

Society Sync: An Innovative Way to Implement Society Management Software

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Abstract:- This paper discusses about the implementation of "society sync" of sites and apps operated by housing associations. It enables housing associations to function more efficiently. In the traditional management methods of housing companies, more of paperwork is required and there is no sufficient guarantee or security for data provided to each enclosure Society by residents. Additionally, there is no central administration for storing data, which is also committee members who are not only lacking transparency between committee members as well as with residents. There are many limitations and drawbacks that lead to this dysfunctional society. Society Sync can help solve many such problems. Society Sync is designed as a web-based application to manage and streamline the operations of the housing association. The system is divided into three modules which are Admin, Resident, and Security. Admin module is for enterprise administrative staff to manage and supervise day-to-day operations. The resident module is inhabitants of society interact with the system and have various accesses to online bill payments, maintenance requests, facility reservations, etc. The security module helps security personnel monitor, visitor management, etc. The system aims to provide a secure, efficient, and transparent platform to improve the quality of life for all stakeholders in society ensuring effective management of residents and society.

Keywords:- Society sync, website, admin login, member login, gatekeeper login, user-friendly interface, hassle-free, reporting tools, efficiency, cutting edge security.

I. INTRODUCTION

In society, manual labor is usually used for all necessary tasks social place. There is no automatic mechanism for this that members know what is going on. Everyone in society's expense reports is kept in paper form by the chairman organization. This includes the tedious work of creating invoices and distributing them to all members of society. Sometimes an invoice is not delivered to members and this is undocumented, which is the main task of society to collect payments and it takes a lot of time work to notify society members or send additional members' communication. This is a system that can solve all problems therefore necessary, how to manage a shared apartment completely redesigned with innovative corporate management software called "Society Sync". It is a platform that hits there in the form of a website and application and offers several features that simplify community management tasks such as Communications, maintenance, and security. Small apartments from buildings to large apartment

complexes, each with its own characteristics Society Sync is designed to accommodate them all. It is a step towards greater transparency in society's digitization. It can help houses and apartments Communities go paperless and promote environmental sustainability while maintaining class and safety [1].

II. RELATED WORKS

A. No Broker Hood

No Broker Hood, a piece of software, was created to provide several cutting-edge features to make daily tasks easier. Visitor management, bill payment, and complaint management are just a few of its distinctive features [2].

B. ADDA

Worldwide, more than 3500 apartment complexes make use of the ADDA apartment or housing society administration software. It can be used by the MC members of the flat association to handle help desk tickets, manage society accounts, billing, spending tracking, communicate with residents internally, and more [3].

C. My Society Club

The cloud accounting service from Mysocietyclub.com includes functions including an online bill management system. Members can easily pay their dues online thanks to administrators' speedy creation of maintenance bills for resident members and one-click delivery of those bills to the members [4].

D. Apna Complex Platform

It is the best technique to make apartment complex life convenient and joyful for residents, management committee members and security staff [5].

E. My Gate

A device for managing a gated community that simplifies life for everyone—from residents and management committee members to security officers and facility administrators. Its extensive functionality simplifies a variety of tasks, such as authorizing the entry of delivery executives, paying maintenance invoices, using home service, and raising a ticket to the facility management, into a single click [6].

III. METHODOLOGY

There is a great responsibility in running a housing cooperative. Their management has become a problem as it continues to grow until it becomes more like a consolidated township. A gated community needs the most robust security system imaginable. Collaboration between people and technology provides the best security. This is the right

combination of society management software. The app includes features such as visitor management, parking management, authentication, and timely check-in and check-out to ensure smooth and efficient gate security [5]. what is the catch? It helps housing/housing companies go paperless and contribute to environmental sustainability while maintaining elegance and security. Society Sync is a digital method for coordinating the daily activities of the society. It has a notice board system about events, maintenance requests, etc., various payment gateways, a basic maintenance system with booking functionality, to check the availability and use of services provided by the society, assets and inventories, and a digital type of secretary and contact with the inhabitants of society [1][2]. Residents may see upcoming meetings, and society notifications, and be alerted of any concerns or changes in the community [1]. Residents can also write complaints directly to the secretary about anything, which the secretary will investigate and resolve and the status of the complaints whether it is on hold or open, or closed can be seen by the residents [3]. We initially went to many societies including our own and while conversing with the secretary it came to our knowledge that a secretary's job is quite cumbersome and hard and there was no centralized system to ensure smooth governing of society whilst keeping all the members and residents happy at the same time. After brainstorming we came up with the idea of a social management system and named it Society Sync. However, firstly we developed a PowerPoint presentation and listed all the major problems and flaws in

the traditional governing system of society and listed the ways in which we can solve them somehow digitally which helped us understand the actual need of this proposed system, then we developed a website and a mobile app as it increased daily usability & convenience of the users we were targeting. Also, an analysis of the current system showed that it did not do well with the SOPs included in the proposed system with features such as emergency calls, easily accessible document storage, and email templates.

IV. PROPOSED SYSTEM

To make coordinating various activities and events in a society easier, the proposed solution gives residents access to a website. Data from numerous flat owners and their families can be stored in the software. An administrator must enter different flat owner data and billing amounts into the system [3]. The system includes a tool for automatically creating bills. It computes numerous related costs, adds them up, and then generates a bill as a result [2] [3].

Our program is divided into several modules, including the Apartment FAQ Page, Admin Login, Staff Members Login, Member Login, Gatekeeper Login, and Member Registration.

For secure and trouble-free operation of the application, each module has a separate set of functionalities depending on the rights granted to that specific user [1] [2].

