North South University



Project Report On Human Resources Management Systems For Royal Cement Limited

SUBMITTED TO:

Dr. Md. Hasanuzzaman
Professor
Department of Computer
Science & Engineering
University of Dhaka

SUBMITTED BY:

Md. Farhadul Islam (1512750660)

Mahnoor Ali (1512883660)

Methela Barua (1513086660)

Table of Content

CONTENT	PAGE NO.
1. Abstract	
1.1 Introduction	2
1.2 Objective	2
1.3 Limitation of Existing System	4
1.4 Proposed System Design	
1.4.1 Hardware and Software Requirement	4
1.4.2 System Flow Chart	5
1.4.3 DFD - Data Flow Diagram	8
1.4.4 Input Screen/ Form Design	15
1.4.5 Database Tables/ File Design	20
1.4.6 Output Design	26
2. Conclusion	38
3. Reference and Bibliography	38

PROJECT ABSTRACT

1.1 Introduction

With a view to facing the global challenge of 21st century, Royal Cement Limited (RCL), one of the leading & largest cement industries in Bangladesh emerged in 2001. Since its inception, it upholds country; is image in international arena providing world-class cement, with a capacity of 3200 MT/day, through the best utilization of latest technology based well-equipped resources. From the very beginning it has been maintaining the global standard as per ISO 9001:2000 to fulfill customers desire & satisfaction. Royal Cement Limited, located at Dhaka Trunk Road in the area of Sitakunda in Chittagong with a total area of 46 thousand sq meter, was established and enriched by combined endeavors of countries leading companies named Kabir Steel Group & BSA Group. With a well-furnished head office at the heart of city, Kabir Manzil,Sheikh Mujib Road, Agrabad in Chittagong. In the arena of cement sector, we stand unique and unparalleled with our salient features like these:-

- « Production capacity per day being 3200M.ton.,
- « More than 500 human resources.
- « Owing a self-sufficient power plant.
- « Possessing own bag plant.
- « Adequate transport facilities to supply cement for the asking to the customers.
- « Automatic truck-loader that ensures quick delivery of cement.
- « Using modern dryer technology.
- « Owing a mother vessel and four other lighter vessels with capacity of 35000M.ton and 2200 M.ton each respectively.

1.2 Objective

A Human Resources Management System (HRMS) refers to the systems and processes at the intersection between human resource management (HRM) and information technology. It merges HRM as a discipline and in particular its basic HR activities and processes with the information technology field, whereas the programming of data processing systems evolved into standardized routines and packages of enterprise resource planning (ERP) software. On the

whole, these ERP systems have their origin from software that integrates information from different applications into one universal database. The linkage of its financial and human resource modules through one database is the most important distinction to the individually and proprietary developed predecessors, which makes this software application both rigid and flexible.

The main objective of this project is to develop an effective and efficient "Human resource Management System" for Royal Cement Limited as well as integrate activities of human resource department.

The HRMS maintains the following core activities:

- Job Vacancy System
- Recruitment System
- Training System
- Attendance Processing System
- Leave Processing System
- Payroll Processing System
- Loan & Advance System
- Provident Fund System
- Performance Appraisal System
- Promotion System
- Transfer System
- Suspension System
- Quit/Terminate System
- Retirement System

1.3 Limitation of Existing System

The Present system uses a very basic excel sheets, The decision for appraisal of assigning next task are not properly projected.

- Need for extra effort.
- Data maintenance may not be accurate
- Longer time to find a suitable employee
- No facility for employees to know their details
- Danger of losing files in some cases
- It is not User Friendly

