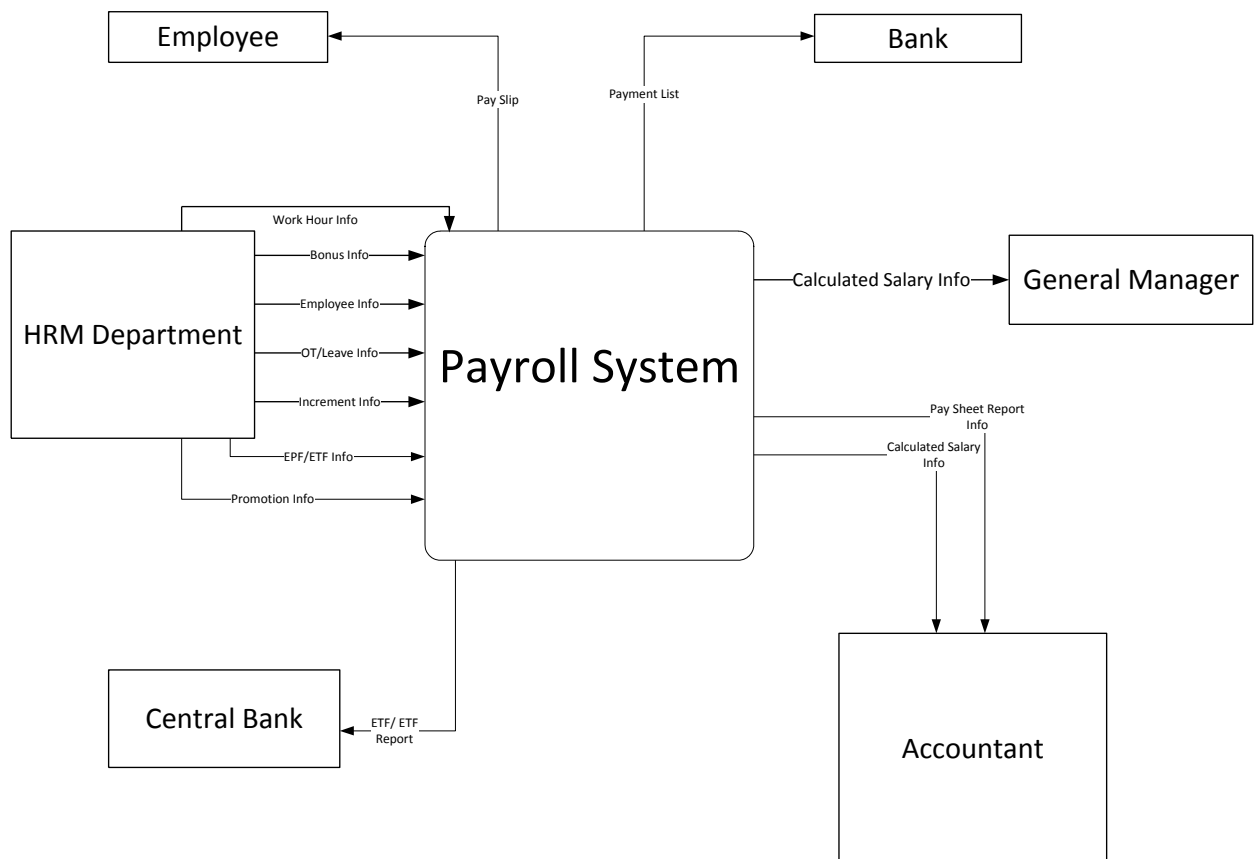
Design of the Proposed System

Chapter 4

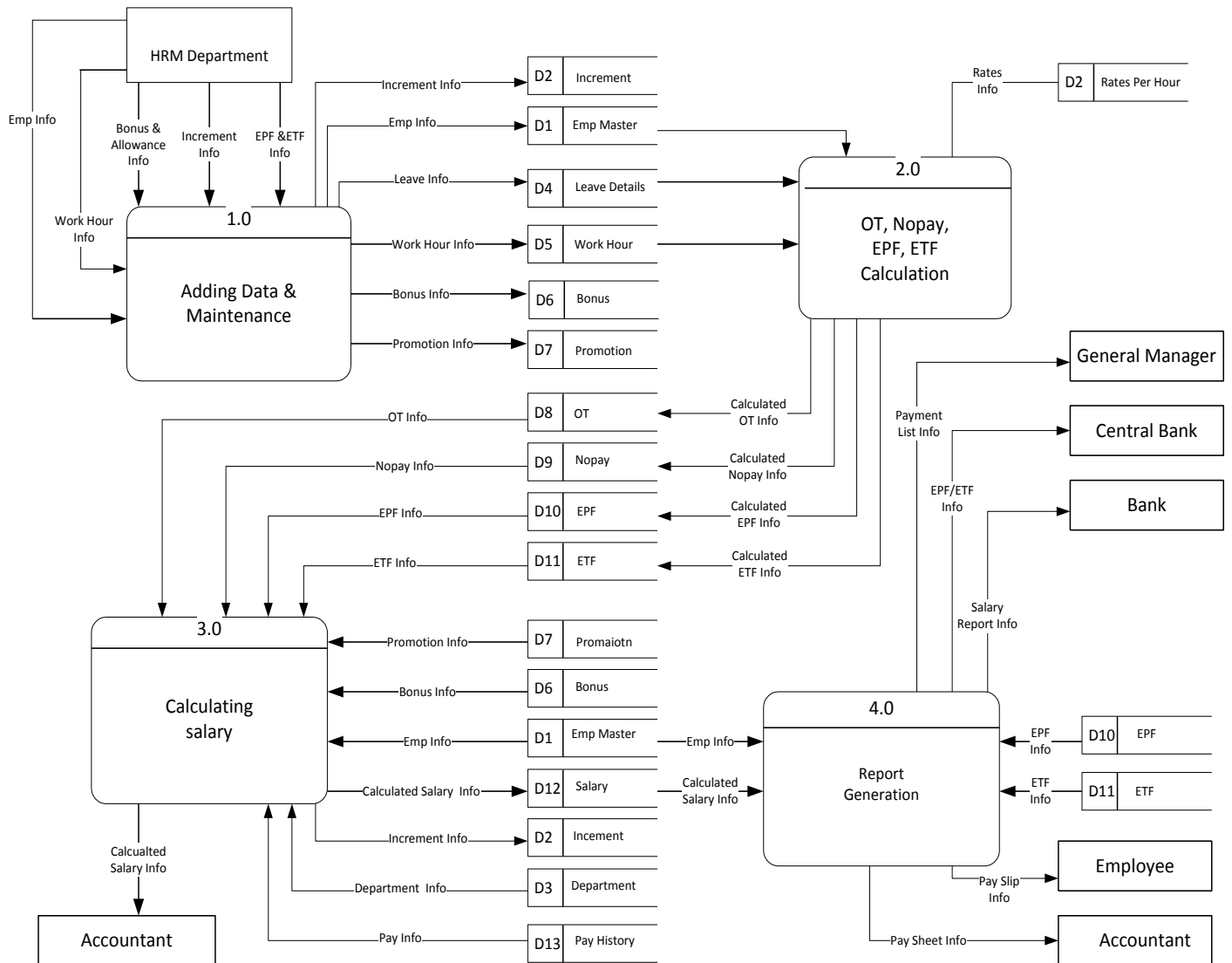
Design of the proposed system

Dataflow Diagram

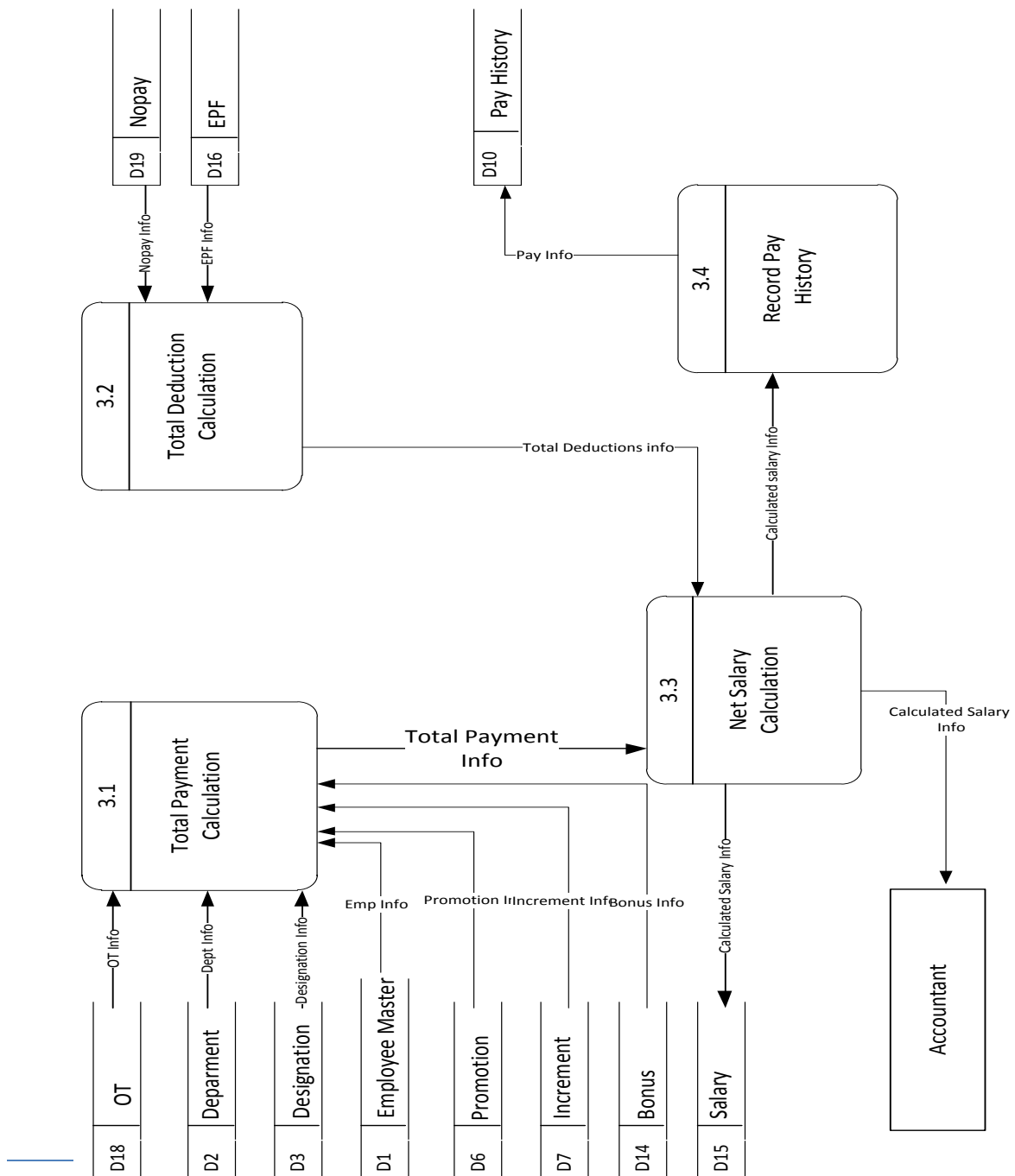
Context Diagram of the Proposed System



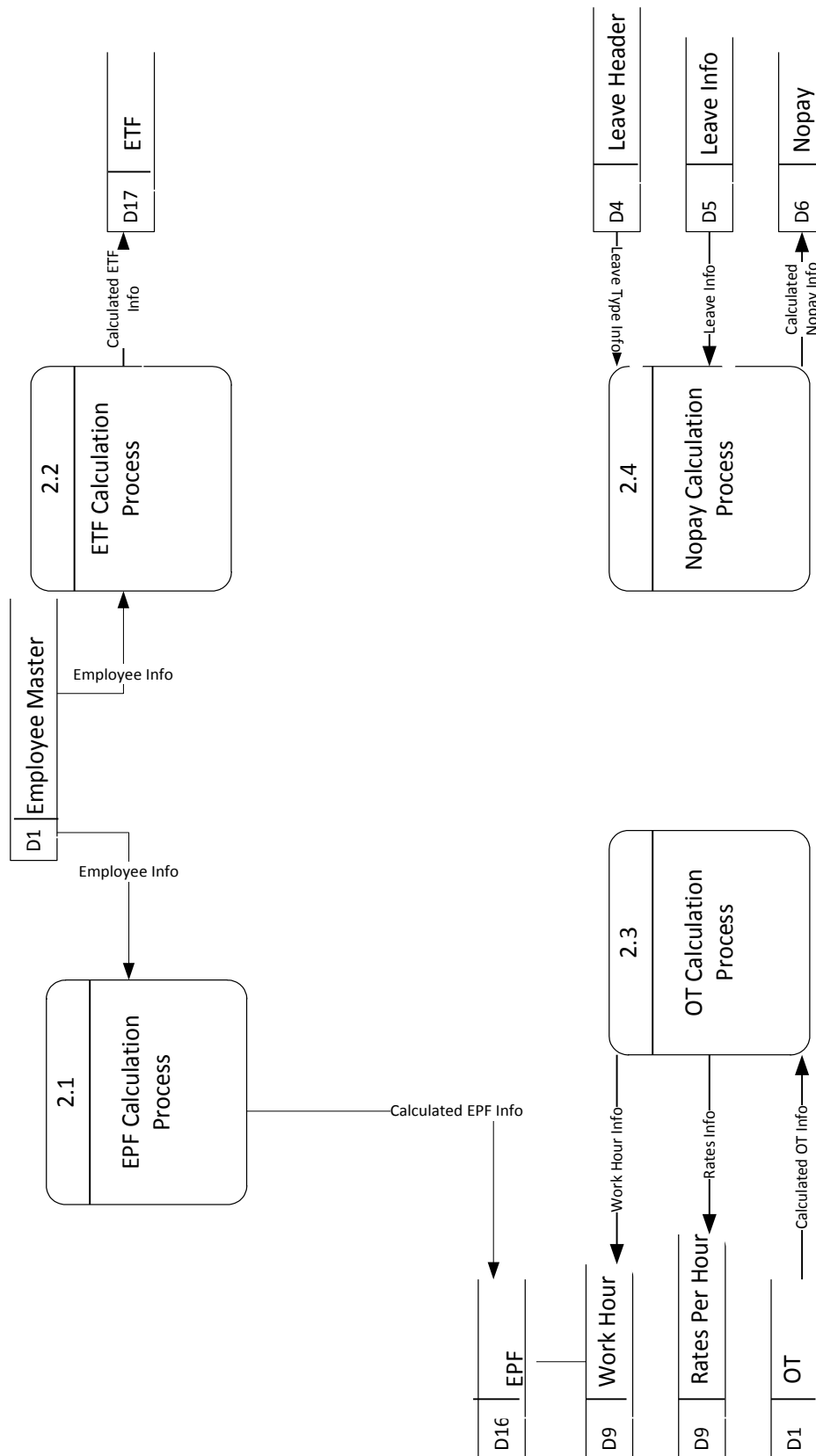
Level 0 DFD for Proposed System



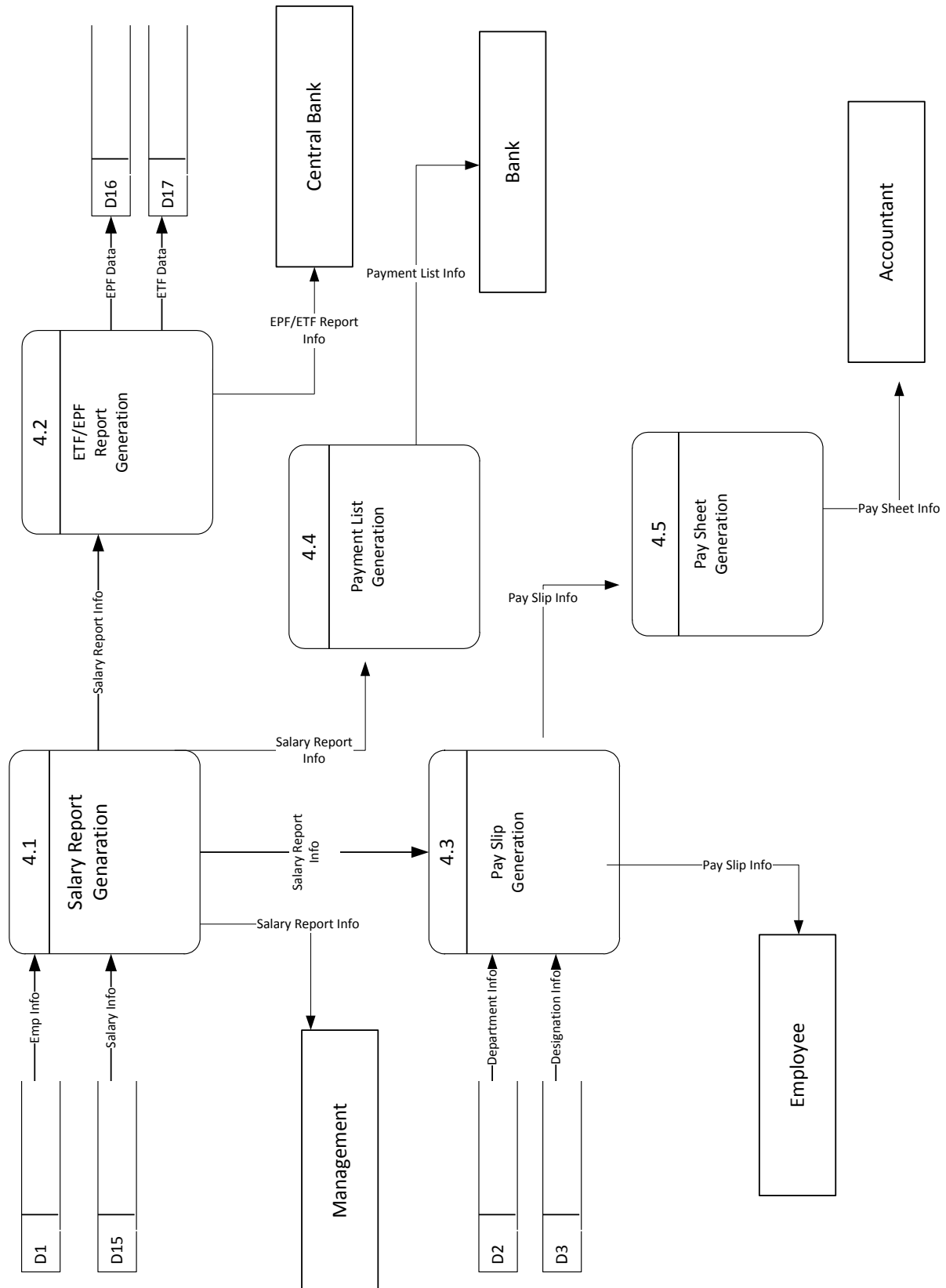
Level 1 DFD for the Salary Calculation Process



Level 1 DFD for the EPF, ETF, OT, No pay Process



Level 1 DFD for the Report Generation Process



Chapter 4

Design of the proposed system

File Design

Files List

File No	File Name	Page No
SF1	Login	28
SF2	Signup	29
D1	Employee Master	30
D2	Department	31
D3	Leave Details	32
D4	Promotion	33
D5	Increment	34
D6	Work Hour	35
D7	Pay History	36
D8	Rates Per Hour	37
D9	Bonus	38
D10	Salary	39
D11	EPF	40
D12	ETF	41
D13	OT	42
D14	No pay	43

Chapter 4

Design of the proposed system

Section File Design

File Structures

Login File

File No : SF1
File Name : Login File
Description : Username and password of the system
File Organization : Random
File Type : Reference File
Primary Key : UName
Foreign Key :
Record Size : 16 bytes

Field Name	Description	Type	Size
UName	Username	Char	10
PWord	Password	Char	6

Signup File

File No : SF2
File Name : Signup File
Description : Username and password create for the system
File Organization : Random
File Type : Reference File
Primary Key : UName
Foreign Key :
Record Size : 16 bytes

Field Name	Description	Type	Size
UName	Username	Char	10
PWord	Password	Char	6

Employ Master File

File No : D1
 File Name : Employee Master
 Description : Employee Personal File
 File Organization : Indexed Sequential
 File Type : Master File
 Primary Key : EmpNo
 Foreign Key : DeptNo, DesigNo
 Record Size : 144 bytes

Field Name	Description	Type	Size
EmpNo	Employee Number	Numeric	5
FName	First Name	Char	15
