

# Employee Management System

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## 1. Title

Employee Management System

## 2. Description

### 2.1 Overview

The Employee Management System (EMS) is a comprehensive web-based application designed to streamline the management of employee records within an organization. It provides two main user roles: Admin and Employee, with distinct permissions and functionalities for each.

Admins have complete control over managing employee data, including adding new employees, editing details, and removing records. This system ensures secure role-based access control, preventing unauthorized users from accessing sensitive data. Employees can log in to view their personal information, including project assignments, financial records, and previous employment history.

EMS is built with a strong emphasis on usability, data validation, and security, offering essential features such as customizable employee records, financial management, and robust validation for critical fields such as email, phone numbers, and address formats.

### 2.2 Key Features

**Role-based Login:** EMS uses a secure role-based login system. The system authenticates users using their company-provided email or employment code and password. Based on the user's role (Admin or Employee), the application navigates them to the appropriate dashboard. Admins have access to a full suite of features, while employees have limited, view-only permissions.

**Admin Dashboard:** The Admin dashboard acts as a central hub for managing all employee records. Admins have the following capabilities:

- Create New Employees: Admins can add new employees by entering personal, professional, project, and financial details. All fields undergo validation, ensuring correct data input.
- Edit Employee Records: Admins can select an employee record and update details

except for key fields like the Employment Code, Date of Birth, and Company Email, which are immutable after creation.

- Delete Employees: Admins can remove employee records, ensuring obsolete or inactive employees are no longer in the system.

- View Employee List: The Admin can view a full list of employees, which includes essential information such as Employment Code, Employee Name, Company Email, Manager Name, Current Project, and action buttons for viewing, editing, or deleting records.

**Employee Dashboard**: The Employee dashboard is more restricted, designed for individual employees to view their own details. Employees have access to:

- Personal Information: Full name, address, contact information, and emergency contact.

- Professional Details: Employment code, office phone number, office address, and details of their reporting manager.

- Project History: Current and previous project assignments, including project code, start/end dates, client/project name, and reporting manager.

- Financial Information: PAN, Aadhar, bank account details (Bank Name, Branch, and IFSC code), and salary details, with an option to download the last six months'

**Project Management**: Admins can associate employees with various projects. Each project entry includes the project code, start/end dates, client/project name, and reporting manager details. This helps track employee project assignments over time.

**Data Validation**: EMS incorporates several data validation rules:

- Employment Codes: 6-digit numbers.

- Emails: Proper format for personal and company emails.

- Age: Maximum of 3 digits, positive numbers only.

- Phone Numbers: 8 to 12 digits for office numbers, 10 digits for personal numbers.

- Addresses: Validated for address lines and 6-digit pincode formats.

**Finance Management**: The finance section includes personal financial data like PAN, Aadhar, and bank details. Employees can also access their salary breakdown and download payslips. Admins do not have access to download employee payslips.

### 3. Participants and Their Respective Roles

NAME	ROLE IN THE PROJECT
Swapna Sunkari	Have been actively involved in both frontend and backend development. In the frontend, designed the admin dashboard along with its internal pages. On the backend, integrated both the frontend and backend using controllers and executed role-based logins with precision.
Srija Chiliveri	Created designing and developing secure, user-friendly login and signup pages, ensuring smooth user authentication and onboarding. Involved in creating admin dashboard for managing users and system data, while integrating backend systems for security and scalability.
Syed Akhlaq Hussain	Created an Employee Dashboard page utilizing Frontend technologies HTML, CSS and JS which serves as a centralized interface for employees. The dashboard features navigation links that direct users to dedicated sections for Profile, Professional, Project, and Finance Details including the logout button enhancing user experience and accessibility to important information.
Suvarna Mangina	Created the pages for Profile Details, Professional Details, Project Details and Finance Details in Employee Dashboard using HTML, CSS and JS.
Udugu Saranya	Created profiles which contain employee personal information and displays profile picture in employment dashboard using HTML, CSS and JS.
Sushant Balu Patil	Integrated the frontend with the backend using Spring Boot. Developed the backend with the focus on creating CRUD operations for employee data management. Mapped the Frontend forms to backend endpoints to retrieve and display data dynamically. Ensured smooth communication between the layers for efficient data handling and user interaction.
Tushar Pawar	Developed the backend focusing on building authentication security using Spring Security. Implemented user authentication, role-based access control, and custom login/logout mechanisms. Also, created RESTful controllers to manage data flow between the frontend and backend, and implemented essential services such as user management, authorization and session handling.
Swapnali Vilas Yadav	Created the Admin Dashboard utilizing HTML, CSS and JS which serves as a centralized interface for both admin and employees. Provided the navigation links for adding employees, viewing the admin's name and log out. Created a table displaying employee details to enhance data organization and accessibility.
Tharuna Sri	Involved in development of backend regarding integration of both backend and frontend using Javascript and fetch(Api).

