SRS

Title: Employee Management System

List of actors:-1. Administrator

2. Employees

1. Introduction:-

Employee Management System is an essential software designed to keep track of employee information in any organization. It securely stores the employees' personal as well as work-related details. This Project simplifies the task of maintain records because of its user friendly nature. The application is simplified as much as possible to avoid errors while entering the data. It also provides error messages while entering invalid data. No prior knowledge is required to use this system.

Moreover this application is designed for the particular need of the company to carry operations in a smooth manner. Only admin has the access to add new employee's data. Admin can see and update each and every employee record.

Database will store all the details of employees such as name, contact information, department, join date, date of birth along with his/her educational details and work experience. This application enables employees to update and modify their own profile.

1.1 Purpose:-

Employee Management System (EMS) reduces the burden of HR department of any organization. It makes the task of storing and updating

the data effortless. It assists HR to keep track of employee information such as salary details, personal details and more.

1.2 Scope:-

The Employee Management System can be used in any organizations like an IT industry or hospitals. There is always a scope of future enhancements.

1. Module to mark the attendance of employee

2. Module to calculate the salary of the employee

1.3 Intended Audience:-Any industries or company

1.4 Intended Use:-

The Employee Management System provides the employer with the insights into the workforce as well as to manage the data of the employees. Hence making the management of employee data smooth and error free. With the help of this management system we can get all the data in one place in an organized way. The EMS can also be used to track the performance of the employees.

1.5 Definitions and Acronyms:-

Definition:

An employee management system is an application to securely store and manage the personal as well as other work-related details of the employees. The EMS helps to eliminate the manual process of managing the data hence saving a lot of time and money.

Acronyms:-

1) EMS-Employee Management System

Aims & Objective

1.6 Specific Goals are:

1) No prior knowledge is required to use this system. This System is made as user-friendly.
2) EMS is useful for keeping all employees information so it helps admin to manage each and every employee details.
3) We provide up to date information that is not possible manually.
4) The objective of project is to make it easy, simple, reliable, user-friendly and corrective. Moreover less time consuming as compared to manual work.

2. Overall Description

2.1 Existing System Function:-

The existing system of the Employee Management System are based on our traditional way of keeping records and details on paper and registers. This leads to the Un-Security of all the information stored and leads to the hassle, whenever the retrieval of the data or some information has to be done. It becomes very hard to manage all the contents by using pen and paper. It becomes tedious job to maintain the records and to keep the track of the past records as well as existing records.

2.2 Proposed System:-

The Employee Management System provides the feature for Admin and Employee:-

- Record Management:

It will provide facility to admin keep records of every employee.

- Performance Management:

It will provide facility to admin to update performance of every employee

2.3 Benefits of Employee Management System:-

1. This System helps to keep records of employees.
2. Easy to manage attendance record.
3. It is easy to use.
4. It saves time, money and labour.
5. Easy to maintain performance of employee.

2.4 Uses and Characteristics:

a. Admin
   - Admin can login and logout to the system
   - Edit employee details
   - update employee details
   - Delete Employee details
   - Add performance details of employee
   - To control Attendance record of employees
   - Increment/hike salary details of employee
   - To keep record of each department

b. Employee
   - Employee can login and logout to the system

- Edit own profile details except performance and salary details
- Update profile
- Employee can mark daily Attendance
- Employee can track his/her performance

2.5 Design and Implementation Constraints:-

1. This Application will use nodejs, expressjs, springboot and java methodologies.
2. HTTP protocols are used as communication protocols
3. Since EMS is web based application, Internet connection must be established.
4. The Employee Management System will be used on Pcs and will function via internet in any web browser.

3. Requirements Specifications

3.1 User Specification

- Admin:-

Admin can add a new and manage the employee's details. The admin can rate the monthly performance of each employee.

- User:-

User can view his/her profile and will also be able to edit the information. The employee can also track his/her performance and also mark the attendance.

3.2 External Interface Requirements:

3.2.1 User Interfaces:-

All the users including the admin will see the same login page when they visit the website. This login form requires the user to enter a valid user email id and password. After successful login the employee will be directed to the home page of the organization.

Here the employee will be able to edit his/her profile.

Whereas the admin will be able to add, delete employee's details.

The user interface will be easy and simple to use. The system will have a simple interface, to eliminate the need of user training for beginner.

3.2.2 Hardware Interfaces:-

In this project no extra hardware interfaces are required.

The system will use the standard hardware and data communication resources. This includes, but not restricted to general network connection at the server/hosting site, network server and network management tools.

3.2.3 Application Interfaces:-

Operating System: Windows 10

Web Browser:

The system is a web-based application. Users need a modern web browser such as Mozilla Firebox, Internet Explorer, Opera, or

Chrome. The computer must have an Internet connection in order to be able to access the system.

3.2.4 Communication Interfaces:-

This system uses communication resources which includes but not limited to HTTP protocol for communication with the web browser and web server and TCP/IP network protocol with HTTP protocol.

This application will communicate with the database that holds all the employees information. Users can contact with server side through HTTP protocol by means of a function that is called HTTP

Service. This function allows the user to use the data retrieved by server to achieve the request fired by the user.

Hardware Requirement

RAM	2 GB
Hard disk	320 GB
Processor	Dual Core

Software Requirements

Client side:

Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

Operating System Windows or any equivalent OS

Server side:

Web Server	TOMCAT
Server side language	REACT
Database	MYSQL
Web Browser	Google Chrome or any compatible browser
Operating System	Windows or any equivalent OS

3.3 Functional Requirements:-

This section provides requirement overview of the system. Various functional modules that can be implemented by this system are

1) Registration:

The user must be registered into the system in order to access the website.

2) Login:

The user who has already registered can login to the system by entering a valid user email id and password.

3) Add employee, Delete employee:

The admin can add or remove an employee. The admin can change the employees department and also increase the salary of the employee.

4) Update employee details:

The employee can edit his/her personal details like name or address.

5) Logout:

After performing the necessary task the user can logout of the system.

The term client/server refers primarily to an architecture or logical division of responsibilities, the client is the application (also known as the front-end), and the server is the RDBMS (also known as the back-end).

3.4 Non-Functional Requirements:-

There is no performance requirement in this system, because the server request and response to client is totally based on internet connection of end user.

Following Non-Functional Requirements will be there in the insurance of the internet:

- Secure access to user’s confidential data.
- 24 X 7 availability
- Portability
- Reusability
- Resource Utilization
- Reliability