

## Employee Management System

### Current Scenario

As per the current process, Admin adds new regulations and assigns them to the department manually. Department Head will send these regulations to the individual users through mail to get their consent. Users will send their comments through the courier service after reading regulations. Department head has to collect the user inputs and will have to pass it on to Admin. As a lot of manual workflow is involved, it takes lot of time for Admin to close each regulation.

Therefore, a new system is required to automate this regulation creation and closure process.

### Business Requirements:

#	Rule Name	Definition
1	Mandatory Employee Fields	The system should check if the following details are being entered while adding/editing a new Employee: <ul style="list-style-type: none"><li>• First Name</li><li>• Last Name</li><li>• DOB</li><li>• Department</li></ul> Appropriate message should be thrown as an alert.
2	Business Validation	While Adding an Employee, the system should not allow the entry of Employee who is not older than 24 years into the system. Appropriate message should be thrown as an alert.
3	Mandatory Department Fields	The system should check if the following details are being entered while adding a new Department <ul style="list-style-type: none"><li>• Department Name</li></ul> Appropriate message should be thrown as an alert.
4	Compliance of RL document	The RL document should be marked as closed only after all the employees of a department have submitted a status report.
5	Mandatory Regulation Fields	The system should check if the following details are being entered while adding a new Regulation <ul style="list-style-type: none"><li>• Regulation details</li><li>• Regulation creation date</li></ul> Appropriate message should be thrown as an alert.
6	Mandatory User Comments Field	The system should check if the following details are being entered while adding a new Regulation: <ul style="list-style-type: none"><li>• Regulation Comments.</li><li>• Comments creation date</li></ul> Appropriate message should be thrown as an alert.

# High Level Business Requirements:

Sno.	Business Requirement ID	Short Description	Description in detail	Interacting Business Processes
1	BR001	Login with different roles User, Admin	There should be provision to login as Admin or as User.	NA
2	BR002	Add Employee	Admin should be allowed to add employee details using Java Console User Interface (CUI).	N/A
3	BR003	View Employees	There should be provision for Admin/User to see the entire Employee list in the organization using Java Console User Interface (CUI).	N/A
4	BR004	Edit Employee	Admin should be allowed to edit employee details using Java Console User Interface (CUI).	N/A
5	BR005	Delete Employee	Admin should be allowed to delete employee details using Java Console User Interface (CUI).	N/A
6	BR006	Add Department	Admin should be allowed to add department using Java Console User Interface (CUI).	N/A
7	BR007	View Department	Admin should be allowed to view department list using Java Console User Interface (CUI).	N/A
8	BR008	Create Admin RL -	Admin should be allowed to add new regulation/legislation and map it to department using Java Console User Interface (CUI).	N/A
9	BR009	View Admin RL -	Admin should be allowed to view already added	N/A

			regulation/legislation using Java Console User Interface (CUI).	
10	BR010	View RL - User	Should allow the employees to view the regulations assigned to them using Java Console User Interface (CUI).	N/A
11	BR011	Update User Comments - User	Should allow the users to update the comments for the regulation assigned to them using Java Console User Interface (CUI).	N/A
12	BR012	View User Comments - User	Should allow the users to view the comments updated by them using Java Console User Interface (CUI).	N/A

Detailed Business Requirements:

SNO	Req. #	Business Requirement	Req. Type *	Priority **	Originator ***	BR Traced to Business Requirement / Use case ID
1	BR001	Provision to log in with two different roles, namely, Admin and User. View, Add, Edit Employee; Create RL; and Add Department operations must be permitted when logged in as Admin. When logged in as User, View RL, Update, and View Comments operations must be permitted.	F	1	Employee Management Console App	NA

SNO	Req. #	Business Requirement	Req. Type *	Priority **	Originator ***	BR Traced to Business Requirement / Use case ID
2	BR002	<p>From Console, Admin should be allowed to enter the following details for the Employee:</p> <ul style="list-style-type: none"> <li>• First Name</li> <li>• Last Name</li> <li>• DOB</li> <li>• Email</li> <li>• Department</li> </ul>	F	1	Employee Management Console App	N/A
3	BR003	<p>In Console, the Admin can see the list of all employees in the organization. The console must capture the following information:</p> <ul style="list-style-type: none"> <li>• User Id</li> <li>• First Name</li> <li>• Last Name</li> <li>• DOB</li> <li>• Email</li> <li>• Department</li> </ul>	F	1	Employee Management Console App	N/A
4	BR004	<p>In Console, Admin should be allowed to Edit any employee</p> <p>Console should allow the admin to edit the following details:</p> <ul style="list-style-type: none"> <li>• First Name</li> <li>• Last Name</li> <li>• DOB</li> <li>• Email</li> <li>• Department</li> </ul>	F	1	Employee Management Console App	N/A
5	BR005	<p>From Console, Admin should be allowed to delete the required Employee.</p>	F	1	Employee Management Console App	N/A

