



Employee Management System at Municipal Corporation, Hinganghat

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ABSTRACT:

The aim of this system is to handle the database administration in municipal corporations. This report describes the development of two applications (Client & Server) and a database. The server application will perform the link function between the client and the database source. We integrate the data from all departments. Employee Information Management System provides a simple interface for maintenance of employee information. The creation and management of accurate, up-to-date information regarding employees is taken care. Employee information system deals with all kind of employee details, service related record, leave record, salary statement, attendance maintaining record and other resource related details too. It tracks all the details of an employee from the day one to the end of the service which can be used for all reporting purpose, tracking of attendance, progress in the service, completed service, years, task or any other assignment details embedded in the employee's website.

Keyword: Database; Client; Server.

INTRODUCTION

Municipal Corporation has offered us with an opportunity to make an application for generating their service record database, salary sheet and leave record. Our system will be based on java to integrate database in encrypted format. Being a government firm data is of at most importance, high level of encryption must be enforced. The design and implementation of a comprehensive employees information system and user interface is to replace the current paper records. HOD is able to directly access all aspects of an employee. The system utilizes user authentication, displaying only information necessary for an individual's duties. Additionally, each sub-system has authentication allowing authorized users to create or update information in that subsystem. All data is thoroughly reviewed and validated on the server before actual record alteration occurs. In addition to a staff user interface, the system

plans for employee user interface, allowing users to access information and submit requests online thus reducing processing time. All data is stored securely on SQL servers managed by the department administrator and ensures highest possible level of security. Previously, the department relied heavily on paper records for this initiative. While paper records are a traditional way of managing employee data there are several drawbacks to this method. It takes a very long time to convey the information to the employee.

PROBLEM STATEMENT

- Municipal Corporation holds a separate department for maintaining the records of employee on paper. As we are moving



towards eco friendly Earth concept, we need to reduce use of paper.

- Also attendance system is on paper and fake attendance is also a big serious issue.
- Searching for particular information of a person, we would have to go through lot of paper work.
- There is no centralized depositor system for the database storage of entire Municipal Corporation of Hinganghat.

OBJECTIVES

- To maintain employee database who are working with Municipal Corporation.
- To maintain service book record of employee which include date of joining grade of council, division, department, etc.
- To maintain daily allowance, grade pay travelling allowance, Provident funds, other allowances, etc.
- To maintain leave record of an employee in following category's like Conditional leaves, medical emergency leaves.
- To Increase the efficiency of Municipal Corporation database record management.
- To decrease time required to access and deliver Employee records.
- To make the system more secured.

OVERVIEW

A large amount of data stored in the system is not easy task. There are number of organization that require to store and manage that data properly for example: College organization, Railway organization, hospital organization etc. In the any management system we can manage or stored data according to our need. Suppose we have to

create management system for salary for this we require detail in brief to arrange data accurately like, employee list to be maintained having id, name, designation, experience. Salary details having employee id, current salary, PF deduction or any other deduction and net salary to be given and also maintain details of total savings of employee salary increment to be given by next year if any depending upon constraints deduction in monthly salary, work and amount to be deducted.

In our project also require to store data of all working employee like employee name, salary, attendance, leaves, allowance etc. They want to do all work fast and easily accessible. The purpose of developing this software project is to fully automate salary system for an organization Hinganghat municipal corporation. This software is capable of calculating monthly salaries, tax and social security of employees of that organization.

IMPLEMENTATION METHOD

Our system consists of client and server application in which database management plays an important role description of our system is as follow:

- Primarily all the employee data will be stored on client system. After a predefined interval of time all the database of client will be duplicated on server system.
- HOD of a particular department would be able to search for any information directly required on server system.
- Predefined algorithm for searching and encryption has been used in our system.
- All the data so stored is encrypted whether it is a client system or server.



- v. Searching will depend on the authorization of the admin or the HOD.
- vi. Attendance is also recorded on our system, which will be used to generate our salary at the end of the month.