LName	Last Name	Char	20
AddL1	Address Line 1	Char	15
AddL2	Address Line 2	Char	15
NIC	NIC Number	Char	10
Sex	Male/Female	Char	1
DOB	Date Of Birth	Date	8
MStatus	Martial Status	Logical	1
DesigNo	Designation Number	Char	10
DeptNo	Department Number	Char	4
BSal	Basic Salary	Currency	10
DJoin	Date Joined	Date	8
Status	Permanent/Casual	Logical	1
TelNo	Home Telephone No	Numeric	10
DiffTP	Office T/P No	Numeric	10
BaAcNo	Bank Account No	Numeric	15

Department File

File No : D2
File Name : Department File
Description : Department reference File
File Organization : Indexed Sequential
File Type : Reference File
Primary Key : DeptNo
Foreign Key :
Record Size : 20 bytes

Field Name	Description	Type	Size
DeptNo	Department No	Char	4
DeptName	Department Name	Char	16

Leave Detail File

File No : D3
File Name : Leave detail File
Description : Leave Transaction File
File Organization : Indexed Sequential
File Type : Transaction File
Primary Key : EmpNo + Year + Month
Foreign Key : EmpNo
Record Size : 16 bytes

Field Name	Description	Type	Size
EmpNo	Employee Number	Numeric	5
Year	Year	Numeric	4
Month	Month	Numeric	2
NoLeaves	No of Leaves	Numeric	2
NoPay	No of no pay days	Numeric	3

Promotion File

File No : D4
File Name : Promotion File
Description : Promotion Data Of Employee
File Organization : Indexed Sequential
File Type : Transaction File
Primary Key : EmpNo + PromoDate
Foreign Key : EmpNo , DeptNo
Record Size : 37 bytes

Field Name	Description	Type	Size
EmpNo	Employee Number	Numeric	5
DeptNo	Department Number	Char	4
PromoDate	Promoted Date	Date	8
Description	Remarks	Char	20

Increment File

File No : D5
File Name : Increment File
Description : Increment Data Of Employee
File Organization : Indexed Sequential
File Type : Transaction File
Primary Key : EmpNo + DeptNo
Foreign Key : EmpNo , DeptNo, DesigNo
Record Size : 35 bytes