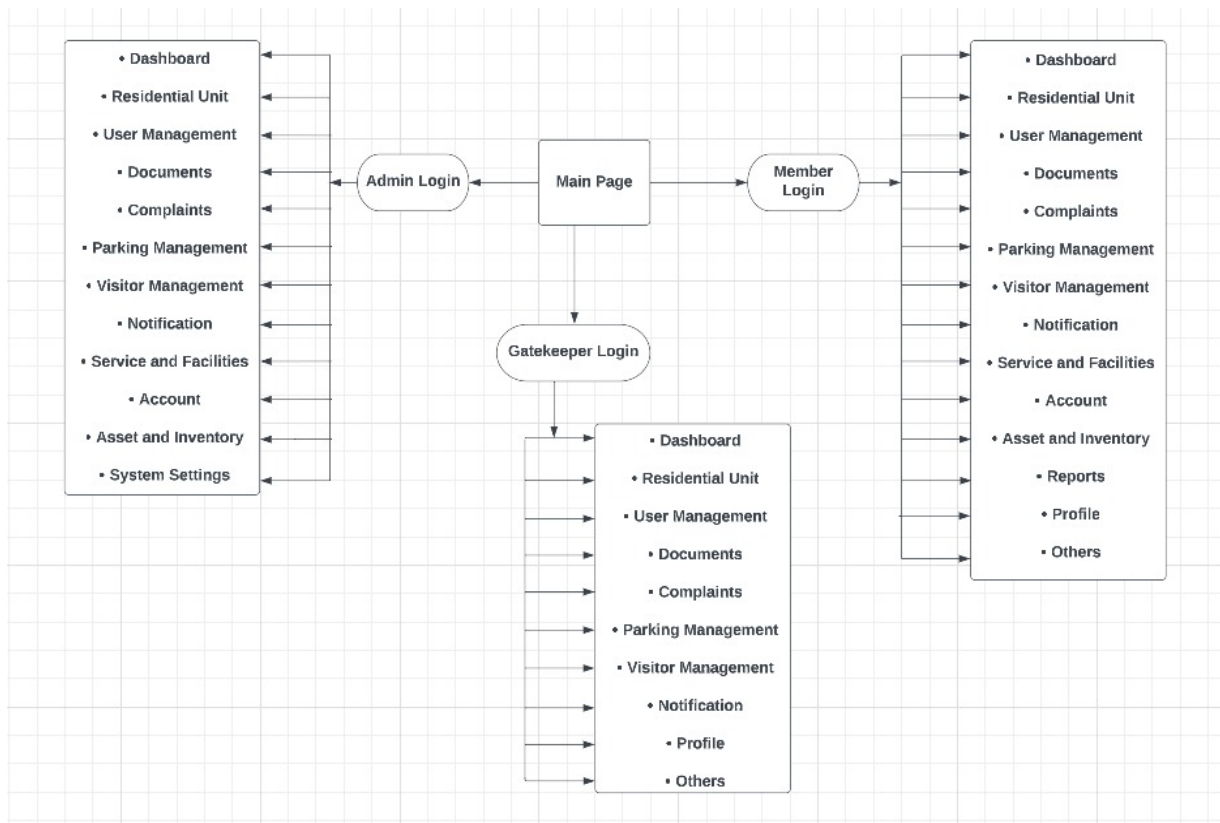


Fig. 1: Architectural view of Society Sync

A. Admin Login:

The Admin Login module comprises Dashboard which indicates the check ins and checkouts data count, event calendar with marked upcoming events, count specifier of the number of residents residing, Gatekeepers on duty and number of Staff members. The Residential Unit consists of the data about the apartments functioning in the society that can be more helpful for the filtering purpose later. The User Management section consists of all the information about the Members, Staff Members, Accountant, Gatekeepers and Committee members like their login details, personal information like Name, Email id, Phone number, etc.

The members can upload any essential and significant papers to the papers feature, which is a special function, so that they can be viewed and utilized later on without difficulty.

Additionally, our application has a section called Complaints where the admin can view all the complaints submitted by the users and notify the users on how the issue is being resolved. The administrator can notify the members on the progress of the complaint as it is being posted. Additionally, the administrator has the authority to oversee the parking system by allocating members to available places. The administrator can also see the slots status whether it is empty or allocated. Additionally, he has the rights to control visitors and add notices of key events [1] [2].

According to the booked timetable, the admin has the authority to inspect, change, and remove the assets and inventory [4]. He will have access to all of the residents' past payment records, invoices, and charges if any resident's backlog is applied.

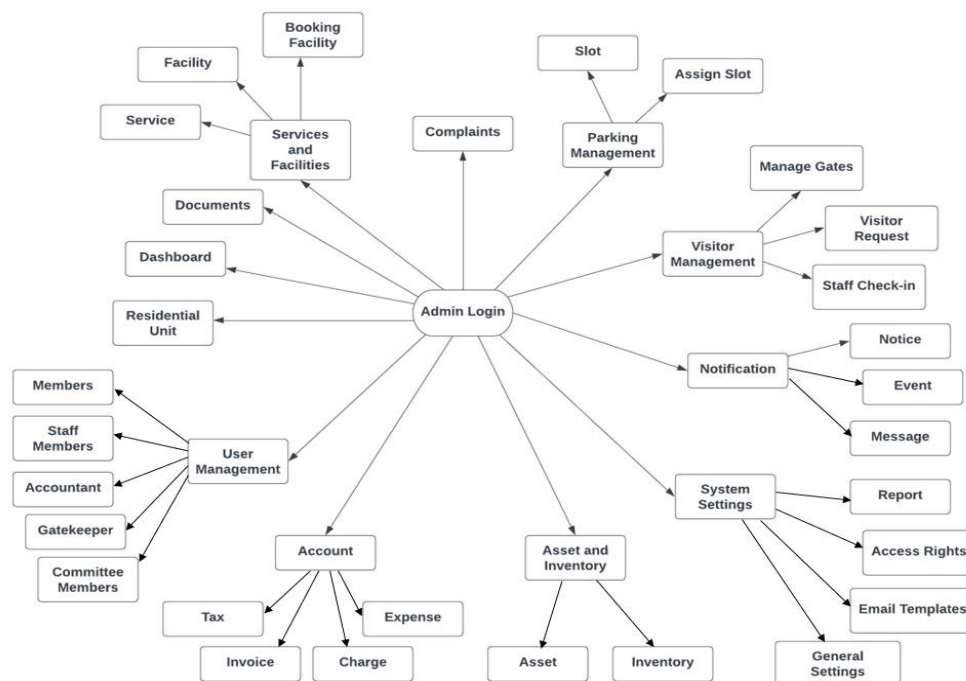


Fig. 2: Architectural view of Admin Login

B. Member Login:

The Society Members view a similar dashboard; however, the residents do not have any further management rights. The Member Login module consists of a Dashboard that specifies the number of check-ins and check-outs, an event calendar with noted forthcoming events, a count specifier of the number of residents residing, the number of Gatekeepers on duty, and the number of Staff members [2] [3].

