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EMPLOYEE INFORMATION AND PAYROLL MANAGEMENT SYSTEM

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Abstract

In today's fast-paced corporate environment, managing employee records and payroll processes efficiently is crucial for organizational success. Manual methods of handling payroll and employee information often lead to errors, delays, and inefficiencies in financial and administrative operations. To overcome these challenges, this project presents the Design and Implementation of an Employee Information and Payroll Management System, which integrates employee data management, payroll processing, tax deductions, benefits administration, and real-time communication into a single platform.This system is designed to automate payroll calculations, generate pay slips, manage tax deductions, and facilitate smooth communication among employees through a chat application. By leveraging HTML, CSS, JavaScript, PHP, MySQL, and XAMPP, the system provides a secure, user-friendly, and efficient solution to streamline administrative tasks and improve employee satisfaction.

***Key Words*:** Employee Information, Payroll Management, Web-based Application, Salary, Allowances, Deduction

1. INTRODUCTION

Employers and individuals who wish to save their employee records have done it manually over the past few decades. As the number of employees rises, it becomes more challenging to manage and readily access these records. The practice of handling an employee's financial information, including their salary, wages, benefits, deductions, and other information, is known as payroll management. If that record is later needed, it should be kept. The purpose of this software is to remove and, in certain situations, lessen the difficulties that the current system faces. An organization's method of paying its personnel is called a payroll system. It covers the base pay and additional benefits that an employee is entitled to from their employer. Payroll systems make it simple to calculate salaries, costs, holiday leave pay, and to create accurate pay slips. The suggested method was created to address issues with the manual approach, including administrative overload, overtime management, employee misclassification, inefficient timekeeping, employee absence monitoring, and delayed payroll processing. The purpose of this web application is to minimise errors when entering data.

2. LITERATURE REVIEW

Marcus Atish D. Rozario (2018) [1] constructed a web-based payroll system that was created with PHP, HTML, and JavaScript. PHP MyAdmin was used to design the database, and Windows 10 was used as the operating system. Computerised records can be maintained and viewed by this online application without receiving duplicate entries. Only administrators use this system, which is utilised by small businesses with few staff.
The desktop-based payroll system that Arjun V. Singh et al. (2016) [2] built was created using Microsoft Access 2007 SQL Server 2008 as the backend and VB.net as the frontend. It is intended for a college administration system that can only be operated by the administrator.
Kritika Mahajan et al. (2015) [1] built a desktop-based payroll system that uses HTML, CSS, and JQuery for the front end, C#, and ASP.net for the back end, and JSON and Ajax for data parsing. PHP, HTML, CSS, and JavaScript were used in the development of the computer-based payroll system that Poonamdeep Kaur et al. (2012) [4] created, and MySQL was used for database design. Ed. The administrator manages who can log in and out, while the head or HR is in charge of other employees' data.

3. PROPOSED SYSTEM

The Employee Information and Payroll Management System is a web-based solution designed to automate HR and payroll processes while ensuring efficiency, security, and real-time communication. This system is developed using Employee and Payroll Calculation Module.

1] Employee Module: -

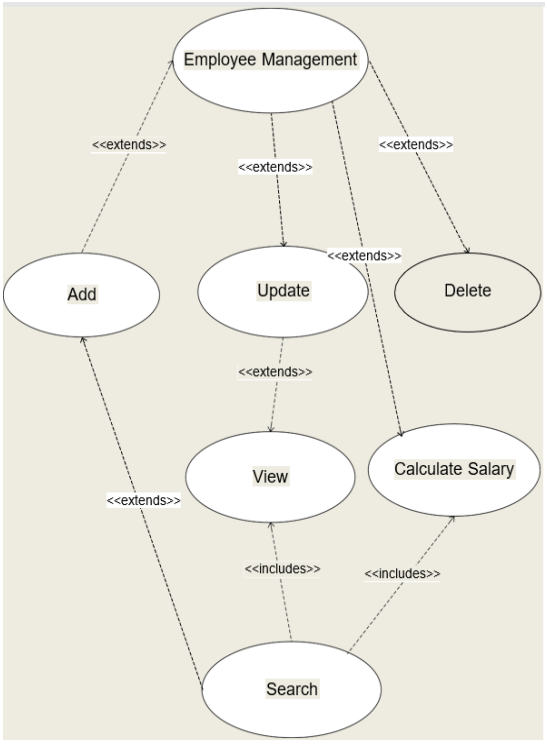

Fig 1: - Employee Module

Theemployee data management module involves creating functionalities to handle employee information. This may include features like adding, updating, and deleting employee records; maintaining records of employee personal details, employment history, salary details, and benefits; and facilitating employee self-service functionalities such as leave applications, tax forms, and time tracking.

