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** | **Changes** |
| Huzaifa Khambaty | 2 | 15-07-2017 |  |
| Huzaifa Khambaty | 3 | 23-07-2017 |  |
| Huzaifa Khambaty | 4 | 29-07-2017 | Process Flow Chart |

[Application Requirements Specification 1](#_Toc488615420)

[1 Scope 1](#_Toc488615421)

[1.1 Overview 1](#_Toc488615422)

[1.2 Objectives 1](#_Toc488615423)

[1.3 Limitations & Assumptions 1](#_Toc488615424)

[2 Process Flow Chart 2](#_Toc488615425)

[3 System Specification 3](#_Toc488615426)

[3.1 Login Screen 3](#_Toc488615427)

[3.2 Dashboard 3](#_Toc488615428)

[3.3 User Management Module 3](#_Toc488615429)

[3.3.1 User Info 3](#_Toc488615430)

[3.3.2 User Permission 3](#_Toc488615431)

[3.3.3 User Profile 4](#_Toc488615432)

[3.4 Setup 4](#_Toc488615433)

[3.4.1 Company 4](#_Toc488615434)

[3.4.2 Department 4](#_Toc488615435)

[3.4.3 Section 5](#_Toc488615436)

[3.4.4 Education 5](#_Toc488615437)

[3.4.5 Designation 5](#_Toc488615438)

[3.4.6 Allowance 5](#_Toc488615439)

[3.4.7 Deduction 6](#_Toc488615440)

[3.4.8 Tax Slabs 6](#_Toc488615441)

[3.4.9 Banks 6](#_Toc488615442)

[3.5 Employee Management: 7](#_Toc488615443)

[3.5.1 Employee Profile 7](#_Toc488615444)

[3.5.2 Employee Family 7](#_Toc488615445)

[3.5.3 Employee Education 8](#_Toc488615446)

[3.5.4 Employee Medical Policy 8](#_Toc488615447)

[3.5.5 Employee Scholarship policy 8](#_Toc488615448)

[3.5.6 Employee Department 9](#_Toc488615449)

[3.6 Attendance Management 10](#_Toc488615450)

[3.6.1 Leave Requisition 10](#_Toc488615451)

[3.6.2 Leave Approval 10](#_Toc488615452)

[3.6.3 Attendance 10](#_Toc488615453)

[3.7 Payroll Management 11](#_Toc488615454)

[3.7.1 Advances 11](#_Toc488615455)

[3.7.2 Loans 11](#_Toc488615456)

[3.7.3 Payroll Generation 12](#_Toc488615457)

[3.7.4 Payroll Posting 12](#_Toc488615458)

[3.8 Document Creation 13](#_Toc488615459)

[3.9 Document Management 13](#_Toc488615460)

[3.10 Special Allowances 13](#_Toc488615461)

# Application Requirements Specification

# Scope

## 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.

## 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.

## 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

# Process Flow Chart

Employee Allowance

Employee Family

Employee Profile

Employee Education

Employee Management

Employee Deduction

Company

Department

Tax Slabs

Attendance

Report

Daily

Attendance

Approved

Leave

Request

Leave

GENERATE SALARY

Print Salary Slip/Register

# System Specification

## 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.

## Dashboard

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

## User Management Module

User management modules consist of following section:

1. User Info

2. User Permission

3. User Profile

### 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 |  |

### 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 |  |

### User Profile

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

## 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**

### 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 |

### 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 |

### 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 |

### 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 |

### 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 |

### 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 |

### 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 |

### 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 |

### 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 |

## 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

### 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 |  |  |

### 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 |  |  |

### 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 |  |  |

### 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 |  |  |

### 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 |  |  |

### 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:**

#### 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 |  |  |

#### 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 |  |  |

#### 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 |  |  |

## 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

### 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 |  |  |

### 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 |  |  |

### 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

## 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

### 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 |  |  |

### 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 |  |  |

### 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:

#### 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 |  |  |

#### 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 |  |  |

#### 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 |  |  |

### Payroll Posting

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

## Document Creation

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

## 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 |  |  |

## 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 |  |  |