

Prime Developers



Employee Management System (EMS)

SOFTWARE REQUIREMENT
Specification (SRS)

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List of Terminologies:

- | | |
|-------------------------------|-----|
| 1. Employee Management System | EMS |
| 2. Head of Department | HOD |
| 3. Human Resource Manager | HR |
| 4. Objectives & Key Result | OKR |

Revision History

Date (dd/mm/yyyy)	Version	Description	Author
2/NOV/2022	1.0	Employee Management System or EMS.	Project manager and analyst

SRS (Software Requirement Specification) document

1.Introduction:

In this world of growing technologies, everything has been computerized. With a large number of work opportunities, the Human workforce has increased. Thus, there is a need for a system that can handle the data of such a large number of Employees. This project simplifies the task of maintaining records because of its user-friendly nature. The objective of this project is to provide a comprehensive approach to the management of employee information. This will be done by designing and implementing an EMS management system that will bring up a major paradigm shift in the way that employee information is handled.

1.1 Objectives:

A web-based EMS to fulfill requirements such as project management, leave management and report generation to assist in performance appraisals. Well-designed database to store employee information. A user-friendly front-end for the user to interact with the system.

1.2 Vision:

The vision is to develop a system that is much easier to operate and a competitor for other systems in a market and much more flexible to add more features in the future.

1.3 Scope of Project:

The scope of this project will be limited to the following:

- **Electronic leave application:**

Complete elimination of paperwork in leave management by enabling an employee to apply for leave as well as check their leave status through the system. This will also enable the HR manager to accept/reject leave applications through the system.

- **Task Management:**

Assign tasks to employees and keep track of their progress.

- **Report generation:**

The HR manager or Admin will be able to generate timely reports in order to monitor employees and this can be used for performance appraisals. The reports will be having all the information of an employee from educational background, tasks done as well as technical skills.

- Recruitment Process:

The admin will add an employee and a default password and employee id will be generated and sent to the new employee's email. The HR manager will then have the ability to add an employee's information to the database.

2 Existing Employee Management System:

Following are the Existing Employee Management systems in the world.

2.3 Deels:

Best for managing global teams of international employees and contractors.

2.4 Monday.com:

Best for employee time & task tracking.

2.5 Paycor:

Best for comprehensive hiring or training initiatives.

2.6 Eddy:

Best all-in-one HR software for small, local businesses.

2.7 15 five:

Best for linking employee performance with OKR management and employee engagement.

3 System Requirements

Functional Requirements:

3.1.1 Authentication:

Login- The user can log in to the EMS system with his/her username and password.

Logout- The user can log out from the EMS system.

Login failure- If the user does not exist in the database or the user has not yet been authorized by the EMS admin.

3.1.2 Authorization:

User role check- After logging in, the user role will be checked from the database and the user interface will be displayed according to their role.

3.1.3 Process Data:

Display Users with defined roles can display the content of the database. To be more specific, employees can only view his/her personal information. HOD can not only see his/her personal information but also the employees' information who are under his/her department. Admin and HR can display their personal information and all employees' information.

3.1.4 Edit:

A user with an employee role can edit his/her specific personal information. Dean or HOD can only edit employees' personal information that is under his/her coverage except for user role type. Admin can edit all information related to all employees' including their user role type.

3.1.5 Search: -

User with Dean/HOD:

The role can search the content of the database for the employees who are under his/her coverage. HR and admin roles can search all the employees' information in the database. The search feature works on specific keywords showing employees' characteristics, skills, features, etc. For example, HR wants to find employees who are well-trained in "PHP Programming Language". He/she will write the specific keyword in the search bar and press the available search button. Afterward, he/she will find a list of all the employees who know "PHP Programming".

3.1.6 Update authentication:

This feature can be used only by admin role type. Admin can update the role type of a specific user. For example, an employee got a promotion and his role type will be changed

from employee role id to HOD or Dean role. Admin will be able to update this authentication mechanism.

3.1.7 Leave Application/Approval/Attendance:

Leave application: -

The user can be able to fill in a leave application form in the appropriate fields.

Leave approval: -

The admin can be able to approve leave applications based on the reasons stated, length of leave as well as available HR in a department. Leave days accrued the user shall be able to check the number of leave days accrued.

Attendance: -

The employee, HOD and HR can see their attendance but also HR can see or view the Attendance of employees and HOD attendance.

3.1.8 Recruitment:

Add new employee: -

HR role type is able to add a new employee to the database. The new employee will have all the required personal information related to him/her. The newly created employee will have an id.

Add a new user: -

After a new employee has been created by the HR role, the admin role is responsible for creating a new user by the specified id assigned in the “Add a new employee” feature. The unique id will be given by the system. Admin will assign a new role such as employee, HOD, HR, and admin to the newly created user.

3.1.9 Report generation: -

Report generation- HR shall be able to generate a report in pdf format for each employee based on the information in the database.

3.1.10 Task Management: -

Tasks: HOD shall assign tasks to employees in his/her department.