Field Name	Description	Type	Size
EmpNo	Employee Number	Numeric	5
DeptNo	Department Number	Char	4
IncreAmt	Increment Amount	Currency	8
BSal	Basic Salary	Currency	10
IncreDate	Increment Date	Date	8

Work Hour File

File No : D6
File Name : Work Hour File
Description : Details about worked hour of employees
File Organization : Random
File Type : Transaction File
Primary Key : EmpNo + Year + Month
Foreign Key : EmpNo
Record Size : 21 bytes

Field Name	Description	Type	Size
EmpNo	Employee Number	Numeric	5
Year	Year	Numeric	4
Month	Month	Numeric	2
Hours	No of extra hours	Numeric	10

Pay History File

File No : D7
File Name : Pay History File
Description : Details about pay history of employees
File Organization : Random
File Type : Transaction File
Primary Key : EmpNo + Year + Month
Foreign Key : EmpNo
Record Size : 41 bytes

Field Name	Description	Type	Size
EmpNo	Employee Number	Numeric	5
Year	Year	Numeric	4
Month	Month	Numeric	2
NetPay	NetPay	Currency	10
TEarn	Total Earning	Currency	10
TDeduct	Total Deductions	Currency	10

Rates per Hour File

File No : D8
File Name : Rates Per Hour File
Description : Rates paid per hour to the employee
File Organization : Random
File Type : Reference File
Primary Key :
Foreign Key : Status
Record Size : 20 bytes

Field Name	Description	Type	Size
Status	Post	Char	10
Rate	Rate per hour	Numeric	10

Bonus File

File No : D9
File Name : Bonus File
Description : Amount of bonus to the employee
File Organization : Random
File Type : Transaction File
Primary Key :
Foreign Key : EmpNo
Record Size : 22 bytes

Field Name	Description	Type	Size
EmpNo	Employee Number	Numeric	4
Date	Date Paid	Date	8
Amt	Amount Paid	Numeric	10

Salary File

File No : D10
File Name : Salary File
Description : Details of the salary paid to the employees
File Organization : Indexed Sequential
File Type : Transaction File
Primary Key : EmpNo + Year + Month
Foreign Key :
Record Size : 61 bytes

Field Name	Description	Type	Size
EmpNo	Employee Number	Numeric	5
Year	Year	Numeric	4
Month	Month	Numeric	2
BSal	Basic Salary	Currency	10
TEarns	Total Earnings	Currency	10
GSal	Gross Salary	Currency	10
TDeduct	Total Deductions	Currency	10
NetSal	NetSalary	Currency	10

EPF File

File No : D11
File Name : EPF File
Description : Details of EPF Contribution of employees
File Organization : Indexed Sequential
File Type : Transaction File
Primary Key : EPFNo + Month
Foreign Key : EmpNo
Record Size : 21 bytes

Field Name	Description	Type	Size
EmpNo	Employee Number	Numeric	5
EPFNo	Employee Provident Fund Number	Numeric	4
Month	Month	Numeric	2
EMPIRate	Employer's Rate	Numeric	5
EmployeeRate	Employees Rate	Numeric	5

ETF File

File No : D12
File Name : ETF File
Description : Details of ETF Contribution of employees
File Organization : Indexed Sequential
File Type : Transaction File
Primary Key : ETFNo + Month
Foreign Key : EmpNo
Record Size : 22 bytes

Field Name	Description	Type	Size
EmpNo	Employee Number	Numeric	5
ETFNo	Employee Trust Fund Number	Numeric	4
Month	Month	Date	8
EMPIRate	Employer's Rate	Numeric	5

OT File

File No : D13
File Name : OT File
Description : OT Details of employees
File Organization : Indexed Sequential
File Type : Transaction File
Primary Key : EmpNo + Year+ Month
Foreign Key : EmpNo
Record Size : 33 bytes

Field Name	Description	Type	Size
EmpNo	Employee Number	Numeric	5
Year	Year	Numeric	4
Month	Month	Date	8
OT Hour	Number of OT Hour	Numeric	4
OT Rate	OT Rate Per Hour	Numeric	4
Amount	Amount	Numeric	8

No Pay File

File No : D14
File Name : No Pay File
Description : No Pay Details of employees
File Organization : Indexed Sequential
File Type : Transaction File
Primary Key : EmpNo + Year+ Month
Foreign Key : EmpNo
Record Size : 21 bytes

Field Name	Description	Type	Size
EmpNo	Employee Number	Numeric	5
Year	Year	Numeric	4
Month	Month	Date	8
NPDays	No Pay Days	Numeric	4

Chapter 4 Design of the proposed system Programs

Programs List

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P4	Search	50
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P8	Employee Master	57
P9	Department	59
P10	Pay History	61
P11	Rates Per Hour	63
P12	Bonus	65
P13	Salary	67
P14	EPF	69
P15	ETF	71
P16	OT	73
P17	No pay	75
P18	Leave Details	77
P19	Work Hour	79
P20	Increment	81
P21	Promotion	83

Chapter 4

Design of the proposed system

Section Programs

Programs Structures

Program 1 Login

Program ID : 01
Description : Login Check
Screen Name : Screen 1
Input File : Login File
Output File :
Output Report :

Begin program

Display Screen (S1)

Input username and password

if log Button Clicked

 if any textboxes are empty then

 Display Message Screen (MS 1)

 else

 Open Login File

 seek Uname=File UName and PWord=File PWord

 If Username and Password Not Found then

 Display Error Message (MS 7)

 Else

 Display Screen (MS 9)

 End if

 End if

Else If ClearButton Clicked

 Clear Textbox1 and Textbox2

Else if AddUserButton Clicked

 Display Screen (S2)

End if

End Program

Program 2 Signup

Program ID	:	02
Description	:	Signup Check
Screen Name	:	Screen 02
Input File	:	Signup File
Output File	:	
Output Report	:	

Begin program

Display Screen (S1)

Input username and password

If Sign up Button Clicked

 if any textboxes are empty then

 Display Message Screen (MS 1)

 Else

 Open Signup File

 Find Uname and PWord=File UName,PWord

 If Username and Password Not Found then

 Display Error Message (MS 7)

 Else

 Display Screen (S 3)

End if

End if

Else If Clear Button Clicked

Clear Textbox1 and Textbox2

End if

End Program

Program 3 Main Form

Program ID	:	03
Description	:	Main Form
Screen Name	:	Screen 03
Input File	:	
Output File	:	
Output Report	:	

Begin program

Display Screen (S 3)

Input username and password

if Search Button Clicked

Display Screen(S 4)

Else If Maintenance Button Clicked

Display Screen(S 8)

Else If Report Button Clicked

Display Screen(S 6)

Else If Tools Button Clicked

Display Screen(S 7)

Else If Back Button Clicked

Display Screen(S 1)

Else If Exit Button Clicked

End Program

Program 4 Search

Program ID	:	04
Description	:	Search
Screen Name	:	Screen 04
Input File	:	Employee Master File
Output File	:	
Output Report	:	

Begin program

Display Screen (S 4)

Input Emp_No

if Search Button Clicked

if EMp_No Text box Empty then

Display Message Screen (MS 1)

Else

Open Employee Master File

Seek Emp_No=File Emp_No

if Found then

```
        Get Information into Grid View
        Display Grid View
    Else
        Display Message Screen (MS 6)
    End if
End if
```

```
If Grid view Row Double Clicked then
    Get all Information from Selected row
    Send to Employee master textboxes
End if
```

Program 5 Maintenances

Program ID : 05
Description : Maintenance Menu
Screen Name : Screen 5
Input File :
Output File :
Output Report :

Begin program

If Employee Master Button Clicked

Display Screen(S 8)

Else if Work hour Button dicked

Display Screen(S 18)

Else If EPF Details Button Clicked

Display Screen(S 14)

Else If ETF Details Button Clicked

Display Screen(S 15)

Else If Department Details Button Clicked

Display Screen(S 9)

```
Else If Pay history Button Clicked
    Display Screen(S 10)
Else If OT Details Button Clicked
    Display Screen(S 16)
Else If Leave Details Button Clicked
    Display Screen(S 19)
Else If EPF Rates per hour Button Clicked
    Display Screen(S 11)
Else If No pay Details Button Clicked
    Display Screen(S 17)
Else If Promotion Details Button Clicked
    Display Screen(S 21)
Else If Salary Details Button Clicked
    Display Screen(S 13)
Else If Bonus Details Button Clicked
    Display Screen(S 12)
Else If Increment Details Button Clicked
    Display Screen(S 20)
Else If ETF Details Button Clicked
    Display Screen(S 15)
Else If Back Button Clicked
    Display Screen(S 1)
Else If Exit Button Clicked
    End Program
End if
```


End Program

Program 6 Report

Program ID : 06
Description : Report Menu
Screen Name : Screen 6
Input File :
Output File :
Output Report :

Begin program

If ETF Report Button Clicked

Display Screen(S 22)

Else if Payment List Button clicked

Display Screen(S 23)

Else If EPF Report Button Clicked

Display Screen(S 24)

Else If ETF Report Button Clicked

Display Screen(S 25)

Else If OT Report Button Clicked

```
        Display Screen(S 26)
    Else If Day Report Button Clicked
        Display Screen(S 27)
    Else If No Pay Report Button Clicked
        Display Screen(S 28)
    Else If Back Button Clicked
        Display Screen(S 1)
    Else If Exit Button Clicked
        End Program
    End if
End Program
```

Program 6 Tools

Program ID	:	06
Description	:	Tools
Screen Name	:	Screen 6
Input File	:	
Output File	:	
Output Report	:	

Begin program

If about Button Clicked

Display About

Else if Help Button clicked

Display Help

Else If Change Password Button Clicked

If any textboxes are empty then

Display Message Screen (MS 1)

Else

Open signup File

```

        Seek UName=current user name textbox
        PWord= current password textbox
        Update record to file
    End if
End if
End program

```

Program 8 Maintenance > Employee Master

Program ID	:	08
Description	:	Employee master
Screen Name	:	Screen 08
Input File	:	Employee Master File
Output File	:	
Output Report	:	

```

Begin program
Open Employee master file
Display Screen (S 8)
Input all textboxes data
if Add Button Clicked
    if any textboxes are empty then
        Display Message Screen (MS 1)
    end if
end if

```

```
    Else if already exist data found then
        Display Message Screen (MS 2)
    Else
        Write record to file
        Display Message Screen (MS 3)
    End if

Else If Modify Button Clicked
    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already Exist data found then
        Display Message Screen (MS 2)
    Else
        Update record to file
        Display Message Screen (MS 4)
    End if

Else if Delete Button Clicked
    Seek record from file
    if Emp_No= File Emp_No
        Delete record from file
        Display Message Screen (MS 5)
    End if

Else if Find Button Clicked then
    Display Screen (S 4)
End if

End Program
```

Program 9 Maintenance > Department

Program ID	:	Program 09
Description	:	Department
Screen Name	:	Screen 9
Input File	:	Department File
Output File	:	
Output Report	:	

Begin program

Open Department file

Display Screen (S 9)

