

**Dawat e Hadiyah Karachi
HR-Payroll System
Requirements Specification**

*This document outlines the Application Scope and Requirements for
HR-Payroll System*

Revision History

Author	Revision Number	Date
Huzaifa Khambaty	2	15-07-2017
Huzaifa Khambaty	3	23-07-2017

Application Requirements Specification



Application Requirements Specification	1
1 Scope	1
1.1 Overview	1
1.2 Objectives	1
1.3 Limitations & Assumptions	1
2 Process Flow Chart	2
3 System Specification	3
3.1 Login Screen	3
3.2 Dashboard	3
3.3 User Management Module	3
3.3.1 User Info	3
3.3.2 User Permission	3
3.3.3 User Profile	4
3.4 Setup	4
3.4.1 Company	4
3.4.2 Department	4
3.4.3 Section	5
3.4.4 Education	5
3.4.5 Designation	5
3.4.6 Allowance	5
3.4.7 Deduction	6
3.4.8 Tax Slabs	6
3.4.9 Banks	6
3.5 Employee Management:	7
3.5.1 Employee Profile	7
3.5.2 Employee Family	7
3.5.3 Employee Education	8
3.5.4 Employee Medical Policy	8
3.5.5 Employee Scholarship policy	8
3.5.6 Employee Department	9
3.6 Attendance Management	10
3.6.1 Leave Requisition	10
3.6.2 Leave Approval	10
3.6.3 Attendance	10
3.7 Payroll Management	11
3.7.1 Advances	11
3.7.2 Loans	11
3.7.3 Payroll Generation	12
3.7.4 Payroll Posting	12
3.8 Document Creation	13
3.9 Document Management	13
3.10 Special Allowances	13

Application Requirements Specification

1 Scope

1.1 Overview

Dawat-e-Hadiyah Karachi is a reputed organization which has multiple companies operating under its umbrella. They require a dynamic HR and Payroll Management Software which can operate in its parent and child companies. This software will cover all the process which are currently running in Dawat-e-Hadiyah Karachi and it can also cater new features which will help DH to run its business more efficiently.

1.2 Objectives

The objectives of the B-HR are as following

- To develop new Web based HR and Payroll application
- Cater all the current business processes.
- To cater single employee in multiple companies
- Easy access for management to check regular performance of an employee.
- Training and travelling modules.
- Integration with Financial Accounting Software in Future.
- Advance Reporting options with facility of dynamic dashboard reporting.