The Residential Unit is made up of information about apartments in the society that can be used for filtering later on. The user may also see the User Management area, which has all of the information on the Members, Staff Members,

Accountant, Gatekeepers, and Committee members, such as their login details and personal information such as their name, email address, phone number, and so on [1].

Documents is a unique feature that allows members to upload any necessary and important papers so that they may be simply and quickly retrieved and utilized in the future.

Members can add documents from their computers for future use, file complaints, view notices about upcoming events, book assets and inventories available in the society, book services and facilities as needed, download the invoice for paid maintenance, and view timely activity reports.

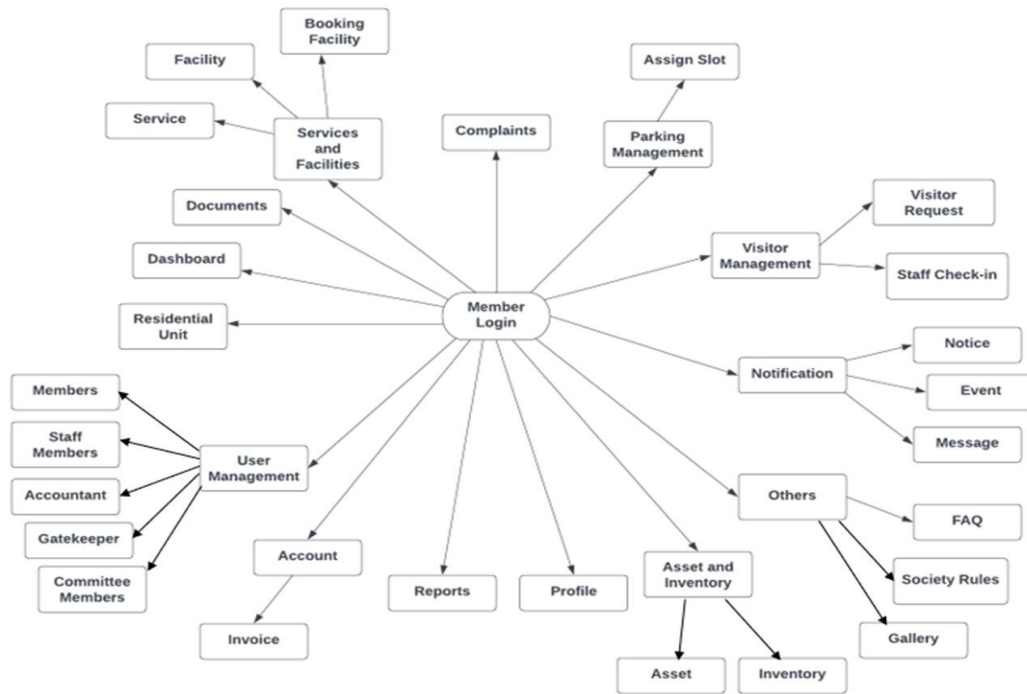


Fig. 3: Architectural view of Member Login

C. Gatekeeper Login:

The Gatekeeper has access to the application as well as the ability to manage visitors. He can also manage the society's parking based on the allocation of inhabitants' vehicles. When a new spontaneous visitor arrives, the

gatekeeper first confirms it with the people whose home the visitor is supposed to visit. Following the verification procedure, the gatekeeper enters the visitor's information such as name, phone number, email, check-in time, and so on, and then admits the visitor [1] [3].

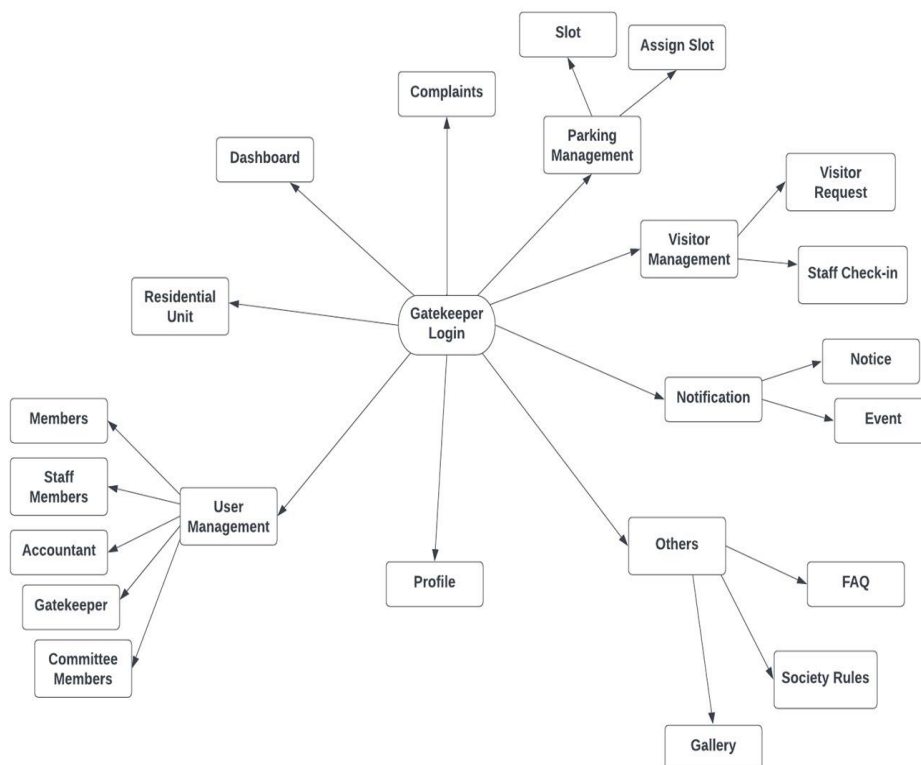


Fig. 4: Architectural view of Gatekeeper Login

V. RESULT AND DISCUSSION

To begin with, we collected information from 10-20 people who operate the society as panel members about the problems they had while running a society. The flow of our system was then designed to address the issues, such as transparency in resolving complaints and notifying other events on mobile phones, with results generated automatically via application, and saving all registries in a secure digital database rather than keeping all records in books. All of this resulted in the creation of three different applications for all of the society. While researching we found that the existing system have several limitations such as not including emergency contacts, no provision to book facilities digitally hence we decided to combine the limitations and create a system which works as an application as well as website which makes it easy to all the

parties. To show the results the screenshots of the implemented software have been attached below. Fig 5 shows the login page of admin, member, gatekeeper login and member registration as well as apartment FAQ Page. Members' and gatekeepers' login credentials will be given by the owner of the app or by the admin [1].