2] Payroll Calculation Module: -

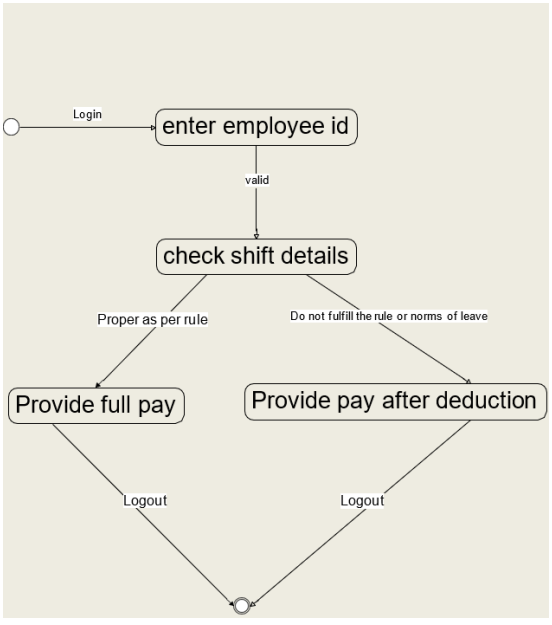

Fig 2: - Payroll Calculation Module

This module incorporates various components such as employee attendance records, timesheets, salary rates, tax calculation algorithms, and predefined company policies. It takes into account variables such as hours worked, overtime, leave taken, and other relevant factors to generate the final payroll for each employee. The module ensures compliance with payroll regulations and accurately handles complex calculations, including tax withholdings, social security contributions, and any customized deductions or benefits specific to the organization. It helps streamline the payroll process, reduces manual effort, and ensures timely and error-free payroll generation.

4. SOFTWARE REQUIREMENTS

The front-end programming languages utilised in this project are HTML, CSS, and JavaScript; the back-end programming language is Python with PHP framework; and the database management tool is MySQL.
HTML: It is a programming language that generates and arranges web information for various browsers to view.
CSS: It goes with HTML and specifies many website content styles, including fonts, colours, layout, spacing, and more.
JAVASCRIPT: Forms, drop-down menus, modal windows, and other interactive features are created using this programming language.
PYTHON: It is a widely used, open-source language with simple syntax. It operates swiftly and offers more effective system integration.

5. IMPLEMENTATION

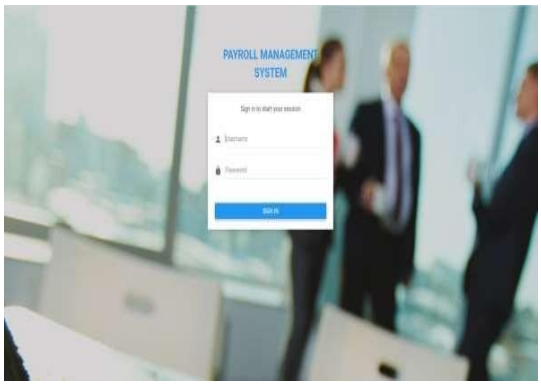

Fig 3: - Login Page

Figure 3 above displays the login page where the user's username and password are accepted. There is an additional option called "forgot password" that allows users to create or modify a new password in the event that they forget theirs. The user can access the registration page directly if they are not registered.

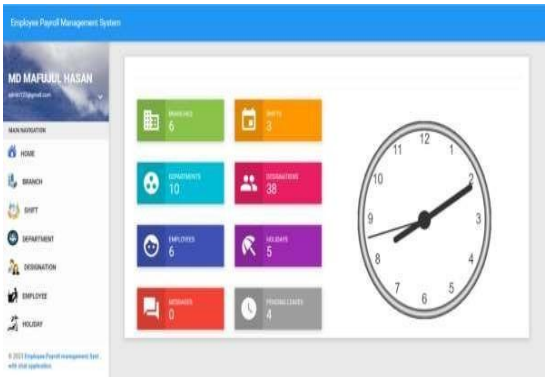

Fig 4: - Admin Dashboard

Figure 4 above depicts the admin dashboard, which displays various project, task, client, ongoing, and impending project statistics.

