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Society Management Progressive Web Application

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Abstract: ***With growing population housing societies are increasing day by day with that more and more need comes from managing those societies. Residents of the society have to deal with so many issues on a daily basis such as bill payments, society notices, events etc. They have to keep following up with security for their guests or visitor's entry. On the other hand, society managers or the administrator of the society have to deal with tracking visitors, bill generations and invoicing, sending, circulars, arranging meetings and handling complaints, keeping documents, expense tracking, and much more. It will provide features like asset management, society management, case management, visitor management, and more to enhance the efficiency and effectiveness of resources of the society. It helps in increasing the interaction between residents of society through smart notifications of different events, meetings, competitions, parties, etc. It also saves lots of paperwork and human effort. It keeps a record of every member of society in its database and provides special privileges to the members like –getting latest news of the society events, updating their information, adding a new member in their house, raising queries for issue resolution, booking party halls, adding tenant information, checking financial statement of society, smart notification of visitor's arrival, verifying visitor through sending OTP to guards, etc.***

Keywords: SMPWA (Society Management Progressive Web Application), PWA (Progressive Web Application)

I. INTRODUCTION

Society Management Progressive Web Application is a cloud based application which is designed with focusing the problems that a resident of a society faces every day. It not only provides a solution to those problems but also an easy and interactive interface to the user. It's a future ready and feature loaded application. It comprises features like Security Management, Visitor Management, Tenant Management, Event Management, Resource Management, Inventory Management, Micro Finance Management etc. on a single dashboard in just one click.

Due to its cross-platform compatibility it can be run on any device without any hassle. It occupies minimal space on your device in just a few Kbs, and also provides secure, fast, reliable information in seconds. It helps in increasing the interaction between residents of the society through smart notifications of different events, meetings, competitions, parties etc. It also saves lots of paperwork and human effort.

It keeps record of every member of society in its database and provides special privileges to the members like –getting latest news of the society events, updating their information, adding new member in their house, raising queries for issue resolution, booking party halls, adding tenant information, checking financial statement of society, smart notification of visitor's arrival, verifying visitor through sending OTP to guards etc.

This app facilitates privileges for admin and super admin also and ensures complete transparency and security of data. This application registers members through smart digital form which takes every essential data from members so as to provide high level of security and verify the form information through sending OTP to the user.

The Security management uses the data in the database to verify a member entry and generate an entry/exit table against it. Different tables for different users are generated for example- for visitors a different form is filled and a separate table from members is generated.

This feature ensures that only the right person should be able to get entry in the society. This app also facilitates features like Tenant Management –This feature registers every tenant of society through filling smart forms followed by OTP verification. It collects all important information about tenants so as to ensure transparency and verification of tenants. Resources Management (man power management) feature of this app ensures availability of maintenance staff and divides the staff according to their skills. This feature of the app registers issues of residents of the society in digital form and allocates the right work to the right person and ensures that the issue raised by residents should be finished in time, at last it takes feedback of users on service and behavior of servicemen. This app provides a vast variety of features which counts from security management to finance management all at a single point in just single click and minimal time.

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II. EXISTING SYSTEM

There are so many solutions available in the market but they are designed either as websites or in application form, which requires a lot of space, high internet speed and more buffering time. Also in existing apps there is no platform independency i.e. every app requires different compatibility features as per Android and iOS accordingly. At the same time existing systems don't run on the latest technologies so they are less secure, reliable and slow. Also existing systems don't work in offline mode. Existing apps available in the market don't provide all features in one app so users have to buy different apps for their requirements.

III. PROPOSED SYSTEM

It's a Society Management Progressive Web Application which facilitates single windows solution of all issues relating to society and will provide real time updates for their respective issues. Also will provide features like asset management, society management, case management, visitor management and more to enhance the efficiency and effectiveness of resources of the society. Our SMPWA is designed in the form of Progressive Web Application which helps it to run faster with consuming less internet data, requires less memory and buffering time. It provides an app-like interface as it's a PWA. SMPWA facilitates platform independency i.e. it can be run on Android and iOS without any compatibility issue. It uses the latest technologies available in the market hence its more secure, reliable and fast. Also it can work in offline mode. Let's take an overview on modules.