3.2 Non-Functional Requirements:

3.2.1 Performance requirements:

There is no restriction on the number of users to be added to the database.

3.2.2 Hardware requirements:

The EMS shall work at minimum hardware specifications:

OS: Windows XP/Vista/7/8,8.1,10 Linux

CPU: Pentium III (700MHz) and above.

Memory: 512 MB and above.

Capacity: 10GB of hard drive

Others: Network interface card, mouse, keyboard, and monitor or LCD.

3.2.3 Usability requirements:

The system Should be easy to understand. There should be no special training to understand the system and its working.

3.2.4 Operational Requirement:

The system must remain operational at working times from Mon-Fri from 9.00 am till 12.00 pm.

3.2.5 Performance Requirements:

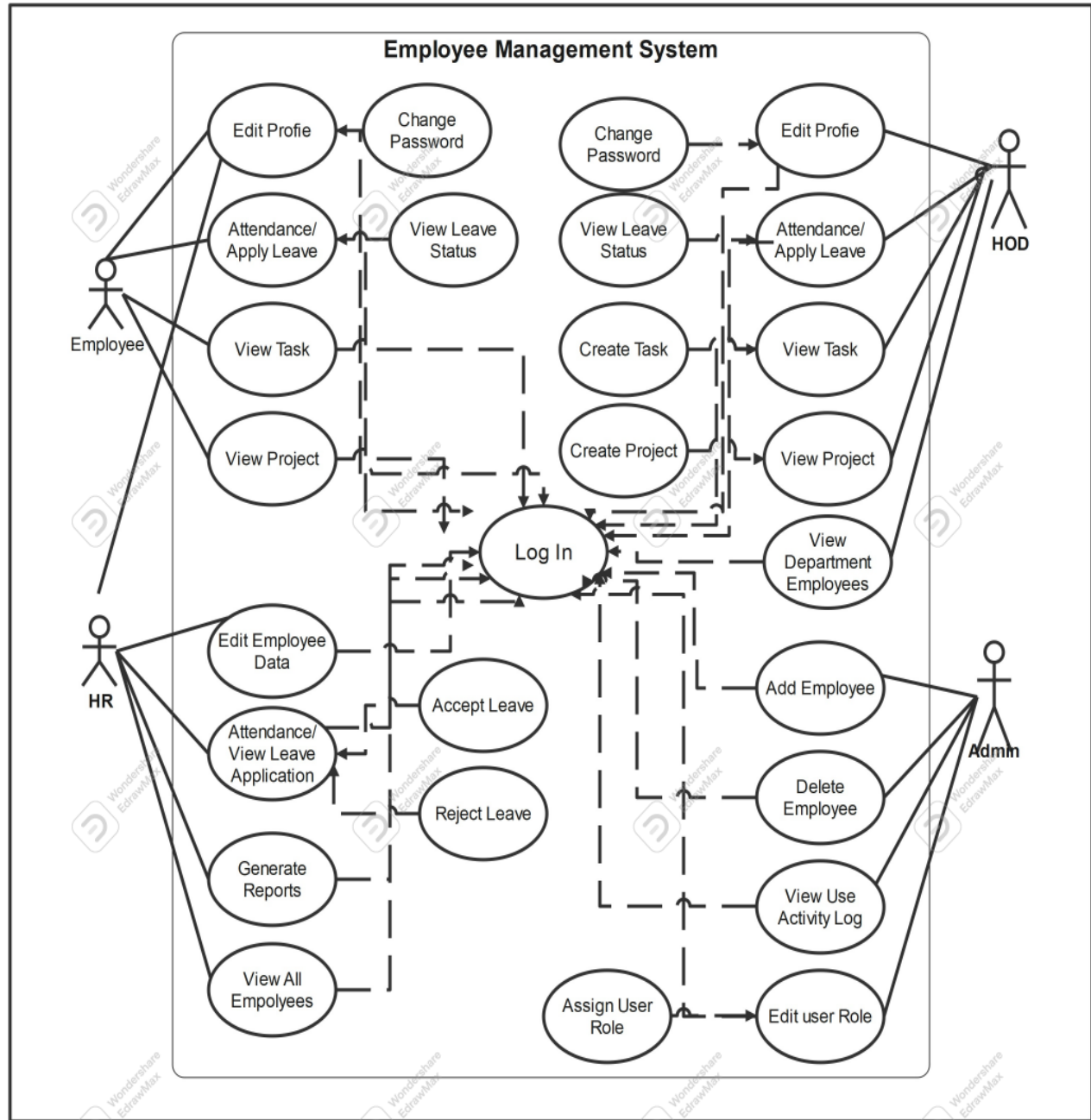
The system shell provides the required result in less than 50 seconds.

3.2.6 Security requirements:

The data of the system must be secured and no one can access it except belonging authorities, the necessary things or steps must be taken or included to secure the system from Cyberattack.

5. Diagrams:

3.3 Use case for EMS:



3.4 Domain Model For EMS:

