Project Name : Human Resource Management System	Version 1.1
Software Requirement Specification [SRS] Date: 02/09/2016	
Organization : Assam Higher Secondary Education Council	

# Human Resource Management Information Systems Software Requirements Specification Document

Prepared By
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Version 2.0 Date:30/09/2016

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### 1 Introduction

The following subsections of the Software Requirements Specifications (SRS) document provide an overview of the entire SRS.

### 1.1 Problem Definition

Nowadays, Organisation try to enhance their management and have a better control over their employees. In order to fulfil these requirements in a more efficient way they need software called Human Resource Management System. HR Management System is software which satisfies the needs of the Human Resources Department of an organisation to manage employees' personal data (Employee No, name, surname, birth-date, birthplace, educational information, designation etc.), annual leaves, payroll, trainings, performance evaluation and so on. This HR Management System will meet the needs for managing the personal data, system authentication and authorization of an employee. Our HRMS project is being developed for Siemens who wants to control and manage their employee's data in a more appropriate and neat way. With the help of this project management will have better software to manage their personal data, accounts information, control mechanism to authorize and authenticate for the employees' entry.

### 1.2 Purpose

The Software Requirements Specification (SRS) will provide a detailed description of the requirements for the Intranet based HRMIS. This SRS will allow for a complete understanding of what is to be expected of the HRMIS to be constructed. The clear understanding of the HRMIS and its' functionality will allow for the correct software to be developed for the end user and will be used for the development of the future stages of the project. This SRS will provide the foundation for the project. From this SRS, the HRMIS can be designed, constructed, and finally tested.

This SRS will be used by the software engineers constructing the HRMIS and the Project coordinator of AHSEC and end users. The software engineers will use the SRS to fully understand the expectations of this HRMIS to construct the appropriate software. The Project Coordinator of AHSEC will be able to use this SRS as a "test" to see if the software engineers will be constructing the system to their expectations. If it is not to their expectations the Coordinator can specify how it is not to their scope and the software engineers will change the SRS to fit the end users' needs.

### 1.3 Scope

This document covers the whole definition of the HR Management System (HRMS) project. It basically includes the requirements for managing the personal data, Service Records Management, Payroll Management, controlling authentication and authorization mechanism, and evaluating of employees' performance. After creating the new HRMS we have to

accomplish data migration from their existing system to our new one. More specifically, our HRMS (HR Management System) controls and manages the personal database such that any user with different role types as Management, admin, employee, Operator and human resource will be able to manipulate their personal data. In addition to manipulating the personal data, our HRMS will provide authentication and authorization mechanism. Every user with any role type can be able to login to the system with his/her username and password.

The software product to be produced is an Intranet based HRMS which will automate the Establishment Section and partial accounts section. The subsystem includes are

- a. Selected Candidate Application management.
- b. Service Book Generation and Maintenance System.
- c. Personal Information Management System.
- d. Employee Leave Management and Monitoring System.
- e. Employee Attendance System.
- f. Pay Slip / Salary Generation System.
- g. Loan / Recovery Management System.
- h. Pension Management System.

These subsystems' functionality will be described in detail in section 2 - Overall Description.

There are three levels of users for the HRMIS. They are Management, Employee and Operator. Management users are defined with Maximum privileges with Approval / Rejection Role. Employee with Modify / Delete Role and Operator with Data Entry and Edit Role. Administrator is the super user of the system having all access like User management, role assignment, Module Assignment, Backup / Restore, Delete / Update etc.

The main objective of HRMIS is to automate the existing manual system and generate desired accurate output through minimum manual intervention.

### 1.4 Definitions, Acronyms, and Abbreviations.

SRS – Software Requirements Specification.

HRMS – Human Resource Management System.

Admin- Administrator

ASHEC-Assam State Higher Secondary Education Council

### 1.5 Overview

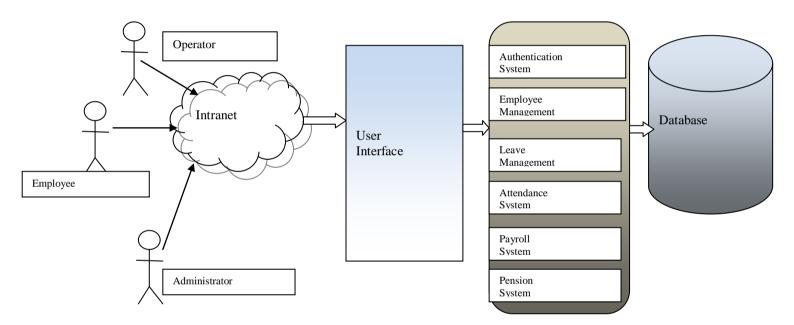
Basically, this document starts with a brief explanation of the problem. Later on, it continues with a detailed solution we propose. Also block diagrams of our solution to visualize the solution and system better, specific and functional requirements, interface requirements, constraints that may be confronted while developing the software, relationship between user types each of which is a data object. This document ends with the planning and estimating the basic schedule of our process.

### 2 The Overall Description

The overall description of our project can be stated as creating and managing the database, developing a friendly user interface to manipulate the database, provide an authentication mechanism to safely accomplish tasks mentioned above

### 2.1 Product Perspective

Currently, ASHEC has an manual HRMS already in use. However, with the Automated HRMS will provide the organisation with capabilities and properties organized neatly. HRMS which is an intranet System will be used by four types of employees' of ASHEC. These types who have different roles can be stated as; admin, management, Establishment, Operator. Every user enters the main authentication page and after that, system will grant them authorization. After being authorized according to their permissions (role type) users will basically query and edit the database via HRMS.



