
SITE, VENDOR AND EMPLOYEE MANAGEMENT SYSTEM

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ABSTRACT

Now a days all sectors and firms use web application to maintain the details. It becomes very necessary to have a web application that supports fewer human efforts. The database has come into light with an intention to store large data. Companies are one such place where huge amount of data is generated and processed, this necessity has given us an opportunity to develop the project named 'Site, Vendor and Employee Management System-Web Application'. This application creates an environment which enable a reputed company to manage it's all site located at different geographical areas in India. With facility of this web-based application company can efficiently manage all its resources allocated / deployed to a its particular site inclusive Estimated Expense, the actual charges tracking irrespective of a particular site work is being done by company itself or its vendor. Apart from these also an important module to enable company to manage it's all employees detail including their attendance, leaves, salary, and other details. Web applications use an addition of server-side scripting language (PHP) to handle the storage and retrieval of the information, and client-side scripting language (JavaScript and HTML and SQL) to present the data to the use in the web browser. Considering the safety, as it is a prime concern for any web application, encryption and decryption of the data is performed.

Keywords: Site List, Vendor List, Employee, Attendance Management, Leave Management, Javascript, PHP, SQL, HTML.

I. INTRODUCTION

1.1 PROBLEM STATEMENT

The client for whom "Site, Vendor and Employee Management System" is developed earlier has to really rely on paperwork for its site, vendor, and employee tracking/management. Which involves risk of losing data of tracking for site work progress, resource allocated and more importantly expenses. Paper based record of its employees, their attendance, and their leaves. Which tends to be lost or require manual auditing. Manual handling of employee information poses many challenges. This is evident in procedures such as leave management where an employee is required to fill in a form which may take some weeks or months to be approved. The use of paperwork in handling some of these processes could lead to human error, papers may end up in the wrong hands and not forgetting the fact that this is time consuming.

1.2 OBJECTIVE

The objective of "Site, Vendor and Employee Management System" is designing a scheduling system for a work center. Scheduling is such a tool with which the process of inform activities and notifications will be easy and even online in the organization where it is installed. Web-based system also reduce labour costs because your employees do not waste time installing or maintaining additional update.

1.3 DESCRIPTION OF THE PROJECT

Transmission line "Site, Vendor and Employee Management System" is a web-based software to enable a reputed company to manage it's all site located at different geographical areas in India. With facility of this web-based application company can efficiently manage all its resources allocated / deployed to a its particular site including Estimated expense, the actual expenditure tracking irrespective of a particular site work is being done by company itself or its vendor. Apart from these also an important modulus to enable company to manage it's all employees detail including their attendance, leaves, salary, and other details.

II. LITERATURE SURVEY

2.1 EXISTING SYSTEM

The client for whom "Site, Vendor and Employee Management System" is developed earlier has to really rely on paperwork for its site, vendor, and employee tracking/management. Which involves risk of losing data of tracking for site work progress, resource allocated and more importantly expenses. Paper based record of its employees, their attendance, and their leaves. Which is tend to be lost or require manual auditing. By Manual and paper-based tracking it is hard to predict required resources for site available resources.

2.2 PROPOSED SYSTEM

With the proposed web-based solution, it will be very convenient and easy to maintain company's site, it's vendor and its employees' details. The very 1st module is dedicated to site management system where company itself can add its details -including location, number of resources employed- like labour, motor vehicle, heavy vehicle such a Crain, JCB, tractor etc. In this module there is initial allocated amount field which will be reflected/adjusted based upon actual expenses. The Second module where company can locate its one of the sites to its another vendor which will have more or less similar facility to indicate its resources and update actual expense to that site with particular details. Except initial estimated expense detail which will be added by company itself. The third and very last module is dedicated to manage company's permanent employee profile, their attendance, leaves, holidays, and their salary pay-out details. By virtue, all these modules a company can manage it site vendor and employees' detail in a very efficient and reliable manner. Can generate reports on very ease. This system requires just internet connectivity and no space in mobile/Laptop to use because it is a web-based application which in fact is website with very easy to use modules and buttons and with different level of access permission.

2.3 FEASIBILITY STUDY

The main objective of the feasibility study is to treat the technical, Operational, logical, and economic feasibility of evolutive the computerized system. All systems are feasible, given unlimited resources and endless time. It is both necessary and smart to evaluate the feasibility of the project at System study phase itself. The feasibility study to be conducted for this project require.