1.3 Limitations & Assumptions

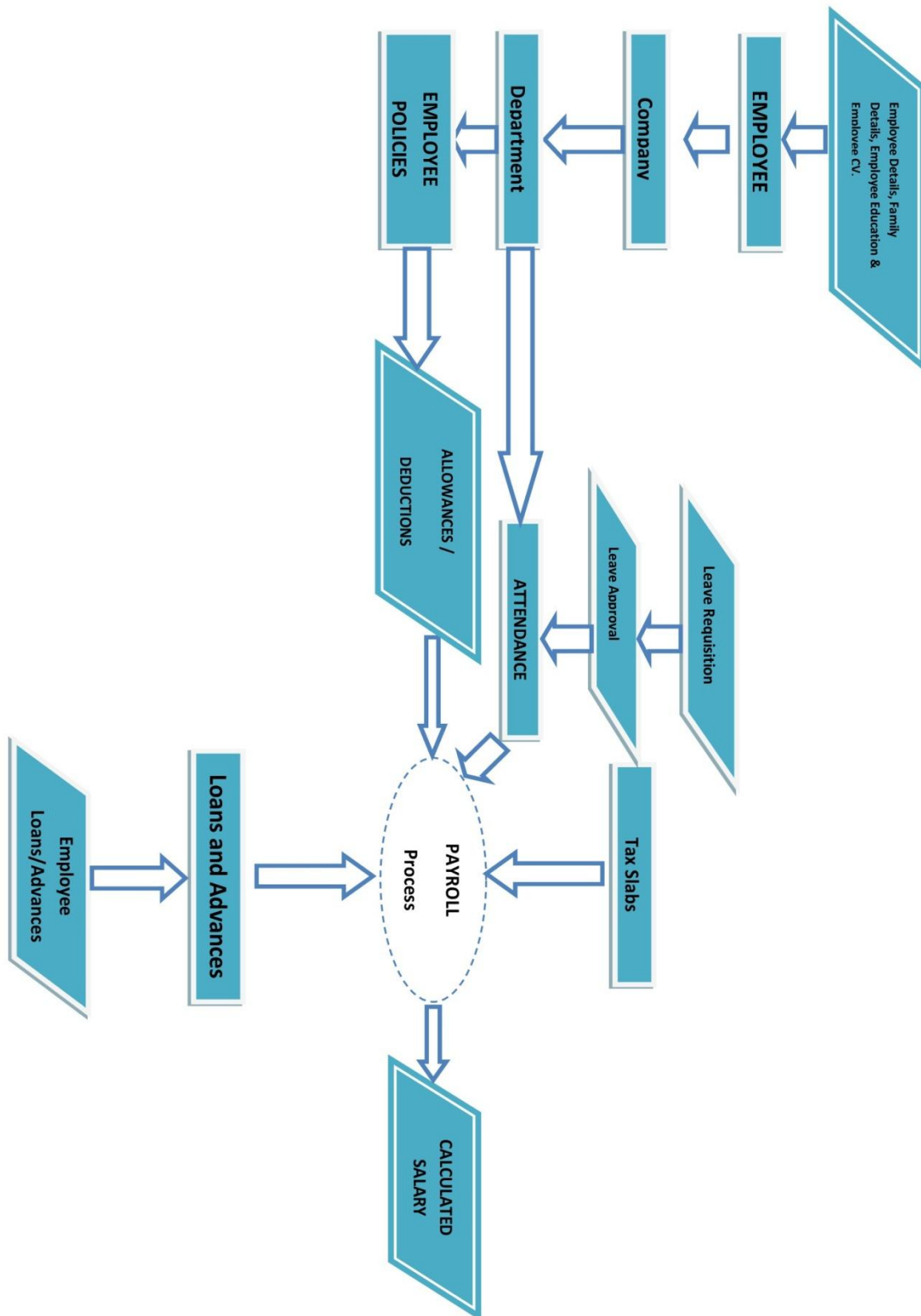
The limitations of the system is

- It will be online application which will be run on browser. Internet is necessary to run the application.
- In case of slow internet, application performance will be effected.

Environment and technology requirements:

- The application will be based on LAMP (Linux Apache MySQL PHP) technology
- No software license is required

2 Process Flow Chart



3 System Specification

3.1 Login Screen

Login Screen consist of two section. In 1st section user name and password will be asked. On success validation user will asked for company, Department and Financial year in which he/she wants to perform task. Company, Department and Financial Year are depends on User privileges.

3.2 Dashboard

Dashboard will be provided with all useful information to summarize the current status in a glance.

3.3 User Management Module

User management modules consist of following section:

1. User Info
2. User Permission
3. User Profile

3.3.1 User Info

This form will be used to create, update the roles in the system for the users. Fields will be

Data Element	Description	Format
LoginName	Input field for the user id. This will be the ID by which user will be log in the system.	String, max 50 chars, can not be empty
User Name	Full Name of the User	String, max 50 chars, can not be empty
Password	Input text field. Password characters will be used to hide the password	String, max 50 chars, can not be empty
UserGroup	Selection box which will be populated from User Permission	

3.3.2 User Permission

This form will be used to create, update the roles in the system for the users. Fields will be

Data Element	Description	Format
User Group	Input Text field description of the role	String, max 50 chars, cannot be empty
Form Name	A display field showing the available fields in the system.	
View	Checkbox to assign View permission to the System	
Add	Checkbox to assign Insert Record Permission to the form	
Edit	Checkbox to assign Update Record Permission to the form	
Delete	Checkbox to assign Delete record Permission to the to the Form	

3.3.3 User Profile

In this form, login user will able to update his profile data.

3.4 Setup

Setup modules consist of following Master Forms:

1. Company
2. Department
3. Section
4. Education
5. Designation
6. Allowances
7. Deductions
8. Tax Slots
9. Bank

3.4.1 Company

Data Element	Description	Format
company_id	Primary Key for the table	INT Auto Increment
company_name	Name of Company	Varchar 16 Characters
created_at	DateTime when records has been created for fist time	DateTime
created_by_id	User ID which created the records	CHAR 38

3.4.2 Department

Data Element	Description	Format
department_id	Primary Key for the table	INT Auto Increment
company_id	Foreign Key Relation with Company	INT
department_name	Name of Department	Varchar 16 Characters
created_at	DateTime when records has been created for fist time	DateTime
created_by_id	User ID which created the records	CHAR 38

3.4.3 Section

Data Element	Description	Format
section_id	Primary Key for the table	INT Auto Increment
company_id	Foreign Key Relation with Company	INT
department_id	Foreign Key Relation with Department	INT
section_name	Name of Section within Departments	Varchar 16 Characters
created_at	DateTime when records has been created for fist time	DateTime
created_by_id	User ID which created the records	CHAR 38