### 2.1.1 Hardware Interfaces

The HRMS will be placed on Intranet Server and will be accessed through any PC with Local Network connectivity throughout the Premise.

### 2.1.2 Software Interfaces

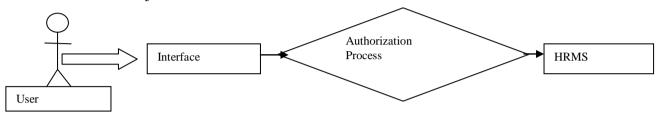
All databases for the HRMS will be configured using MySQL. These databases include Digitized Service Book information, Employee Information and Transactional Data. These can be modified by the end users. The Front End will be designed with CSS, HTML, Ajaz, Javascript and core coding in PHP.

### 2.2 **Product Functions**

HRMS implements some major functions in order to accomplish required tasks. These functions constitute a basis for the whole system. These functions can be stated as:

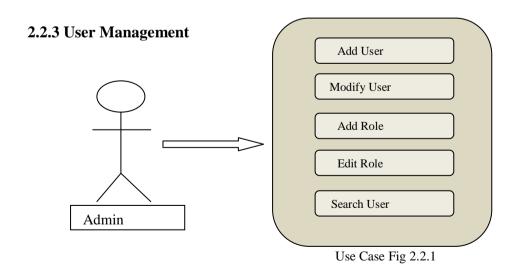
### 2.2.1 Authentication and Authorization

Being connected to internet, users will be able to get into the system. In order to see the interface related to his/her role type, the users account should be authorized and also his/her user name and password should be authenticated. These tasks are basically held by the functions implemented under the header of Authentication and Authorization major function.

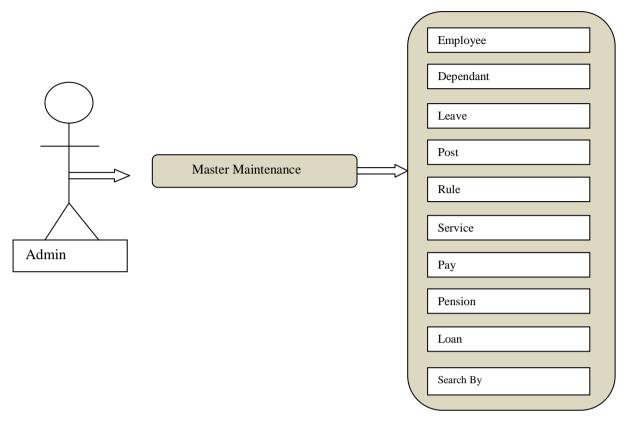


### 2.2.2 Process Data

These functions which can be examined in that process data major function are basically Provides user to manage the database according to the desired task. These management Tasks constitute the major feature of the HRMS. With the help of these functions a user can Update some basic personal data like contact information, marital status etc. In addition to update data, a user can also search the database in order to obtain the list of the users' which has the properties desired. Also a user may also see the specific information about a user or all users which can be named as report. In other words searching is the operation with rows of the database while reporting is operation with columns of the database.

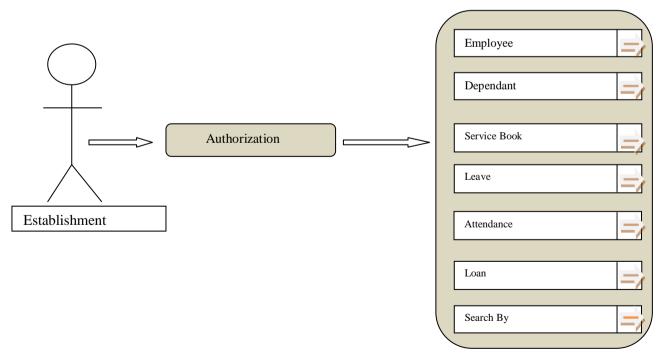


### 2.2.4 Admin Activities



Use Case Fig 2.2.4

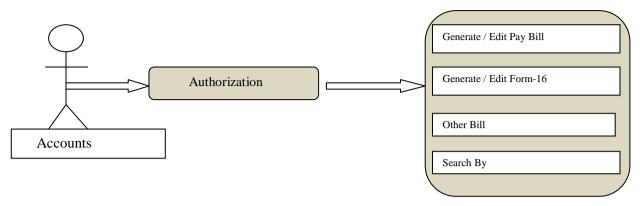
### 2.2.5 Establishment / HR Activities



Use Case Fig. 2.2.5: Establishment

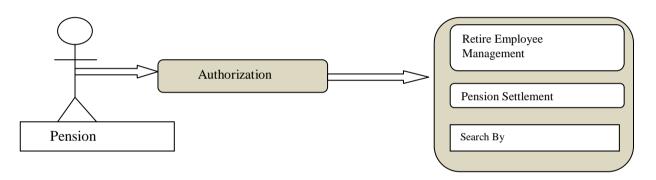
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### 2.2.6 Account Activities



Use Case Fig. 2.2.6: Accounts

### 2.2.7 Pension Activities



Use Case Fig. 2.2.6: Pension

# 3. Assumptions and Dependencies

### 3.1 Regularity Policies:

Each user must be an employee of ASHEC. In other words, each user has account created by Establishment and authenticated by admin.

Department head is also treated as Dept Administrator who subsequently can create users under establishment and Allow role to only view.

### 3.2 Hardware Limitations

There is no limitation in the operating system in which HRMS will work. However, the HRMS system and the database will work on a server that needs to be always online. Users can access the system with any internet browser. Specific Requirements

This section contains all the software requirements at a level of detail, that when combined with the system context diagram, use cases, and use case descriptions, is sufficient to enable designers to design a system to satisfy those requirements, and testers to test that the system satisfies those requirements.

### 3.3 Interface Requirements

All the users will see the same page when they enter HRMS. This page asks the users a username and a password.

A common User interface is used involving authentication process

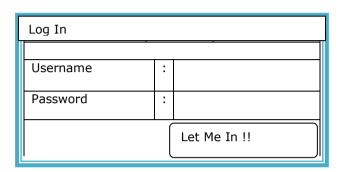


Fig 3.3

After being authenticated, users will see the Dashboard containing information of the first tab of the user role types. This Dashboard includes different tabs according to their role types determined by admin at the authentication phase. By the way, users may have more than one role. Then a user who has more than one role will be able to see all the tabs that are related to his/her role types.

These tabs can be named as; Personal Data Tab, Employee List Tab, Add New Employee Tab, Add New User Tab, Manage Users Tab, Users List Tab and Arrange Roles Tab.

As Administrator role the Dashboard contains Tabs mentioned in **Fig. 2.2.4**. Each Tab in the Dashboard may/will have Sub Tabs which is displayed on selection of Parent Tab.

As Establishment user is authenticated Dashboard as in **Fig. 2.2.5** is visible and on subsequent selection of 'Employee' a sub tab containing Add employee, Edit Employee, List Employee, Search Employee is accessible and similarly other Tabs also will have sub tabs.

### 3.3.1 Employees Tab – Establishment

On selection of this tab, Department head or similar role user can enter New / Old Records of Employee such as Name, Designation Contact information, Date of Joining etc. Employees joins as 'Lien' / Employees Suspension and termination are also maintained.

### 3.3.2 Dependant Tab – Establishment

On Selection of this tab, user can manage dependant information and update as and when required. Present age of dependant can be auto calculated based on date of birth declaration.

### 3.3.3 Service Book Tab – Establishment

This tab will allow user to digitize the service book for employees that are presently in service as well as new employee service book will also be generated. Certain data will flow from 'New employee' details Entry and other can be updated through this tab. Search and find facility to update service book is also available.

### 3.3.4 Leave – Establishment

The Menu is used to Apply / Approve Leave of employee, However a normal employee can use the same tab to apply for leave only, and section head can approve/reject the same, A batch processing prior to salary generation for updating leave is done through this tab. This in turn will update service book for earn leave calculation. Other facility like 'Search and find'. The Earn leave is calculated at this stage. All types of leave is updated in Service book.

### 3.3.5 Attendance – Establishment

This tab is used to import monthly attendance sheet from excel to the application. User can update absent status. Time IN and Time Out is recorded. Normal User with limited role can view their monthly attendance through this tab.

### 3.3.6 Loan – Establishment

This tab is used by user with limited access to apply for Loan; other user with more privilege can process the application to higher level for approval / rejection. Applicant can view the status of loan application through this tab. The standing instruction of the employee can be updated. GPF Loan Management, HBA Loan Management, Updating Service Book.

### 3.3.7 Pay Bill – Accounts

User with specific role can access this tab. Pay Bill generation is automated through batch processing once Establishment user authenticate and update data. Accounts section user has access to Generate claims and deductions, Updating facts and figures, Generate monthly Individual Pay slip, Generate monthly bank statement, Generate Account Code.

### 3.3.8 Form-16: Accounts

In this tab user of Accounts role can Create, Update Form-16 of individual employee. Normal Role user can print the Form-16 through individual login.

### 3.3.9 Other bill: Accounts

Other Bill tab can be accessed by Accounts Role Users which will further have Sub Tabs like OT Bill, Festival Advance, Ex-Gratia, and Arrear.

### 3.3.10 Retired Employee: Pension

In this tab user with Pension Role can get access to Employee Information and Dependant Information, Loan Information and Calculate Pension Amount for approval.

### 3.3.11 Settle Pension: Pension

In this tab user can 'Fix Pension' and generate standing Instruction. User with normal role can 'View' status.

# 4.0 Functional Requirements

In this section, we will explain the major functions of HRMS along with the data flow. So the major functionality of the project such as authentication mechanism, personal data processing, Leave, Pay, Loan, Service Book, Pension, report, and graphical user interface unit will explain step by step.

### 4.1 Authentication

Login	User can login to the HRMS system with his/her username and password.
Logout	Users can logout from the HRMS system.
Login Failure	If the user does not exists in the database or the user did not get authorized by the HRMS admin yet.

### 4.1.1 Authorization

User Role Check	After logging in, the user role will be checked from the database
	and the user interface will be created according to that role /
	roles.