ARCHITECTURE

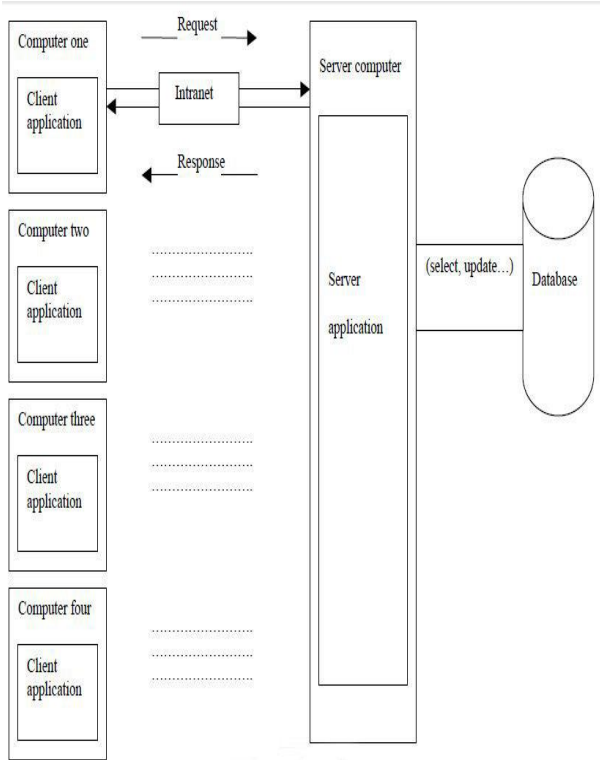


Fig. 1. Architecture of the system
Architecture of ‘Employee Utility Management System’ is as shown above in figure.

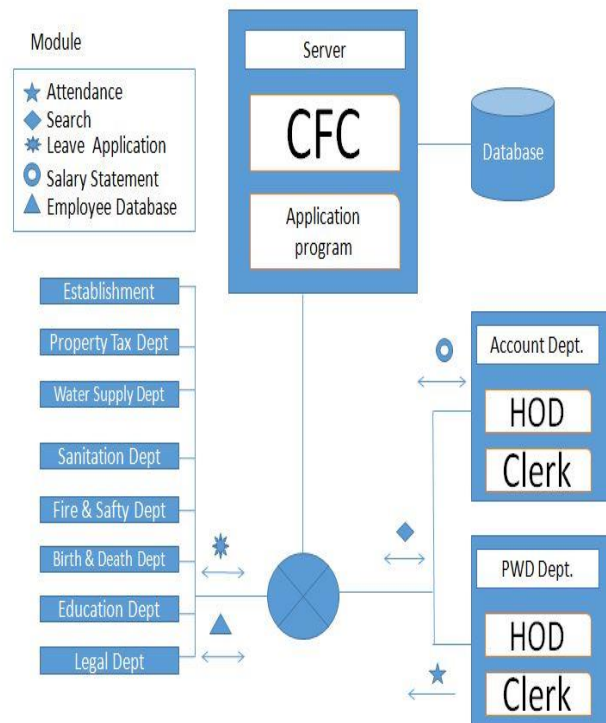


Fig. 2. Architecture along with dataflow
There are 11 departments in Municipal Corporation of Hinganghat. Each department has its own functionality indulged. Every department does its own work independently. Under a huge umbrella, every department functions effectively. There are 520 employees currently working in MCH (Municipal Corporation Hinganghat). Every department has its own HOD (Head of Department), who looks after every activity of the department. Every department in MCH is connected to a parent department i.e. the CFC (Centralized facility Center) which looks after every other department and the database. The CFC department is under the ADMIN of the entire system. In above architecture, data flow is also shown. The direction of arrow shows the flow of data. Operations are performed on the basis of requirements.



Modules or activity or events used in the above architecture are:

- Attendance.
- Search.
- Leave application.
- Salary statement.
- Employee database.

MODULES

Module 1: Registration

Registration of new employee can be performed on the client (clerk) and database would be updated on the server machine. At any instance editing of new employee detail would be done only if HOD authorizes. At the time of registration, clerk will have to feed all the details of the new employee into the database. This data will be updated at the centralized level i.e. the main server (CFC department).

