Residential Lease Management System

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***Abstract**:*

With the prevailing change over in fields of technology, it is necessary to grasp and acknowledge the power of technology. Housing sector remains keen to face the challenges of transformation by applying a new strategy that simplifies easy management of rental and leased houses. Hence there is need to develop a Residential Lease Management System that can streamline the effective and efficient work for the rental managers. This application is applicable for Multi store business management those who wants to lease out units in their buildings to different tenants. This system affects the complete workflow with the transparency of data. With this system, Property owners have a better visibility of their occupied and vacant units. The solution offers tools to capture tenant details, maintenance record keeping, track deadlines, create invoices and store lease agreements. Property owners can send bulk notices or group emails for rent reminders, maintenance alerts, site visits, renewal and regularly updating the contract or any other news that need to be shared with all the tenants. This system quickly integrates with existing paper-based property management system, enabling paperless work order management and saves time.

Keywords:

Salesforce, Lease agreements, Renewal, CRM, Cloud computing, Transparency

Introduction:

Residential Lease Management System:

A Residential Lease Management System is a software that has been specially developed to help landlords and property managers organize their rental properties, accounts, finance and tenants. The software may be designed to handle a particular or multiple aspects of property management, including buying, selling, leasing and renting. This software is used to simplify the day-to-day operations associated with residential and commercial properties. This system will create and track lease between tenant and individual units. The common features of this software such as online signing of lease agreements and full reporting help to streamline renewal management. This software also comes with various features that improve efficiency. The software is cloud-based and therefore, you will not need to install any software on your computer to use it. You can access this Residential Lease Management software from anywhere 24/7. The software makes it easy to manage various important property data. For example, you track important data such as property maintenance, lease renewal and expiry dates. Keeping track of these data is important for efficient management of your lease management of your lease properties. The operational features of a lease management software enable efficient functioning of the activities related to your properties. Below are things you can do with the software:-

1. Come with an online portal or website where you can promote your company and listings online.

2. Set up unlimited user accounts for your team to remotely access the software. 3. Get valuable property data.

4. Share and store important documents with tenants and owners through a file library.

5. Track repairs and maintenance of the properties you are managing.

6. Allow tenants to pay for their leases online and track their payments.

The main aim of developing this Residential Lease Management System SalesForce Project is to manage their business using Salesforce software.
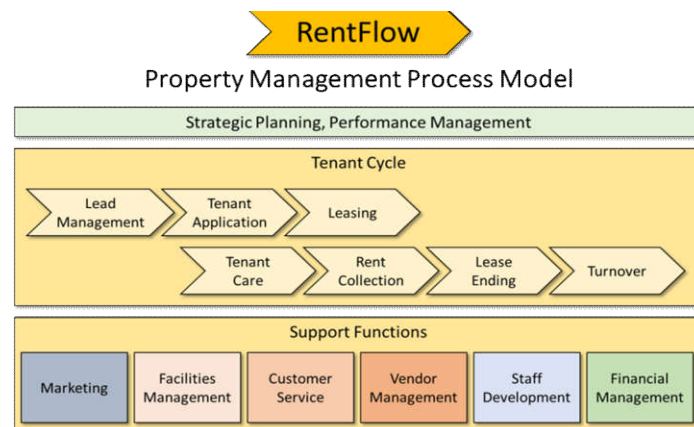

Figure 1:- Function Flow of Lease Management

Salesforce Lightning:

Salesforce is very hot cloud computing technology in IT industry, which is available on cloud, no need to install any software as well as no hardware required. Salesforce.com (SFDC) is number one on demand CRM, which runs on salesforce.com platform, as well as CRM (Customer Relationship Management) is a model used to manage organization interactions like Phone calls, Meetings, Emails and Social media with customers and also prospects penetrating to Sales, Marketing and Support. Salesforce.com which is a software giant manages to give the buyer an easy to use as well as extremely effective CRM solution. It also offers features to personalize its inherent data structures and GUI to suit the specific needs of a business. More recently, it has started offering the IOT connectivity to the CRM platform. Key features of Sales cloud are Contact Management, Salesforce engage, Lead Management, Reports and Dashboards, Sales forecasting, Email integration, Workflow and Approval, Territory Management, Files sync and share, Sales performance Management and Partner Management. Salesforce delivers a highly customized experience to the customers, employees and partners of the organization. Such a platform is used to create custom pages, components, apps etc. Also it works quickly, mainly because of the superior architecture on which it is built.