SNO	Req. #	Business Requirement	Req. Type *	Priority **	Originator ***	BR Traced to Business Requirement / Use case ID
6	BR006	From Console, the Admin should be allowed to enter the following details for the Department <ul style="list-style-type: none"> <li>Department Name</li> </ul>	F	1	Employee Management Console App	N/A
7	BR007	From Console, Admin can view the department list. The Console must capture the following information: <ul style="list-style-type: none"> <li>Department Id</li> <li>Department Name</li> </ul>	F	1	Employee Management Console App	N/A
8	BR008	From Console, Admin should allow creation of a new Regulation/ Legislation document. It should capture the following fields. <ul style="list-style-type: none"> <li>RL Type</li> <li>RL Details</li> <li>Creation Date</li> <li>Department</li> </ul>	F	1	Compliance Tracking	N/A
9	BR009	From console, Admin should allow the user to View the RL for each department. It should display the following fields. <ul style="list-style-type: none"> <li>RL Id</li> <li>RL Type</li> <li>Description</li> <li>Creation Date</li> <li>Department</li> <li>Status</li> </ul>	F	1	Compliance Tracking	N/A

SNO	Req. #	Business Requirement	Req. Type *	Priority **	Originator ***	BR Traced to Business Requirement / Use case ID
10	BR010	From console View RL, User should allow the employees to view the regulations assigned to them. The Employees should be allowed to view the previously created status report.	F	1	Compliance Tracking	N/A
11	BR011	From console, Admin should allow the user to update the comments for each regulation assigned to them. <ul style="list-style-type: none"> <li>User Comments</li> <li>Date</li> </ul>	F	1	Compliance Tracking	N/A
12	BR012	From console, User should be allowed to view the Comments entered by them.	F	1	Compliance Tracking	N/A

\* Req. Type

- F Core Functionality,
- E Exception,
- UI User Interface
- R Reporting

Business Objective Traceability Matrix:

Business Objective	Business Requirement Number	Priority	Requirement Title	How requirement satisfies objective	Status
To maintain the employee details in an application	1	High	Employee Management Console App	Allows the Admin to maintain the employee details effectively	Open
To track the compliance of each law to closure	2	High	Compliance Tracking	Allows the Admin to create and track the new law effectively	Open

## Functional Specification

The Employee Management Console application is integrated by linking all the modules. EMP is basically a system that helps maintain employee information, map employees to departments, create RL documents, and track compliance and user comments.

A few important modules in the system.

- a) Employee Record Maintenance – Add, Edit, Delete, View Employees.
- b) Departments – Add, View Department
- c) Regulations/Legislation – Create, View Regulation
- d) Compliance Tracking

This document details the requirements for overall integrated application. This application can be accessed by administrators and registered users only.

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### Integrated application features

1. Application should have single login page. Login page should be the welcome page for the application.
2. Only registered users and administrators should be able to access the application.
3. Users should not be able to access the application features can be accessed without login.
4. There should be logout feature. Once logged out, users should come to the welcome page or design logout page. Re-login can be done from these pages.

5. Application home page must have facility to access the following functionalities:
- a) Admin users must be able to Add, Edit, Delete, and View Employees
  - b) Admin users must be able to Add and View Departments
  - c) Admin users must be able to create regulation and View regulation status of all departments.
  - d) Users must be able to View Regulations assigned to them.
  - e) Users must be able to View and Update their Comments on regulation.
  - f) Users must be able to track Compliance of department through status.
6. At any point of time, user should be able to go back to homepage.
7. None of the features should be accessible if session expires.
8. Logged-in user should be tracked through session.
7. If user clicks the back button after logout, browser pages should not be accessible.
8. On login, user credentials should be validated against the registered users in the system.
9. Log in page should have username and password fields to receive username and password and should have login button.
10. Password must be encrypted.
11. Username and password cannot be blank.
12. If the username and password does not exist in the system, application should show proper error message.

### **Integrated application non-functional features**

- 1. Exceptions should not be shown on console.
- 2. No debug message should appear on console.
- 3. All the errors and exceptions should be logged to log file.
- 4. Log file path should be configurable.
- 5. Database connections should be configurable and should not be hard coded.

### **Table Structure and Relationship**