## 4. Screenshots Demonstrating the Execution of the Application

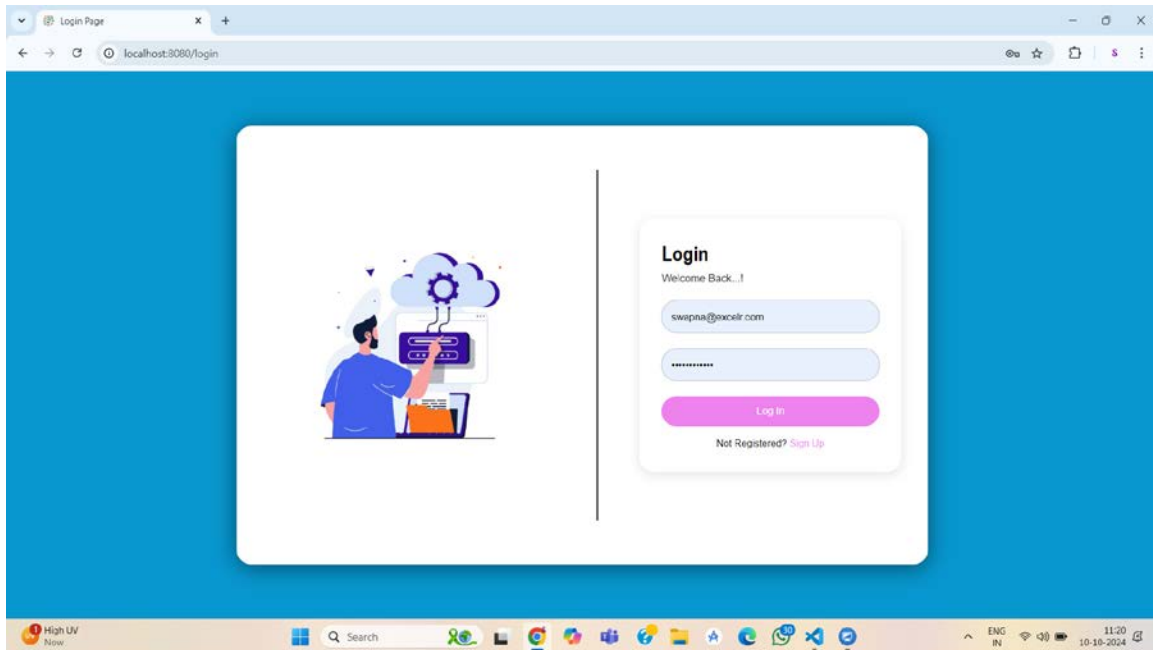


Fig.1: Admin Login Page

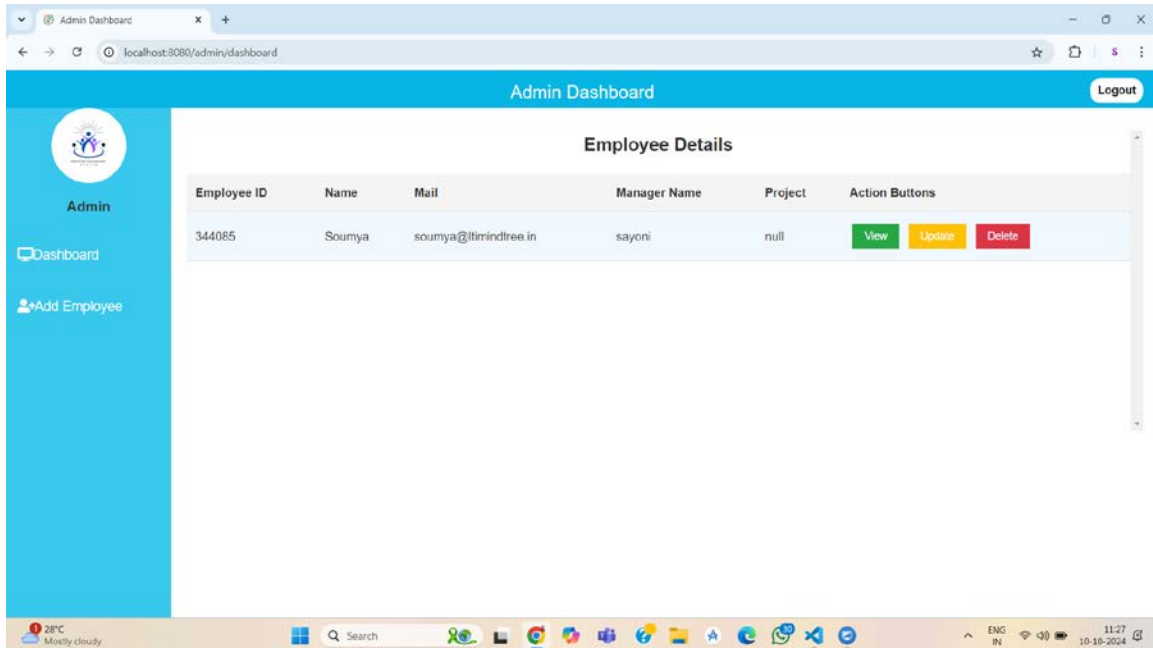


Fig.2: Admin Dashboard



Dashboard x +

localhost:8080/admin/view\_employee/102

### View Employee full details

#### Personal Details

Name: Soumya

Date of Birth: 2022-10-04 Age: 0 Gender: female

**Current address**

City: hyderabad Pin Code: 504001

Address Line-1: kbhp Address Line-2: girls hostel

**Permanat Address**

City: Karimnagar Pincode: 506001

Address Line-1: Karimnagar Address Line-2: maruthnagar

Mobile Number: 7893818896

#### Professional Details

Employee Code: 344085

Company Mail ID: soumya@timindtree.in Office Phone Number: 9014160756

HR Name: sayoni

Reporting Manager Code: 563249

Reporting Manager Email: sunkarishwapna.2401@gmail.com

Date of Joining: 2024-01-26

Current City: hyderabad

Office Address Line 1:


31°C Partly sunny

ENG IN 12:59 10-10-2024

Fig.4: Viewing an Employee

Login Page x +

localhost:8080/login



### Login

Welcome Back...!

soumya@timindtree.in

\*\*\*\*\*

Log In

Not Registered? [Sign Up](#)

USD/CAD +0.30%

ENG IN 21:48 10-10-2024

Fig.5: Employee Login

Employee Dashboard & Personal Details

localhost:8080/employee/dashboard

**Soumya**

Personal