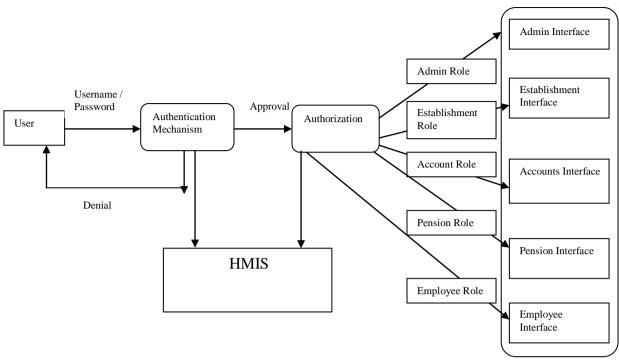


Fig: 4.1.1 Authentication and Authorization DFD

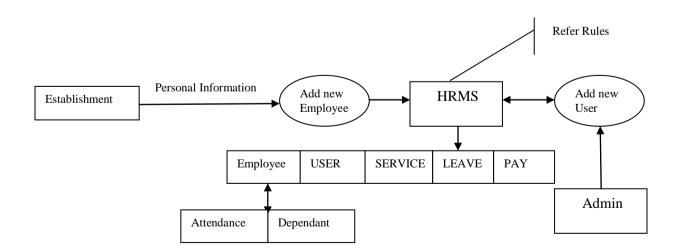
# 4.1.2 Process Data

Display	User with defined roles can display the content of the database. Being more specific, employee can only view his/her personal information. Establishment / Accounts / Pension Can view all employees Information. Admin can display their personal information and all employees' information.
Edit	A user with Establishment role can edit Employees personal information and dependant information as well as master records of Leave and Salary. Accounts role can edit employees' financial information. Pension Role can edit / modify Employees Pension related information and dependant information. Admin can edit all information related to HMIS.
Search	All User will have a common Search Facility only Display of Search will be different based on Roles like user with Establishment role can search any information Employee, Bills, Pension. User with Account role can be search information related to Bills. User with pension role can search employees pension related data and dependant information

Report	This feature is basically used to filter the contents of the search Mechanism. For instance, as we mentioned in the above search feature. The user with Establishment role wants to get a report of employees who joined before February 2005. A user with Account Role can get report on Bill Related information of Individual / Group of employees Or a Pension role type can get a report of some or all employees' related to pension employees' pension information and dependant information. Search and find Facility is widely used by Admin with all information.
Update authentication	This feature can be used by admin role, Establishment role, Account role and pension role. However except admin role all are restricted to their domain of information. Admin can update the role type of a specific user. For example, an employee got promotion and his role type will be changed from employee role to Account role or whichever section the employee belongs to. Admin will be able to update this authentication mechanism.

# 4.1.3 Recruitment

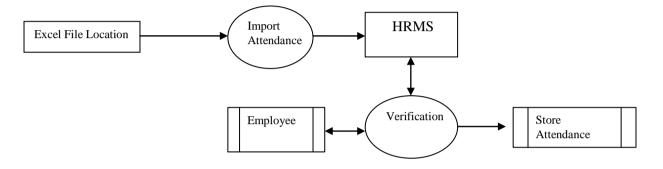
Add New Employee	User with Establishment role can add new employees information from application and upload all related document after digitization. A new Employee code is generated and all related Masters are initialized.
Add a new user	Admin will create a new user and desired role will be assigned.



Recruitment DFD Fig.: 4.1.3

### 4.1.4 Attendance

Import Attendance	User with Establishment role can import employees attendance information from an excel file on monthly basis.
Update Leave Records	Establishment can update individual employees leave records.



4.1.4 Attendance DFD

# **4.1.5 Leave**

Apply Leave	Any user can apply leave online. The Section head role will authenticate the leave referring to existing leave statistic of the employee. Approval authority based on statistical report will Approve / Reject leave. The process can be applied at any time with authentication.
Update Service Book	Once the Leave is approved, the data also flows to service book to record details. And the balance is updated against the employee.

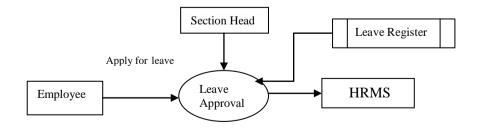


Fig 4.1.5 Leave Approval DFD

# 4.1.6 Loan

Apply Loan	Any user can apply Loan against CPF or HBA or Vehicle online. The Section head role will authenticate the Loan referring to Rule Book and eligibility. The information is then processed to the higher level with documental support which may require for approval. Establishment / Approval Committee will approve or reject at their authorization level.
Update Service Book	Once the Loan is approved, the data also flows to service book to record details. EMI calculation flows to accounts role user with a notification.

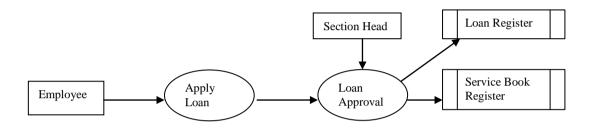


Fig 4.1.5 Loan Approval DFD

# **4.1.7 Pay BILL**

Authenticate Employee and prepare bill	User with Account role can authenticate employee. The establishment section will prepare list of employees considering present / absent from the attendance. The leave approval will also take place prior to send the employee for Pay Bill preparation.
Prepare Deductions	User with account role will refer to loan register for loan deduction / LIC / IT / any advance etc.
Prepare Claims	User can prepare various head for claims. By referring employees salary masters.
Publishing Pay bill	When Pay bill is authenticated by Administrator role of the department. The same is published at individual Login.
Summery	A monthly summery is generated considering all employees data and is posted against account head.

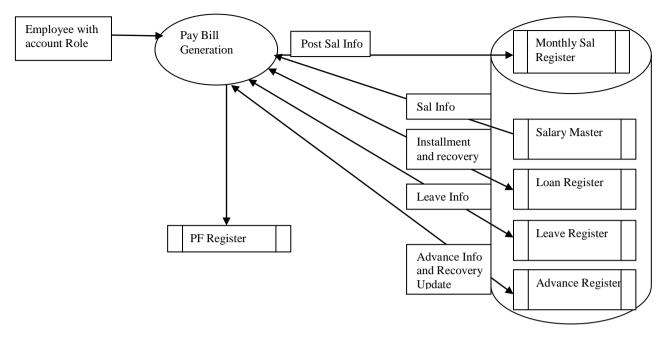


Fig 5.0 Pay Bill DFD

### **4.1.8 OT BILL**

Authenticate Employee and prepare bill	The establishment section will prepare list of employees and segregate Regular and casual for OT calculation. considering In time and Out time from the attendance. The selected employee with total No of hours of OT is Approved by respective Section Head and the Information flows to accounts for preparation of Bill.
Prepare OT	User with account role will Prepare OT Bill and Publish.

