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## Advisory Functions and advance HRMS

<sup>1</sup>Priyanka Chaudhari, <sup>2</sup>Pramod Gosavi

<sup>1</sup>PG Student, <sup>2</sup>Associate Professor

Department of Computer Engineering,  
Godavari College of Engineering, Jalgaon, India

### Abstract

Two applications have been built as part of the employee management system, which is an application-based system. One application is for employers to maintain personnel details, while the other is for employees to record their attendance. Every Government or private organization uses information systems[2.] to store employee data. However, it has been discovered that many small-scale enterprises in India still utilize paper and pen to preserve records. However, there are numerous high-tech devices available that can perform this function, however, they are all expensive for reasons mediocre industries This essay addresses developing a method to handle their challenges at a lower cost. Each employee's attendance will be tracked by this system, and at the end of the month, their salaries will be determined. It calculates each employee's total working hours as well as overtime. Because every small business has its preferred holidays and week off policies, the employer is given complete discretion over how to handle each employee's holidays and workweek.

**Keywords:** attendance, employee management, payroll, salary calculation.

### I. INTRODUCTION

Every organization maintains a record of its employees. Employee records are essential for managing employees. These records are necessary for any organization to manage the workforce, calculate pay, and assess employee performance [1]. The HR team's management of all these records is a difficult task and time-consuming procedure [3], which can be sped up by employing the EMS, or employee management system [5]. Any organization's success depends on its human resources, which are a crucial component. Organizations make significant investments in staff management. A human resource information system, or HRIS, is in charge of accounting and inventory control [6]. EMS is an informatics tool that helps owners, HRs, and managers save time, energy, and money. All businesses, whether public or private [5], require employee management systems. However, they have been keeping records using the antiquated, traditional approach of pen and paper for years. Recently, however, there has been a significant growth in the use of automatic systems[11] that can handle wage calculation on their own. Since these systems are expensive and need ongoing maintenance, they are challenging to adopt in many places. To resolve this issue, I have an EMS that is based on a mobile application. Each employee's wage and daily attendance will be computed. This technology was created so that smaller organizations may also use it. It helps small-scale industries manage their staff and is less expensive than other systems. This solution attempts to address this problem so that the HR staff can concentrate on other processes rather than resolving disputes because there are many disagreements in small industries owing to the erroneous calculation of pay and overtime. An organization benefits from streamlining the record-keeping procedure. ABSTRACT 226 International Journal for Modern Trends in Science and Technology. Organizations must apply this personnel management approach to increase the effectiveness of their work [4.]. This essay explores the development process, issues encountered, and advantages of utilizing the system. This system is made up of which one of two mobile apps that are best for the HR department to oversee staff and a separate one for each employee. They can check in using a QR code.

The goal of the employee management system was to address the issue that organizations encountered while determining each employee's wage. This method tries to ensure accurate automatic attendance so that no one may falsify their attendance. This system ensures that all necessary computations for correctly calculating salary are completed. EMS encourages automated use and guarantees that employees' salaries will be correctly computed without any fraud. Each employee is given the appropriate holidays, week offs, and holiday vacations by their employers. It gives employees the freedom to choose their days off, and salaries are then computed in accordance at the end of the month. As a result of this feature, salaries may vary depending on the number of days off granted to employees on different weeks off. Create a system that aids a company in managing its personnel. After the month, the system should supply the calculated salary, leaves, and working hours of their employees as well as a facility to record attendance. This application's primary function is to track daily attendance while also providing the computed income, current days of leaves taken, and working hours. Because the HR team used to spend a lot of time on this task at the end of every month[8], it frequently happened that employees didn't receive their salaries on time. This destroyed the relationship between employees and employers, which negatively impacted the company's growth. Creating a system to improve, streamline, and make this process more dependable will be the project's biggest difficulty.

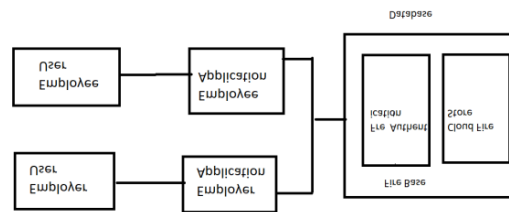


Figure: System Architecture

## II. LITERATURE REVIEW

The literature review is divided into different sections that explain the uses and advantages of this system.