Input Dept_code and Dept_name

if Add Button Clicked

if any textboxes are empty then

```

        Display Message Screen (MS 1)
    Else if already exist data found then
        Display Message Screen (MS 2)
    Else
        Write record to file
        Display Message Screen (MS 3)
    End if
Else If Modify Button Clicked
    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already Exist data found then
        Display Message Screen (MS 2)
    Else
        Update record to file
        Display Message Screen (MS 4)
    End if
Else if Delete Button Clicked
    Seek record from file
    if Emp_No= File Emp_No
        Delete record from file
        Display Message Screen (MS 5)
    End if
Else if Find Button Clicked then
    Display Screen (S 4)
End if

```

End Program

Program 10 Maintenance > Pay History

Program ID	:	Program 10
Description	:	Pay History
Screen Name	:	Screen 10
Input File	:	Pay History File
Output File	:	
Output Report	:	

Begin program

Display Screen (S 10)

Open Pay history File

Input all textboxes Data

if Add Button Clicked

 if any textboxes are empty then


```

        Display Message Screen (MS 1)
    Else if already exist data found then
        Display Message Screen (MS 2)
    Else
        Write record to file
        Display Message Screen (MS 3)
    End if
Else If Modify Button Clicked
    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already Exist data found then
        Display Message Screen (MS 2)
    Else
        Update record to file
        Display Message Screen (MS 4)
    End if
Else if Delete Button Clicked
    Seek record from file
    if Emp_No= File >Emp_No
        Delete record from file
        Display Message Screen (MS 5)
    End if
Else if Find Button Clicked then
    Display Screen (S 4)
End if

```

End Program

Program 11 Maintenance > Rates per hour

Program ID	:	Program 11
Description	:	Rates per hour
Screen Name	:	Screen 11
Input File	:	Rates Per Hour Detail File
Output File	:	
Output Report	:	

Begin program

Display Screen (S 11)

Open Rates per hour File

Input all textboxes Data

if Add Button Clicked

```

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already exist data found then
        Display Message Screen (MS 2)
    Else
        Write record to file
        Display Message Screen (MS 3)
    End if

Else If Modify Button Clicked

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already Exist data found then
        Display Message Screen (MS 2)
    Else
        Update record to file
        Display Message Screen (MS 4)
    End if

Else if Delete Button Clicked

    Seek record from file

    if Emp_No= File >Emp_No
        Delete record from file
        Display Message Screen (MS 5)
    End if

Else if Find Button Clicked then

    Display Screen (S 4)

```

End if

End Program

Program 12 Maintenance > Bonus

Program ID	:	Program 12
Description	:	Bonus
Screen Name	:	Screen 12
Input File	:	Bonus Detail File
Output File	:	
Output Report	:	

Begin program

Display Screen (S 12)

Open Bonus File

Input all textboxes Data

if Add Button Clicked

```

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already exist data found then
        Display Message Screen (MS 2)
    Else
        Write record to file
        Display Message Screen (MS 3)
    End if

Else If Modify Button Clicked

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already Exist data found then
        Display Message Screen (MS 2)
    Else
        Update record to file
        Display Message Screen (MS 4)
    End if

Else if Delete Button Clicked

    Seek record from file

    if Emp_No= File >Emp_No
        Delete record from file
        Display Message Screen (MS 5)
    End if

Else if Find Button Clicked then

    Display Screen (S 4)

```

End if

End Program

Program 13 Maintenance

> Salary

Program ID	:	Program 13
Description	:	Salary Details
Screen Name	:	Screen 13
Input File	:	Salary File
Output File	:	
Output Report	:	

Begin program

Display Screen (S 13)

Open Salary File

Input all textboxes Data

if Add Button Clicked

```

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already exist data found then
        Display Message Screen (MS 2)
    Else
        Write record to file
        Display Message Screen (MS 3)
    End if

Else If Modify Button Clicked

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already Exist data found then
        Display Message Screen (MS 2)
    Else
        Update record to file
        Display Message Screen (MS 4)
    End if

Else if Delete Button Clicked

    Seek record from file

    if Emp_No= File >Emp_No
        Delete record from file
        Display Message Screen (MS 5)
    End if

Else if Find Button Clicked then

    Display Screen (S 4)

```

End if

End Program

Program 14 Maintenance > EPF

Program ID	:	Program 14
Description	:	EPF
Screen Name	:	Screen 14
Input File	:	EPF Detail File
Output File	:	
Output Report	:	

Begin program

Display Screen (S 14)

Open EPF File

Input all textboxes Data

if Add Button Clicked


```

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already exist data found then
        Display Message Screen (MS 2)
    Else
        Write record to file
        Display Message Screen (MS 3)
    End if

Else If Modify Button Clicked

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already Exist data found then
        Display Message Screen (MS 2)
    Else
        Update record to file
        Display Message Screen (MS 4)
    End if

Else if Delete Button Clicked

    Seek record from file

    if Emp_No= File >Emp_No
        Delete record from file
        Display Message Screen (MS 5)
    End if

Else if Find Button Clicked then

    Display Screen (S 4)

```

End if

End Program

Program 15 Maintenance

> ETF

Program ID	:	Program 15
Description	:	ETF
Screen Name	:	Screen 15
Input File	:	ETF Detail File
Output File	:	
Output Report	:	

Begin program

Display Screen (S 15)

Open ETF File

Input all textboxes Data

if Add Button Clicked

```
    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already exist data found then
        Display Message Screen (MS 2)
    Else
        Write record to file
        Display Message Screen (MS 3)
    End if
Else If Modify Button Clicked
    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already Exist data found then
        Display Message Screen (MS 2)
    Else
        Update record to file
        Display Message Screen (MS 4)
    End if
Else if Delete Button Clicked
    Seek record from file
    if Emp_No= File >Emp_No
        Delete record from file
        Display Message Screen (MS 5)
    End if
Else if Find Button Clicked then
    Display Screen (S 4)
```

End if

End Program

Program 16 Maintenance > OT

Program ID : Program 16

Description : OT

Screen Name : Screen 16

Input File : OT File

Output File :

Output Report :

Begin program

Display Screen (S 13)

Open OT File

Input all textboxes Data

if Add Button Clicked

```

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already exist data found then
        Display Message Screen (MS 2)
    Else
        Write record to file
        Display Message Screen (MS 3)
    End if

Else If Modify Button Clicked

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already Exist data found then
        Display Message Screen (MS 2)
    Else
        Update record to file
        Display Message Screen (MS 4)
    End if

Else if Delete Button Clicked

    Seek record from file

    if Emp_No= File Emp_No
        Delete record from file
        Display Message Screen (MS 5)
    End if

Else if Find Button Clicked then

    Display Screen (S 4)

```

End if

End Program

Program 17 Maintenance Employee > No pay

Program ID : Program 17
Description : No Pay
Screen Name : Screen 17
Input File : No Pay Detail File
Output File :
Output Report :

Begin program

Display Screen (S 17)

Open No pay File

Input all textboxes Data

if Add Button Clicked

```

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already exist data found then
        Display Message Screen (MS 2)
    Else
        Write record to file
        Display Message Screen (MS 3)
    End if

Else If Modify Button Clicked

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already Exist data found then
        Display Message Screen (MS 2)
    Else
        Update record to file
        Display Message Screen (MS 4)
    End if

Else if Delete Button Clicked

    Seek record from file

    if Emp_No= File >Emp_No
        Delete record from file
        Display Message Screen (MS 5)
    End if

Else if Find Button Clicked then

    Display Screen (S 4)

```

End if

End Program

Program 18 Maintenance > Leave Details

Program ID	:	Program 18
Description	:	Leave Details
Screen Name	:	Screen 18
Input File	:	Leave Details File
Output File	:	
Output Report	:	

Begin program

Display Screen (S 18)

Open Leave details File

Input all textboxes Data

if Add Button Clicked


```

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already exist data found then
        Display Message Screen (MS 2)
    Else
        Write record to file
        Display Message Screen (MS 3)
    End if

Else If Modify Button Clicked

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already Exist data found then
        Display Message Screen (MS 2)
    Else
        Update record to file
        Display Message Screen (MS 4)
    End if

Else if Delete Button Clicked

    Seek record from file

    if Emp_No= File >Emp_No
        Delete record from file
        Display Message Screen (MS 5)
    End if

Else if Find Button Clicked then

    Display Screen (S 4)

```

End if

End Program

Program 19 Maintenance > Work Hour

Program ID	:	Program 19
Description	:	Wok hour
Screen Name	:	Screen 19
Input File	:	Work Hour Detail File
Output File	:	
Output Report	:	

Begin program

Display Screen (S 19)

Open Work hour File

Input all textboxes Data

if Add Button Clicked

```

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already exist data found then
        Display Message Screen (MS 2)
    Else
        Write record to file
        Display Message Screen (MS 3)
    End if

Else If Modify Button Clicked

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already Exist data found then
        Display Message Screen (MS 2)
    Else
        Update record to file
        Display Message Screen (MS 4)
    End if

Else if Delete Button Clicked

    Seek record from file

    if Emp_No= File >Emp_No
        Delete record from file
        Display Message Screen (MS 5)
    End if

Else if Find Button Clicked then

    Display Screen (S 4)

```

End if

End Program

Program 20 Maintenance > Increment

Program ID	:	Program 20
Description	:	Increment
Screen Name	:	Screen 20
Input File	:	Increment File
Output File	:	
Output Report	:	

Begin program

Display Screen (S 20)

Open Increment File

Input all textboxes Data

if Add Button Clicked

```
    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already exist data found then
        Display Message Screen (MS 2)
    Else
        Write record to file
        Display Message Screen (MS 3)
    End if
Else If Modify Button Clicked
    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already Exist data found then
        Display Message Screen (MS 2)
    Else
        Update record to file
        Display Message Screen (MS 4)
    End if
Else if Delete Button Clicked
    Seek record from file
    if Emp_No= File Emp_No
        Delete record from file
        Display Message Screen (MS 5)
    End if
Else if Find Button Clicked then
    Display Screen (S 4)
```

End if

End Program

Program 21 Maintenance > Promotion

Program ID	:	Program 21
Description	:	Promotion
Screen Name	:	Screen 21
Input File	:	Department File
Output File	:	
Output Report	:	

Begin program

Display Screen (S 21)

Open Promotion File

Input all textboxes Data

if Add Button Clicked

```
    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already exist data found then
        Display Message Screen (MS 2)
    Else
        Write record to file
        Display Message Screen (MS 3)
    End if

Else If Modify Button Clicked

    if any textboxes are empty then
        Display Message Screen (MS 1)
    Else if already Exist data found then
        Display Message Screen (MS 2)
    Else
        Update record to file
        Display Message Screen (MS 4)
    End if

Else if Delete Button Clicked

    Seek record from file

    if Emp_No= File >Emp_No
        Delete record from file
        Display Message Screen (MS 5)
    End if

Else if Find Button Clicked then

    Display Screen (S 4)
```

End if

End Program

Chapter 4

Design of the proposed system


Screens

Screen List

Screen No	Screen Name	Page No
S1	Login	87
S2	Signup	88
S3	Main Form	89
S4	Search	90
S5	Maintenances	91
S6	Reports	92
S7	Tools	93
S8	Employee Master	94
S9	Department	95
S10	Pay History	96
S11	Rates Per Hour	97
S12	Bonus	98
S13	Salary	99
S14	EPF	100
S15	ETF	101
S16	OT	102
S17	No pay	103
S18	Work Hour	104
S19	Leave Details	105
S20	Increment	106
S21	Promotion	107
S22	Report Viewer	108