Professional

Project

Finance

**Employee Name: Soumya**

**Personal Details**

Name: Soumya

Date Of Birth: 2022-10-04

Age: 22

Gender: female

Current Address City: hyderabad

Current Address Line1: kbhp

Current Address Line2: girls hostel

Current Address pincode: 504001

Permanent Address city: Karimnagar

Fig.6: Employee Personal Details

Professional Details

localhost:8080/employee/professional

**Professional Details**

Employee Code: 344085

Company Mail: soumya@timindree.in

Office Phone Number: 9014160756

Reporting Manager Name: sayoni

Reporting Manager Code: 563249

Reporting Manager Email: sunkarishwapna.2101@gmail.com

Date Of Joining: 2024-01-26

City: hitech

Office Address Line 1: gachbowli

Office Address Line 2: madhapur

Pincode: 50980

Fig.7: Employee Professional Details

Employee Dashboard and Finance

localhost:8080/employee/finance

**Soumya**

Employee Name: Soumya

LOGOUT

**Finance Information**

**Pan Card** 9645236017

**Aadhar Card** 789532541065

**Bank Name** sbi

**Branch** main

**IFSC Code** 963258741052

**Account Number** 485163297015634

**CTC** 5

**Download Payslips** Download Last 6 Months

Fig.8: Employee Finance Details

## 5. Github Link

<https://github.com/Sushantlog/Excelr-Group-12-Employee-Management?tab=readme-ov-file>