3.4.4 Education

Data Element	Description	Format
education_id	Primary Key for the table	INT Auto Increment
education_name	Name of Section within Departments	Varchar 16 Characters
created_at	DateTime when records has been created for fist time	DateTime
created_by_id	User ID which created the records	CHAR 38

3.4.5 Designation

Data Element	Description	Format
designation_id	Primary Key for the table	INT Auto Increment
designation_name	Name of Section within Departments	Varchar 16 Characters
created_at	DateTime when records has been created for fist time	DateTime
created_by_id	User ID which created the records	CHAR 38

3.4.6 Allowance

Data Element	Description	Format
allowance_id	Primary Key for the table	INT Auto Increment
allowance_name	Title of Allowance Head	Varchar 16 Characters
created_at	DateTime when records has been created for fist time	DateTime
created_by_id	User ID which created the records	CHAR 38

3.4.7 Deduction

Data Element	Description	Format
deduction_id	Primary Key for the table	INT Auto Increment
deduction_name	Title of Deduction Head	Varchar 16 Characters
created_at	DateTime when records has been created for fist time	DateTime
created_by_id	User ID which created the records	CHAR 38

3.4.8 Tax Slabs

Data Element	Description	Format
Tax_slab_id	Primary Key for the table	INT Auto Increment
range_from	Starting of Annual Salary Range	Decimal
range_to	Ending of Annual Salary Range	Decimal
Tax_percent	Percent on slab range	Decimal
created_at	DateTime when records has been created for fist time	DateTime
created_by_id	User ID which created the records	CHAR 38

3.4.9 Banks

Data Element	Description	Format
Bank_id	Primary Key for the table	INT Auto Increment
Bank_name	Starting of Annual Salary Range	Decimal
Bank_address		
Manager_name		
Manager_email		
Manager_phone		
Contact_person_name		
Contact_person_email		
Contact_person_phone		
created_at	DateTime when records has been created for fist time	DateTime
created_by_id	User ID which created the records	CHAR 38

3.5 Employee Management:

This module use to manage all information for an employee. This module consists of following section.

1. Employee Profile
2. Employee Family
3. Employee Department
4. Employee Education

3.5.1 Employee Profile

Data Element	Description	Format
employee_id	Primary Key for the table	CHAR 38 GUID
ref_account_id		
full_name		
qualification_id		
cnic_no		
its_no		
Dob		
mobile_no		
Address		
phone_no		
Email		
created_at		
created_by_id		

3.5.2 Employee Family

Data Element	Description	Format
employee_family_id	Primary Key for the table	CHAR 38 GUID
employee_id		
Relation		
full_name		
cnic_no		
its_no		
Dob		
mobile_no		
Email		
ntn_no		
created_at		
created_by_id		

3.5.3 Employee Education

Data Element	Description	Format
employee_family_id	Primary Key for the table	CHAR 38 GUID
employee_id		
education_id		
major_subject		
institute_type		
institute_name		
completion_date		
grade_percent		
created_at		
created_by_id		

3.5.4 Employee Medical Policy

This module will store the policy for medical of an employee or his/her spouse, children and parents if applicable.

Data Element	Description	Format
employee_medical_policy_id	Primary Key for the table	CHAR 38 GUID
employee_id		
department_id		
company_id		
wef_date		
self_percent		
spouse_percent		
parent_percent		
children_percent		
Remarks		
created_at		
created_by_id		

3.5.5 Employee Scholarship policy

This module will store the policy for medical of an employee or his/her children where applicable.

Data Element	Description	Format
employee_scholarship_policy_id	Primary Key for the table	CHAR 38 GUID
employee_id		
department_id		
company_id		
wef_date		
self_percent		
children_percent		
Remarks		
created_at		
created_by_id		

3.5.6 Employee Department

One Employee can be in Multiple Company / Department. Each Department / Company will have its own Joining and Leaving Date and Salary Structure.

Data Element	Description	Format
employee_department_id	Primary Key for the table	CHAR 38 GUID
employee_id		
company_id		
department_id		
designation_id		
joining_date		
leaving_date		
bank_name		
bank_account		
bank_title		
Status	Active / Inactive	

This is further divided into following section:

3.5.6.1 Employee Salary

This will maintain the history of salary structure with respect to wef_date.

Data Element	Description	Format
employee_salary_id	Primary Key for the table	CHAR 38 GUID
employee_id		
company_id		
department_id		
wef_date		
basic_salary		

3.5.6.2 Employee Salary Allowance

Data Element	Description	Format
employee_allowance_id	Primary Key for the table	CHAR 38 GUID
employee_salary_id		
allowance_id		
allowance_code		
allowance_name		
allowance_type	Fixed / Function (to Calculate)	
function_name		
allowance_amount		
sort_order		

3.5.6.3 Employee Salary Deduction

Data Element	Description	Format
employee_salary_deduction_id	Primary Key for the table	CHAR 38 GUID
Employee_salary_id		
deduction_id		
deduction_code		
deduction_name		
deduction_type	Fixed / Function (to Calculate)	
function_name		
deduction_amount		
sort_order		

3.6 Attendance Management

This module use to manage Leave Information for an employee. This module consists of following section.