A. Inventory Management

Fig.1.Inventory management system

Where Inventory management features will ensure the availability and latest condition of different assets of the society. Also this feature will allow the society an eagle view of its assets that tends to better management. It keeps a track record of every asset of inventory in digital form. It also provides all essential information about all assets like- category, price, number of items, time, date of purchase etc.

B. Security Management

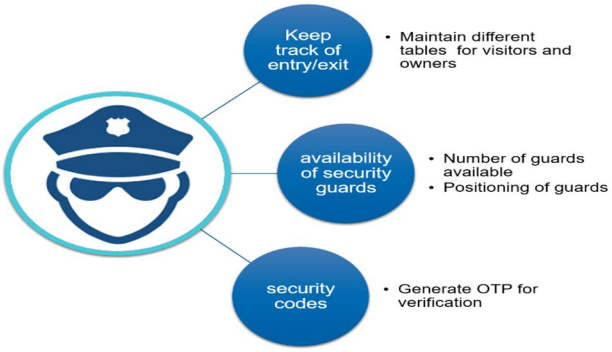

Fig.2.Security management system

Security management features will provide the information about each entry and exit of any person from society, it also keeps track of every item/good which comes into society or goes outside. It also provides information of security guards like- availability of security guards, number of guards on holidays for how much period of time, their positioning in society, their details etc. It also provides information like the number of cameras in society, their working conditions etc.

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C. Visitors Management

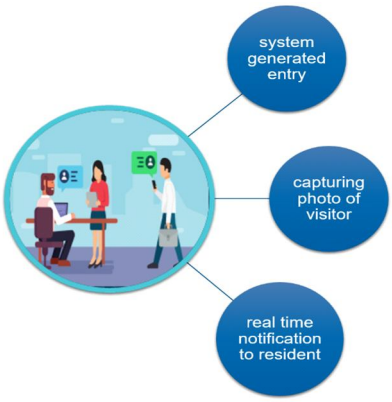

Fig.3.Visitor management system

This feature will provide system generated entry of a particular person/visitor in society, this will include some sub features like capturing photo of visitor and give real time notification to resident for his visit and many other incidental features will be there as well.

D. Tenant Management

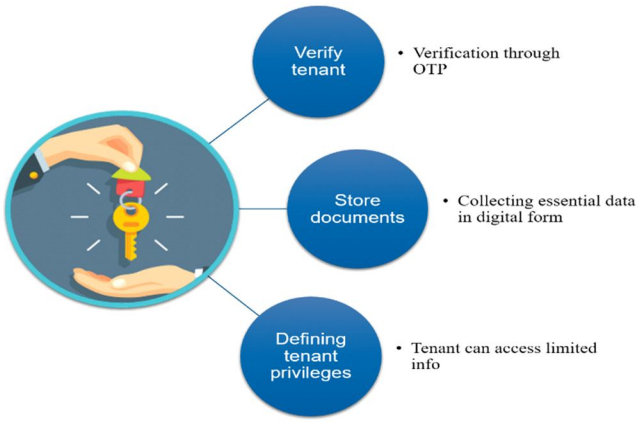

Fig.4.Tenant management system

This feature will provide all the particulars of the tenant like his Aadhaar number, name, DOB etc. Which further enhances the security level of the society. This feature maintains all details of every tenant in a secure database, so this information can easily be retrieved when needed. It also generates special id for tenants so that they can access less privileges as compared to the owner.

IV. CONCLUSION

With growing population housing societies are increasing day by day with that more and more need comes from managing those societies. Residents of the society have to deal with so many issues on a daily basis such as bill payments, society notices, events etc. They have to keep following up with security for their guests or visitor's entry. On the other hand, society managers or the administrator of the society have to deal with tracking visitors, bill generations and invoicing, sending, circulars, arranging meetings and handling complaints, keeping documents, expense tracking and much more. There are so many solutions available in the market but none of them solve all problems but now we have SMPWA for you, a one-stop solution for all of your problems. It's a Society Management Progressive Web Application which facilitates single windows solution of all issues relating to society and will provide real time updates for their respective issues. Also will provide features like asset management, society management, case management, visitor management and more to enhance the efficiency and effectiveness of resources of the society. It helps in increasing the interaction between residents of the society through smart notifications of different events, meetings, competitions, parties etc. It also saves lots of paperwork and human effort.