- Technical Feasibility
- Operational Feasibility
- Economic Feasibility
- Logical Feasibility

TECHNICAL FEASIBILITY

Technical feasibility includes Risk Resources availability and technologies. The management provides brand new hardware and software facilities for the successful completion of the projects. With these brand-new hardware and software support the system will perform extremely well. The system is available through Internet.

OPERATIONAL FEASIBILITY

In the existing manual system, it is very difficult to maintain and update large amount of information. The development of the system was begun because of the requirement put forward by the management of the concerned department. This system will handle the request in a good way and make the process easier thus, it is sure that the system developed is operationally feasible.

ECONOMIC FEASIBILITY

In the economic feasibility the development cost of the system is evaluated measuring it against the ultimate benefit derived from the new system. It is got that the benefit, from the new system would be more than the cost and time involved in its development.

LEGAL FEASIBILITY

In the legal feasibility it is essential to check that the software we are going to develop is legally correct which means that the ideas which we have taken for the proposed system will be legally executed or not. So, it is also a most important step in feasibility study.

III. METHODOLOGY

This system works below prototype model. The prototype model is a System Development Method (SDM) where a prototype which approximates a final system or product is built, evaluated, and tested for any errors and then re-programmed as required until an acceptable prototype is finally achieved, from which the complete final system or product can be develop. The basic idea in this adopted model is that instead of freezing the requirements prior to a design, or initializing the coding, a throw-away prototype is built to understand the necessary requirements. This prototype is developed based on the currently known and available requirements as shown in figure 1.

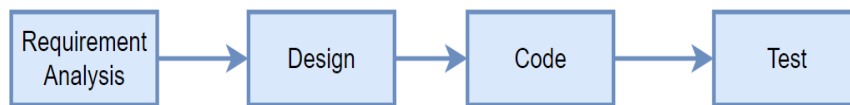


Figure 1: Block diagram explaining the steps required in the development of the system.

Prototype model is used when the required system needs to have an effective interaction with the end users. Typically, online system web interface have a very large amount of interaction with end users because of which they are best suited for prototype model. By using this prototype, the client can find an actual feel of the system as the interactions with prototype can enable the client to have superior understanding of the requirements of the desired system. Prototyping is an attractive and innovative idea for analyzing difficulty and large systems for which there is no manual process or existing system to help in representative the requirements. The sequential phases in Prototype model is as shown in figure 2.

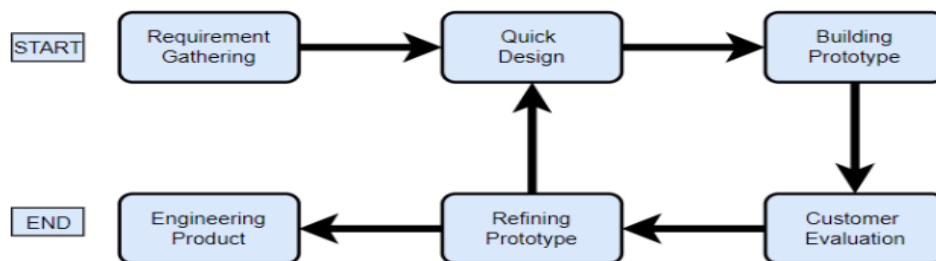


Figure 2: Block diagram showing the sequential phases in prototype mod

3.1 REQUIREMENTS GATHERING AND ANALYSIS

A prototype model starts with requirements' analysis and the requirements of the system are defined in detail. The user is interviewed in order to aware the requirement of the system. Here the users are company administrator, vendor and employee. The vendor and employee are interviewed in order to gather the company requirements. Following are the requirements given by the administrator: Work Site Management, Attendance Sheet, Salary, and Attachment of leave application. Also, the requirements mentioned by the employees are employee designation, employee details, Salary such as company's works attended, Employee development programs (EDP) attended, posting journals and conference paper to the administrator with an option to upload necessary documents.

3.2 QUICK DESIGN

When requirements are known, an elementary design or a quick design for the system is created for testing. It is not a detailed design and includes only the main aspects of the system, which gives an idea of the system to the user. A quick design helps in developing the prototype as shown in figure 3.