Input fields are

1. Division
2. District
3. Name of Municipal Council
4. Class of Council
5. Name of Employee
(State/Municipal/Contract Basis)
6. Date of Birth of Employee (State/
Municipal/ Contract Basis)
7. Type (State Cadre/ Municipal Cadre/
Contract Basis/ Daily Wages)
8. Category of Employee (SC/ST/ VJNT-
A/VJNT-B/VJNT-C/VJNT-D/SBC/ OBC/
Open)
9. Does Employee Handicapped Yes/No
10. When Directly Recruited in State
Municipal Cadre

11. When Transferred/Required in this Council
12. From Which Municipal Council he is Transferred to this council
13. Existing Pay Scale of State/ Municipal Employee
14. Existing Grade Pay of State/ Municipal Employee
15. Gross Salary Drawn on 1st January 2015 by State/ Municipal Employee
16. Date of Retirement of State/ Municipal Employee
17. If from Municipal Cadre Please Mention Post Held by Employee
18. Date of Holding This Post
19. Qualification of State/ Municipal Employee
20. Honorarium/ Minimum Wages to Contract/ Daily Wage Basis Employee Per Month
21. Gross Salary Drawn on 1st January 2015 by Employee State/ Municipal Cadre/Daily Wages
22. Job Description of Contractual Employee

Module 2: Leave Records Maintenance

If an employee would need a leave he/she would have to fill a form for to apply for a leave. There are 31 leaves available for government employee per year. If leave exceed above the limit salary will be deducted.

Following types of leaves are allotted by government employee:

1. Sick Leave/Medical Leave:
If an employee is suffering because of an illness or disease he/she is allowed to take



leave(s) and this leaves will be payable by the municipal corporation.

2. Casual Leave:

Casual Leaves (CL) are granted for certain unforeseen situation or were you are requiring going for one or two days leaves to attend to personal matters and not for vacation.

3. Full day paid leaves:

Full day paid leaves includes leaves those are due to medical unfitness. There are 15 medical leaves.

4. Half day paid leaves:

This kind of leaves are calculated as a half working day for e.g. if an employee wasn't able to attend the first half day he/she can at least attend second half if wanted.

The above leaves are calculated together and on the basis of rules which are defined earlier, information is stored in database. This leave information is again used for calculation of the salary in the next module.

Module 3: Salary Sheet Generation

There are two types of employee, permanent and contract basis. Contract basis worker are paid depending upon daily wages and number of days work for a month. Permanent employees are paid according to daily allowances plus other allowances and PF (provident fund) is deducted.

Amount paid to an employee:

1. Substantives pay (personal pay or special pay, if any should also be shown in this column as a separate entry below substantive pay): This is the fixed amount

which is allotted for an employee by the office. The pay excluding the other allowances.

2. Officiating pay (107% DA): Officiating pay are paid to an employee who is officiating rest of employees i.e. head of department.
3. H. R. A. (10%): House rent allowance if an employee is lining in a rented house, rent is paid by the government.
4. Vehicle allowance: If an employee owns a vehicle he/she would get the petrol allowances for the entire month.
5. Total: This is an intermediate total which is the sum of Substantives pay, Officiating pay, H. R. A., Vehicle allowance.
6. LIC: Life insurance corporation group policy includes few policies which are compulsory for the government employee.
7. Income tax: Income tax is calculated according to the entire package paid to an employee throughout the year. The income tax for the year is around 6 to 10% depending upon type of institutional body.
8. Provident fund subscription: Provident fund is deducted from this salary every month and is stored till the date of retirement.
9. Net amount payable: Net amount paid is the result of addition of all the allowances minus provident fund.

Module 4: Attendance

Attendance of every employee is record with the help of unique user name and password provided to them at the time of registrations. Every day employees would have to login to mark their



attendance at client machine (clerk). If an employee attends the office after the lunch half day will be consider and vice versa this half day will be consider as a half pay salary.

Biometric systems can be used in two different modes. Identity verification occurs when the user claims to be already enrolled in the system (presents an ID card or login name); in this case the verification biometric data obtained from the user is compared to the user's data already stored in the database. Identification (also called search) identification occurs when the identity of the user is a priori unknown. In this case the user's biometric data is matched against all the records in the database as the user can be anywhere in the database or he/she actually does not have to be there at all.

CONCLUSION

The application development is not completed yet but once it would be finish, it would serve to reduce the use of paper work, higher authority would easily be able to monitor the employees, Data security would be increase & Transparency of employee service record would be attained. Leave record management placed and important role in generating the salary of an employee. This salary is to be accurate in order to maintain the government's funds. Attendance of an employee can be monitored at a centralize level.

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