

# Payroll system Using Fingerprint and Face Detection

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**Abstract** - In today world all the thing are moving faster and if we want to stay in this field then we need to do all the work as fast as it is required. In an organization there are so many employee and all are having different work to do and they are paid accordingly. The monthly salary calculation of employee is very time consuming and hectic work. And manual calculation will also consume more time. It will be more beneficial if this work is done automatically and it will consume less time. For solving such problem we require the Software or the application that can all the task. For this we introduce the Payroll System using fingerprint and face detection. In web application the Admin has full access to all the information and can control all the centralize access. Each user like employee or HR or admin can login into the software by writing username and password which are allocated to them from the company. It involves keeping track of hours worked and is capable of keeping a record of employee data including their pay, allowances, deductions and taxes on monthly bases. To keep track of all the details of employees. This system will calculate monthly salary of the employee depending on the record of the employee which is watched by payroll system regularly and it also reduces human effort.

**Key Words:** Monthly salary; Fingerprint; Face detection deduction;

## 1. INTRODUCTION

The "Payroll System" is based on the salary activity for each company staff depending on their attendance. The first activity is based on saving the employees details where each employee will be given a unique Employee ID. The Admin only has the authority to enter the number of leaves available for leave type and for each employee. Whenever an employee wishes to take a leave, he is supposed to enter his employee Id. As soon as this is done, he has to select the leave type like casual leave, providential leave etc.

Depending on the leave type the number of leaves available will be shown. The employee is supposed to enter the no of leaves he needed and it will be saved in the database. In the meanwhile, the no of leaves available will be deducted depending on the no of days he wished to take a leave. Now based on the no of days an employee attended, salary will be calculated and a separate salary slip will be provided for reference.

Admin has the authority to add employee details. And he also has the right to edit or delete employee information to/from the list.

Admin provides a unique username and password for each employee through which he can login and apply for leave. All the information's are being saved in the database.

In an organization, there are many departments and each department has a payroll section to manage its payroll activities. Each section has to perform necessary operations like data collection and preparation, entry, updates, monitoring and reporting of data. Many of these existing practices and procedures need to be reassessed at this time of changing needs, changing demands of employees and changing technologies. Net pay of each employee is calculated by his allowances and deductions mentioned according to the company rules.

The individual pay slips are printed out as a receipt if employee wants to get a print out. Pay bands, grade pay, allowances, deductions and tax information are updated if there is any amendment in salary structure. The computer based payroll application is the web based design.

## 2. Problems in existing system

In order to maintain their design pay slips and other related information to project development, which include customer requirements, storage department is immense. The lack of consistency in pay slips maintenance leads to both loss of work as well as money and time. With the total automation of payroll Management System, the manual storage dependency is minimized to a large extent. Present day organizations, especially large companies house employees in large numbers.

## 3. Proposed Methodology

The Payroll system using fingerprint and face detection is the web application which will give access to the admin from any of the source and can also maintain the security factor. In this the admin as keep the track of all the employee. The admin can view the number of leaves taken by the employee for what reason, and the generation of the payslip can also be generated on the basis of the leaves taken by employee, allowances, deductions and taxes.

Each employee has the unique Employee ID by using which the admin can specify the employee. The System also uses the employee unique fingerprint to do necessary work such as daily attendance of the employee.

In case if the employee is not recognized then the employee can verified using the face of the employee which will act

like the Employee ID in that case or the employee can verify both the fingerprint and face Id. When the Employee comes to organization then the employee first need to mark his/her attendance through any of the two options given to employee. On the basic of the attendance the Employee salary is calculated and some other factors are also considered such as allowances, deductions and taxes.

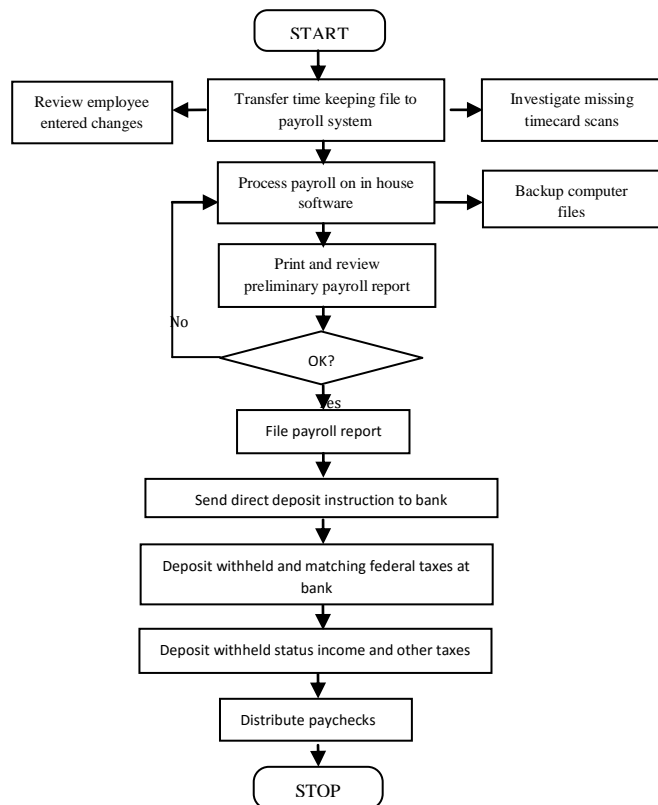


Fig -1: Flowchart of proposed system

#### 4. Future Work

Future works of this study will include the always room for improvement, and the software we created can also be improved. This would be the first step in making the software network-enabled and the eventually web-enabled. This is especially because we had to create it within a limited time. With more time, the software can be improved to include security with using the cloud concept. was our original after thought to programming the software. In addition, the software can also be improved in terms of the calculations it can do, and more flexibility in the rates used in calculations per employee.

#### 5. CONCLUSION

The goal of this review paper was to a web based payroll system using ASP.NET, Html, CSS, MS SQL, Ajax and JavaScript. This computer based Payroll system is accessible on the internet and calculates, maintains and records the payroll information of employees. This Application will help

to automate payroll system of an organization. Multiple authorized users will be able to login and logout from a web browser. Login checks (username, password) are controlled by administrator. Administrator will have total web based control to completely customize the payroll system. HR of the company will be able to authenticate new employees, update existing employees pay, view reports. The system is user friendly. The application is equipped with tools for updating salary records, tax calculation, add new allowances, leave appraisal or request deduction and savings and many other features that are easy to be operated by users. The prototype payroll system using fingerprint and face detection is complete in itself and ready to be implemented but changes and growth in requirements will be a reality on every software projects there is need to timely update them.

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