3.3 BUILD PROTOTYPE

Information collected from the preliminary or fast design is modified to form the first sample prototype, which represents the working model of the required system. Detailed design is formed from the fast design in which each step is carefully understood and implemented as per the requirements of the user (administrator). The administrator login is created in this design as the first step and later the modules are attached along with username and password. In the next step, the sidebar is created which includes the fields identified by the user. Implementation of old step leads to the design of page which has the details of the fields.

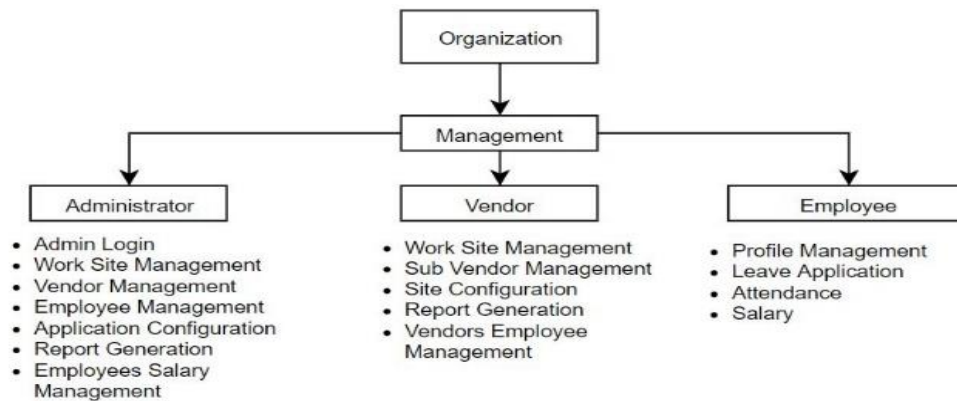


Figure 3: Flowchart explaining the quick design of the prototype

3.4 USER EVALUATION

Next, the proposed system is presented to the end user for entire evaluation of the prototype to analyze and recognize its powers and weaknesses such as what is to be attached or removed to make the system more effective. Comments and proposal are together from the end users and provided to the developer for further modification of the system.

3.5 REFINING PROTOTYPE

Once the user evaluates the prototype and if he/she is not satisfied, the current prototype is purified according to the requirements. That is, a new prototype is developed with additional intimation and modification provided by the user. The new prototype is evaluated just like a former prototype. This process continues until the whole requirement specified by the user is met. Once the user is acquiescent with the developed prototype and if he finds no error, a system is developed on the basis of the final prototype.

3.6 ENGINEER PRODUCT

Once time the requirements given by the user are completely satisfied, the user then accepts the last prototype. The final system is evaluated thoroughly by the developer followed by the routine maintenance on regular basis for preventing large-scale failures and minimizing period.

The advantages of prototype model are:

- 1) Users are actively involved within the development.
- 2) Diminished time and price.
- 3) The prototyping model helps to clarify needs which are not understandable, hence reducing ambiguity and rising communication between the developer and the users.
- 4) The user can get a correct feel of the functionality of the software and he can suggest the changes and modification.
- 5) Since, during this methodology a working model of the system is provided, the users get a better understanding of the system being developed.
- 6) Errors can be find out much earlier.
- 7) Missing functionality may be identified easily.
- 8) Confusing or tough functions may be identified.

IV. RESULTS AND DISCUSSION

When a user opens site, vendor and employee management system he/she gets to the login page. This page requires the user to enter the username which is their register number and the password provided through the admin. When both the username and the password match with that given through the admin, he/she is logged in.

4.1 ADMIN PAGE

When the user is logged-in as an admin, the admin page is displayed where the admin can see the sidebar at the leftmost corner of the page as shown below. The sidebar includes the fields like Manage Site, User Rights,

configuration, manage vendors and manage employees, and report generation. Under the circular, admin can manage the site and view them whenever required. The employee's field leads to the employee page where the admin can view employee and their details. Admin Home page is as shown in figure 4.

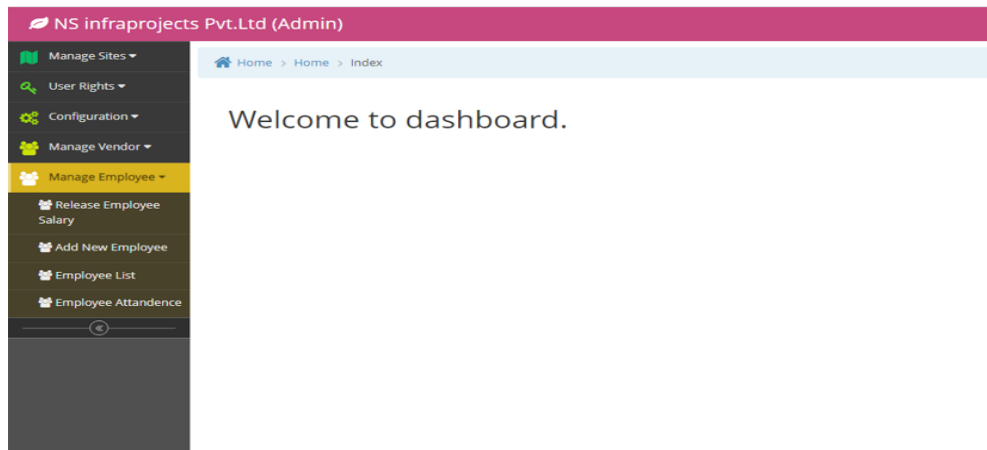


Figure 4: Admin Home page

4.2 MANAGE SITE

The site management can add new site in which may be company name, company address, work order number, work name, workplace, client GSTIN, work order value, project start date and project completion date, and view the sites list. Site page is shown in figure 5.

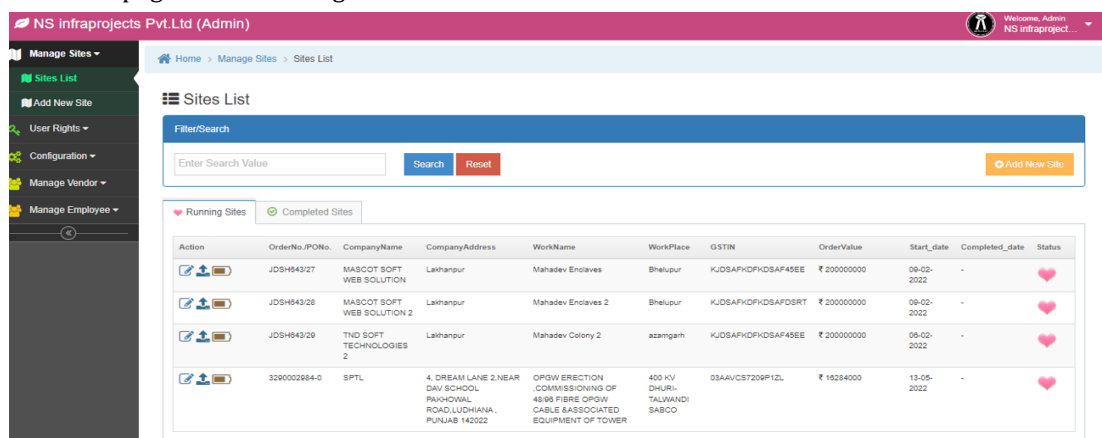


Figure 5.1: Sites list

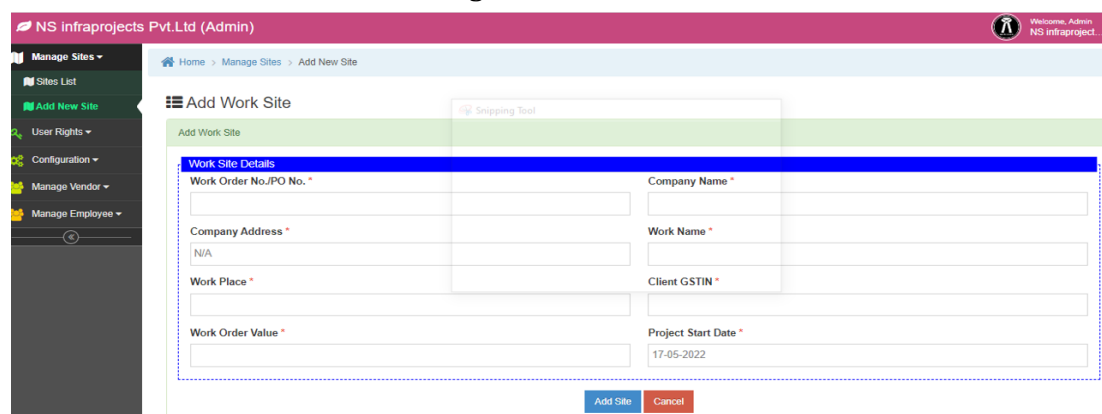


Figure 5.2: Add New Site

4.3 VENDOR LOGIN

A vendor can login with username and password specified by the administrator. Furthermore, employees are added along with their details. Vendor can view the vendor list and add vendor in which may be name of

vendor, company name, GSTIN number, pan number, contact number, email, address, state, city and Pin Code. Vendor page is shown in figure 6.

