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APPLICATION OF DATA MINING FOR DISTRIBUTED ENTERPRISES RESOURCE MANAGEMENT SYSTEM

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Abstract - *Payroll is an important operation for every organization to pay employee correctly their salary emolument on time. For a big organization, the taking control employees pay calculation is quite daunting. This computer based payroll system is capable of keeping a record of employee data including their pay With distributed system, allowance, deduction and calculating gross salary so that fresh definition are reflected from the month onwards. This system provide multiple user data access. Which user walks throw the entire process as per right allocated from adding new employee to generate pay slips with clear step by instruction, Furthermore the system is flexible to implement changes in pay scales. This payroll system can solve much problem face by the exiting payroll system, for example the calculation for the salary will automatic calculate by the system taking all deduction in consideration. It can take improve time efficiency and provide user friendly environment to the user and also improves administrator work performance. Furthermore provide shorter time for information retrieval and easier way to maintain details. From the case study reviews some of the problem occurs in the current system. For example, the whole procedure involving delivering employees pay is very tedious, time consuming and frequent verification is required to avoid the risk of salary calculation error. This system has been developing using C#, JavaScript, HTML, CSS and database has been designed using MYSQL.*

***Key Words*: Distributed Payroll System, C#, JavaScript, Hyper Text Markup Language, Cascading Style Sheet, MySQL.**

1. INTRODUCTION

In an organization, there are many departments and each department has a payroll section to manage its payroll activities. The software plays an important role for the company in getting relieve of the work burden. Many small organizations prefer the payroll software for storing all information about its employee. The software provides the company the chock- whole records of the employee salaries, and they also reduce the national tax income, and the employee easily checks their payroll and employee easily print their payroll slips from there. The system developed for the organization, aims at providing all the features that the organization has asked for. The proposed system is aimed at solving all the problems of the current system as well as enhancing the experience of the clients while using this system.

Each employee's Net pay is calculated by his allowances and deductions mentioned according to the organization rules. The individual pay slips are printed out as a receipt if employee need 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 distributed in design. Distributed enterprise application is defined as an application with software components residing on more than one computer in a network.

2. Literature Survey

DESIGNING:

• This software is used for designing the product along with HTML, CSS and visual Studio C#.

• We are making a Responsive design for the application which can work on any platform according to the user's need.

DEVELOPING:

• For programming Backend code we are using C# and ASP.net.

• Database connectivity is from Enterprise Library and the database is SQL Server 2012.

1. .NET 4.5

.NET Framework 4.5 was released on 15 August 2012;

Version: The .NET Framework 4.5 is only supported on Windows 7, 8 later.

2. SQL Database 2012

SQL is a standard language for store and retrieve databases. Microsoft SQL Server is a relational database system developed by Microsoft whose first priority is to store and retrieve data as requested by other software applications.

3. Software Development Life Cycle for Payroll System

Software Development Life Cycle (SDLC) is a system that describes the activities performed at each stage of a software development project. This software starts with the analyzing system, designing, and implementation and continues through the maintenance and disposal of the system. The steps given below describe life cycle of payroll system:

1) System Analysis: Analysis involves a detailed study of the current working system, leading to specifications of a new computer based payroll system. During analysis of software, data and information are collected on the available files, decision points and transactions handled by the present system.

System Analysis is also includes sub-dividing of hardly process involving the entire system, identification of data manual and store processes.

2) Existing system: In order to implement their design of pay slips and other related information to project development, which include customer requirements. The lack of consistency in pay slips result in both loss of work as well as benefit of money and time. And With the total automation of payroll Management System, the manual storage dependency is minimized to large amount. Present day organizations, especially large organization house employees in large numbers.

3) Proposed System: The proposed system is a distributed system and base of this system is a database, which stores all the information related personnel, allowances, educations, taxes, savings and net pay. This system will stay up to date with pay tax filings. This includes calculating allowances, taxes and other deductions, printing individual pay slips and deduction vouchers.

The features of the system are-

1. It maintains the payrolls as well as employee Information.
2. The system should also be easy to access, accurate and consistent results can be obtained in the form of documents whenever the user needs.
3. System should inherit all the properties of high security, fast recovery, robustness, flexibility, reliability, scalability.

4. System Design and Architecture

This system will help to login to system and perform their task and pay as they need. The system would allow the administrators to make the settings that are relevant to their company. The system will capture the details of the employee's relevant to their company. According to the details the salary of an employee would be calculated and the salary slip would be generated. The system also provides several other reports.