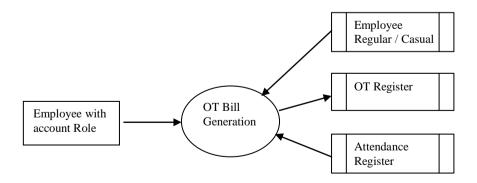


Fig 5.1 OT Bill DFD

### **5.0 Non-functional Requirements**

### 5.0.1 **Performance requirements**

- 5.0.1.1 The number of the online user of the HRMS can be estimated as 50 at most.
- 5.0.1.2 There is no restriction on the number of the users to be added to the database.

### 5.0.2 Design constraints

### 5.0.2.1 Hardware Requirements

The HRMS application will be storing 200 employees' personal data and transactional Data with Digitised Service Records. Roughly 5 TB of storage capacity is needed.

### 5.0.2.2 **Software Requirements**

- Since HRMS application is a web-based application, internet connection must be established.
- The HRMS software will be used on PCs and will function via intranet in any web browser.
- The HRMS application interface will be developed by PHP Laravel framework.
- The HRMS software personal database model will support MYSQL environment as DBMS.
- The HRMS will run on any platform Supporting Open source Technology. Application will run on 1GB or higher of RAM.

# 6.0 Data Model and Description

This section describes attributes of database objects and relationship between them with a data table dictionary and tables to overcome confusions. These data objects are made under the consideration of getting rid of unnecessary attributes and normalization factors. The HRMS application consists of five main database groups.

Group 1: Employee Information

Group 2: Authentication and Authorization Information

Group 3: Account Information

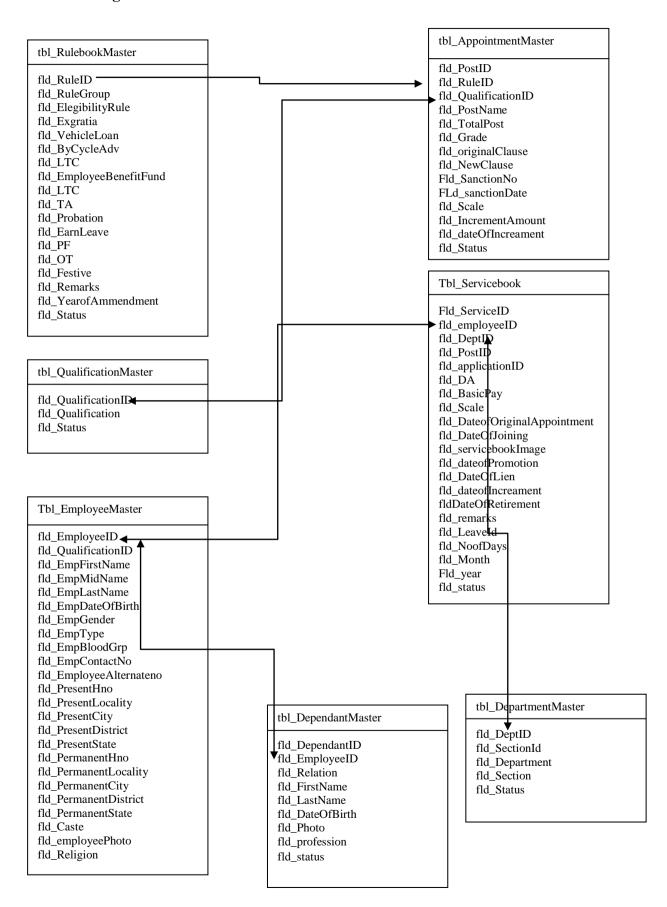
Group 4: Pension Information

# 6.1 Data Description of ASHEC Establishment Master Data Module

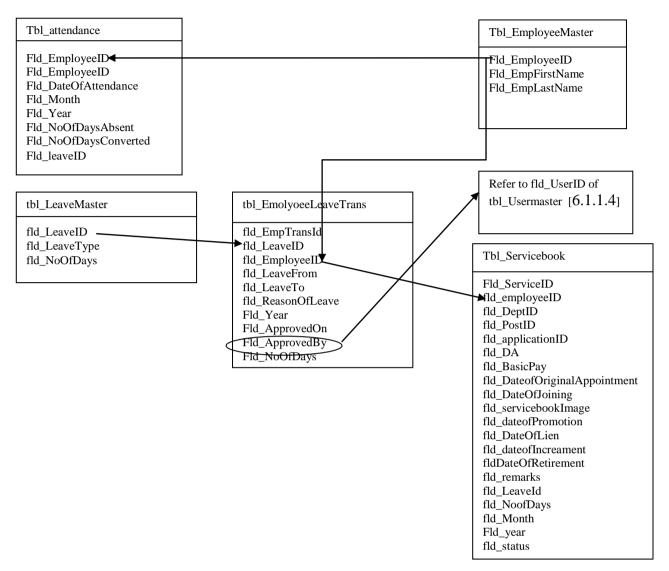
This section mainly describes each table of the ASHEC Establishment Master Data Module in details. We determine each table and its responsibility in the module. Each table keeps many fields related to the specific data object. Then in the following sections we will explain the relationships of each database module table with each other.