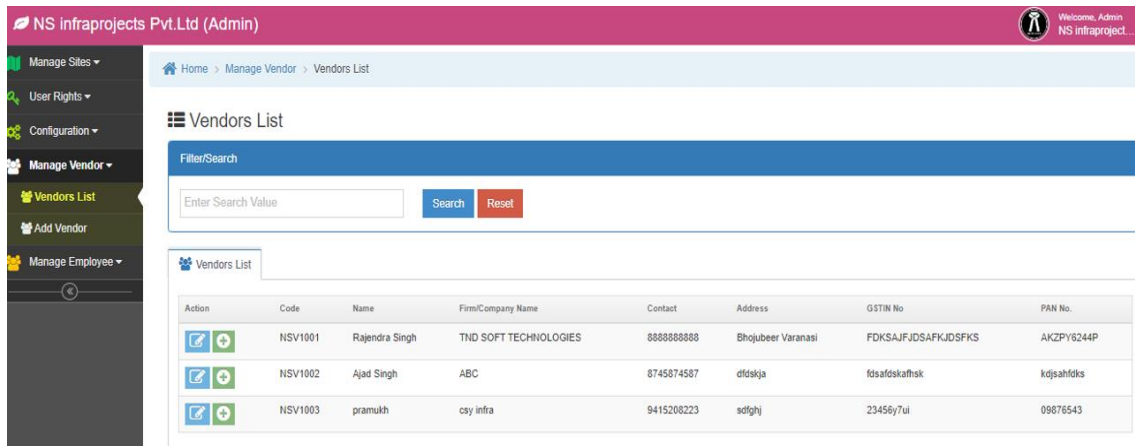


Figure 6.1: Vendor List

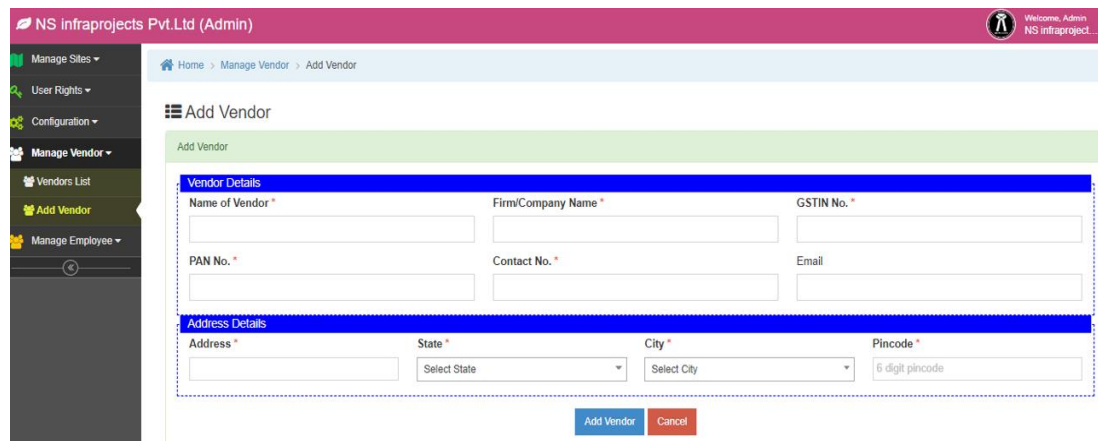


Figure 6.2: Add Vendor

4.4 EMPLOYEE LOGIN

An employees can login with username and password specified by the administrator. Furthermore, employees can create and update their profile when required. After login, employees can see their profile, attendance report, leave application and their salary etc. Employees can find some notice in which can be assignment or any other notice that given by company. Salary can be updated and can be viewed by the admin and the employees. Company can increase salary (company’s works attended, gain more qualification, and take more responsibilities) administrator. Employee page is shown in figure 7.