Fig 8 describes the notification feature. The admin posts notices, events and messages related to the society which gets notified to the members through email. Fig 9 mentions the services like all the emergency contacts and facilities like the basketball court, swimming pool etc. The residents can book the below mentioned facilities as per hour or on day basis. The account section manages all the bills, tax, charges and creates invoices when residents pay as shown in Fig 10.

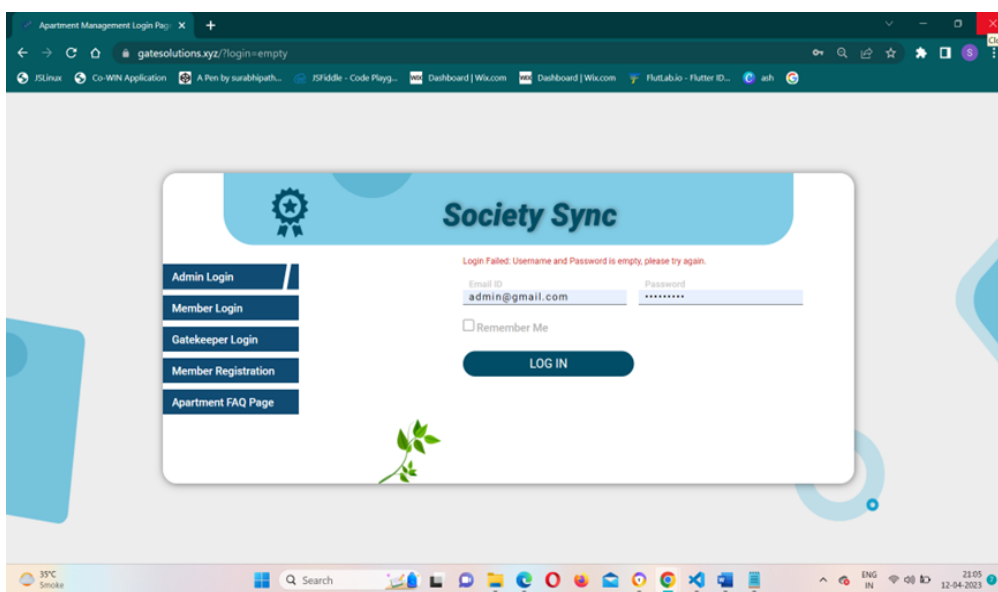


Fig. 5: Website view of Login Page

A. Admin Login

Fig 6 depicts the admin page's dashboard, which lists all the features on the page's left side. Delivers a report on all of the visitors at the same time, as well as the overall number of gatekeepers, employees, complaints, compounds, etc. The administrator can establish several compounds in accordance with the society's wings by clicking on the

residential unit, or they can concurrently create and manage many societies. The list of all the society's residents, employees, accountant, gatekeepers, and committee members is displayed in User Management. Following the client's posting of a complaint, the admin can adjust the status of the complaint to closed, on-hold, open, or scheduled, as shown in Fig. 7 [1] [2].