- 1. tbl\_Rulebookmaster
- 2. tbl\_AppointmentMaster
- 3. tbl\_Servicebook
- 4. tbl\_Employeemaster
- 5. tbl\_DepartmentMaster
- 6. tbl\_qualificationMaster

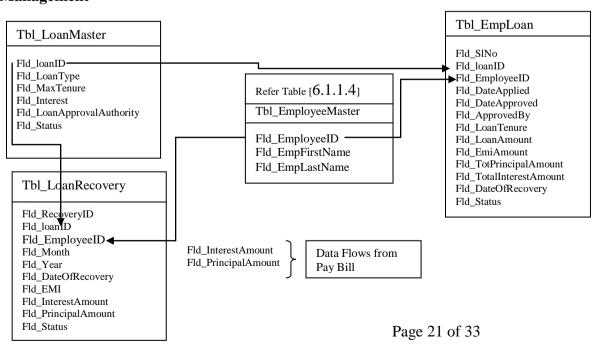
### **Data Package: Establishment**



### Leave Management



### Loan Management



# 6.1.1 Data Object

# **6.1.1.1** Tbl\_RuleBookMaster Table

Name	Tbl_RuleBookMaster
Description	Table is used to Maintain various Rules of ASHEC and Employees benefits. This table can be amended time to time or new rule can be set.

# **6.1.1.2** tbl\_AppointmentMaster Table

Name	tbl_AppointmentMaster
Description	Table is used to Create post and Rule applied to the post along with other master details such as clause, scale which is defined based on post as per guidelines, Qualification required for the post, Grade Pay and Grade of the post.

# **6.1.1.3** tbl\_Servicebook Table

Name	tbl_Servicebook
Description	This table is for maintaining entire service record of an employee starting from date of Joining till retirement. The table also has provision to store Service book image as of date for existing employee. However the data is also stored to retrieve information if necessary.

# **6.1.1.4** tbl\_Employeemaster Table

Name	tbl_Employeemaster
Description	Basic and Master information of an employee is stored in this table. And any change in the master information will make a new service entry in tbl_Servicebook. Here an unique code called Employee ID is assigned and is treated as Primary key of the table which is referred as Foreign Key in tbl_servicebook.

### **6.1.1.5** tbl\_DepartmentMaster Table

Name	tbl_DepartmentMaster
Description	This Table stores all department / section under council. Therefore the table can be modified or added for any new department being formed or closed. However the impact will be in service book too.

### **6.1.1.6** tbl\_qualificationMaster Table

Name	tbl_qualificationMaster
Description	This Table stores all Qualification to be used against employee.  The master can be edited by admin to add / remove qualification.

# **6.2** Data Description of ASHEC Authentication and Authorisation Module

This section mainly categorise into two section authentication and authorisation. Specific users who are allowed to access ASHSEC Data Module. The various Roles signifying access control has been defined in the module. Access to application is totally role based, each table containing many fields related to the specific data object. The fields are self explanatory and the utility of the table is also précised.

### 6.2.1 Authentication and Authorisation Module

Tbl\_EmployeeMaster

Tbl\_ModuleMaster

Tbl\_GroupMaster

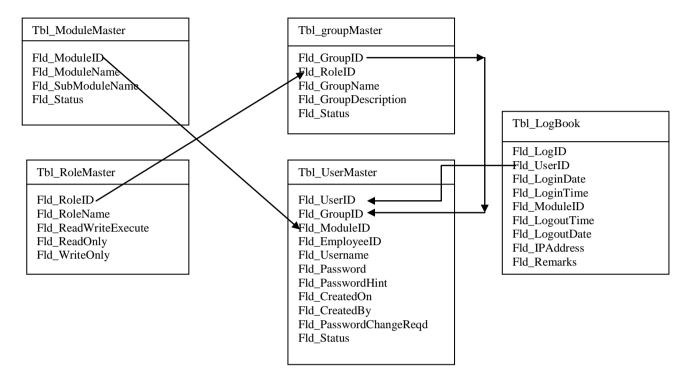
Tbl UserMaster

Tbl RoleMaster

Tbl\_Logbook

### **Data Package: Authentication and Authorization**

Tbl\_EmployeeMaster: As defined in **6.1.1.4** 



### 6. 2.2 Data Objects: Authentication and authorization

### **6.2.2.1** Tbl\_ModuleMasterTable

Name	Tbl_ModuleMaster
Description	This Table is used to Maintain All Modules that are comprises of HRMS of ASHEC. The Module Will Also have sub module such
	as Establishment itself is a module and Establishment->Loan is another module, Establishment->Leave is another.

### **6.2.2.2** Tbl\_GroupMaster Table

Name	Tbl_GroupMaster
Description	This Table is used to Maintain All Groups like Section Head, UDA Jr. Asstt. etc. A group of employees is identified by group name. The module can be assigned to a group.

### **6.2.2.3** Tbl\_RoleMaster Table

Name	Tbl_RoleMaster
Description	This Table is used to Maintain Roles as Read, Write and Execute.
	Execute is the highest role and others are individual Role. Some
	role May be a combination of Read and Write. The Group will be
	assigned with Role and applicable to All user under the group.

### **6.2.2.4** Tbl\_UserMaster Table

Name	Tbl_UserMaster
Description	This Table is Will Keep Information about Users of existing or new employee to access HRMS. Each user will be assigned under a group and the roles will be applicable under the applied group. The Password and password Hint is also stored in this table. Administrator may set Never change password to the user if necessary.

# 7.0 Data Description of Leave and Loan Module

This section mainly describes each table of the ASHEC Leave and Loan Data Module in details. The Tables are related to tblEmployeeMaster described in Establishment Module. The reference Tables are not described since it has already been.