1.4 Proposed System Design

1.4.1 Software and Hardware Requirement

Software Requirement

- HTML, CSS, PHP
- MySQL Server
- Notepad++/ Notepad
- MS visio

Hardware Requirement

- Intel 3.0 ghz or higher processor
- 2 GB RAM
- 10 GB HDD Space

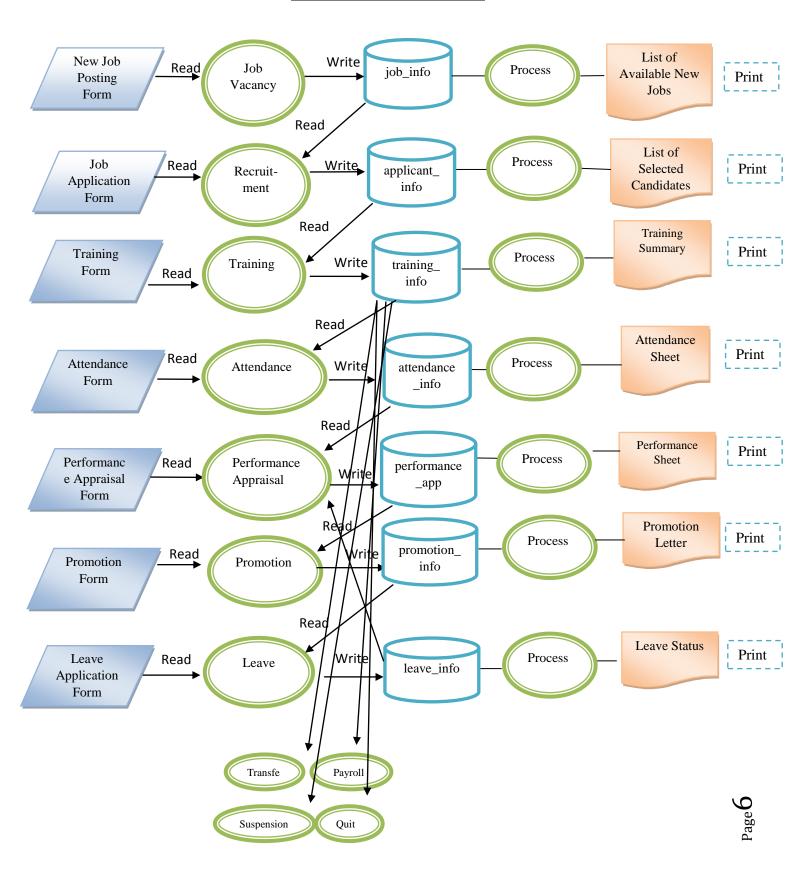
1.4.2 System Flow Chart

System flowchart is the graphical representation of the flow of data in the system, and represents the work process of the system. Various symbols are used in the flowchart to designate specific actions.

In our project, we have used below symbols:
Parallelogram Parallelogram represents the input form that needs to be carried out in the system flowchart.
Ellipse indicates the decision to be performed in the flowchart.
<u>Circle</u> The circle signifies the process of the program in the system flowchart.
Flow Line Flow line, a line with an arrowhead, is used to indicate the flow of data or logic in the system flowchart.
<u>Database</u> Database is used to indicate the tables of data or stored in the system flowchart.
<u>Document</u>

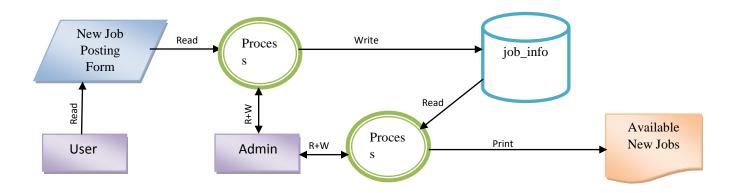
Document indicates the files to be printed in the flowchart.

System Flow Chart of HRMS

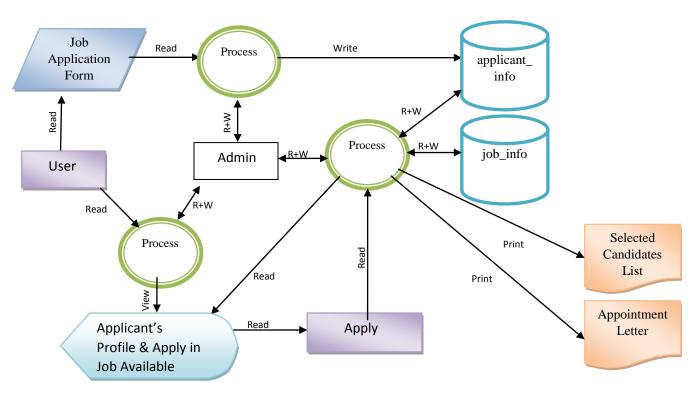


Data Flow Diagram of HRMS

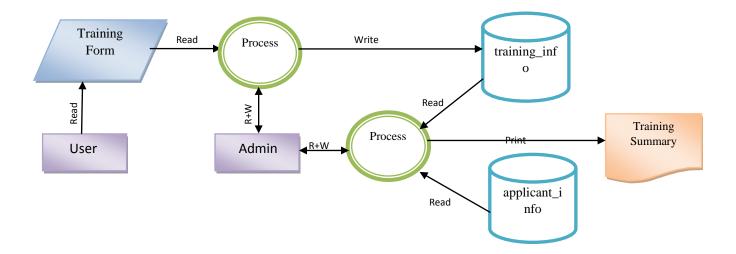
• Job Vacancy System:



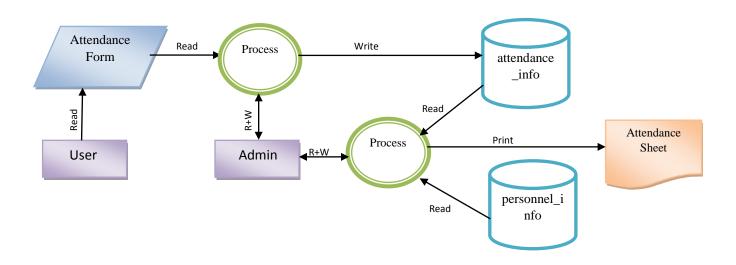
• Recruitment System:



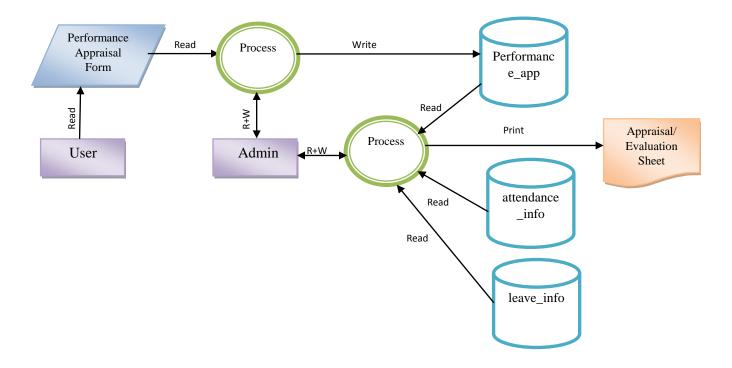
• Training System:



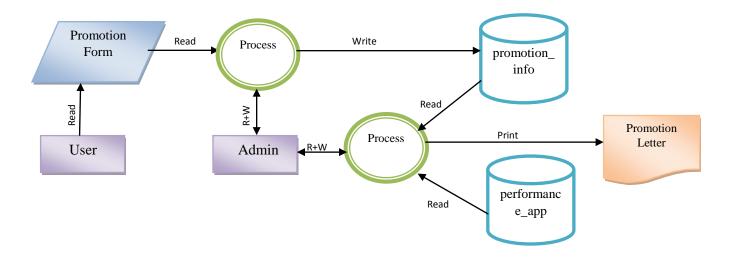
• Attendance System:



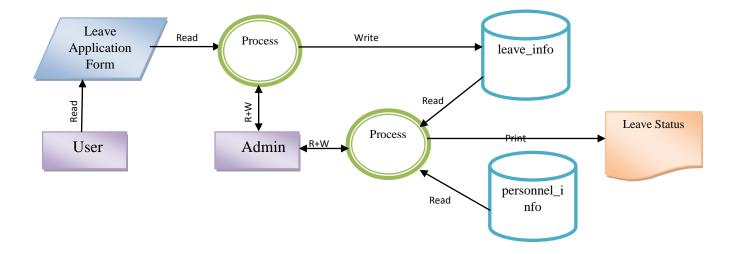
• Performance Appraisal System:



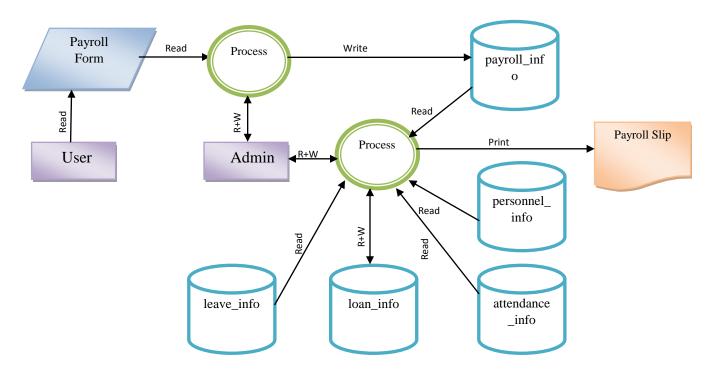
• Promotion System:



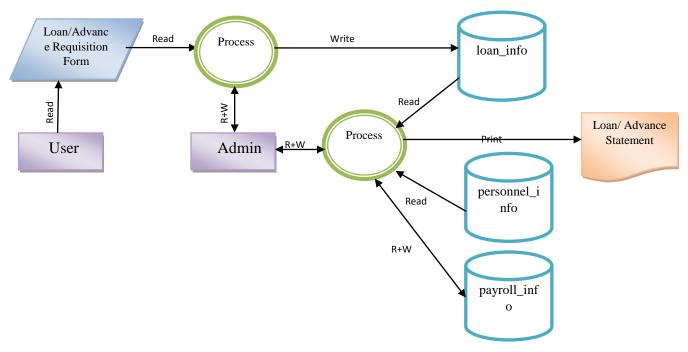
• Leave System:



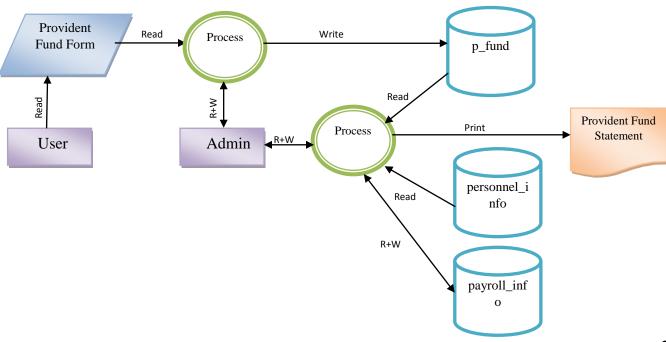
• Payroll System:



• Loan/Advance System:

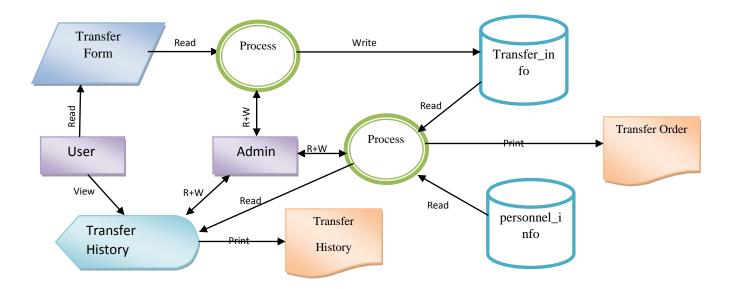


• Provident Fund System:

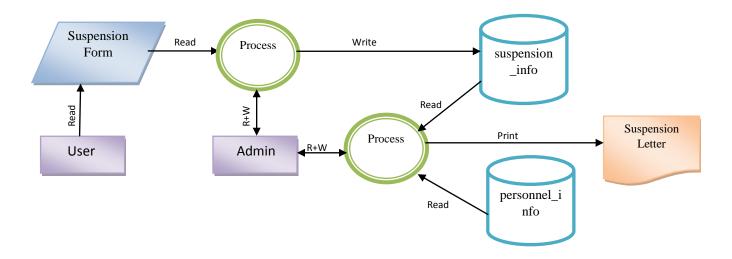


 $^{
m lage}12$

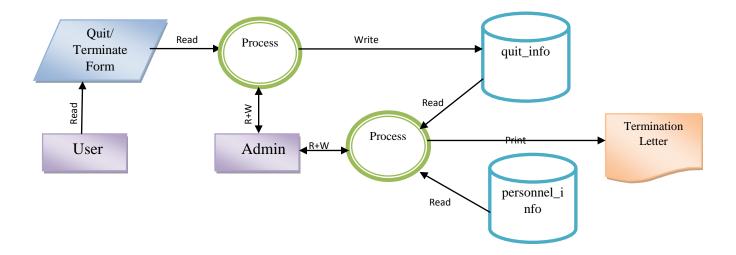
• Transfer System:



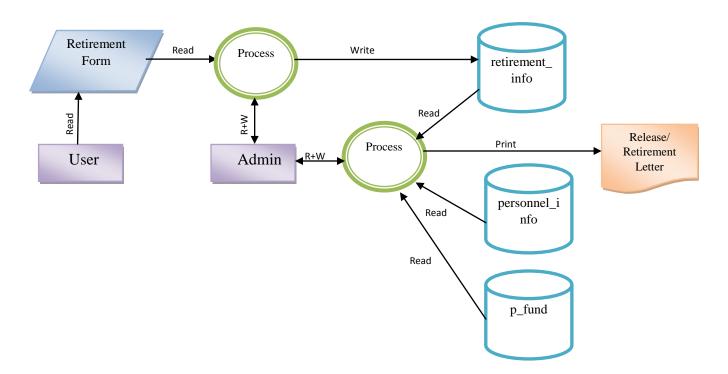
• Suspension System:



• Quit/ Terminate System:



• Retirement System:

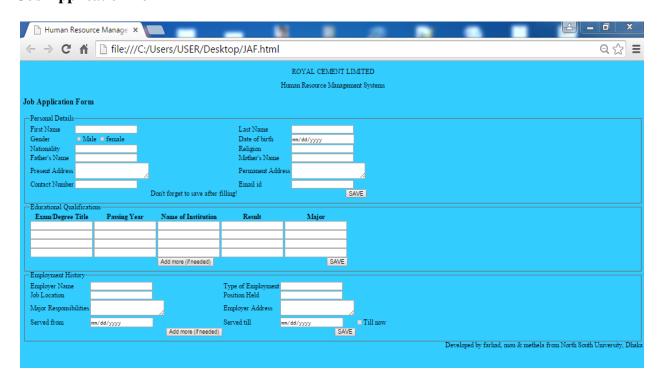


Input Screens

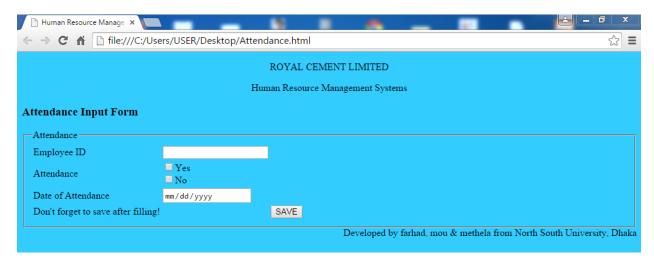
New Job Posting Form



Job Application Form



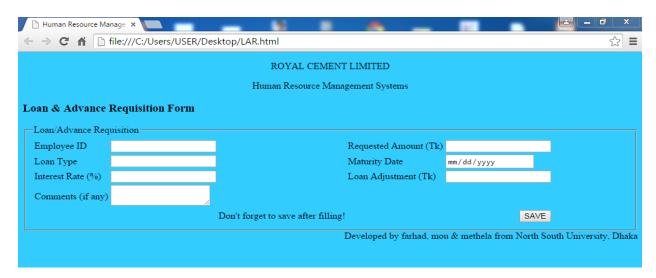
Attendance Input Form



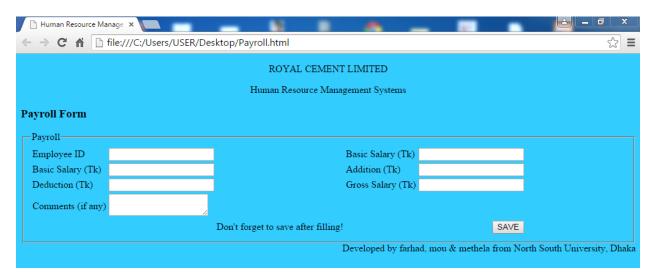
Leave Form



Loan & Advance Requisition Form



Payroll Form



Performance Form



Promotion Form



Suspension Form



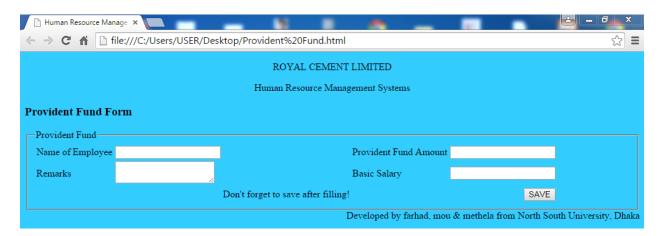
Training Form



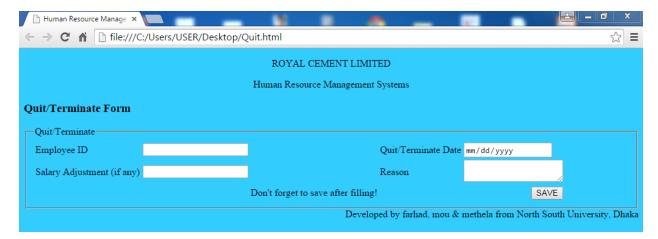
Transfer Order Form



Provident Fund Form



Quit/Terminate Form



Retirement Form



Table/ File Design

New Job Posting File Design

Name of the File: job_info Author: Programmer 1

Date:

01.02.2015

Number of Field: 11

Key Field: job_id

Name of variable	Description	Data type	Length	Keys
job_id	Description	N	6	PK
post_date	Date of Job Posting	N	10	
job_nature	Job Nature	С	12	
job_title	Job Title	S	50	
job_desc	Job Description	S	300	
	Min Educational			
edu_req	Qualification	S	100	
exp_req	Min Experience	N	2	
job_loc	Job Location	С	12	
salary	Minimum salary	N	12	
app_deadline	Application Deadline	N	10	
operator_id		N	6	FK

Job Application File Design

Name of the File: applicant_info

Author: Programmer 1

Date:

01.02.2015

Number of Field: 15 Key Field: application_id

Name of		Data		
Name of variable	Description	type	Length	Keys
application_id		N	6	PK
job_id		N	6	FK
reg_id		N	6	FK
f_name	first name	S	50	
l_name	last name	S	50	
gender	gender	С	2	
birth_date	date of birth	N	10	
nationality	nationality	С	20	
religion	religion	S	20	
father_name	father's name	S	50	
mother_name	mother's name	S	50	
pre_add	present address	S	120	
	permanent			
Per_add	address	S	120	
contact_num	contact no	N	11	
email	email id	S	20	

