

Web Portal: Housing Society Management System

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ABSTRACT

“Simplicity is the ultimate sophistication”. Housing Society Management System exactly follows this phrase and aims at making the current situation in the society simple and efficient. Society Management System reduces the conflicts that arise within the society by providing facilities such as online voting system, online hall allocation, etc. It automates certain attributes that occur within the society and makes it easy for the members of the society an easy access to the society happenings and on goings.

Keywords - Bye Laws, Datepicker, Web Portal.

I. INTRODUCTION

Generally, in Society all the work is decided in meetings and maintenance bills, contact no of members are recorded on the papers. There is no automated system for doing all the things that generally happens in society, so that members can come to know what is happening in society. The Society Management System allows members to login with their own account and get updated with society happenings. Society Management System is the website portal to reduce conflicts among society members. The system has automated functionality for calculating monthly maintenance bill and member can view their bill status on their account. The main functionality of this project is that, there is a voting system for different society positions like Chairman; Treasurer Etc. Member can vote the candidates that are standing for different roles in society.

1.1 System Architecture

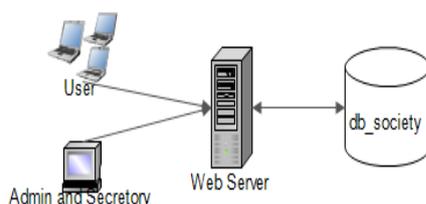


Fig.1.1 Generalized System Architecture

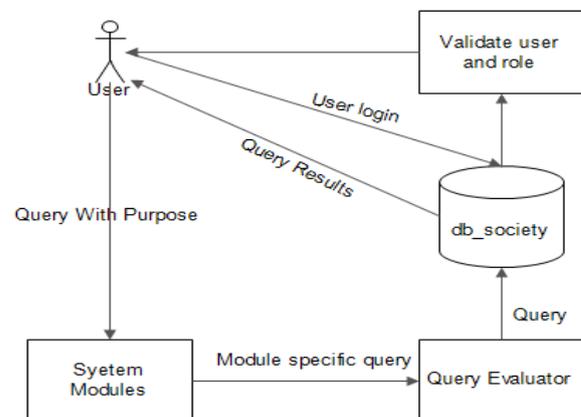


Fig 1.2 System Behaviors

The system provides a unique interface to every user to interact with the system. System accepts queries from users and evaluates the need of the query and fires it over the database and results are displayed to the user.

II. EXISTING SYSTEM

Existing system for a society is based on our traditional way keeping records and details on paper and registers. Access of these details and papers are not granted to common member in absence of the authority. For voting for various designations (secretary, treasurer, chairman, etc) in society members need to be present on site for voting. Due to some unavoidable reasons some members cannot cast vote. Proposed system has a facility for voting online which will provide anytime anywhere access. Booking a hall for celebration in a society was tedious work as details were on paper and were only accessible only to the authority which may create confusion when two or more people want to celebrate

in same hall. We studied Housing Society Management System ^[5]. This software system generates bill automatically and manually. It creates bill of all members at single click. In this system bills can be generated as per multiple of months i.e. monthly, quarterly half yearly etc. due day of bills can be assigned. Housing Society Management System does not allow user to cast vote or manage nominees and does not have a provision for hall allocation. This software concentrates mainly on generation of bills whereas our system integrates various other features of society which are exact replica of the real happenings in the society. Including features like voting, hall allocation, report generation etc. Our system provides more efficient and accurate results and can be accessed anywhere anytime.

III. PROPOSED SYSTEM

Society Management System is the website portal designed to reduce conflicts among society members. The system has automated functionality for calculating monthly maintenance and member can view their bill status on their account. The main functionality of this project is that, there is a voting system for different society positions like Secretary, Chairman, Treasurer Etc. Member can vote the candidates that are standing for different roles in society. The Society Management System allows members to login with their own account and get updated with society happenings. Datepicker is a JQuery function that allows user to pick up any date in user friendly manner.

The following are the modules included in this system:

1. Login and Administration
 - Login will separate the user, secretary and Administrator of the System.
 - The monthly maintenance bill will be authenticated by administrator.
 - Admin can also set the candidate for voting and allocation of hall.
 - The administrator and members has authority to login to the website and manage their profile.
 - Secretary has the special privileges of updating monthly bills.
2. Voting System
 - The voting system will also be included in this system.
 - The voting system allows members to elect the candidates that are standing for different positions in society.
 - The candidates for different roles will be assigned by administrator.
 - The result of voting will be declared on welcome page after login.

3. Reports and Monthly Bill Generation
 - Various type of reports viz. Resource Report, Total revenue etc. can be generated by the system with a provision of downloading the reports too.
 - Rates defined as per the "Bye Laws" ^[5], and the System will calculate the maintenance charges under different heads and for different types of premises.
 - The member can view his previous month bill status on their profile.
 - The administrator can confirm the member status by just one click and it will be automatically reflect in the db. If the bill is not paid on or before the specific fixed date (like 15th of every month), the arrears will be added to the bill.
4. Hall Allocation for Celebration
 - This module will be used for allocating hall or open ground for celebration. Admin can allocate the hall to the member by his end only.
 - Before allocation, on a particular date from a member, it will be checked that there is no other event is planned from other member.
5. Complaints
 - User can report new complaints using the system interface.
 - While the Administrator and Secretary has the rights to reply to the complaint and replies can be checked anytime.