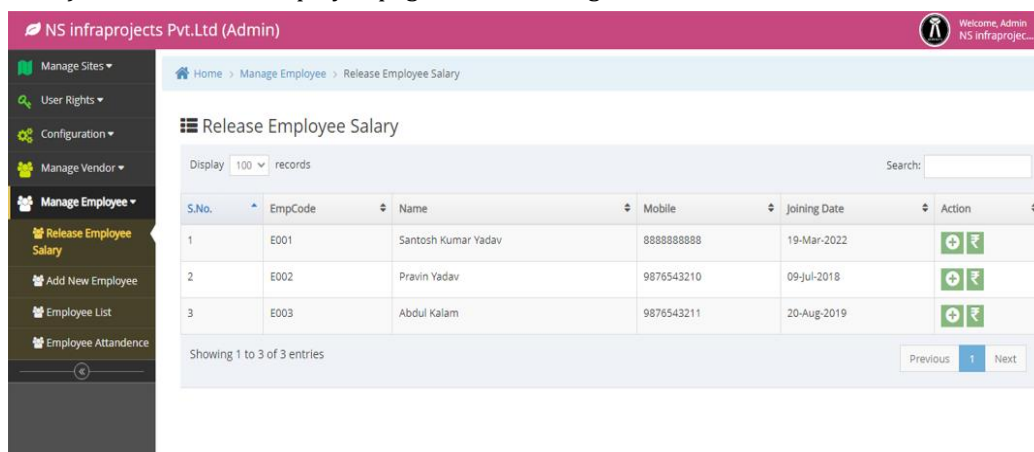
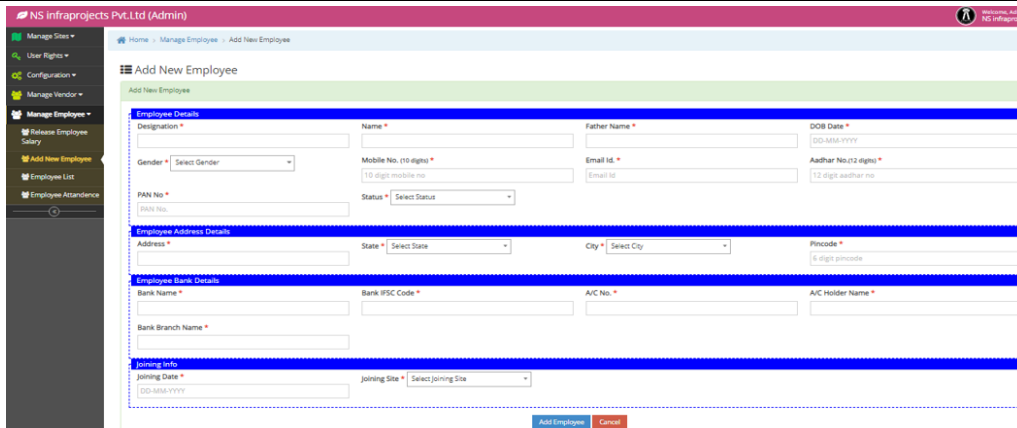


Figure 7.1: Release Employee Salary



Employee Details

Designation * Name * Father Name * DOB Date *

Gender * Mobile No. (10 digits) * Email Id. * Aadhar No.(12 digits) *

PAN No. * Status * Email Id.