Screen 01 Logging


Chandana Apperals (PVT) Ltd Login

**CHANDANA**
APPARELS

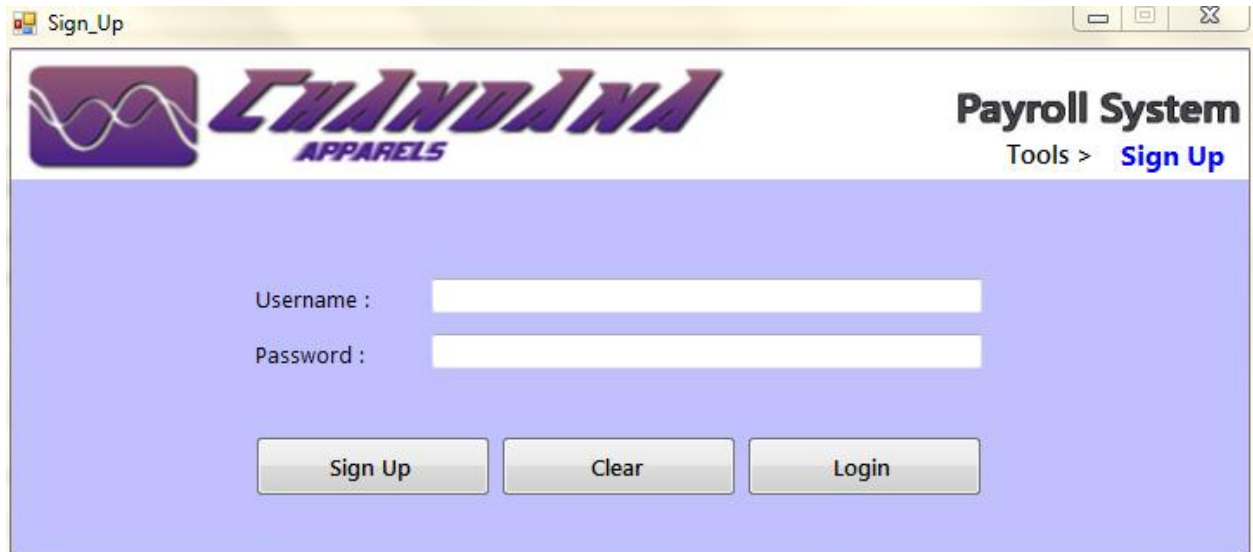
Payroll System
[Login](#)

Username :

Password :



Screen 02 Signup



The screenshot shows a web application window titled "Sign_Up". The header features the "CHANDANA APPARELS" logo on the left and the text "Payroll System" on the right, with a navigation link "Tools > Sign Up". The main content area has a light blue background and contains two input fields: "Username :" and "Password :". Below these fields are three buttons: "Sign Up", "Clear", and "Login".

Sign_Up

CHANDANA
APPARELS

Payroll System
Tools > [Sign Up](#)

Username :

Password :

Screen 03 Main Form



Screen 04 Search

EmpSearch

CHANDANA
APPARELS

Payroll System
[Search](#)

Emp No

Screen 05 Maintenances

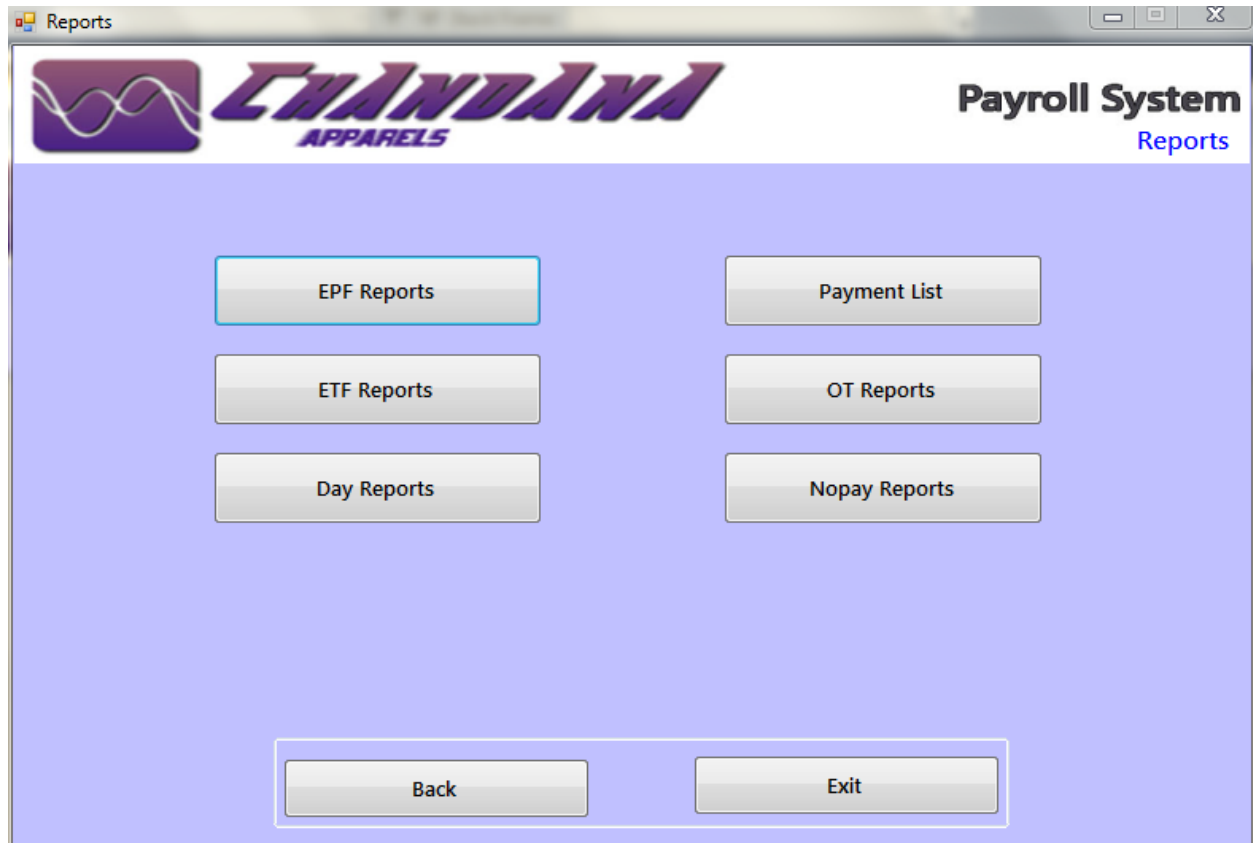
Maintenance

CHANDANA
APPARELS

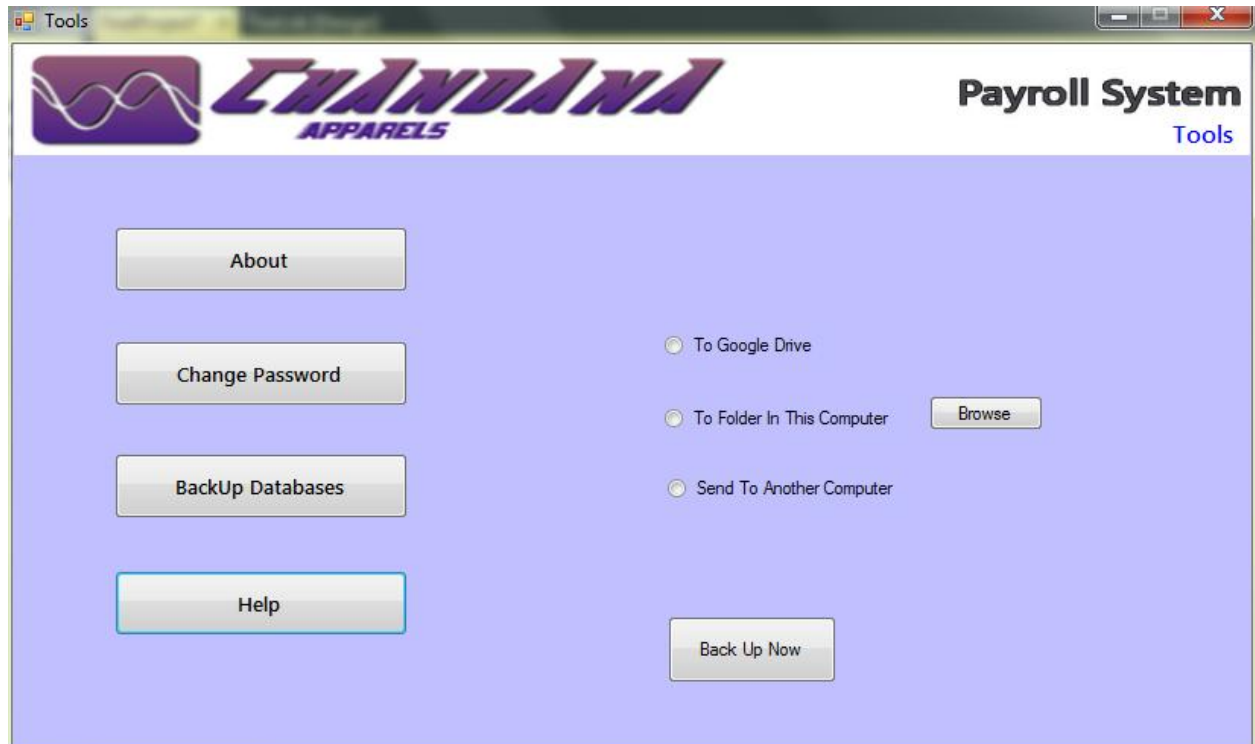
Payroll System
Maintenance

Employee Master	Work Hour	EPF Details
Department	Pay History	OT Details
Leave Details	Rates Per Hour	No Pay Details
Promotion	Salary Details	Bonus Details
Increment		
ETF Details	Back	Exit

