

# AUTOMATED ACCESS COMMUNICATION SYSTEM

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## **ABSTRACT**

*Automated Access Communication System is concerned with the development of a system that is simple and easy to use yet a powerful web application for sharing, managing and controlling enterprise documents on intranet/internet in a secure manner within the particular organization. It enables the communication between all the departments of the company through online. The development of this new system contains the following activities, which try to automate the entire process keeping in the view of database integration approach.*

## **KEYWORDS**

*ERP; manage; secure; enterprises; department.*

## **1. INTRODUCTION**

The development of this new system contains the following activities, which try to automate the entire process keeping in the view of database integration approach. User friendliness is provided in the application with various controls provided by system Rice User Interface. The system makes the overall project management much easier and flexible. It can be accessed over the Intranet. The user information can be stored in centralized database which can be maintained by the system. This can give the good security for user information because data is not in client machine. Authentication is provided for this application only registered parties (Employees of all Departments) access. There is no risk of data management at any level while the project development is under process. With the introduction of new technologies and new web architectures, ERP has evolved into web-enabled ERP to target the greater customer base and efficient business strategies. With the introduction of new technologies and new web architectures, ERP has evolved into web-enabled ERP to target the greater customer base and efficient business strategies. Business located over various region can take advantage of central consolidation and better management reporting and business management. ERP applications also means that successful companies tend to rationalize business processes to achieve production, supply, sell the business processes in a straight line passing from the business-to-market, enhance the responsiveness and improve customer satisfaction. The import of ERP system has a rather long history with the dynamic progress of the companies themselves. After the determination of the type of ERP system, the interior structure of the company will be stable in a long time. However, because of the differences in children companies, in the top view of the header, it will be full of variances in the configurations of ERP in the children companies. With the latest technological trend of big data analytics and cloud computing, ERP has evolved into cloud-enabled ERP. Cloud service providers in conjunction with ERP vendors can provide easy, faster

and flexible modular pay-asyou-go services to accommodate business functionalities and avoid the many possible challenges and costly implications of establishing and implementing an on-premise ERP internally, Cloud ERP can further be evolved into Edge ERP. Cloud computing technology with its extension to edge computing has the potential to offer virtually unlimited computing and processing power. One such extension can be utilized to eliminate the need to physically setup a data center or a distributed server locally. A more trending area of study is extending cloud services towards outer edge network, ERP solutions that currently exist on cloud computing can be offset from the center of the cloud towards the edge network using edge computing technology.

The second section discuss about the literature review and continued by problem statements. The fourth section gives the experiments and results followed by the conclusion and future enhancement

## 2. LITERATURE SURVEY

ERP has been an important component in the process of enterprise information. Especially, for the large companies, ERP is the basis of the information architecture. There are adequate literatures on ERP, just like the expanding scale of ERP in industries. For large companies, ERP systems are deployed in clusters as distributed system, which is the new character of information system [1]. Corresponding to the hierarchy structure of company organizations, ERP systems are also deployed in complex structure with hierarchy levels. In the organization, the integration of ERP systems has been a hot research field, and has promoted the additional value of ERP systems. However, facing the complex of distributed architecture, the traditional static deployment and configuration of ERP will encounter the difficulty of increasing scale of distributed nodes. It will be an important research topic in the next generation of ERP systems to utilize the experiences of ERP importing and running in the organization or wider scope [2]. From 1990s, organizations have moved from standalone business information systems applications to integrated and flexible enterprise wide information systems and the rise of Enterprise resource planning (hereinafter, ERP) systems has been the major event in the software industry. ERP systems present a holistic view of the business from single information and IT architecture. But ERP systems are comprehensive, huge and complex systems and warrant careful planning and execution not ensure the successful implementation. [3]. Business Process Management (hereinafter, BPM) includes methods, techniques, and tools to support the design, enactment, management, and analysis of operational business processes. It can be considered as an extension of classical Workflow Management systems and approaches. [4] As the business environment has changed over the years from traditional business to e-business, and to the greater ecommerce business, so has the MRP architecture, evolved into an automated and easily manageable process flow [5]. With the flexibility and the advantages of Internet, businesses needed to grow with the efficiency and requirements of customer demands and satisfaction. Business powerhouses then integrated various functional separate in-house tools into a single application such that the business could interlink each inter-dependent processes and achieve a coherent form of a single centralized application. This is where Enterprise Resource Planning (ERP) came into existence, which combines the manufacturing processes, human resource, assets, financials, procurement logistics and administration [5]. ERP implementation process, critical success factors for the assessment from the date of management[6], high-level support, training, management reform, partners and management processes, and other aspects of the restructuring, which also includes specific factors for each of the measure, For example[7], project management of the resources there to measure, team, skills and management of high-level support for its aims, to participate in activities such as the index. Training costs and time to reform the management of the exchange, hope, resistance and visibility, and so on, the partners have a role in management, price and experience, the restructuring process, there are cost and time. The import of ERP system has a rather long history with the dynamic progress of the companies themselves. After the determination of the type of ERP system, the interior structure of the company will be stable in a long time. However, because of the differences in children