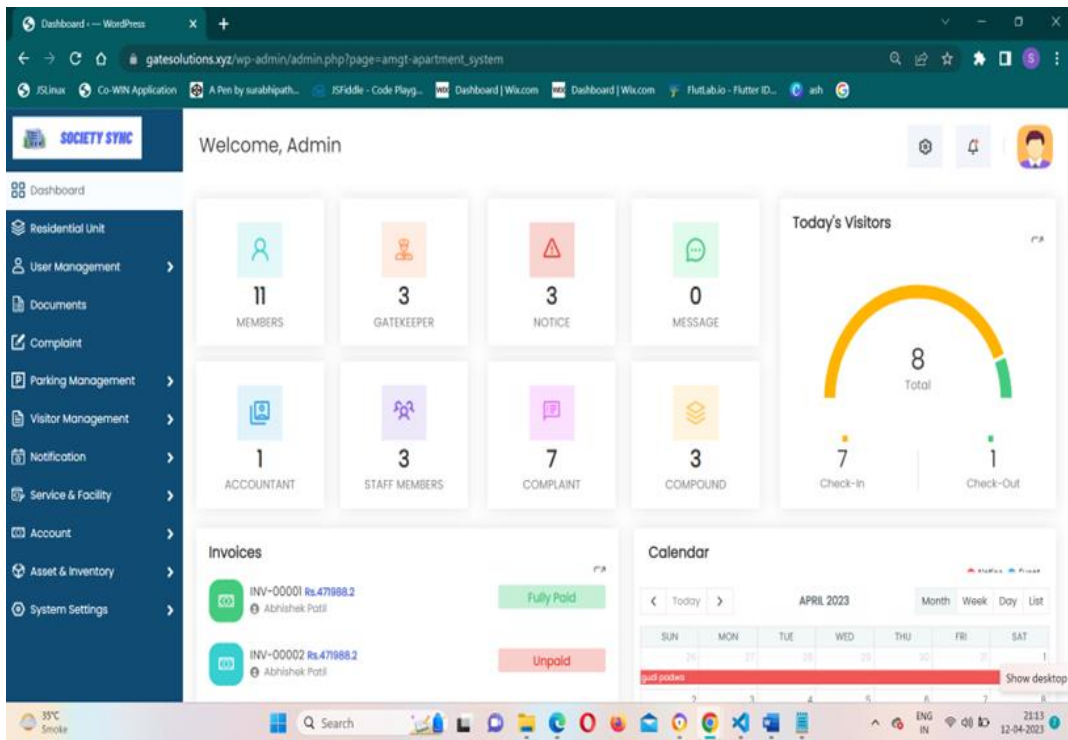


Fig. 6: Dashboard of the Admin Page

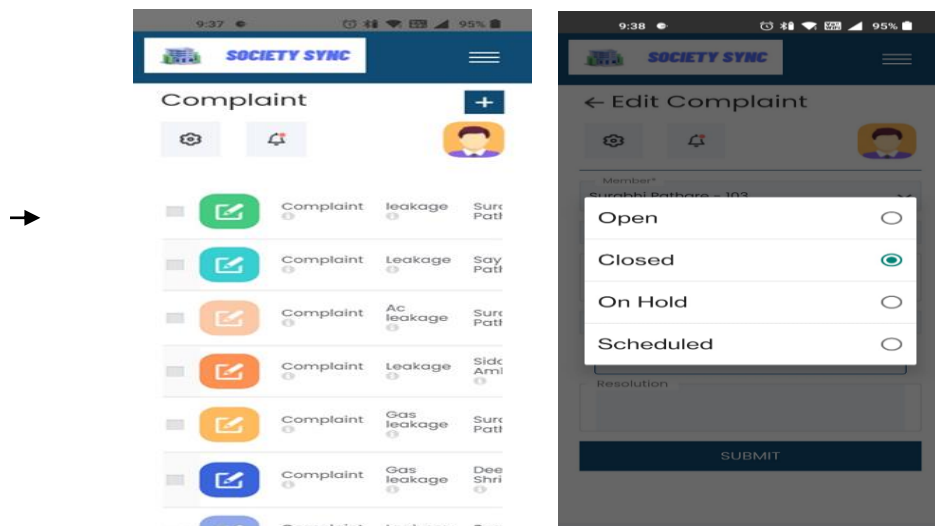


Fig. 7: Complaint Resolving Procedure

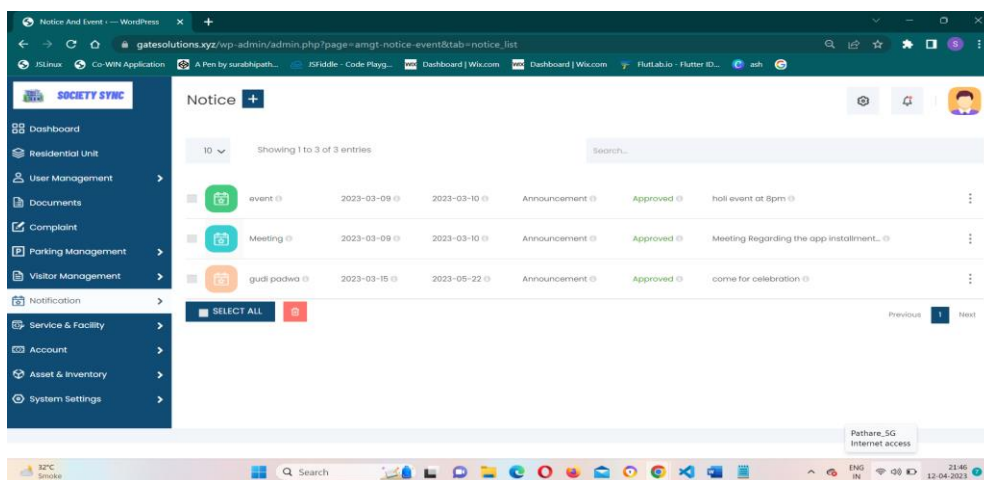


Fig 8: Posting Notices, events and messages

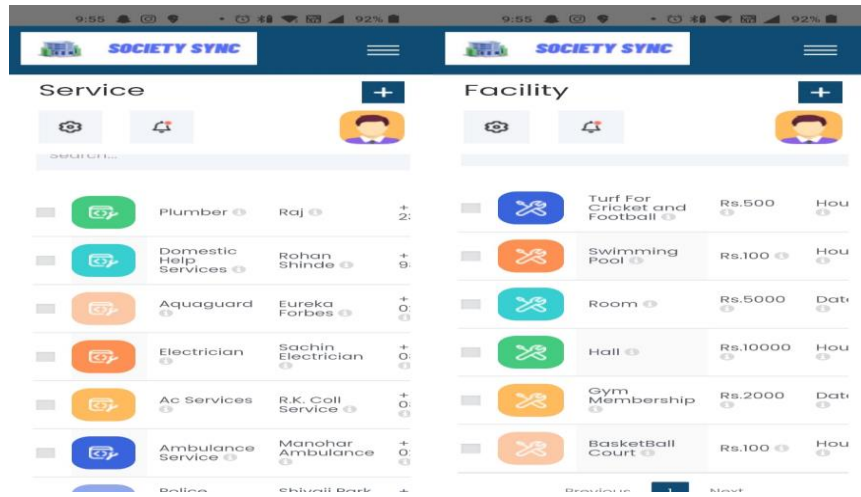


Fig. 9: Service & Facility

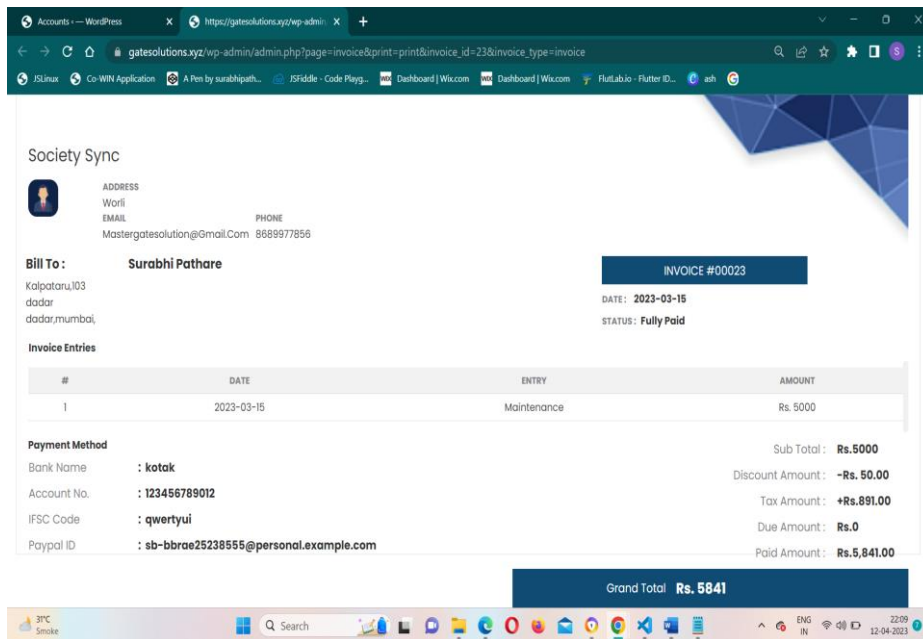


Fig. 10: Invoice Created of Users' Payment

Fig 11 mentions the assets and inventories that are a part of the facilities provided by the society. Some are rented while some can be utilized for free. System setting consists

of all the admin rights, shows various email templates used while updating the residents etc. [3] [4].

