

Employee Payroll Management System

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Abstract: The Employee Payroll Management System (EPMS) automates payroll processing for organizations using web-based technologies. This project is designed with a front-end powered by HTML, CSS, and JavaScript, a back-end developed using PHP, and MySQL as the database for managing employee and payroll records. The system offers real-time updates, error-free calculations, and secure data handling. Initial deployment shows improved efficiency, reduced manual workload, and enhanced user experience.

I. INTRODUCTION

Efficient payroll management is a vital function for any organization. Traditional systems relying on manual record-keeping and spreadsheets are error-prone and time-consuming. This project aims to develop a secure and user-friendly web-based Employee Payroll Management System (EPMS) to simplify payroll operations, offering features like automated salary calculations, employee data management, and detailed report generation.

II. Software Analysis

A. Front-End Technologies

- **HTML** : For structuring web pages.
- **CSS** : For designing an intuitive and responsive user interface.
- **JavaScript** : For client-side scripting and dynamic interactivity.

B. Back-End Technologies

- **PHP**: For server-side logic and data handling.

C. Database

- **MySQL**: A relational database used to store and retrieve employee and payroll data.

D. Development Tools

- **Visual Studio Code**: IDE for code development.
- **XAMPP**: For hosting the Apache server and MySQL database locally.

III. Existing System

Manual payroll systems often involve redundant paperwork, delayed processing, and significant error risks. These systems lack scalability and cannot ensure secure data access, making them unsuitable for modern organizations.

IV. Proposed System

The proposed EPMS addresses these challenges by offering:

- **Real-Time Operations:** Automated updates to employee details and payroll calculations.
- **Error Reduction:** Accurate salary and deduction computations.
- **Secure Data Access:** Encrypted data storage with user authentication.
- **Responsive Design:** Accessible across devices with a consistent user experience.

V. Modules

A. Employee Management Module

Allows the administrator to add, edit, and delete employee records, including personal details, job role, and salary structure.

B. Payroll Processing Module

Calculates gross pay, deductions (e.g., taxes, benefits), and net pay based on predefined policies.

C. Report Generation Module

Generates and exports payroll summaries and detailed employee-specific reports.

D. User Authentication and Role Management

Ensures secure access by authenticating users and assigning roles (e.g., admin, HR)

VI. Architecture Diagram

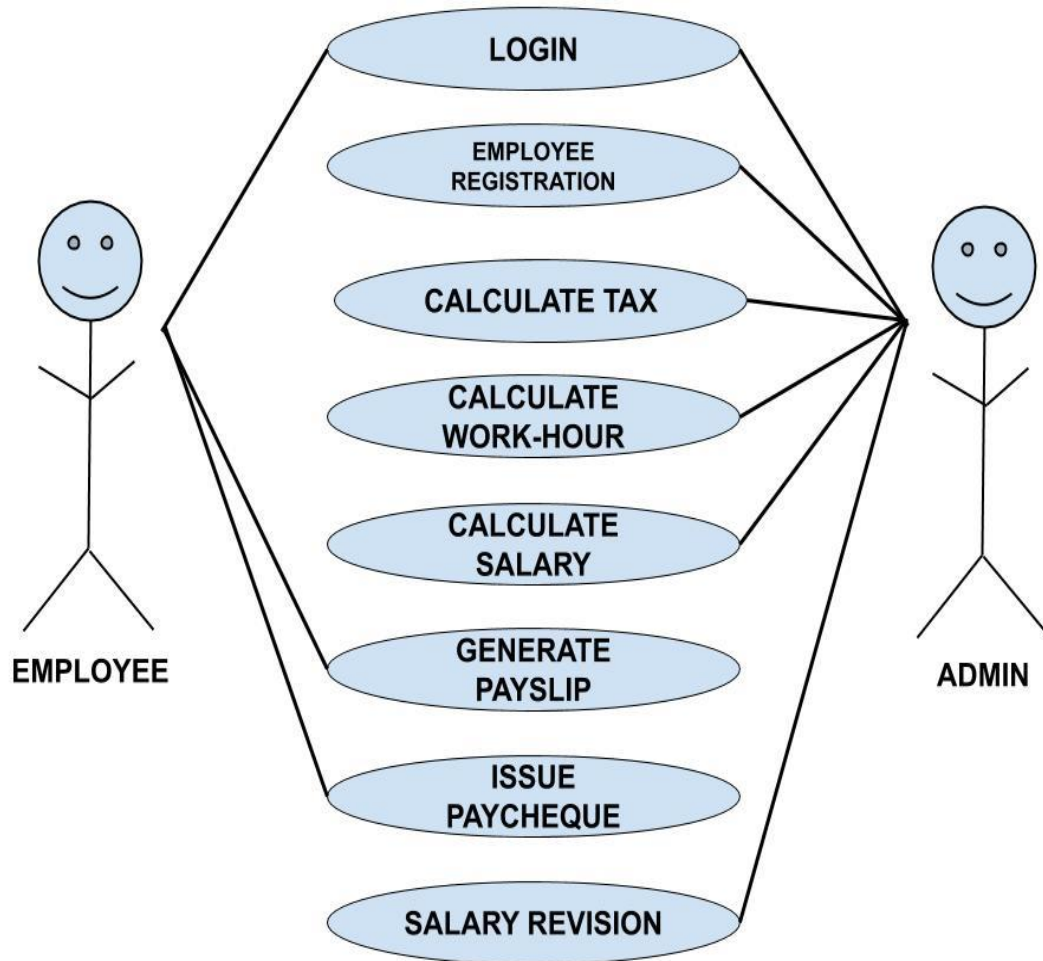


Fig.1. Use Case Diagram

VII. Result

The EPMS was successfully implemented using HTML, CSS, JavaScript, PHP, and MySQL. The system demonstrated:

1. Accurate and fast payroll processing.
2. Intuitive and responsive design across devices.
3. Secure data handling with robust user authentication

VIII. Conclusion

The Employee Payroll Management System provides an efficient, web-based solution for automating payroll operations. By leveraging modern web technologies, the system ensures accuracy, scalability, and ease of use. Future enhancements may include integrating third-party APIs for tax calculations and mobile app development for broader accessibility.

References

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