Screen 06 Reports




Screen 07 Tools



Screen 08 Employee Master

EmployeeMaster

 **CHANDANA**
APPARELS

Payroll System
Employee Master

Emp No

First Name

Last Name

Address Line 1

Address Line 2

NIC

Sex ☒ Male ☐ Female

DOB

Marriage Status

Desig No

Dept No

Basic Salary

Date Joined

Status

Tel No

Diff Tel

B Acc No

Find

Add

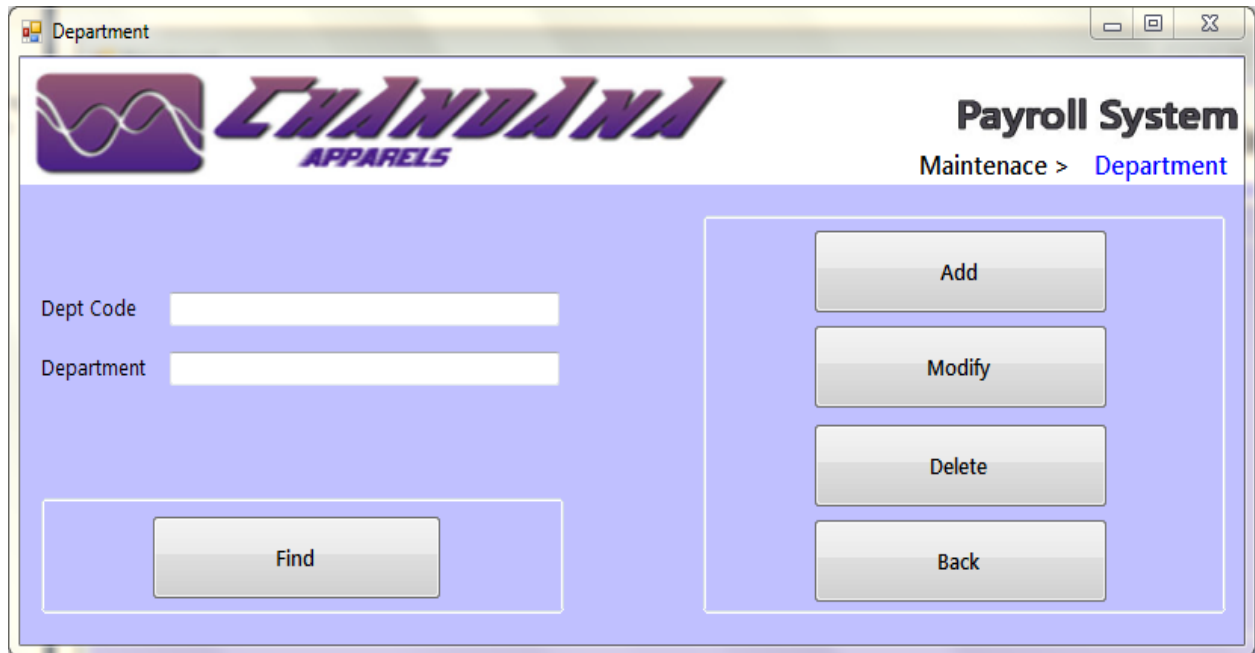
Modify

Delete

Back

Seen 09 Department

Department

 **CHANDANA**
APPARELS


Payroll System
Maintenance > [Department](#)

Dept Code

Department

Screen 10 Pay history

Pay_history_file


**Payroll System**
Maintenance > [Pay History File](#)

Emp_No	<input type="text"/>	<div>Add</div> <div>Modify</div> <div>Delete</div> <div>Back</div>
Year	<input type="text"/>	
Month	<input type="text"/>	
Net Pay	<input type="text"/>	
Total Earning	<input type="text"/>	
Total Deduction	<input type="text"/>	

Find And Get Information

Screen 02 Rates per hour

Rates_Per_Hour

 **CHANDANA**
APPARELS


Payroll System
Maintenance > [Rates Per Hour](#)

Desig No

Rate

Screen 12 Bonus

Bonus

 **Payroll System**
Maintenance > Bonus

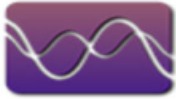
Emp No

Date

Amount

Screen 13 Salary

Salary

 **CHANDANA**
APPARELS

Payroll System
Maintenance > [Salary](#)

Emp No	<input type="text"/>	<div>Add</div> <div>Modify</div> <div>Delete</div> <div>Back</div>
Year	<input type="text"/>	
Month	<input type="text"/>	
Basic Salary	<input type="text"/>	
Total Earning	<input type="text"/>	
Gross Sal	<input type="text"/>	
Total Deduction	<input type="text"/>	
Net Sal	<input type="text"/>	

Find And Get Information

Screen 14 EPF


The screenshot shows a software window titled "EPF" with standard Windows window controls. The interface has a light blue background. At the top left is a logo for "CHANDANA APPARELS" featuring a stylized wave icon. To the right of the logo, the text "Payroll System" is displayed in bold, with "EPF" in blue text below it. The main area contains several input fields and buttons. On the left, there are five labels with corresponding text boxes: "Emp No", "Rate", "Month", "Employers Rate", and "Employees Rate". Below these is a button labeled "Find And Get Information". On the right side, there is a vertical stack of four buttons: "Add", "Modify", "Delete", and "Back".

Field/Label	Value
Emp No	
Rate	
Month	
Employers Rate	
Employees Rate	

Buttons: Add, Modify, Delete, Back, Find And Get Information

Screen 15 ETF

ETF

 **CHANDANA**
APPARELS

Payroll System
ETF

Emp No


Rate

Month

Employers Rate

Screen 16 OT

OT


 **CHANDANA**
APPARELS

Payroll System
Maintenance > OT

Emp_No	<input type="text"/>
ETF No	<input type="text"/>
Month	<input type="text"/>
Employee Rate	<input type="text"/>
OT Rate	<input type="text"/>
Amount	<input type="text"/>

Screen 17 No pay

Nopay

 **CHANDANA**
APPARELS

Payroll System
Maintenance > [No Pay](#)

Emp_No


Year

Month

Nopay Days

Screen 18 Work hour

Work_Hours

 **CHANDANA**
APPARELS

Pavroll Svstem
Maintenance > [Work Hours](#)

Emp No

Item Code


Year

Month

Hours

Screen 19 Leave Details


Leave_Details

 **Payroll System**
Maintenance > [Leave Details](#)

Emp No	<input type="text"/>
Item Code	<input type="text"/>
Year	<input type="text"/>
Month	<input type="text"/>
No Leave	<input type="text"/>
No Pay	<input type="text"/>

Screen 20 Increment


InIncrement_Date

 **Payroll System**
Maintenance > [Increment](#)

Emp No	<input type="text"/>
Desig No	<input type="text"/>
Dept No	<input type="text"/>
Increment Amt	<input type="text"/>
Basic Sal	<input type="text"/>
Increment Date	<input type="text"/>

Screen 21 Promotion

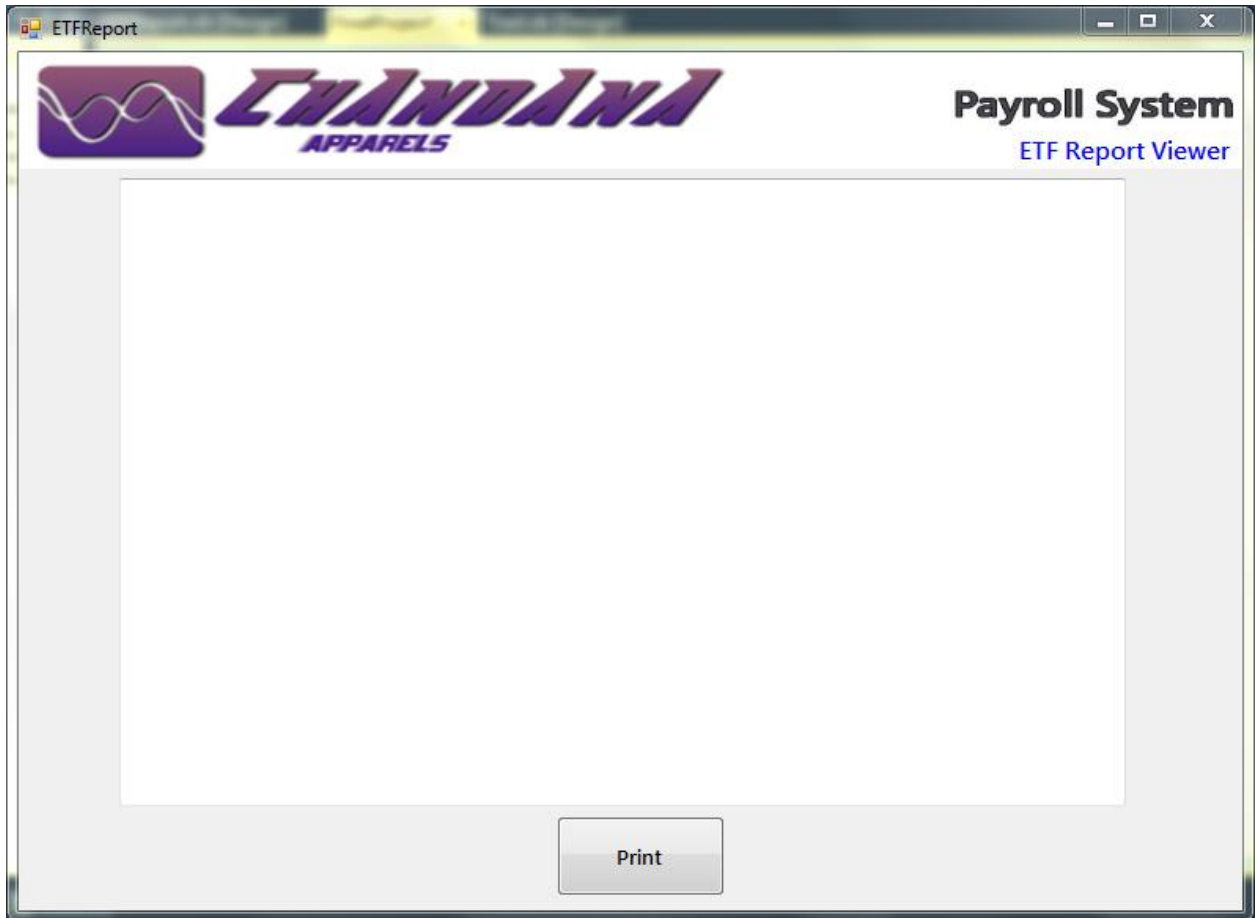
Promotion

 **CHANDANA**
APPARELS

Payroll System
Maintenance > [Promotion](#)

Emp No	<input type="text"/>
Designation No	<input type="text"/>
Dept No	<input type="text"/>
Promoted Date	<input type="text"/>
Description	<input type="text"/>

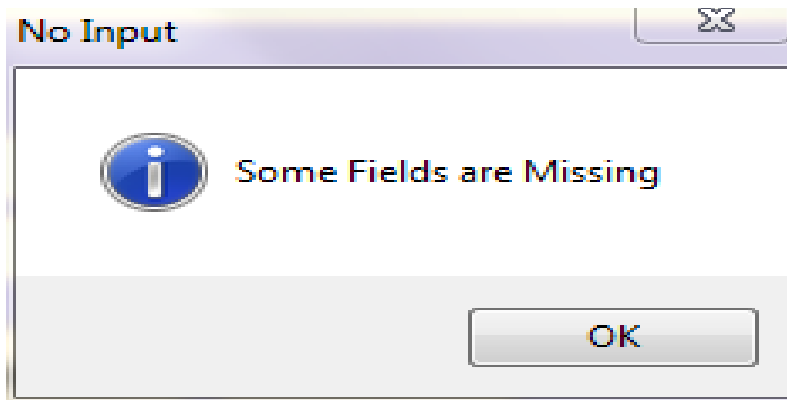
Screen 22 Report Viewer



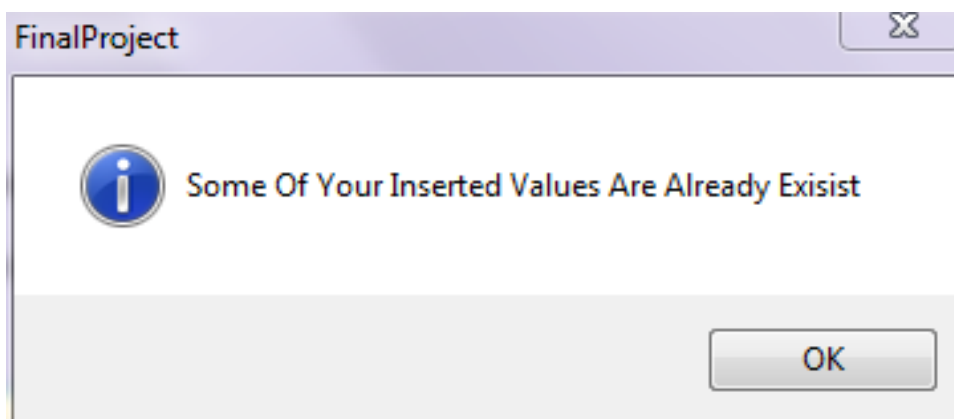
Message Screen List

Screen No	Screen Name	Page No
MS1	No Input	109
MS2	Already Exist	110
MS3	Record Added Successfully	111
MS4	Record Update Successfully	112
MS5	Record Delete Successfully	113
MS6	Invalid Input	114
MS7	Authentication Failure	115
MS8	Signup Successes	116
MS9	Login Successes	117

