Housing Society Management Web Application with recommendation system

Saurabhi Raut¹, Priyanka Pawar², Masira Shaikh³, Neha Bhat⁴, Prof. P.N. Kalavadekar⁵

¹Student, Department of Computer Engineering, SRES COE, Kopargaon(MS), India
²,³,⁴Student, Department of Computer Engineering, SRES COE, Kopargaon(MS), India
⁵Department of Computer Engineering, SRES COE, Kopargaon(MS), India

Abstract: The increase in urbanization has given rise to the concrete jungle. Many housing societies are formed these days where people live in apartments. So as to maintain the culture and heritage various programs are celebrated in groups by the societies. Also, people involve themselves in various social activities. Every person has hobbies, interests and likes. They cherish it either individually or with other people. Some need a platform to showcase their talents and others may take it as a business opportunity. The housing society web application is providing a perfect platform for the residents of the societies to become aware of the society's cultural, social and sports group and meet the like-minded colleagues and develop a healthy lifestyle.

I. INTRODUCTION
So as to have a healthy living, now-a-days people have set their standards of discipline in community living. Cities have mini cities known as housing societies or commercial societies which features private schools, hospitals and business centers. They form a digital network so as to manage their society through applications and websites. This helps people understand the ongoing changes in their surrounding and help them stay tuned to the latest updates. The management of the society is an important aspect in this case. The society has two important group of people looking after, the chairmen panel which accounts secretaries and their head. The other group of people is of the residents who help maintain the overall maintenance and standards of the society by giving their valuable inputs to the society's progress. The web application provides a platform to the super admin to add the societies as well as its residents and their details. The secretary of each society will have its own panel having features like maintaining the accounts, sending and receiving the message and broadcasting the notices, update the society groups and events via calendar. The residents can be a part of any group they want, but to simplify the process, system is setup with recommendation system which recommends the residents a group the society has based on the hobbies, interests and sports they like which is already maintained by the system while signing up the resident. Also the end user of this product has a privilege to view all the events, festivals post on the business wall and access the emergency contacts and help tab to use the website.

II. LITERATURE SURVEY
[1]In order to curb the old practices of maintaining the records of bills, funds, other services, meeting details etc digitalization of the housing societies is very important. [2]Social networks play an important role at connecting the people via online chatting, participating in online campaigns and clubs. Thus we have introduced the groups system as every housing society has various groups for its purposes like social work, business advertisement, and to cherish their hobbies and sports. Many people like been part of various groups but at times prefer being aloof or hesitate to ask for membership. Thus the recommendation system helps to suggest them the favorable group as per the hobbies and liking towards sports making it more clear for the residents to join the group among the list of groups. [3]While registering the resident in the system database, the hobbies and the sports liking are considered. The web application makes use of recommendation system which suggests the groups (if the group is available in the society) to a particular person based on its hobbies and likings. The resident can thus join and leave the group whenever required. The system thus displays the recommendation for sports based groups and hobbies/interests based groups separately so as to differentiate and make it clear to the resident. The diagrammatic representation is given in the results section.
III. SYSTEM OVERVIEW

[4] The web application has three panels namely the super-admin panel, the secretary panel, and the resident panel. The super-admin has privilege to add the housing societies and its respective residents through back end. The government provided emergency contacts as that of the police control room, the fire brigade, ambulance etc are given by the super-admin and can simply be viewed by all the society members. The help tab is for user friendliness and showcases how the website functions.

[5] The secretary panel has more facilities than other panels. The secretary too can add the resident from front-end through the resident info update tab, this is how the resident can be enrolled in the system. Festivals and the events in the calendar can be manually added in this panel, whereas the residents can only view them. The service providers tab enables the secretary to add the society’s service providers (internal) as well as external ones and the residents can view them and contact whenever required. The compose message tab enables the secretary to send personal messages to the residents, respond their queries if request, complaint or suggestion, also broadcast the notice which will be visible in the notice tab. The system provides one to one communication among the secretary and the resident and vice-a-versa. So as to make the system curated the functionality of communication among all the residents through the web application has not been mentioned. The users can send request to the secretary via Business tab can send a request to the secretary and thus can be approved by the secretary in Approve Business Wall tab, which will thus be visible accordingly on the business wall. Only the secretary is exclusively provided the facility of Account tab where one can manage the dues from every resident flat. The list of all the society members will be fetched in the table and the secretary can then fill the records.

Society groups can be added by the secretary and members can add themselves as well the secretary can add the members as per the request. Based on the hobbies, interests and sports played by the person the groups are recommended to the user in two separate tabs - groups based on hobbies and favorite sports. The resident can then further add oneself in the recommended group.

The web application is connected to the system via the web API so as to synchronize the updates made through the mobile application and web application both.

IV. RESULTS

In this figure, the groups likes chess and reading are suggested to the Resident-1.

4.1 Group recommendation i.e. chess and reading

In the figure below we see, the Resident information been filled along with the hobbies/interests and sports liking. If the group exists, then and only then that group is recommended to the resident.
4.2 Hobbies and sports liking to be included in the ResidentInfo detail

V. CONCLUSION
The system helps residents to interact with each other and form social networks by becoming a part of any group either cultural or sports group. Through this application it will become very easy to promote ones business and provide various services to people, thus leading to employability through socialism. There is no need to personally meet the chairmen panel to give complaints or suggestions or take the panel's appointments. This job can be done using the application by sending messages to the secretary and also get the response of the job done. It makes the residents of their respective societies to stay constantly updated with the current affairs of the surrounding they lie and also participate in various events promoting different cultures.

VI. FUTURE SCOPE
The web application provides a good privilege to start business and provide services other than the society members. The respective societies can have partnership with other businessmen, famous business centers restaurants, service-providers. This partnership may provide valuable insights like discounts and offers to the specific residents of the society. The private parking lots can be included in the system giving direction to the residents by allocating parking areas. This will act has a two-way hand shake providing a good profit to both the parties and increase the socialism among people.

VI. ACKNOWLEDGMENT
We would like to pay gratitude towards our guide, Prof. P.N. Kalavadekar to help us in our project work and also to Mr. Sachin Inamdar to help us provide resources required for our project.

REFERENCES