Employee Address Details

Address * State * City * Pincode *

Employee Bank Details

Bank Name * Bank IFSC Code * A/C No. * A/C Holder Name *

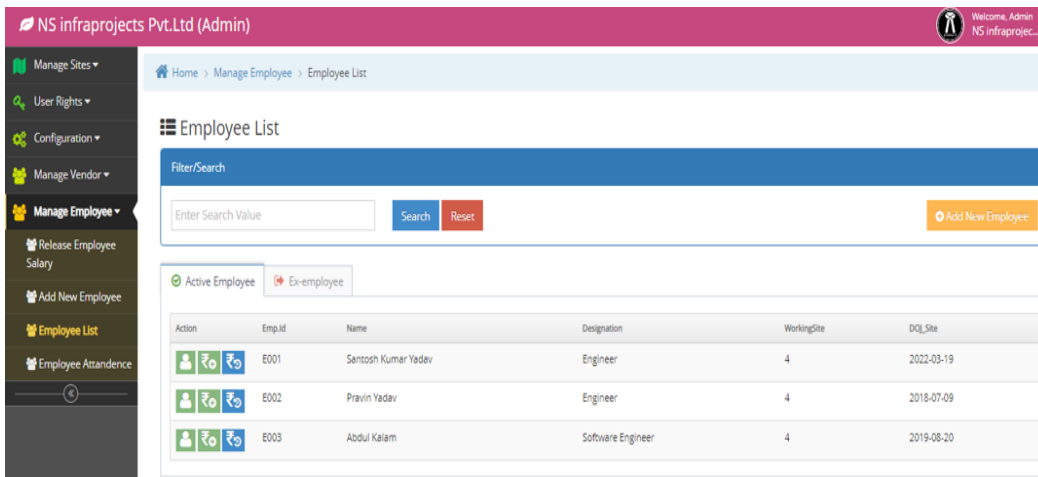
Bank Branch Name *

Joining Info

Joining Date * Joining Site *

Buttons: Add Employee, Cancel

Figure 7.2: Add New Employee



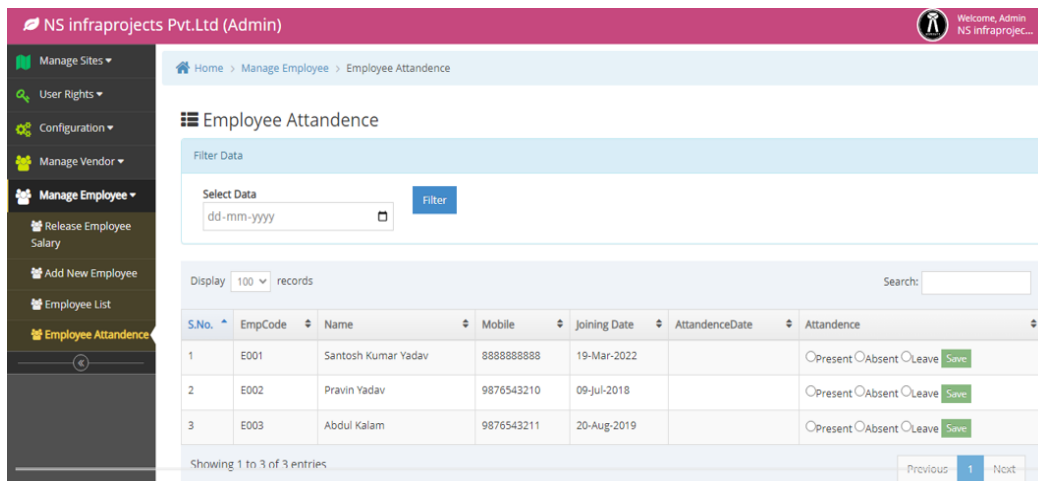
Employee List

Filter/Search: Enter Search Value Search Reset Add New Employee

Active Employee Ex-employee

Action	Emp.Id	Name	Designation	WorkingSite	DOJ_Site
<input type="button"/> <input type="button"/>	E001	Santosh Kumar Yadav	Engineer	4	2022-03-19
<input type="button"/> <input type="button"/>	E002	Pravin Yadav	Engineer	4	2018-07-09
<input type="button"/> <input type="button"/>	E003	Abdul Kalam	Software Engineer	4	2019-08-20

Figure 7.3: Employee List



Employee Attendance

Filter Data: Select Data Filter

Display 100 records Search:

S.No.	EmpCode	Name	Mobile	Joining Date	AttendanceDate	Attendance
1	E001	Santosh Kumar Yadav	8888888888	19-Mar-2022		<input type="radio"/> Present <input type="radio"/> Absent <input type="radio"/> Leave <input type="button"/> Save
2	E002	Pravin Yadav	9876543210	09-Jul-2018		<input type="radio"/> Present <input type="radio"/> Absent <input type="radio"/> Leave <input type="button"/> Save
3	E003	Abdul Kalam	9876543211	20-Aug-2019		<input type="radio"/> Present <input type="radio"/> Absent <input type="radio"/> Leave <input type="button"/> Save

Showing 1 to 3 of 3 entries Previous 1 Next

Figure 7.4: Employee Attendance

V. CONCLUSION

The site, vendor and employee management system are reliable, saves time and easy to control. Salary, attendance, and curriculum details can be viewed by the employee as well as the vendor using this application. In addition to this, the system allows employee to view details and notifications irrespective of place and time. The efficient management process with immediately result preparation makes the system simple to use and access. The system is large secure. The physical work and resources required in traditional process is reduced. The proposed system incorporates simple user-interface. Thus, based on the analysis of literature survey also

the existing system, we have come to a conclusion that the proposed system will not only helping the automation to the company, but also helps to deploy resources successfully.

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