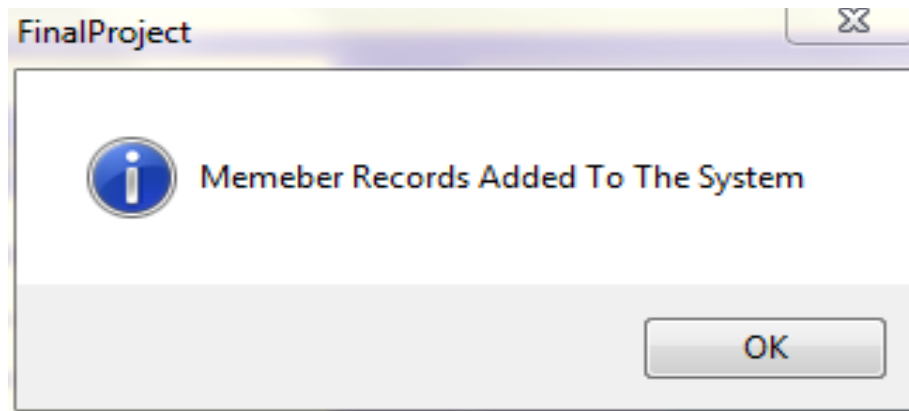
Message Screen 1 No Input



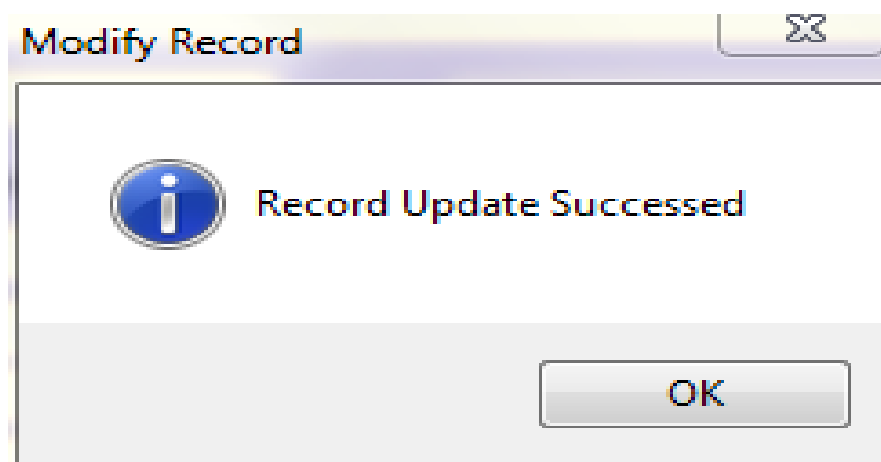
Message Screen 2 Already Exist



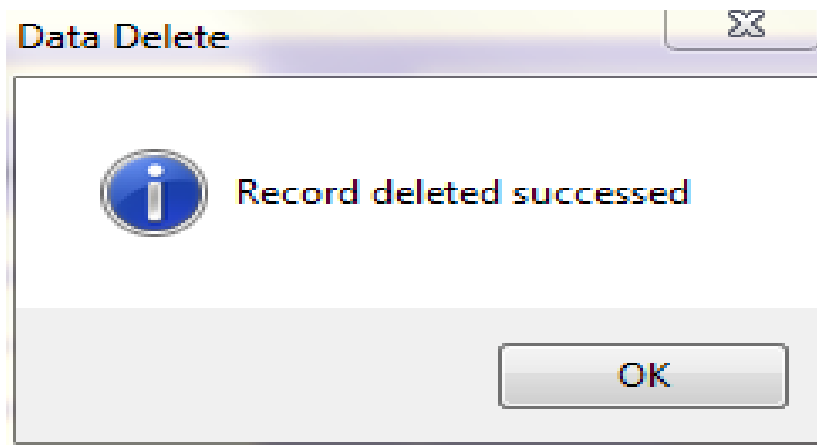
Message Screen 3 Record Added Successfully



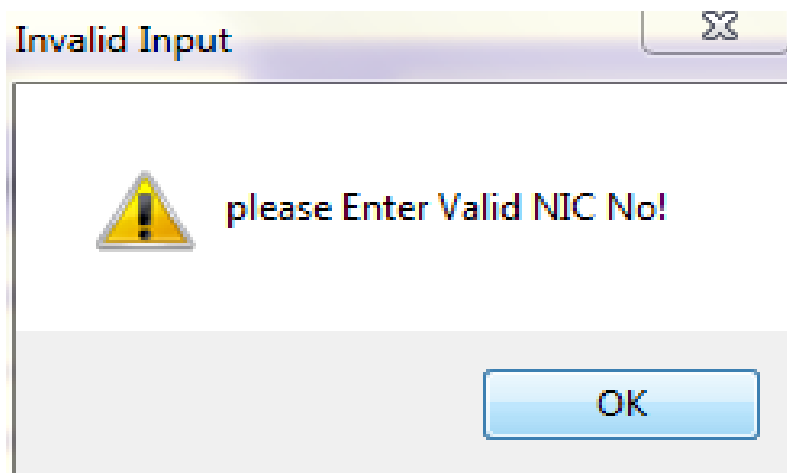
Message Screen 4 Record Update Successfully



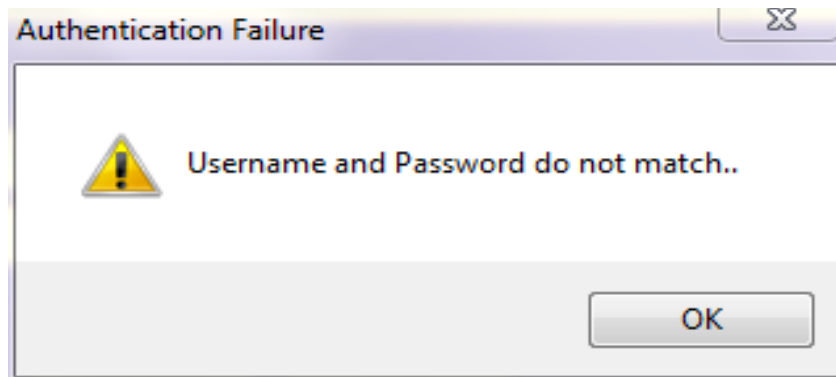
Message Screen 4 Record Delete Successfully



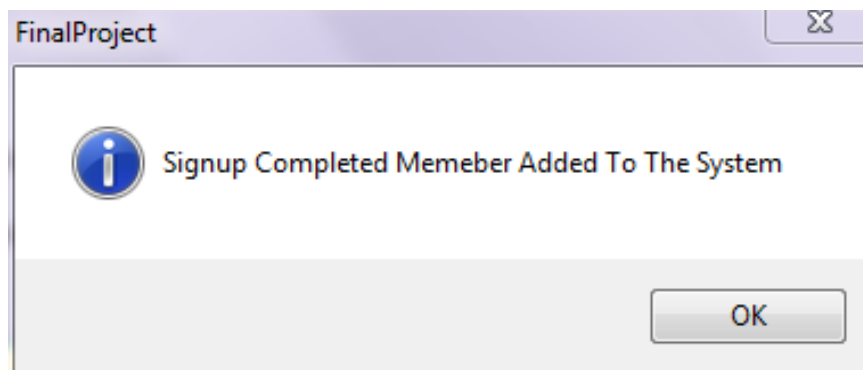
Message Screen 4 Invalid Input



Message Screen 4 Authentication Failed



Message Screen 4 Signup Complete



Chapter 4

Design of the proposed system

Reports

Reports List

Report No	Report Name	Page No
R1	EPF Report	115
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Report 1 EPF Report

Report ID: 01

Report Name: EPF report

Report Description: EPF details

Chandana Apparel (pvt) Ltd.

Ganewatta Road,
Kurunegala.

EPF Report

EPF Report for the month of year.....

Employee No	EPF No	Basic Salary	Employers Contribution To EPF	Employees Contribution To EPF	Total Contribution To EPF

.....

HRM Manager

Report 2 ETF Report

Report ID: 02
Report Name: ETF report
Report Description: ETF details

Chandana Apparel (pvt) Ltd.

Ganewatta Road,
Kurunegala.

ETF Report

ETF Report for the month of year.....

Employee No	ETF No	Basic Salary	Employers Contribution To ETF	Employees Contribution To ETF	Total Contribution To ETF

.....

HRM Manager

Report 3 OT Report

Report ID: 03
Report Name: OT report
Report Description: OT details

Chandana Apparel (pvt) Ltd.

Ganewatta Road,
Kurunegala.

OT Report

OT Report for the month of year.....

Employee No	OT Amount

.....
HRM Manager

Report 4 Remittance Report

Report ID: 04
Report Name: Remittance list
Report Description: Sent salary info

Chandana Apparel (pvt) Ltd.

Ganewatta Road,
Kurunegala.

Remittance Report

Remittance list for the month of year.....

Emp No	Account Number	Amount

.....

HRM Manager

Report 4 No Pay Report

Report ID: 04
Report Name: No pay report
Report Description: No pay details of the employee

Chandana Apparel (pvt) Ltd.

Ganewatta Road,
Kurunegala.

No Pay Report

No Pay Report for the month of year.....

Employee Number	No Pay Report

.....

HRM Manager

Report 5 Payment Report

Report ID: 05

Report Name: Payment report

Report Description: Payment details

Chandana Apparel (pvt) Ltd.

Ganewatta Road,
Kurunegala.

Payment sheet

Pay sheet Report for the month of year.....

Emp No	Name	OT Hours	No Pay Days	Basic Sal	OT Amount	Gross Salary	EPF Contribution	No Pay Amount	Net Salary

.....