### 7.0.1 Leave Module

**7.0.1.1** Tbl\_Attendance Table

Name	Tbl_Attendance
Description	The Table fetches monthly attendance data from excel sheet and days of absent are marked. The Respective Department user may convert days of absent to leave depending on approval.

# **7.0.1.2** Tbl\_LeaveMaster Table

Name	Tbl_LeaveMaster
Description	The Table will keep Master record of various type of Leave as per applied rule and other parameter like Leave type CL / EL/ Maternity etc. with no of days allowed in a year as per rule.

# **7.0.1.3** Tbl\_EmployeeLeaveTrans

Name	Tbl_EmployeeLeaveTrans
Description	The Table will keep Transactional Data. All related fields like Leave type, leaveFromdate, leavetodate, ReasonofLeave, Leaveapprovedby and dateof approval is stored. The table will refer to tblEmployeeMaster for referencing fld_employeeId. This table will also refer to tbl_usermaster for fld_approvedby field.

### **7.0.1.4** Tbl\_EmployeeServiceBook

As mentioned in 6.1.1.3 above. A record will be added to the table with Fld\_LeaveID and Fld\_LeaveFrom, fld\_LeaveTo

# **7.0.1.5** Tbl\_EmployeeMaster

As mentioned in 6.1.1.4 above.

### 7.0.2 Loan Module

### **7.0.2.1** Tbl\_LoanMaster Table

Name	Tbl_LoanMaster
Description	The Table keeps master record for all type of loan approved By council. Maximum tenure of as per rule and Rate of Interest is maintained in the master.

### **7.0.2.2** TBL\_EmployeeLoan

Name	Tbl_ EmployeeLoan
Description	This Table maintains master record for applied and approval details of loan against employee. fldLoanId is referred from tbl_loanMaster, fixation of EMI amount, and date of Recovery is initialized and fld_employeeID is referred from tbl_Employee Master. This table also Maintain fld_loanApprovedby which is

	referred to tbl_UserMaster.fld_userID

### **7.0.2.3** Tbl\_LoanRecovery.

Name	Tbl_LoanRecovery
Description	This Table will maintain the entire recovery of loan amount against employee and fld_EMIamount and fld_Interest amount and fld_principalAmount is invoked whenever the PayBILL module is executed.

### 8.0 Data Description of ASHEC Accounts Module

This section mainly describes each table of the ASHEC Account Data Module in details. The Role and activities of tables are defined in the module. Each table comprises of multiple fields related to the specific data object. The data of other Table of other modules are also referred in this section. The following section will also provide relationships between table and thereafter a description of each table with role or activity.

TBL PayTransact.

TBL EmpPFRegister.

TBL\_EmpLoan.

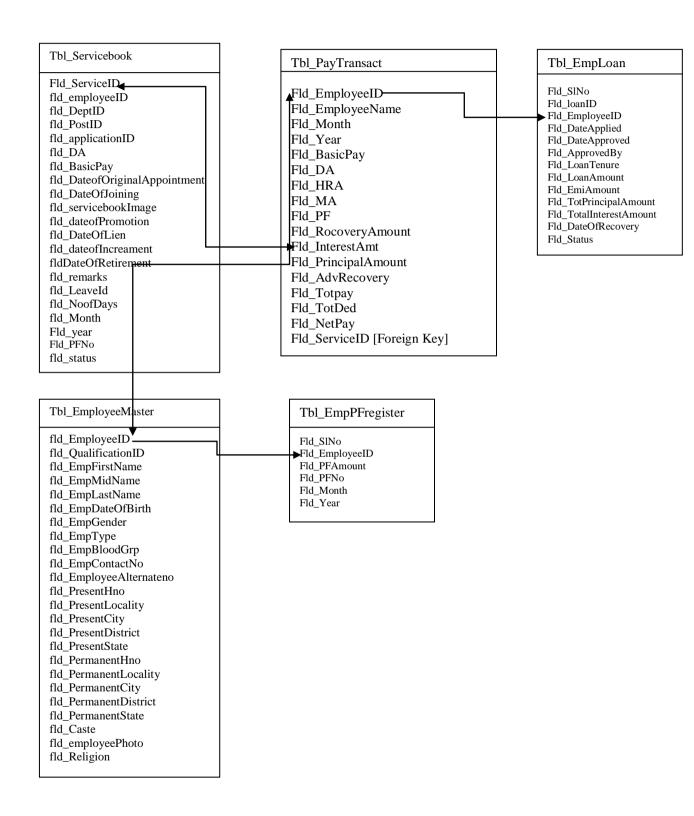
Tbl\_ServiceBook.

TBL\_EmployeeMaster.

### 8.0.1 Leave Updating and Approval

This section is available to all Section Head Login where a report based on previous month attendance records fetched from Bio matrix device and Employees Leave Balance can be accessed by the user and the user with Section Head Role can convert the Absent to leave and subsequently the leave balance will get updated.

### Package Pay Bill



### **8.0.2** TBL\_PayTransact

Name	TBL_PayTransact
Description	This Table will maintain the entire Claims and deduction of an employee on monthly basis. Prior to saving record in this table all calculation and referral data will move from Tbl_EmployeeMaster, Tbl_EmpLoan.

### **8.0.3** Tbl\_EmpPFRegister

Name	Tbl_EmpPFRegister
Description	The purpose of this table is to store monthly PF/NPS Data
	depending on

# 9. 0 Data Description of ASHEC Pension Module

This section will describe the flow of Employee's Personal and dependant Data. 8 to 10 months prior to date of retirement. An employee is asked to fill up a mandatory family and self declaration form. The declared form contains information about dependant and their present status along with date of birth. The Process of pension settlement is described in the following DFD.