3.1 How System Works

3.1.1 Working of the System

- (1) For a new member he will register on the website by providing the necessary details.
- (2) If already registered, then the user can directly login to the system.
- (3) The system will differentiate as per the login as either
 - a. Administrator
 - b. Secretary
 - c. User
- (4) After login you will be directed to the dashboard of the system where you will have various options as per the type of the user
 - a. The administrator can insert posts, notices, manage the site, manage users looks etc.
 - b. The secretary can access the posts.
 - c. The member can manage his/her profile.
- (5) On visiting the main site, the user will have two options Logout and My Society and all the recent news and activities will be visible to the user.
- (6) On clicking the My Society option, you will be directed to the society's dashboard.

- a) Here the administrator can select the members for voting for various positions, can check any complaints received and even reply the solution to the sender, check the status of the maintenance bills of each member and set it as paid if a particular member has paid the bill, generate reports and also allot halls to the member if requested.
- b) The secretary will have the right to update the prices of the maintenance bills if there is a case of rise in the prices due to some reasons, and also reply to the complaints received.
- c) The member of the society can view the recent posts and notices of the society, he can vote for the candidates which are selected for voting for various positions. He can also send any complaints or queries to the authority and can also search for other members present in the society.

3.1.2 Algorithm for Voting System

- (1) The administrator will manage the nominees and select various members for different posts.
- (2) After the member logs in, he'll see the nominees and can cast his vote for a person for a particular post. The member is allowed to cast his only once.
- (3) The status of the member can be checked using

```

if (status*==0)
{
    Cast vote
    Counter++
    Status=1
}
    
```

else
 The system will display a message "You have already voted. Thank you".
 *(Status indicates whether the user has already voted or not. Status=0 says that user has voted yet else the user has voted.)

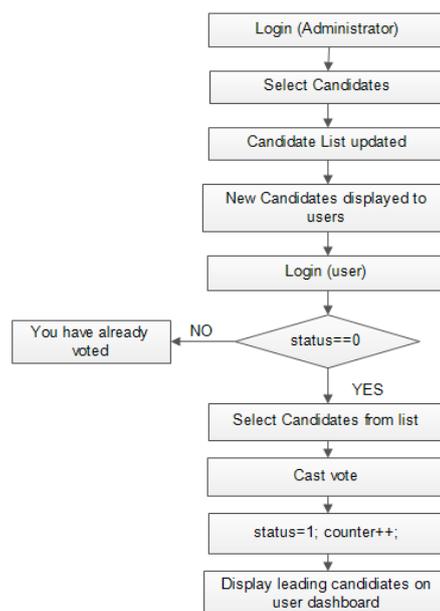


Fig. 3.1.2 Flow graph of Voting System

3.1.3 Algorithm for Allotting Hall

- (1) Select date, type of hall required.
- (2) If(status==0)
 - {
 - Display the booking details
 - Book the hall
 - Status=1
 - }
- (3) else if(status==1)
 Display the message "Sorry, Hall is not available for the selected date."
 Status here indicates whether the hall is booked or not.

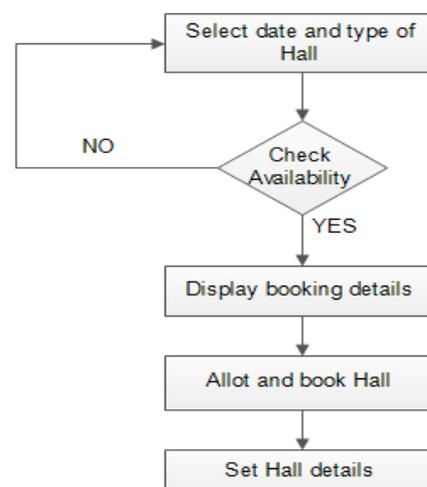


Fig.3.1.3 Flow graph for Hall Allocation

IV. RESULTS

4.1 Administrator

Logging into the system directs user to the control panel. Control panel allows user to manage his profile and allows privileged users some rights like to post news, updates etc.

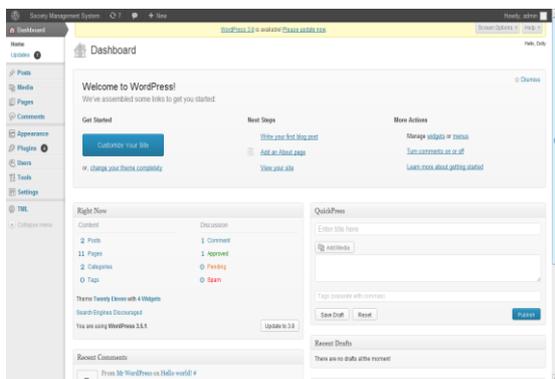


Fig. 4.1 Admin Control Panel

4.2 Menu Bar

The system separates the users on basis of the level of the user. User dashboard is displayed as per the level of the user. Level 0 is for the normal user, level 1 for the secretary and level 10 for the administrator. System allows Administrator to authenticate bills, Manage Candidates for various designations of the society, allot halls for celebration etc. Whereas Secretary is allowed to alter the bills i.e. update the monthly bills. User is allowed to cast vote and search people in the society.