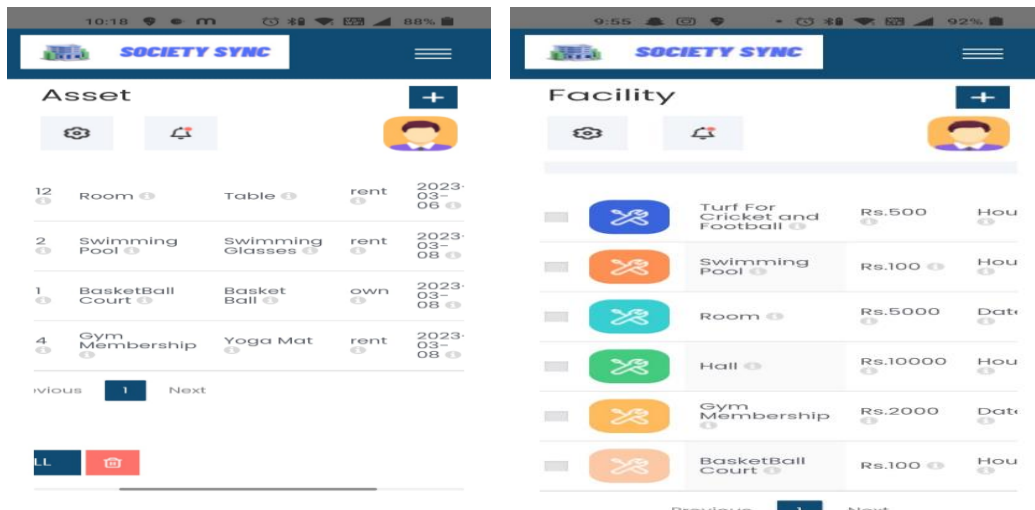


Fig. 11: Assets & Inventory

B. Member Login

The member login's dashboard, which lists its features, is depicted in Fig. 12. The user has the ability to digitally store useful documents in the database as shown in Fig 13 If members are aware that a visitor is approaching them, they

can pre-enter the database. Additionally, they can provide information about specific deliverymen who have visited them. This enables the gatekeeper to quickly authenticate the guest and direct them to the appropriate apartment, as seen in Fig. 14 [2].