companies, in the top view of the header, it will be full of variances in the configurations of ERP in the children companies. In another aspect, for the dynamic market and the managerial objectives, the ERP systems will be configured in a dynamic form. In order to improve the ERP system for each children company by the status of itself, the experiences should be shared, at least in the scope of the entire company. It will help to reduce the maintenance cost and promote the broadcasting of knowledge in the company.

### 3. PROBLEM STATEMENT

#### Existing System

The existing system is required to provide a useable and well managed interface for users (Employees), and administrator users to view and manipulate the data for which it is responsible.

For each it must allow the rapid formulation and resolution of queries related to the user information.in There is also a requirement for the system to interact with other information sources as required, both as an information source and as a consumer of related information during the resolution of queries.

#### Proposed system

The development of this new system contains the following activities, which try to automate the entire process keeping in the view of database integration approach. User friendliness is provided in the application with various controls provided by system Rice User Interface.The system makes the overall project management much easier and flexible. It can be accessed over the Intranet. The user information can be stored in centralized database which can be maintained by the system.

#### Architecture Diagram

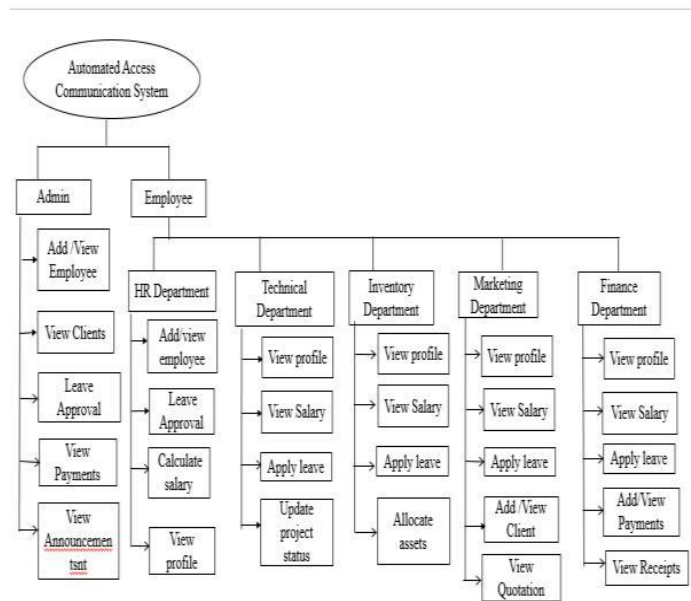


Figure 1: Architecture Diagram

## **4. EXPERIMENT AND RESULT**

### **Modules**

#### **Admin**

The admin enables the user id and password for all the employees with respective departments. Admin controls all the activities of the employees. Admin could be able to produce the reports as per the requirements of the management.