Related Work:

Micheal Schiender, et.al. presented "Leasing variants Distributed Systems." This paper aims towards explaining the concept of 'Lease', making use of JINI and COBRA. JINI, also

known as Apache River is architecture of network on which various distributed systems are built as well as it also uses small java code to allow connections over the network. Where as,COBRA is an environment for building various services. The paper briefly explains the leasing service, followed by the advantages and disadvantages on the specified platforms. The basic aim behind leasing, given in this paper is to ensure limited access to the available resources for a bounded period of time, rather than using them unrestrictedly. It describes the components of leasing i.e request processing policy, scheduling algorithm, lease renewal policy, renewal decision rule. [1].

Chris Cloete, et.al. presented "The selection of property management software." A paper that discusses the topic of property management in two folds , it begins with elaborating a study that aims at determining factors that need to be considered when the selection of a software for property management has been made. It also focuses on the implementation process. The approach then further categorizes the requirements of the potential buyer and how they need to be addressed. The paper further extends by evaluating the computer property management software residing at South Africa. According to the paper, property management refers to the administration or management of propertyto achieve goals for the owner of the property. [2].

Nimish Chaini, et.al. wrote the "SALESFORCE- CUSTOMER RELATIONSHIP MANAGEMENT Zero Motorcycles." The paper starts with the mentioning how potential customers play an important role in improvement of business and how essential it is to ensure utmost customer expectations. Selection and usage of the accurate business technology in order to support the business model is a vital task. The paper discusses about an upsurging motorbike company, which uses Salesforce.com, and explains how benefits of this domain has helped them to gather endless possibilities for business expansion and interpreting the customer requirements. Not only this, but the paper explains about what salesforce.com is i.e it explains salesforce as Service as Software(SaaS) CRM company. Whereas, CRM is a technology that allows the business owners to maintain a healthy relationship with the customers professionally. [3].

Dulani Halvitigala and James Gorden, et.al. proposed "The selection of property management software." The paper specifically objectifies the usage of computer software for property management in New Zealand. It explains that the traditional administrative method of paperwork has now emerged to strategic market positions due to burgeoning information technology. The paper uses the statistics of residential properties in New Zealand as an example to explain the concept of property management using computer software. This portrays the use of questionnaire and in- depth survey as methods to employ property management for small scale industries. [4].

Loveday Nwaunynwan, et.al. proposed an idea Lease accounting methodology: A theoretical reflection." in which the paper elaborates the concept of lease management moreover in terms, as a source of finance. Another aspect of lease based on operation of lease. Not only this, but it also portrays factors that influence the choice of lease arrangements. Using lease strategies for financial collection, has served as a new way of acquiring resources. It explains lease as rationale which allows the firm with borrowing capacity which in turn reduces the potential risk associated with owning a property. The paper states the example taking into account its benefits globally starting from Africa, where Nigeria has proven to be prominent player of leasing industries with N671 billion assets, In USA, most of the finance has been put together by leasing industries instead of commercial mortgage market and corporate bond.[5].