HRM Manager

Chapter 4

Design of the proposed system

VB.net Codes

Adding Data to Employee Master File

Try

```
If (mycon.State = ConnectionState.Open) Then
    mycon.Close()
Else
    Dim value As Integer
    countcal()
    mycon.Open()

    'TextBox2.Text = count

    If (String.IsNullOrEmpty(TextBox3.Text)) Then
        MessageBox.Show("Please Enter First Name Field ", "No Input",
        MessageBoxButtons.OK, MessageBoxIcon.Warning)
    ElseIf (String.IsNullOrEmpty(TextBox4.Text)) Then
        MessageBox.Show("Please Enter Last Name Field ", "No Input",
        MessageBoxButtons.OK, MessageBoxIcon.Warning)
    ElseIf (String.IsNullOrEmpty(TextBox5.Text)) Then
        MessageBox.Show("Please Enter Address 1 Field ", "No Input",
        MessageBoxButtons.OK, MessageBoxIcon.Warning)
    ElseIf (String.IsNullOrEmpty(TextBox6.Text)) Then
        MessageBox.Show("Please Enter Address 2 Field ", "No Input",
        MessageBoxButtons.OK, MessageBoxIcon.Warning)
    ElseIf (String.IsNullOrEmpty(TextBox7.Text)) Then
        MessageBox.Show("Please Enter NIC Field ", "No Input",
        MessageBoxButtons.OK, MessageBoxIcon.Warning)
    ElseIf (String.IsNullOrEmpty(TextBox9.Text)) Then
        MessageBox.Show("Please Enter Date Of Birth Field ", "No Input",
        MessageBoxButtons.OK, MessageBoxIcon.Warning)
    ElseIf (String.IsNullOrEmpty(TextBox11.Text)) Then
        MessageBox.Show("Please Enter Designation Field ", "No Input",
        MessageBoxButtons.OK, MessageBoxIcon.Warning)
    ElseIf (String.IsNullOrEmpty(TextBox12.Text)) Then
        MessageBox.Show("Please Enter Department Field ", "No Input",
        MessageBoxButtons.OK, MessageBoxIcon.Warning)
    ElseIf (String.IsNullOrEmpty(TextBox13.Text)) Then
        MessageBox.Show("Please Enter Basic Salry Field ", "No Input",
        MessageBoxButtons.OK, MessageBoxIcon.Warning)
    ElseIf (String.IsNullOrEmpty(TextBox14.Text)) Then
        MessageBox.Show("Please Enter Date Joined Field ", "No Input",
        MessageBoxButtons.OK, MessageBoxIcon.Warning)
    ElseIf (String.IsNullOrEmpty(TextBox15.Text)) Then
        MessageBox.Show("Please Enter Telephone ", "No Input",
        MessageBoxButtons.OK, MessageBoxIcon.Warning)
    ElseIf (String.IsNullOrEmpty(TextBox15.Text)) Then
        MessageBox.Show("Please Enter Different Telephone ", "No Input",
        MessageBoxButtons.OK, MessageBoxIcon.Warning)
    ElseIf (String.IsNullOrEmpty(TextBox1.Text)) Then
        MessageBox.Show("Please Enter Bank Account No", "No Input",
        MessageBoxButtons.OK, MessageBoxIcon.Warning)
```

```

ElseIf (Not IsNumeric(TextBox7.Text)) Then
    If value > 0 AndAlso value < 10 Then
        value = value
    Else
        MessageBox.Show("please Enter Valid NIC No!", "Invalid Input",
        MessageBoxButtons.OK, MessageBoxIcon.Warning)
    End If
ElseIf (Not IsNumeric(TextBox11.Text)) Then
    If value > 0 AndAlso value < 1000 Then
        value = value
    Else
        MessageBox.Show("please Enter Number For Designation No Field!",
        "Invalid Input", MessageBoxButtons.OK, MessageBoxIcon.Warning)
    End If
ElseIf (Not IsNumeric(TextBox12.Text)) Then
    If value > 0 AndAlso value < 5 Then
        value = value
    Else
        MessageBox.Show("please Enter Number For Department No Field!",
        "Invalid Input", MessageBoxButtons.OK, MessageBoxIcon.Warning)
    End If
ElseIf (Not IsNumeric(TextBox13.Text)) Then
    If value > 0 AndAlso value < 400000 Then
        value = value
    Else
        MessageBox.Show("please Enter Number For Basic Salary Field!",
        "Invalid Input", MessageBoxButtons.OK, MessageBoxIcon.Warning)
    End If
ElseIf (Not IsNumeric(TextBox14.Text)) Then
    If value > 0 AndAlso value < 8 Then
        value = value
    Else
        MessageBox.Show("please Enter Number For Date Joined Field!",
        "Invalid Input", MessageBoxButtons.OK, MessageBoxIcon.Warning)
    End If
ElseIf (Not IsNumeric(TextBox15.Text)) Then
    If value > 0 AndAlso value < 10 Then
        value = value
    Else
        MessageBox.Show("please Enter Number For Telephone No Field!",
        "Invalid Input", MessageBoxButtons.OK, MessageBoxIcon.Warning)
    End If
ElseIf (Not IsNumeric(TextBox16.Text)) Then
    If value > 0 AndAlso value < 10 Then
        value = value
    Else
        MessageBox.Show("please Enter Number For Different Telephone No
        Field!", "Invalid Input", MessageBoxButtons.OK, MessageBoxIcon.Warning)
    End If
ElseIf (Not IsNumeric(TextBox1.Text)) Then
    If value > 0 AndAlso value < 1000 Then
        value = value
    Else
        MessageBox.Show("please Enter Number For Valid Bank Account No
        Field!", "Invalid Input", MessageBoxButtons.OK, MessageBoxIcon.Warning)
    End If

Else

```



```

        If (RadioButton1.Checked) Then
            sex = "Male"
        End If
        If (RadioButton2.Checked) Then
            sex = "Female"
        End If

        Dim com1 As String
        Dim com2 As String
        com1 = ComboBox1.SelectedItem.ToString
        com2 = ComboBox2.SelectedItem.ToString

        Try

            cmdinsert.CommandText = "INSERT INTO employee VALUES('" &
            TextBox2.Text & "','" & TextBox3.Text & "','" & TextBox4.Text & "','" & TextBox5.Text &
            "','" & TextBox6.Text & "','" & TextBox7.Text & "','" & sex & "','" & TextBox9.Text &
            "','" & com1 & "','" & TextBox11.Text & "','" & TextBox11.Text & "','" & TextBox13.Text &
            "','" & TextBox14.Text & "','" & com2 & "','" & TextBox16.Text & "','" & TextBox15.Text &
            "','" & TextBox1.Text & "')"
            cmdinsert.CommandType = CommandType.Text
            cmdinsert.Connection = mycon
            cmdinsert.ExecuteNonQuery()
            MsgBox("Memeber Records Added To The System",
            MsgBoxStyle.Information)

            mycon.Close()
            countcal()
            defaulter()
        Catch ex As Exception
            MsgBox("Some Of Your Inserted Values Are Already Exisist",
            MsgBoxStyle.Information)
            MsgBox(ex.Message, MsgBoxStyle.Information)
            mycon.Close()
        End Try

    End If
End If
Catch ec As Exception
    MsgBox("Database Connection Error Occured ", MsgBoxStyle.Information)
End Try
mycon.Close()

```

Modify Data from Employee Master File

```
If (mycon.State = ConnectionState.Open) Then
    mycon.Close()
Else
    mycon.Open()
    countcal()

    Dim com1 As String
    Dim com2 As String
    com1 = ComboBox1.SelectedItem.ToString
    com2 = ComboBox2.SelectedItem.ToString
    Try
        mycon.Open()
        Dim up As New OleDbCommand
        up.CommandText = "UPDATE employee SET First_Name='" & TextBox3.Text &
        "','Last_Name='" & TextBox4.Text & "','Address_1='" & TextBox5.Text & "','Address_2='" &
        TextBox6.Text & "','NIC='" & TextBox7.Text & "','Sex='" & sex & "','Date_Of_Birth='" &
        TextBox9.Text & "','Marriage='" & com1 & "','Designation='" & TextBox11.Text &
        "','Department='" & TextBox12.Text & "','Basic_Salary='" & TextBox13.Text & "','Joined='" &
        TextBox14.Text & "','Status='" & com2 & "','Tel_1='" & TextBox16.Text & "','Tel_2='" &
        TextBox15.Text & "','Bank_Acc='" & TextBox1.Text & "' WHERE Emp_No=" & TextBox2.Text & ""
        up.CommandType = CommandType.Text
        up.Connection = mycon
        up.ExecuteNonQuery()

        MsgBox("Record Update Succeeded", MsgBoxStyle.Information, "Modify
Record")
        countcal()
        defaulter()
    Catch er As Exception
        MsgBox(er.Message)
    End Try

End If
```

Delete Data from Employee Master File

```
If (mycon.State = ConnectionState.Open) Then
    mycon.Close()
Else
    mycon.Open()
    countcal()
    TextBox2.Text = count

    Dim up As New OleDbCommand
    Dim co As Integer
    Try
        mycon.Open()
        co = TextBox2.Text
        up.CommandText = "DELETE FROM employee WHERE emp_No=" & co & ""
        up.CommandType = CommandType.Text
        up.Connection = mycon
        up.ExecuteNonQuery()

        MsgBox("Record deleted succeeded", MsgBoxStyle.Information, "Data
Delete")

        countcal()
        defaulter()

    Catch rt As Exception
        MsgBox(rt.Message)
    End Try

    mycon.Close()
End If
```

Requirements

Hardware

Intel Pentium III Higher Processor

256 MB RAM

40 GB HDD

Software

Microsoft Access 2007

Microsoft .net Framework 4.0

Live ware

System Administrator

Database Administrator

Environment

Microsoft .net Framework 4.0

Cost Benefits of the System

Money is needed to buy software we need as mentioned in requirements and we should trained an employee to handle this software in a good manner if not whole system will give errors. Approximately we need LKR. 50000 amount of money to implement this software.

Here are some benefits of this computerized system

1) Time Saving

If a company invests in payroll software it can reduce the amount of man hours spent on this particular area – because the system is automated. This means that once a clerk inputs the initial data it will work out individual employee tax deductions automatically, until the original information is altered.

2) Recordkeeping

For firms that adopt this small business software it also means that they can keep on top of employee sick leave, holidays and personal time very efficiently. Furthermore, it means that those working in the accounts department can make reports with extremely accurate data rather than sifting through hand-written ledgers, allowing them to do their job more effectively.

3) Planning and reporting

This in turn means that company owners and managers are provided with the best data about their organization's funds. It also means that they can forecast labor costs that interact with budgeting and accounting programmers that allows them to make more calculated decisions on where to take the business in the future.

4) Saving money

Sometimes it's important to save the best till last, and this is one of those instances. By adopting payroll software small firms can reduce the amount of positions needed in payroll as the system is automated – but because the technology is so efficient it means that money isn't lost through paying the incorrect amount of tax or not paying staff on time.

5) Easy calculations

Efficiency in payroll calculation is important in every company. It requires accuracy to pay employees the right amount of money they have earned. To avoid the hassles of calculating payroll manually, you can use software to automate the process. The process is productive and effective in saving time and money. Your accounting department can create reports and financial documentation easily.

6) Forecasting

When you have payroll software, it allows you to see and monitor all payroll expenses instantly. This helps you graph financial data to help you create a forecast. If you have an idea of your business performance, it will be easier to decide when you need to hire new staff for the company. You can make adjustments and calculate salary increases to help you make an assessment on how it will affect your money. It is easier to know whether your decision is good for the business.

7) Reliable backup

As a business, keeping large amounts of data for payroll can be challenging. You can't store piles of papers and data manually. But when you are using payroll software, it is convenient to save records in various databases available online. In case your computer or system is destroyed, you should still have a backup to get all your records back.

Final Conclusion

The system study that we have carried out in this report is based on the manual system of Chandana Apparel Pay roll System. Through the introduced computerized system organization's requirements are met to the requested level, providing efficient and effective functionality, security actions, and up-to-date reports to review the functionality of the organization as some of the major improvements.

As results of this introduced computerized system have given the organization much more efficient and effective system compared to their manual system.

The main aim of this project was to how to develop pay roll system and we were able to finish that successfully.

Thank You