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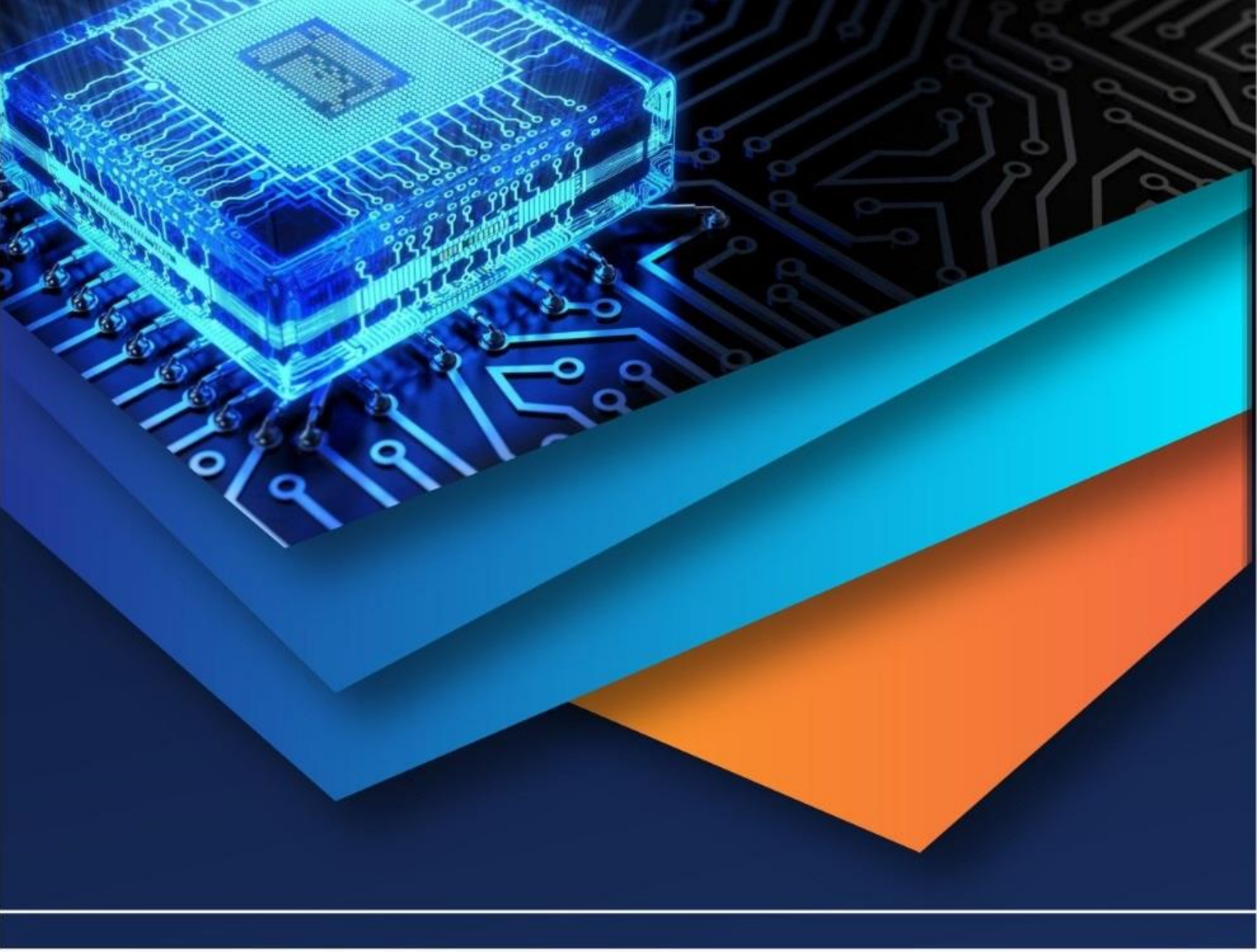

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