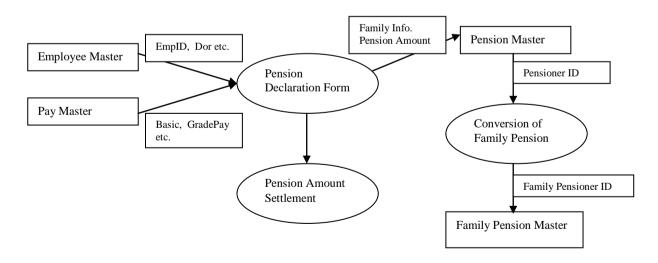


Fig 9.0

### Proposed Tables with relationship

TBL\_EmployeeMaster

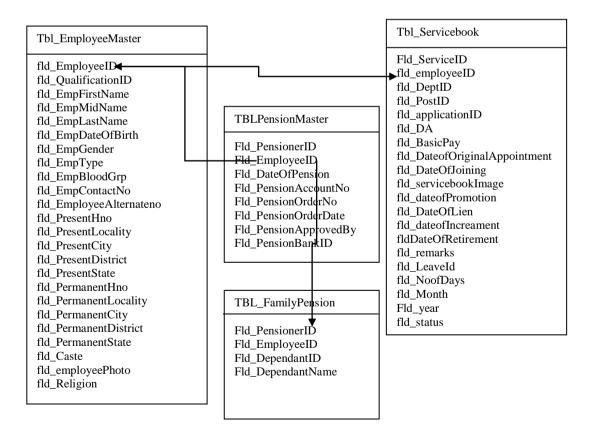
TBL\_ServiceBook

TBL PensionMaster

TBL\_FamilyPension

- **9.1 TBL\_EmployeeMaster**: This table is used to extract Employees Information like First name Last name and other Master Information.
- **9.2 TBL\_ServiceBook**: This table contains last updated information of the employee and is used to extract basic pay and grade pay for pension calculation.
- **9.3 TBL\_PensionMaster**: This table will contain information such as employee pension ID, Employee ID, Name and Contact Details and Pension Amount, Pension Account.
- **9.4 TBL\_FamilyPension**: This table is used after the demise of Pensioner. The family Information which are already stored against the pensioner at the time of retirement is transferred to this table along with family pension amount.

### **Package Pension**



Process Involved: The Calculation is based on following criteria

Average Basic Pay=(Last 10 months basic pay) /10 Basic Pension = (Average Basic Pay/2) x (qualifying years/25) Qualifying year is total no of years the employee served. Monthly Pension = Basic Pension + Current DA + Current Medical Allowance

Arrear calculation: Whenever DA is changed and Effective of DA is announced by State Government. The Arrear Calculation is carried out which is Total of basic pension of the effective month \* Effective DA. The difference between Previous Da and effective DA is calculated as arrear.

Family Pension: 30% of last Salary drawn by Employee.

# 10. Behavioural Model and Description

Each employee will be added to the system by entering the personal data of an employee by Establishment Branch. At the creating state, HRMS will give a Unique ID to the newly added employee.

After being added by Establishment, each employee has a right to be introduced to the system by admin. At this state, admin determines the role type of the user and this user is given a password automatically.

At the entering state of the system, each user sees the same interface which asks a username and a password.

After entering state, each user sees the same interface with different tabs related to their role Type(s) (Section Head, Establishment Head, admin, and employee). At this stage:

### • Section Head can

- Search employees under his/her responsibility or search all the users he/she desires, i.e a manager can search rows of the database.
- Edit/Approve Loan / Leave of employees' who are under his responsibility.
- Information related to the employees him /her desires to learn, i.e. a Section Head can search columns of the database.

### • Employees can

- View their personal data
- View Leave Balance Status.
- Apply For Various type of Loan
- Request for Address / Dependant information change to Section Head
- Declare Income Tax Related Information to update

### • Establishment Head can

- Search employees who have Send Request for Updating Personal and Asset Declaration.
- Transfer an Employee between Section
- Edit Service Book Records

### System Requirement Specification V 2.0

- Edit Dependant Information.
- Get report about an employee, or employees.
- Add employee by entering some specific personal data of that employee.
- Edit employees' data
- Super Administrator can
  - Create user and Apply / Revoke Role.
  - Create / Edit Rules of Council
  - Create / Edit Post under Council
  - Edit Service Book
  - Edit any user's (Establishment, Section admin, employee) Information
  - Add user, in other words create a valid account to login.
  - Reset Password / restrict a user.
  - Modify of all master Data of Employee.
  - Arrear Calculation.
  - Modify any historical data and so on

### **Administrator Panel**

### Activity: Add / Modify / Remove

- User
- Employee
- Dependant
- Service Book
- Qualification
- Post
- Department
- Attendance
- Loan
- Leave
- Pay Bill
- Reports

### System Requirement Specification V 2.0

- Pension
- Utility

### **Section Head Panel: Establishment**

### Activity: Add / Modify / Remove / Approve of respective Department

- Employee
- Leave
- Loan
- Advance
- OT
- Pay Bill
- Dependant
- Attendance
- Service Book

### 11. **FORM – 16**

A predefined form to capture Data and store employees' declaration for Tax savings. The form will be used as per the suggested format and various sections will be available under the savings scheme.

TBL\_Declaration

Fld\_EmployeeID

Fld\_SavingsAmount

Fld\_Section

Fld\_year

Fld Month

Fld\_Tenure

Fld\_Status

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