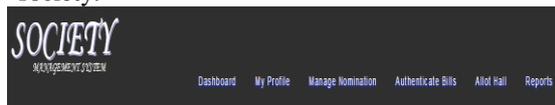


Fig.4.2 (a) Admin Menu



Fig.4.2 (b) Secretary Menu



Fig.4.2 (c) User Menu

4.3 Hall Allocation

Hall allocation module allows the administrator to manage the booking of hall.



Fig.4.3 Check Hall

4.4 Voting System

Elections for the various posts are the important event of the society. Due to some unavoidable reasons members in the society are not able to cast votes. This allows users to cast vote for elections from anywhere. This reduces the paper work and reduces the time required for counting the votes.

Manage Nominations

Secretary		
	Neeraj Bhandari	<input type="checkbox"/>
	Akshay Abhyankar	<input type="checkbox"/>
	Rocky Jagtiani	<input type="checkbox"/>
	Rama Pandey	<input type="checkbox"/>
	Demo Test	<input type="checkbox"/>

Fig.4.4 (a) Manage Nominations

Vote

Secretary			
Profile	Candidate Name	Post No	Vote
	Neeraj Bhandari	29	<input type="checkbox"/>
	Rocky Jagtiani	16	<input type="checkbox"/>

Treasurer			
Profile	Candidate Name	Post No	Vote
	Neeraj Bhandari	29	<input type="checkbox"/>
	Prasen Patil	19	<input type="checkbox"/>

Chairman			
Profile	Candidate Name	Post No	Vote
	Neeraj Bhandari	29	<input type="checkbox"/>
	Akshay Abhyankar	20	<input type="checkbox"/>

Fig.4.4 (b) Voting Panel

4.5 Bill Generation

Bills are generated by the system hence the system reduces the paper work and produces the bills in digital form. The system displays whether the bills are paid or not. The system provides Administrator to authenticate the bills paid by the user. System provides a special interface to the Secretary to update or change the amount charged to the members of the society as per the "bye laws" [1], [2], [3], [4].

Detailed Bill

Not Paid

[4] 'Sinking Funds' means the funds constituted under the Bye Law No. 13(c).

M/S.MR./MRS. Dhanu Palli
 FLAT/SHOP NO. 19
 The following are the contribution charges which are payable by you as per resolutions passed in General Body. You are requested to make payment on or before 15 Jan, 2014 (due date) to avoid interest.

MONTHLY BILL FOR MONTH December 2013		
Sr.No	Particulars	Amount Rs.
1	Water Charges	100 Rs.
2	Sinking Fund	100 Rs.
3	Maintenance Charges	100 Rs.
4	Parking Charges	100 Rs.
5	Building Insurance Charges	100 Rs.
6	Lift Charges	100 Rs.
7	Audit Charges	100 Rs.
8	Terrace/Ground use Charges	100 Rs.
9	Post Charges	200 Rs.
10	Interest on delayed payment	120
TOTAL Bill Due for this month Rs.		2470
Last Month Balance		1360
Total O/S Standing Due Rs.		2470

Fig.4.5 (a) Bill Receipt

ONLINE REFERENCE

[5] www.housing-society-management-software.software.informer.com/1.0/

BILL CHARGES December 2013		
Charges	Particular	Amount Rs.
1	Water Charges	₹100
2	Sinking Fund	₹100
3	Maintenance Charges	₹100
4	Parking Charges	₹100
5	Building Insurance Charges	₹100
6	Lift Charges	₹100
7	Audit Charges	₹100
8	Terrace/Ground use Charges	₹100
9	Post Charges	₹200
		UPDATE
TOTAL Bill Of this month Rs.		1000

Fig. 4.5 (b) Update Bill

V. CONCLUSION

Society management system puts forth the actual working of a society. Administration, working, voting, etc. similar to a society are the key features of our project. User can access feeds and news from the society anywhere and anytime for their own comfort.

VI. FUTURE SCOPE

This project can be enhanced further by adding online payment facility for the members to reduce the extra work of the admin. The software is flexible enough to be modified and implemented as per future requirements. We have tried our best to present this free and user-friendly website to Society members. Message and Email alerts for various happenings in the society can be added to the system so that users do not miss the updates and happenings of the society.

REFERENCES

- [1] Maharashtra Co-operative Housing Societies Act; [MCS Act] 1960.
- [2] 'Reserve Funds' means the funds constituted under the provisions of section 66(1) of the Act and 'Bye law' No. 12 (i).
- [3] 'Repairs and Maintenance Funds' means the fund constituted under the Bye Law No. 13(a).