Rakesh Kumar and Yougeshwary Sharma, Sonu Agrawal, Pragya, et.al. together published "Extremely Effective CRM Solution using Salesforce". This describes salesforce as a burgeoning cloud technology , which eliminates the installation need of hardware and software. This paper covers all the corners one needs to consider when working with

salesforce starting from what is cloud computing, its types, architecture, service models, introduction to MVC, introduction to salesforce, SOQL, comparison operator and Force.com. It brings into light the benefits of using cloud computing which proves, anytime, anywhere access of data through a mobile application or with simple internet connection. This paper provides insight about cloud computing and salesforce and how it must be used to deliver an excellent software as a service.[6].

I N Drimitreva, et.al. proposed "Management accounting and analysis of financial lease effectiveness." The article mainly supports the periodically updating of financial leases to improve the accuracy of leasing. The research aims to create a methods that helps to analyse the functioning of financial lease which are based on the estimations surveyed from the requirements of International Financial Reporting Standards. This article supports the concept of lease renewal which helps to increase the quality of lease management. Regular renewal of lease is carried out by an automated mail generating tool, which allows the manager to generate a renewal mail. The mail can be drafted before hand which requires minute editing based on the involved customer of leasee. [7].

Junaid Ahmed Kirmani, et.al. proposed an idea which was like "Rental housing management system." Usage of software technology as an inventory system helps the manager or the lessor to keep a track of the transactions in the stinted time frame. It shows the transaction being linked with updating the database simultaneously. This article projects a lease management system developed as a web application using Microsoft ASP.Net and SQL 2008. The working of the project focuses on allowing the buyers to search for houses using addresses, whereas allowing the sellers to log into the system and manage the advertisements and the database. [8].

Henry Peter Gommans, et.al. proposed an effective "Rental house management system." After a brief survey, it was seen that maintaining the records about the rental properties, about the potential buyers, leasing policies, renewal and maintenance etc. required large number of manual work and manpower as well as the resources which made this monotonous and an expensive job. Thus, a web application had been developed, which made this work easier by dividing all the work unto the categories and form filling. This web application made it easy to make changes in the interface without much hustle. This allows the manager sto make necessary and smooth transactions within a limited time frame. [9].

Juee Daryapurkar, et.al. published " The MULTITENANT APPLICATION BASED on SALESFORCE.COM." The paper shows the idea which allows the user to access their data from anywhere around the globe with no much of hustle , also ensuring high quality of the data available at remote locations. This eradicates the burden on the local storage memory or system. This paper mainly focuses on one of the major feature of salesforce, reports and dashboard. Usage of reports and dashboard provides immediate insight to the statistical data , providing easier data visualization , not only this, but also the reporting tool is beneficial to the owners providing larger and bigger insights within small budget. The data visualization can be seen in the form of bar graphs, pie charts etc. Salesforce is considered to have a multitenant architecture , where it contains a single database, but is accessible to multiple end users. It also supports and explains salesforce and cloud computing as a secure and efficiently growing technology. [10].

Proposed System:

Developing an online Lease Management System which is used to simplify the day-to-day operations associated with residential and commercial properties. This system will create and

track lease between tenant and individual units. The system will be used by the Management or Owner and Coordinator. Management or Owner should be able to add Buildings and their flat in the system. Coordinator will create a contract for tenant for a vacant flat. Once contract is approved, email notification should be sent to the tenant with contract details and mark building's flat as occupied. Visual Force page provides search functionality in order to search contract's by Tenant and Building. In addition to this, we will also create a report and dashboard section in which total flats per building, total vacant flats per building, total occupied flats per building and total revenue generated by each tenant per building per flat. These dashboards automatically creates alerts and notifications for bookings. For the betterment of the system, we will allow property owners to send bulk notices or group emails or any other news to all the tenants. This significantly reduces the manual effort to manage the information of the properties each and every month.