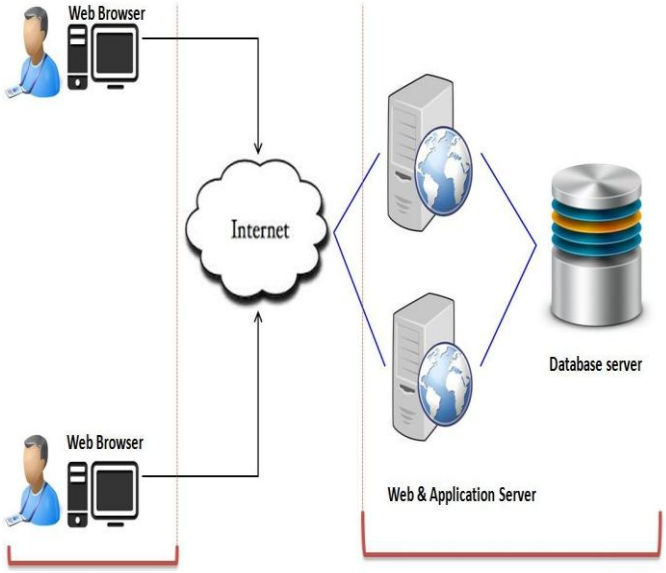

Fig: Architecture

Important to any organization is the security of company and employee information. Our solutions are delivered through a certified secure online environment. Security of payroll data And records are essential to ensure confidentiality and must be given a high priority at all times by payroll processing and management staff. The payroll professional must make sure that the computer records are secured the paper files are still confidential and that the staff is safe before turning out that light at night or turning off the computers. In this paper, there is Strong security mechanism and various added features that making this system a complete processing package.

In this payroll application administrator provide a user-name and password for each employee with his designation of his own by accessing through the secure login. The other one is administrator provides different user profile with secure login and password depending on their designation. This means that only authorized user can access information and no chance of miss use of data.

5. OVERVIEW OF THE SYSTEM

The payroll system developed for all type of organizations for paying as they use and it aims at providing all the features with the intention of the organization has required for. The proposed system is aimed at solving all the problems of the current system manual and standalone system as well as enhancing the experience of the clients while using this system.

The system is also providing an interactive interface that makes it easy for the user of the organization to enter edit and update data relevant to the current task they are set

with. The system is also reducing the burden of documentation so that they can give attention to on developing other aspects of their organization. This designed system is obtainable to be less time consuming. So that the companies that aspiration to automate their payroll can make use of this software by paying for they use.

While using of payroll management system on the distributed computing environment should follow some systematic rules and regulations. The provider will take care of the software, which they keeping as service to end users. The service providers should have their own firewall to achieve security from end users. The end user supposed to use the software which is available to them. They also should have restricted access of the service provider's details and infrastructure details etc.

The proposed system will perform the following functions and flow is as shown in the below fig.

- It will use the concept of cloud computing.
- It will be used by several companies at the same time.
- It will keep the record of the employees.
- It will process the salary of the employee. o It will calculate the Professional Tax of the employees for whom it is applicable.
- It will calculate the Provident Fund of the employee.
- It will calculate the ESIC of the employees for whom it is applicable.
- It will fetch, save and add attendance for the employees.
- It will generate the salary slip of the employee.

6. Future Scope

There is always room for improvement, and the software we created can also be improved. This is especially because we created it within a limited time. With in more time, the software can be improved to include security. This would be the first step in making this software network-enabled, eventually web-enabled. This is our original after thought to programming the software, and we use XML. In addition, the software can also be improved in terms of the calculations and also more flexibility in the rates used in calculations per employee.

7. CONCLUSION

This Application will help to automate payroll system of an organization. Many authorized employee will be able to login from a web browser. Login checks (username, password) are handled by administrator. Administrator will have total web based control or authority to completely change the system. Administrator of the organization will be able to authenticate new employees, update existing employees pay, and view reports. The system is user friendly. Whenever there is an error in inserting data, it quickly shows an error. This system is prepare with tools for updating salary records, National tax calculation, add new allowances, leave approval or request Deduction and savings and many other features those are easy to be operated by users. The system has provided for full salary information including all payroll elements and changes that have been implemented. The prototype computer based payroll system is complete in it and ready to be implemented and growth in there requirements will be a reality on every software need to update the same applies to this payroll system.

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