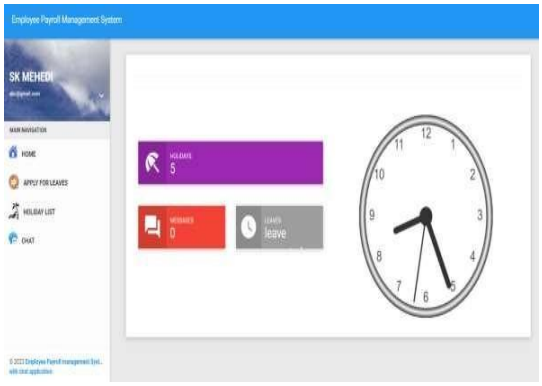

Fig 5: - Employee Dashboard

The employee dashboard, depicted in Fig. 5, provides a summary of the work that workers are doing today, together with information on their status and various activities.

Fig 6: - Payslip

The payslip generated in Fig. 6 above includes the employee's basic salary, DA, HRA, TDS, and other allowances, as well as their net wage.

6. DISCUSSION

Numerous systems that are based on different front-end, back-end, and database languages are available for managing payroll and accessing employee data. PHP, HTML, and JavaScript were utilised to create a payroll system that was exclusively utilised by small businesses. Another desktop-based system that employed Microsoft Access 2007 SQL and vb.net was put into place. Using HTML, CSS, and JQuery, a computerised system was created that exchanges data from a server using JSON and AJAX. Using a MySQL database, another payroll system was put into place, with the administrator controlling login and logout access. This suggested system Frontend programming is done with HTML, CSS, and JavaScript; backend programming is done with Python and the Django framework; and database tools are done with Posgresql. All of the data needed for business organisation is managed and stored in a database by this system. Both the company (HR) and the administrator (admin) can oversee it. Both desktop computers and smartphones can access this web-based system.

7. CONCLUSION

This project is user-friendly and designed for a variety of businesses. One can efficiently and sequentially manage all employee details by modifying this system. Every employee's login information, registration information, salary information, leave information, and tasks have all been successfully saved in the database. Employee data is likewise protected, and they may quickly obtain an employee's details if they need them. Additionally, it aids in eliminating any human error that may have occurred during the manual process. It can provide fast computations for entire payroll administration. This program has the ability to update salary records and address any issues pertaining to pay, employee attendance, overtime, leave, and other matters. Consequently, this program will assist in automating that organization's business data.

REFERENCES

[1] Kritika Mahajan, Shipla Shukla, Nitasha Soni “A Review of Computerized Payroll System” International Journal of Advanced Research in Computer and Communication Engineering Vol. 4, Issue 1, January 2015.

[2] Prabu S, Akash Goyal, Anmol Agrawal, Siddhant Nagelia “Employee Payroll Management System” International Journal of Innovative Science and Research Technology, Volume 3, Issue 4, April 2018.

[3] Marcus Atish D Rozario (2018) “Employee Database and Payroll Management System” Maulana Abul Azad University of Technology Kolkata, Department of Computer Application.

[4] DhanammaJagli, Ramesh Solanki, Parth Chandaranam “Payroll Management System as SaaS” Proceedings of National Conference on New Horizons in IT - NCNHIT 2013.

[5] Arjun V. Singh, Siddesh V. Chaphekar, Yogesh S. Sawant “Automated Payroll System (A-Pay)” International Journal of Modern Trends in Engineering, Vol. 03, Issue 02, February 2016.

[6] Poonamdeep Kaur, Dr. Dinesh Grover “Computer Based Payroll System Implementation for E-Governance at Punjab” Agricultural University, Department of Computer Science. International Journal of Engineering Research and Development. Vol. 5, Issue 3, December 2012.

[7] Sampada A. Chavan, Neelam D.Gaikwad, Vinay V.sakpal, Javed Bilakhia, Rupali Pashte “Survey on Various Automated Payroll System” International Journal for Research & Development in Technology Vol. 7, Issue 3, March 17.

[8] Rafiqul Alam Khan “Payroll Management System” School of science and technology, Bangladesh Open University.