1. Leave Requisition
2. Leave Approval
3. Attendance

3.6.1 Leave Requisition

Data Element	Description	Format
leave_requisition_id	Primary Key for the table	CHAR 38 GUID
company_id		
department_id		
employee_id		
from_date		
to_date		
Reason		
Status	Pending / Approved / Rejected	
created_at		
created_by_id		

3.6.2 Leave Approval

Data Element	Description	Format
leave_approval_id	Primary Key for the table	CHAR 38 GUID
company_id		
department_id		
employee_id		
from_date		
to_date		
admin_remarks		
status	Approved / Rejected	
approved_type	With Pay / Without pay	
created_at		
created_by_id		

3.6.3 Attendance

Data Element	Description	Format
attendance_id	Primary Key for the table	CHAR 38 GUID
company_id		
department_id		
employee_id		
attendance_date		
attendance_status	P/A/LP/LW	
created_at		
created_by_id		

P=Present, A=Absent, LP=Leave with Pay, LW=Leave without pay

3.7 Payroll Management

This module use to generate the payroll. This module consists of following section.

1. **Advances**
2. **Loans**
3. **Payroll Generation**
2. **Payroll Posting**

3.7.1 Advances

Data Element	Description	Format
advance_id	Primary Key for the table	CHAR 38 GUID
company_id		
department_id		
employee_id		
advance_date		
advance_amount		
remarks		
created_at		
created_by_id		

3.7.2 Loans

Data Element	Description	Format
loan_id	Primary Key for the table	CHAR 38 GUID
company_id		
department_id		
employee_id		
loan_date		
total_amount		
total_installment		
remarks		
created_at		
created_by_id		

Loan Installment

Data Element	Description	Format
loan_installment_id	Primary Key for the table	CHAR 38 GUID
loan_id		
company_id		
department_id		
employee_id		
installment_date		
installment_amount		
Remarks		
created_at		
created_by_id		

3.7.3 Payroll Generation

This module will generate the payroll however salary slip and other documents will not be printed until payroll has been posted. Before posting any amendments can be done. HODs can also be able to generate the payroll for their department.

Following Table will help us understand the structure of payroll:

3.7.3.1 Employee Payroll

Data Element	Description	Format
employee_payroll_id	Primary Key for the table	CHAR 38 GUID
company_id		
department_id		
employee_id		
payroll_year		
payroll_month		
payroll_display_month		
basic_pay		
total_allowance		
gross_pay		
total_deduction		
net_pay		
created_at		
created_by_id		

3.7.3.2 Employee Payroll Allowance

Data Element	Description	Format
employee_payroll_allowance_id	Primary Key for the table	CHAR 38 GUID
employee_payroll_id		
allowance_id		
allowance_code		
allowance_name		
allowance_amount		
sort_order		
created_at		
created_by_id		

3.7.3.3 Employee Payroll Deduction

Data Element	Description	Format
employee_payroll_deduction_id	Primary Key for the table	CHAR 38 GUID
employee_payroll_id		
deduction_id		
deduction_code		
deduction_name		
deduction_amount		
sort_order		
created_at		
created_by_id		

3.7.4 Payroll Posting

Administrator will post the payroll once it has been finalized. Payroll once posted cannot be updated.

3.8 Document Creation

Predefined samples will be created to generate the official documents for the employee. Such as Appointment Letter, Increment letter, etc

3.9 Document Management

Employee's HR documents needs to be managed and stored in the system. Documents like Employee CVs, CNIC, Appointment letter, Increment Letter, etc would be store here.

Data Element	Description	Format
employee_document_id	Primary Key for the table	CHAR 38 GUID
employee_id		
department_id		
company_id		
document_type_id		
remarks		
document_name		
file_name		
sort_order		
created_at		
created_by_id		

3.10 Special Allowances

Special Allowances such as Muwasat, Enayat, Bonus, Traveling allowance, Training allowance and others which are not reflected in payroll will be cater here.

Data Element	Description	Format
special_allowance_id	Primary Key for the table	CHAR 38 GUID
employee_id		
department_id		
company_id		
allowance_type_id	Medical/ScholarShip/Enayat/Muwasat	
allowance_sub_type_id	Hospital/Medicine/HEC/University/....	
relation	Self/Spouse/Parents/Children	
remarks		
total_amount		
created_at		
created_by_id		