With the proposed system, Residential Lease Management System is a comprehensive system that affects the complete workflow with the transparency of data. It eases the complete process of property management as well as helps in the enhancement of your business. It is a reliable system that proves enhance your planning and project management. Residential Lease management system can guarantee the business to track the tasks, documentation, budget and productivity of the business with a smooth process. Payment collection can posses few risks and is a time-consuming ask so Residential Lease management system is a comprehensive system that securely tracks your payments and makes it more secure. It has not only eliminated the traditional paperwork and requirement of manpower but helps to prepare the documentation electronically.The proposed system is:

1. Lessee will be able to rent from the platform itself.

2. Lessor will be able to list the available sites on the platform.

3. Payment will be taken care of by the salesforce system itself.

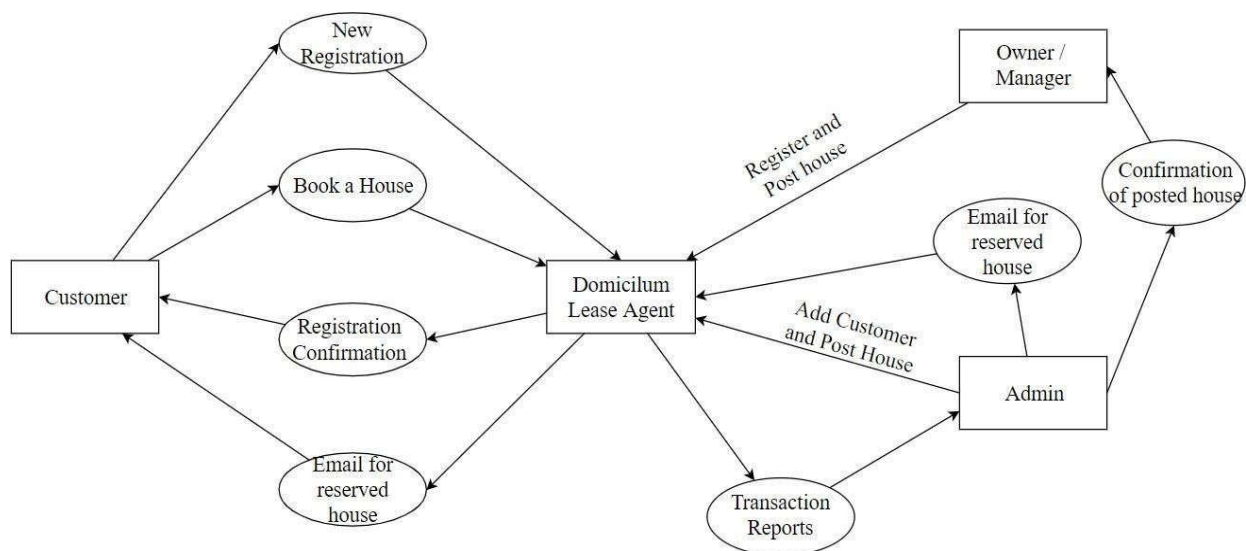4. Providing a completely transparent system also eliminate middle man.

Figure 2:- System ArchitectureResult:

Thus, developing a system using Salesforce will not only ease the leasing process for the lessor but will also provide easy access to gain insight to the overall development. The Salesforce provides us with the feature of reports and dashboard which gives graphic representation of the entire database. The use of bar graphs and pie charts can be used as a way to represent the new customer and housing information added to the system, renewal and expiry details. This feature is one of the major advantage Salesforce has. Data visualization has always been proved one of the added advantage of any software or an upcoming technology, providing immediate and simpler insight to the system data. The graphs mentioned below provides the statistics of the overall units available per building, total occupied units and total vacant units. Salesforce makes allows to use Google graphs and Google heaps which can be used as a tool for creating graphical data. With the help of reports and dashboard, the admin can easily analyze the business growth of the lease management system.

Figure 3:- Reports and Dashboard

Conclusion:

Thus, we have created a system that only ensures data security using high levels of cloud computing but also we have provided much efficient system for managing the leasing of apartments and houses to the lessee. Apart from the lessor and lessee interaction, renewal of the deal. This system also allows the lessee to select the apartment according to his requirements, including the budget, environment , security and various other amenities.

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