### 1) Existing System:

The organization's current employee management system still relies solely on pen and paper to record employee data, as was the case in the past[1.][2.]. Large numbers of registers must be kept for this reason, which causes a blatant loss of time when creating reports or looking up employee records, as well as the loss of data if any files are deleted. Additionally, because it is an expensive process, it is a difficult burden for enterprises. However, new technologies like IoT and web-based systems are used somewhere, but they are also expensive and challenging to install in some locations. The other methods that are now available rely on card punching, biometric scanning, or facial recognition. However, each of these calls for the installation of an external device in the workspace, which is once more an expensive operation that needs ongoing upkeep[7]. The proposal minimizes or completely gets rid of the problems with the current system and prevents data entry mistakes. It is less expensive, simpler to deploy and use than the current system, requires no maintenance, produces accurate data, and saves a significant amount of time.

### 2) Proposed System:

The proposed solution is based on a Smartphone application that needs internet access to function. This system offers the following amenities:

1. Employer must add personnel and necessary information,
2. An employer may declare a company holiday one day in advance.
3. An employer cannot change holidays that have already occurred.
4. Employer must click "Get Salary" to obtain each employee's pay; he will then see the previous month's pay.
5. The employee can be edited and removed by the employer.
6. When entering the building, the employee must scan the QR code for In after installing the app and configuring it according to the instructions. And, when I'm leaving the building, I have to scan another QR for Out.
7. Employees are only permitted to register their attendance once every day, and the policy is secure and stringent.

The sole prerequisite for using this system is owning a Smartphones, which is not difficult in today's environment. One further point to keep in mind for people without Smartphone is that not every employee is required to have one. Employers can indicate the attendance of their staff using a feature in the employer app.

### III. DEVELOPMENT METHODOLOGY

The same web-based application development process was used to create this system. Software is created so that it can be reused, and because it is impractical to create the entire system at once, it must be created in stages [15]. A system is produced using the incremental development methodology in a sequence of versions (increments), with each version adding capability to the one before it.

#### 1) System Analysis:

The creation of an employee management system that can track each employee's attendance. Users' data must be protected and accessible whenever necessary.

Data must be organized to allow for reuse. It is crucial to handle holidays properly to properly calculate employee salaries. Applications should be able to provide, with just a click, information on salary, total hours worked, overtime, and present days at the end of the month.

#### 2) Planning:

This phase of development comprises careful planning for the tasks to be taken and a timeframe that reflects that. It is essential to ensure that the development process runs well and is finished on schedule. It entails preparing the steps necessary to carry out the project, enable it to fulfil its goals, and use them in a way that prevents future issues.

#### 3) Design Analysis:

Each screen design is thought out and examined to determine whether it would be able to produce the intended outcomes as part of the design analysis process. Whenever necessary, this step is repeated. If a change or update is necessary, it starts here. Making the design in such a way that it provided a straightforward user experience was the most difficult component of this. It is a step-by-step process in which the design is initially created so that it can implement all necessary functionalities and later on the design can be made attractive.

#### 4) Database Design and its Implementation:

Designing a backend entails creating databases and classes by with the functionality we wish to offer. I've utilized Cloud Fire-store for databases. This was the part that I found to be the most difficult because I had to keep reminding myself that data should be stored so that it can be accessed easily and should not be mixed. Because data is used in multiple places, there is a high risk of it being stored more than once. Another task was to store data so that it stays separated. Another was to determine what and where the fields are needed.

### IV. CONCLUSION

This system will aid organizations in system development and employee management. The staff management system is made to conserve resources like time, money, and energy. It is tremendously beneficial in an organization to streamline the record maintenance process. Maintaining employee satisfaction is important because they are the foundation of any organization. Their wage calculation will become more transparent thanks to this idea. Additionally, it will simplify HR tasks so they may concentrate on other tasks. This employee management method oversees an employee's overall performance as well as their many parts inside a business.

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