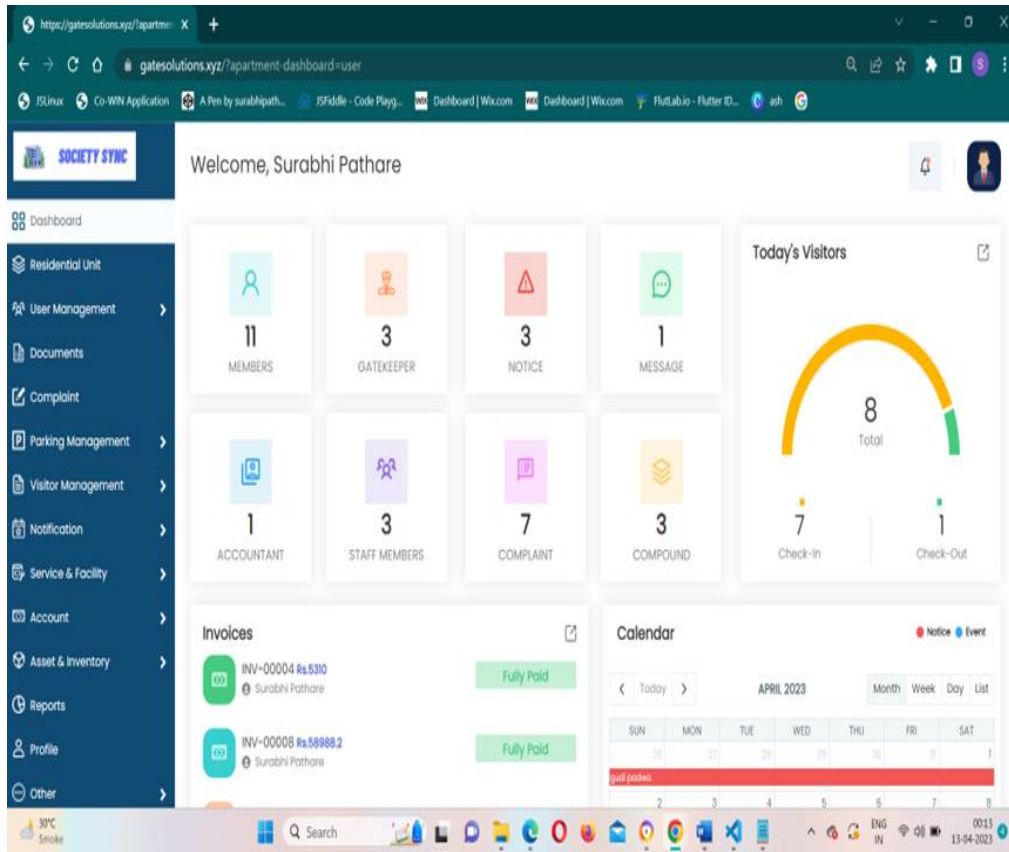


Fig. 12: Dashboard of the member login

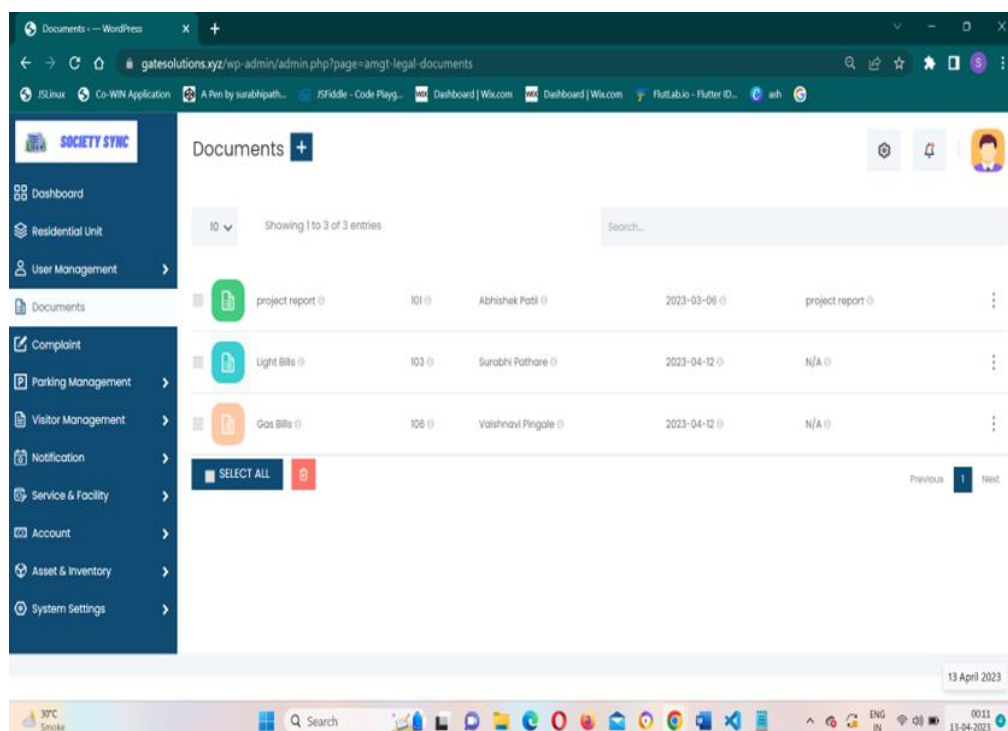


Fig. 13: Documents

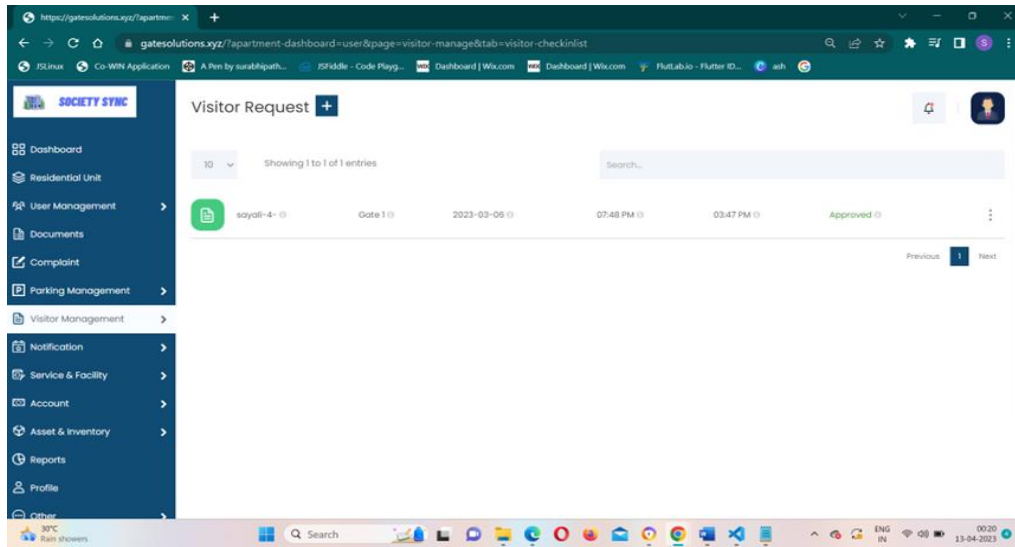


Fig. 14: Visitor Request

Residents can book facilities such as basketball court, room on hourly basis as per their requirement as describes in Fig 15 [4]. The system calculates the bills automatically and generates an email response to the respective user. Below is

a screenshot of the email which is send to the member once the facility gets booked and the notices which the admin posts (Fig 16) [4].