#### **Employee**

##### **HR Department**

Every employee of the HR Department will be login into this system with userid and password. Entire HR department activities such as Recruitement, Employee Leave Approval, Employee salary calculation will be taken care through this system.

##### **Technical Department**

After the payment confirmation from the customers and clients, the respective project work will be allocated to the technical team along with deadline through this system. Accordingly the respective team goes towards the project completion. After completion of the project the information will be updated so all the other departments and their managers can view the complete data through this system.

##### **Inventory Department**

Every employee of this department will be login into this system with userid and password. The respective department employees will maintain the companies entire assets details such as new purchases of computers, machineries, furniture's. The movements of assests in and out. Allocation of assets to the respective departments and employees as well.

##### **Marketing and Sales Department**

Every employee of this department will be login into this system with userid and password. Every employee can be able to update their client and customer details, quotation and invoice preparation, customer tracking about their payment details etc.

##### **Finance Department**

Every employee of this department will be login into this system with userid and password. Every employee can be able to do all the activities relating their department such as maintaining cash, salary payment and other office expenses.

#### **Database**

MySQL is an open-source relational database management system (RDBMS). MySQL is free and open-source software under the terms of the GNU General Public License, and is also available under a variety of proprietary licenses. MySQL is a fast, easy-to-use RDBMS being used for many small and big

businesses. MySQL is developed, marketed and supported by MySQL AB, which is a Swedish company. MySQL is becoming so popular because of many good reasons.

- MySQL is released under an open-source license. So you have nothing to pay to use it.
- MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.
- MySQL uses a standard form of the well-known SQL data language.
- MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, JAVA, etc.
- MySQL works very quickly and works well even with large data sets.
- MySQL is very friendly to PHP, the most
  - appreciated language for web development.

MySQL supports large databases, up to 50 million rows or more in a table. The default file size limit for a table is 4GB, but you can increase this (if your operating system can handle it) to a theoretical limit of 8 million terabytes (TB).

- MySQL is customizable. The open-source GPL license allows programmers to modify the MySQL software to fit their own specific environments.