Payroll File Design

Name of the File: payroll_info

Author: Programmer 1 Date: 01.02.2015 Number of Field: 8 Key Field: payroll_id

Name of variable	Description	Data type	Length	Keys
payroll_id		N	6	PK
	Employee			
emp_id	ID	N	6	FK
basic	Basic Salary	N	10	
addition	Addition	N	10	
deduction	Deduction	N	10	
gross	Gross Salary	N	10	
comments	Comments	S	250	
loan_id		N	6	FK

Loan/ Advance Requisition File Design

Name of the File: loan_info Author: Programmer 1

Date:

01.02.2015

Number of Field: 8 Key Field: loan_id

Name of		Data		
variable	Description	type	Length	Keys
loan_id		N	6	PK
emp_id	Employee ID	N	6	FK
	Requested			
req_amount	Amount	N	10	
loan_type	Loan Type	C	1	
maturity_date	Maturity Date	N	10	
interest_rate	Interest Rate	N	2	
adjustment	Loan Adjustment	N	10	
	Comments (if			
comments	any)	S	250	

Attendance File Design

Name of the File: attendance_info

Author: Programmer 1

Date:

01.02.2015

Number of Field: 4 Key Field: atten_id

Name of variable	Description	Data type	Length	Keys
atten_id		N	6	PK
emp_id	Employee ID	N	6	FK
attendance	Attendance	С	1	
	Date of			
atten_date	Attendance	N	10	

Transfer File Design

Name of the File: transfer_info

Author: Programmer 1 Date: 01.02.2015 Number of Field: 5 Key Field: transfer_id

Name of variable	Description	Data type	Length	Keys
Transfer_ID		N	6	PK
emp_id	Employee ID	N	6	FK
trans_date	Transfer Date	N	10	
location	Location	C	10	
reason	Reason	S	250	

Suspension File Design

Name of the File: suspension_info

Author: Programmer 1 Date: 01.02.2015 Number of Field: 5 Key Field: suspen_id

		Data		
Name of variable	Description	type	Length	Keys
suspen_id		N	6	PK
emp_id	Employee ID	N	6	FK
reason	Reason	S	250	
due_date	Due Date	N	10	
	Charges (if			
charges	any)	N	10	

Quit/Terminate File Design

Name of the File: quit_info Author: Programmer 1

Date:

01.02.2015

Number of Field: 5

Key Field: quit_id

Name of		Data		
variable	Description	type	Length	Keys
quit_id		N	6	PK
emp_id	Employee ID	N	6	FK
reason	Reason	S	250	
	Quit/Terminate			
quit_date	Date	N	10	
salary_adjust	Salary Adjustment	N	10	

Leave Application File Design

Name of the File: leave_info Author: Programmer 1

Date:

01.02.2015

Number of Field: 5 Key Field: leave_id

Name of variable	Description	Data type	Length	Keys
leave_id		N	6	PK
emp_id	Employee ID	N	6	FK
	Reason of			
1_reason	leaving	S	250	
from_date	Leave from	N	10	
to_date	То	N	10	

Training File Design

Name of the File: training_info

Author: Programmer 1

Date:

01.02.2015

Number of Field: 6 Key Field: training_id

Name of		Data		
variable	Description	type	Length	Keys
training_id		N	6	PK
emp_id	Employee ID	N	6	FK
title	Training Title	S	100	
	Training			
objective	Objective	S	250	
	Training Start			
start_date	from	N	10	
end_date	Till	N	10	

Promotion File Design

Name of the File: promotion_info

Author: Programmer 1
Date: 01.02.2015
Number of Field: 5
Key Field: promotion_id

Name of variable	Description	Data type	Length	Keys
promotion_id		N	6	PK
emp_id	Employee ID	N	6	FK
	New			
new_designation	Designation	S	50	
increment	Increment (Tk)	N	10	
effect_date	Effecting From	N	10	

Performance Appraisal File Design

Name of the File: performance_info

Author: Programmer 1

Date:

01.02.2015

Number of Field: 5 Key Field: perform_id

Name of variable	Description	Data type	Length	Keys
perform_id		N	6	PK
emp_id	Employee ID	N	6	FK
	This Year, Present,			
atten_id	Absent	N	6	FK
perform_rating	Rating Point	N	3	
remarks	Remarks	S	250	

Provident Fund File Design

Name of the File: p_fund Author: Programmer 1

Date:

01.02.2015

Number of Field: 4 Key Field: prov_id

Name of variable	Description	Data type	Length	Keys
prov_id		N	6	PK
emp_id	Name of Employee	N	6	FK
payroll_id	Basic Salary	N	6	FK
	Povident Fund			
fund	Amount	N	10	