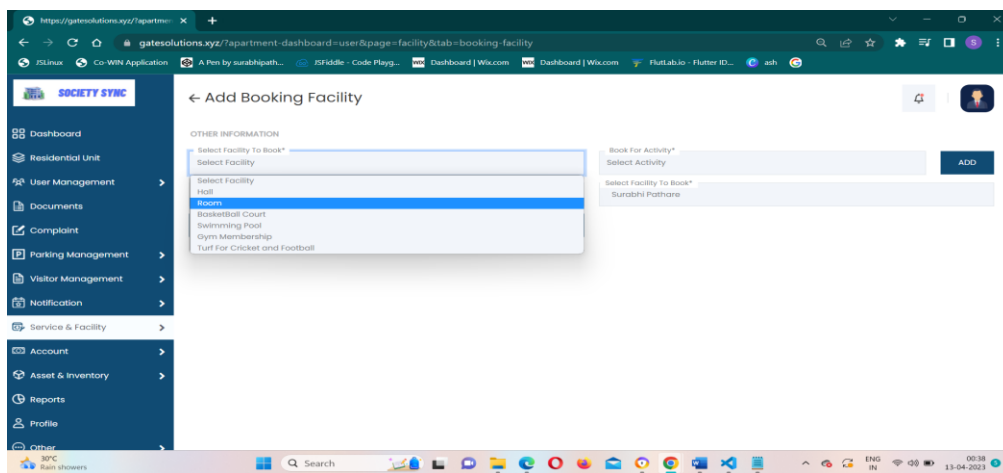


Fig 15: Booking Facility

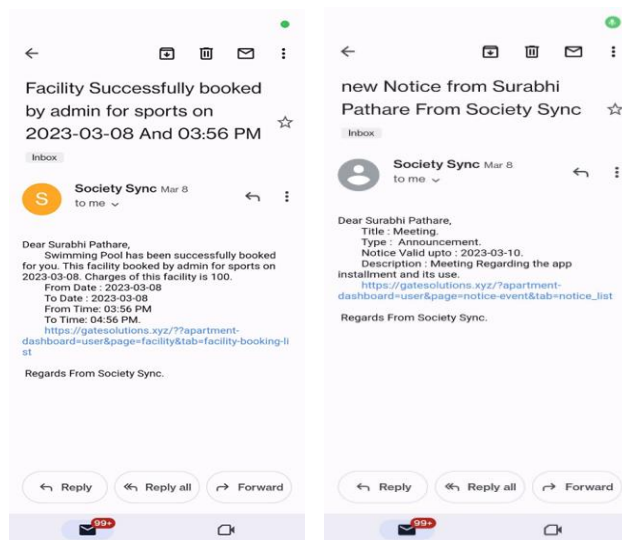


Fig. 16: Email Templates

C. Gatekeeper Login

The visitor control feature, which is depicted in Fig. 17, allows the gatekeeper to monitor who enters and leaves the community. The residents' request for a guest may be

approved by him. The security department also oversees the parking system, keeping an eye on the open spaces and even allocating them to individuals who have made reservations (Fig. 18) [3] [5].

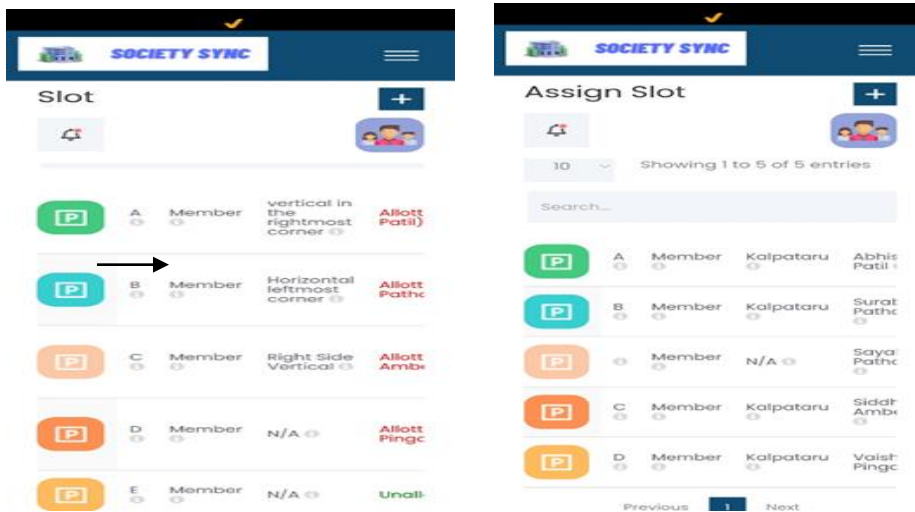


Fig. 17: Parking Management

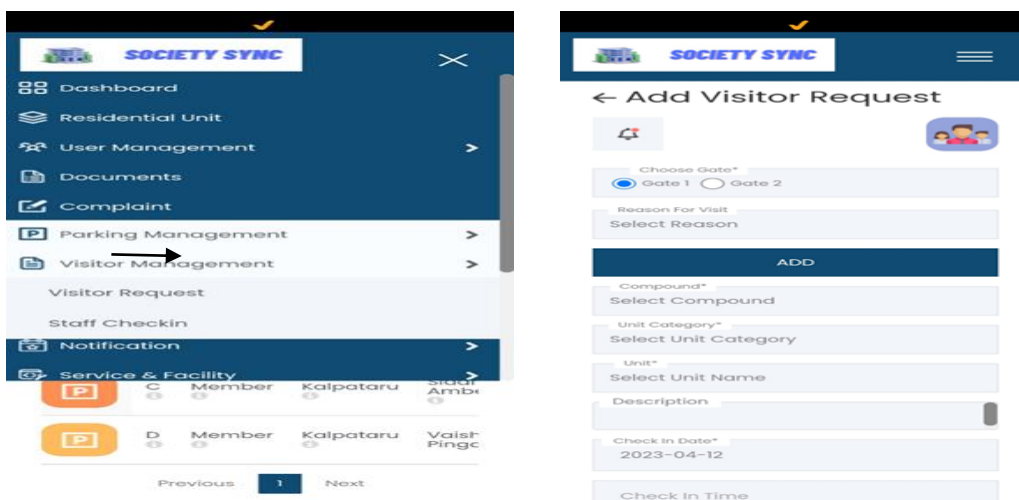


Fig. 18 Visitor Management

VI. FUTURE SCOPE

The potential of Society Sync is enormous and bright. The need for effective societal management software will only grow as more industries continue to digitalize and automate. Here are some potential future scopes for Society Sync:

A. Integration with Smart Home Technology:

By combining Society Sync with smart home technology, residents may find it even more handy. Residents who use smart devices can use the Society Sync app to control different features of their houses, including the lighting, temperature, and security.

B. Integration with AI and Machine Learning:

A watchman may quickly determine if a vehicle entering or leaving the gate belongs to a resident, a guest, or a regular service like the milkman by using OCR technology for

reading the number plates of the vehicle and the aid of a properly designed database.

C. Chatting Apps:

The resident app could include more features, such as the ability to vote for the society's secretary or to vote on any issue, allow members to chat with one another like in chatting apps and allow for polling to gather opinions from all society members in one place.

D. Lost and Found Feature:

For tenants to readily locate items lost on premises using their phones, a lost-and-found feature might be installed and updated by a secretary.

E. Expansion to Commercial Properties:

Managing commercial properties like shopping centers, office buildings, and hotels is possible with Society Sync's expansion to these types of facilities. In addition to offering

effective management solutions for these assets, this may create a new market for the software.

Overall, Society Sync's prospects are promising, and with continued innovation and improvement, it may emerge as the industry standard for managing both residential and commercial communities.

VII. CONCLUSION

Overall, the management of residential communities has changed thanks to the creative and potent Society Sync software. Because of its user-friendly design, cutting-edge security measures, and customizable capabilities, it is an essential tool for society management companies and their clients. Thanks to Society Sync, residents may live more effectively, safely, and joyfully, while management companies can operate more productively and provide better customer service. Since society management software can interface with other smart home gadgets and technologies to build a more effective and connected community, the future potential of this technology is promising.

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