## Output Screens

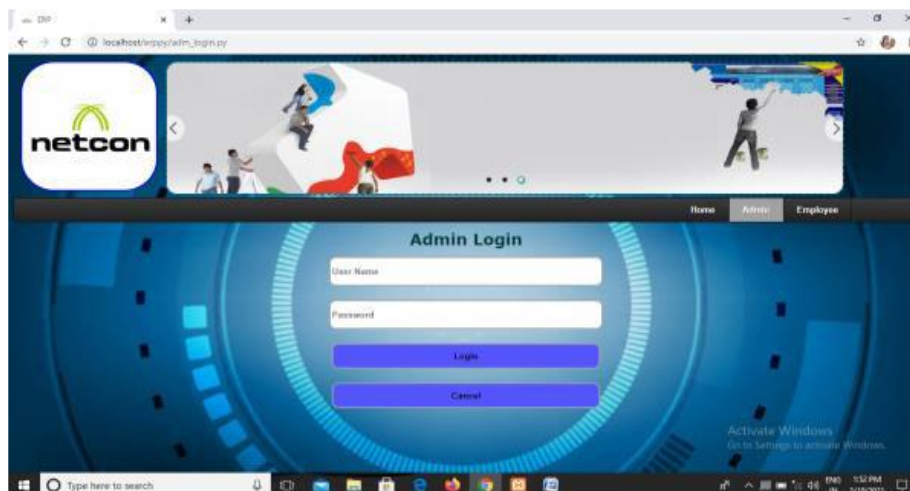


Figure 2: Admin Login

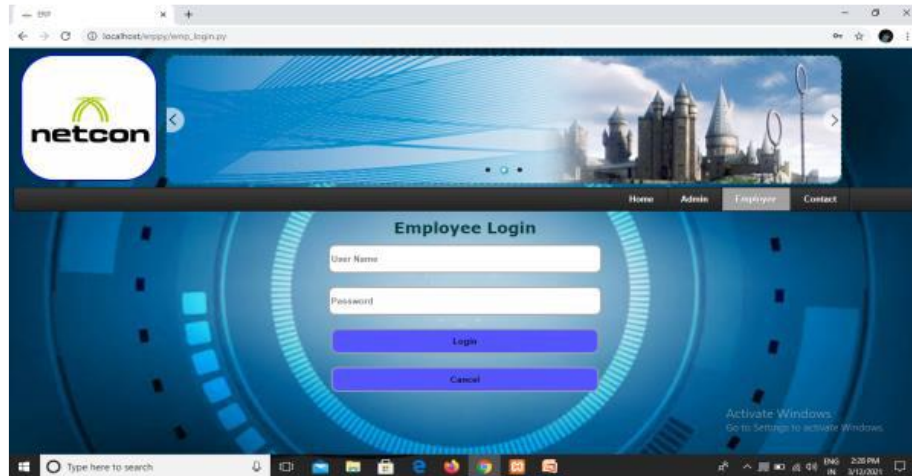


Figure 3: Employee Login

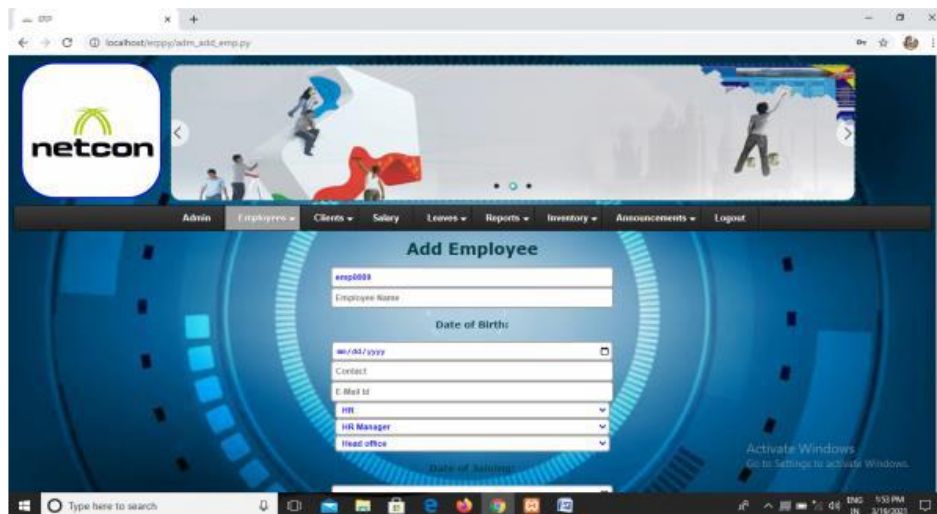


Figure 4: Add Employee

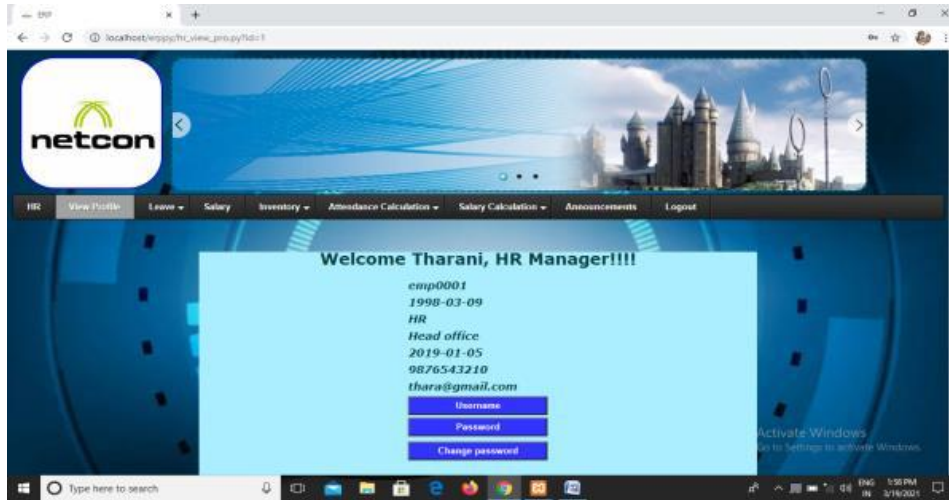
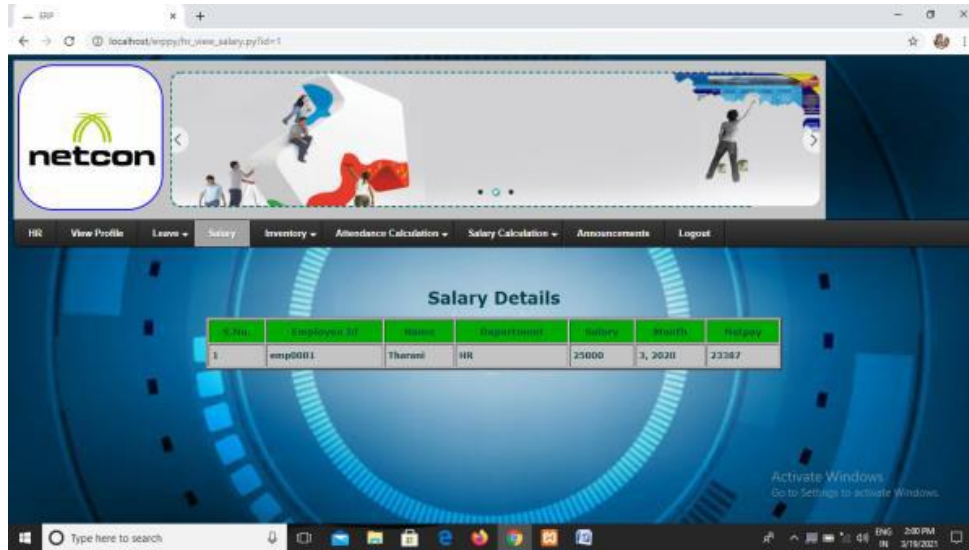


Figure 5: HR Profile



Figure 6: Faculty leave status



The screenshot shows a web browser displaying the Netcon HR system. The page title is "Salary Details". A table lists the salary information for employee emp0001.

S.No	Employee ID	Name	Department	Salary	Month	Netpay
1	emp0001	Tharani	HR	25000	3, 2021	23387

Figure 7: Salary Details



The screenshot shows a web browser displaying the Netcon HR system. The page title is "Salary Calculation". A table lists the salary calculation details for seven employees.

S.No	Employee ID	Name	Department	Designation	Branch	Calculate
1	emp0001	Tharani	HR	HR Manager	Head office	Calculate...
2	emp0002	Gowalya	Marketing	Marketing Manager	Head office	Calculate...
3	emp0003	Sadhasivam	Finance	Finance Manager	Head office	Calculate...
4	emp0004	Huenakshi	Technical	Python Developer	Head office	Calculate...
5	emp0005	Vikash	Inventory	Inventory Manager	Head office	Calculate...
6	emp0006	Kala	HR	HR Manager	Head office	Calculate...
7	emp0007	Subha J	Technical	Python Developer	Head office	Calculate...

Figure 8: Salary Calculation

## PERFORMANCE ANALYSIS

The existing and proposed systems are analysed. The problems can be easily rectified with this concept. Nearly 70% of the performance has been increased.

## 5. CONCLUSION

Automated Access Communication System enables the communication between all the departments in the enterprises. This web application for sharing managing and controlling enterprise documents on internet/intranet.



## 6. FUTURE ENHANCEMENTS

Automated Access Communication System has made enterprises more effective and efficient and has driven businesses to a new level. In future connect many branches of the enterprise. It includes cloud deployment. It is cloud adoption will continue to rise and become generally accepted with the most ERP systems. It reduced costs in capital expenditures and IT resources, the improved maintenance and flexibility.

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