Retirement File Design

Name of the File: retirement_info

Author: Programmer 1

Date:

01.02.2015

Number of Field: 5

Key Field: ret_id

Name of		Data		
variable	Description	type	Length	Keys
ret_id		N	6	PK
emp_id	Employee ID	N	6	FK
	Provident Fund			
prov_id	Amount	N	6	FK
ret_date	Date of Retirement	N	3	
remarks	Remarks	S	250	

Output Design

New Job Output Design

ROYAL CEMENT LIMITED 89, Bir uttam CR datta road, Hatirpul, Dhaka List of Available New Jobs

Date: 01/01/2015 to 31/01/2015

				1		- Date.	71/01/20	10 10 517	01/2010
Job ID	Date of Job Posti ng	Job Nature	Job Title	Job Description	Educati on	Experi ence	Job Locat ion	Salar y	Deadli ne
00001	02- 01-15	Permane nt	Account s Officer	Able to prepare and posting the daily vouchers. Maintain Cash book/Bank book/Journal book. To be responsible to input all daily transactions. Prepare bank reconciliation statement. Prepare and provide all financial report to the Management. Administrative support.	MBA in Account s/Financ e	2 years	Dhak a	2000	31-01- 15
00002	10- 02-15	Contract ual	Area Sales Officer	Order collect from customer. Promoted Market. Develop Market area and increasing sale volume day by day. Must achieve sales target. Maintain proper leadership	Graduat e in Marketi ng	1 year	Gazip ur	1500	31-01- 15

HR PC Printing Date: 02/01/2015

Jage Z

Job Application Output Design

ROYAL CEMENT LIMITED

89, Bir uttam CR datta road, Hatirpul, Dhaka

Page # 1

List of Selected Candidates

Date: 01/01/2015 to 31/01/2015

Application ID	First Name	Last Name	Job Title	Present Address	Contact Number
00001	Farhad	Chowdhury	Accounts Officer	Panthapath, Dhaka	01717894170
00002	Mahnoor	Ali	Accounts Officer	Niketon, Dhaka	01675695051
00003	Methela	Barua	Area Sales Officer	Dhanmondi, Dhaka	01777954265

HR PC Printing Date: 02/01/2015

Payroll Output Design

ROYAL CEMENT LIMITED

89, Bir uttam CR datta road, Hatirpul, Dhaka

Page # 1

Payroll Statement

Date: 01/01/2015 to 31/01/2015

Employee ID	Last Name	Basic Salary	Addition	Deduction	Gross Salary	Loan/Advance	Comments
00001	Islam	50000	2000	3000	49000	25000	
00002	Ali	45000	5000	4000	46000	10000	

HR PC Printing Date:

02/01/2015

Loan/Advance Requisition Output Design

ROYAL CEMENT LIMITED

89, Bir uttam CR datta road, Hatirpul, Dhaka

Page # 1

Loan/Advance Statement

Date: 01/01/2015 to 31/01/2015

Employe e ID	Last Name	Requeste d Amount	Date of Last Requisitio n	Loan Type	Date of Loan Maturit y	Interes t Rate	Adjuste d Amount	Comment s
00001	Islam	25000	12-12-14	Monthly	12-03- 15	5%	15000	
00002	Ali	10000	31-11-14	Quarterl y	31-03- 15	6.50%	7000	

HR PC Printing Date:

02/01/2015

Attendance Output Design

ROYAL CEMENT LIMITED

89, Bir uttam CR datta road, Hatirpul, Dhaka

Page # 1

Attendance Sheet

Date: 01/01/2015 to 31/01/2015

Employee ID	Last Name	Attendance	Total Attencance (days)
00001	Chowdhury	Yes	25
00002	Ali	Yes	24
00003	Barua	No	20

HR PC Printing Date:

02/01/2015

Transfer Output Design

ROYAL CEMENT LIMITED 89, Bir uttam CR datta road, Hatirpul, Dhaka

Page # 1

Transfer Order

Transfer Order no. 01/2015

Dear Mr. Farhad

Management have decided to change your current job location.

Effecting from 01.02.2015, you are transferred to our new office at chittagong to handle the new administration effectively and it will be minimum for one year. After one year management will decide your job place.

Best of luck and keep it up!

With regards,

Managing Director

HR PC Printing Date: 02/01/2015

Suspension Output Design

ROYAL CEMENT LIMITED

89, Bir uttam CR datta road, Hatirpul, Dhaka

Suspension Letter

Page # 1

Suspension no. 01/2015

Dear Mr. Karim

Management have decided to suspend you.

Effecting from 01.02.2015, you are suspended from the post of Executive (Sales & Marketing) position due to continues lower performance or no performance acheived. Also please return the company's property such as Laptop, Mobile set and other charges if any within 31.01.2015 and don't miss to take release letter from your reported personnel for your future inconvenience.

Be confident and increase your capability for better career!

With regards,

Managing Director

HR PC Printing Date: 31/01/2015

Quit/Terminate Output Design

ROYAL CEMENT LIMITED 89, Bir uttam CR datta road, Hatirpul, Dhaka

Page #1

Termination Letter

Termination no. 01/2015

Dear Mr. Karim

Management have decided to terminate your job.

Effecting from 01.02.2015, you are terminated from the post of Executive (Sales & Marketing) position due to ending contactual period. Also please return the company's property such as Laptop, Mobile set and other charges if any within 31.01.2015 and don't miss to take release letter from your reported personnel for your future inconvenience. If any new project will continue management will consider your termination!

Wish your better career!

With regards,

Managing Director

HR PC Printing Date: 31/01/2015

Leave Output Design

ROYAL CEMENT LIMITED

89, Bir uttam CR datta road, Hatirpul, Dhaka

Page # 1

Leave Status

Date: 01/01/2015 to 31/01/2015

Employee ID	Last Name	Leave Date	Reason of leaving	Total leave (days)
00001	Chowdhury	03.01.2015, 04.01.2015	Family Matter	2
00002	Ali	03.01.2015, 04.01.2015, 05.01.2015	Exam of MBA	3
00003	Barua			0

HR PC Printing Date:

01/02/2015

Training Output Design

ROYAL CEMENT LIMITED

89, Bir uttam CR datta road, Hatirpul, Dhaka

Page # 1

Training Summary

Date: 01/01/2015 to 31/01/2015

Training ID	Number of attended employee	Title of Training	Training Objective	Duration (days)
00001	25	Managerial Behavior	To understand the working environment and the conduct of behavior in oraginazation	5
00002	10 Corporate Governance		How to enhance and modify organization governance	3
00003	32	Customer Relation	How to behave with customer and relation criteria	14

HR PC Printing Date: 01/02/2015

Promotion Output Design

ROYAL CEMENT LIMITED 89, Bir uttam CR datta road, Hatirpul, Dhaka

Page # 1

Promotion Letter

Letter ref: HR/Pro/01/15

Dear Mr. Farhad

Management have pleased to your performance.

As reward, your new designation will be Assistant Manager (Admin) & your salary will be increased 10% of basic salary and with other benefit will follow as the company policy, effecting from 01.02.2015.

Well done and keep it up!

With regards,

Managing Director

HR PC Printing Date: 02/01/2015

Performance Appraisal Output Design

ROYAL CEMENT LIMITED

89, Bir uttam CR datta road, Hatirpul, Dhaka

Page # 1

Performance Sheet

Date: 01/01/2015 to 31/12/2015

Employee ID	Last Name	Total Absent (days)	Total Attencance (days)	Total Leave (days)	Perform Rating	Remarks
00001	Chowdhury	5	201	10	A	formal
00002	Ali	7	199	15	A-	casual
00003	Barua	10	190	16	В	casual

HR PC Printing Date: 01/01/2016

Provident Fund Output Design

ROYAL CEMENT LIMITED

89, Bir uttam CR datta road, Hatirpul, Dhaka

Page # 1

Provident Fund Statement

Date: 01/01/2015 to 31/01/2015

Employee ID	Last Name	Basic Salary	Percentage (%) of Provident Fund	Provident Fund Amount
00001	Islam	50000	10	5000
00002	Ali	45000	10	4500

HR PC Printing Date: 02/01/2015

Retirement Output Design

ROYAL CEMENT LIMITED 89, Bir uttam CR datta road, Hatirpul, Dhaka

Page #1

Retirement Letter

Retirement no. 01/2015

Dear Mr. Karim

Management have pleased to you for long time being effort with this company.

As schedule of the company, you are retired from the post of Manager (Accounts) position due to ending job period which effecting from 01.01.2015. Also requested to return the company's property or any transaction if any. Your provident fund and salary payable tk. 5,00,000 and please receive the amount within 2 days after retirement from Head of Accounts.

Thanks again being with this company with long period and your great effort. We cordialy wish your peace retired life!

With regards,

Managing Director

HR PC Printing Date: 31/12/2014

2. CONCLUSIONS

This system is designed to eliminate the drawbacks of the existing system and provide permanent solution to existing problems

The competitive advantage in the organization can be sustained through these modules:

- Recruitment, employee management and administration
- Employee
- Job seeker
- User

3. REFERENCES AND BIBLIOGRAPHY

Management Information System -OBrien

http://en.wikipedia.org/wiki/Human_resource_management

http://Google.com

http://slideshare.net