IACSD

INSTITUTE FOR ADVANCED COMPUTING AND SOFTWARE DEVELOPMENT
AKURDI, PUNE

Documentation On

"SOCIETY MANAGEMENT SYSTEM"
PG-DAC FEB 2020

Submitted By:
Group No: 84
Ms.Vaibhavi A. Shelar   Roll No. 1213
Ms.Vrushali A. Mohite   Roll No. 1217

Prashant Karhale   **Mr. Akshay Parab**
Centre Coordinator   **Project Guide**

IACSD

Table of Contents

<u>List of Figures</u>

1. <u>Introduction</u>

This document is meant to delineate the features of SMS, so as to serve as a guide to the developers on one hand and a software validation document for the prospective client on the other. SMS are designed to provide utility to daily operations of society. This software helps maintains society Maintenance as well as cultural funds and other payments. Secretory can add Electricity billing, Water billing, security maintenance and also manage flat owner data. Then Flat owner need to add there family members and if owner have any issue then owner can complaint online through this system. Secretory can add events and cancel events, issue notice from notice board. 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.

<u>Document Purpose</u>

The advancement in Information Technology and internet penetration has greatly enhanced various business processes and communication between society owners and their customers who are purchasing the flats. This Society Management System is developed to provide the following services:

<u>Enhance Business Processes:</u>
To be able to use internet technology to project to the global world instead of limiting their services to their local domain alone, thus increase their return on investment (ROI).

<u>Online Society Management:</u>
A tool through which admin can register a society and provide many functionalities to them. The admin also receives some set of functionalities which help in managing the society.

<u>Monthly Bill generation:</u>
This system's key functionality is that it helps in generating the monthly bill of the society conveniently.

<u>Problem Statement</u>

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. It is hard to manage all the society system with pen and paper. It gets really hard to maintain the records and then keep track of past records. Hence this system is proposed to overcome the flaws of the existing system and giving power to the admin of the society so that he/she will be able to manage the society easily.

<u>Product Scope</u>

This project traverses a lot of areas ranging from business concept to computing field, and required to perform several researches to be able to achieve the project objectives. The area covers include:

- Housing industry: This includes study on how the daily Society work actually is being done, process involved and opportunity that exist for improvement.
- J2EE Technology used for the development of the application.
- Society's Secretary and House Owners will be able to use the system effectively.
- Web-platform means that the system will be available for access 24/7 except when there is a temporary server issue which is expected to be minimal.

Aims & Objectives

Specific goals are: -

- To produce a web-based system that allow the admin to add Society Details and provide functionalities to its role.
- To ease flat owners by providing different functionalities to it.
- To ease society's secretary to help him in his work to add and track maintenance work efficiently.

2.Overall Description

Product Perspective:

2.1.1 Existing system function:

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. We studied Housing Society Management System. 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.

- **III. PROPOSED SYSTEM**

Product functionality:

Society Management System provides the features for admin, house owner and secretary. It includes several functionalities describes as below:

House Owner Management:

It provides facility to add, update, delete and view the House owners who are purchasing a particular house in the society. We can view their details and also update it if that particular house is sold to any new owner.

Generating Notice:

The secretary can generate a common notice which can be viewed by all the other house owners in their 'View Notices' functionality when they login in, int the system.

Generating Maintenance Bill:

Administrator can generate the monthly maintenance bill on the basis of the monthly water and electricity bill and all other fund payments who are working in the society.

Maintenance Manager:

The project helps the secretary to generate monthly bill of the society based on various bills and salaries of workers working in the society and to be paid society members.

Benefits of Society Management System

- This online society management solution is fully functional and flexible.
- It is very easy to use.
- This online society management system helps in back office administration by streamlining and standardizing the procedures.

- It saves a lot of time, money and labour.

- Eco-friendly: The monitoring of the society management and the overall business becomes easy and includes the least of paper work.

- The application acts as an office that is open 24/7.

- It increases the efficiency of the management at offering quality services to the customers.

- It provides custom features development and support with the application.

Users and Characteristics:

Admin:
- Admin can login to the system.
- Add a Society to system.
- Add Society Details.
- View Society Details.
- Update Society Details.

Secretary:
- Secretary can login to the system.
- Secretary can add user details.
- Add Bills like Water bills, Electricity bills and other funds.
- Add Notices for house Owners.
- Add events which going to held in society.
- Secretary can reply to complaints.

House Owners:
- House Owner can login to the system.
- Add family members details.
- Update Profile.
- If any issue for that complaint to secretary.
- Make payments for issued bills.

Operating Environment:

Server Side:

Processor: Intel® Xeon® processor 3500 series

HDD: Minimum 500GB Disk Space

RAM: Minimum 4GB

OS: Windows 10, Linux 6

Database: Mysql

IACSD

<u>Client Side (minimum requirement):</u>

> **Processor:** Intel Dual Core
>
> **HDD:** Minimum 80GB Disk Space
>
> **RAM:** Minimum 1GB
>
> **OS:** Windows 8 and above, Linux

Design and Implementation Constraints:

- The application will use Ajax, JavaScript, jQuery and css as main web technologies.
- HTTP and FTP protocols are used as communication protocols. FTP is used to upload the web application in live domain and the client can access it via HTTP protocol.
- Several types of validations make this web application a secured one.
- Since Society Management system is a web-based application, internet connection must be established.
- The Society Management System will be used on PCs and will function via internet or intranet in any web browser.

3.Specific Requirement

External Interface Requirements:

User Interfaces:

- All the users will see the same page when they enter in this website. This page asks the users a username and a password.

- After being authenticated by correct username and password, user will be redirect to their corresponding profile where they can do various activities.

- The user interface will be simple and consistence, using terminology commonly understood by intended users of the system. The system will have simple interface, consistence with standard interface, to eliminate need for user training of infrequent users.

Hardware Interfaces:

- No extra hardware interfaces are needed.

- The system will use the standard hardware and data communication resources.

- This includes, but not limited to, general network connection at the server/hosting site, network server and network management tools.

Application Interfaces:

OS: Windows 10, Linux

Web Browser:

The system is a web-based application; clients need a modern web browser such as Mozilla Firebox, Internet Explorer, Opera, and Chrome. The computer must have an Internet connection in order to be able to access the system.

Communications Interfaces:

- This system uses communication resources which includes but not limited to, HTTP protocol for communication with the web browser and web server and TCP/IP network protocol with HTTP protocol.

- This application will communicate with the database that holds all the booking information. Users can contact with server side through HTTP protocol by means of a function that is called HTTP Service. This function allows the application to use the data retrieved by server to fulfil the request fired by the user.

4.System Design

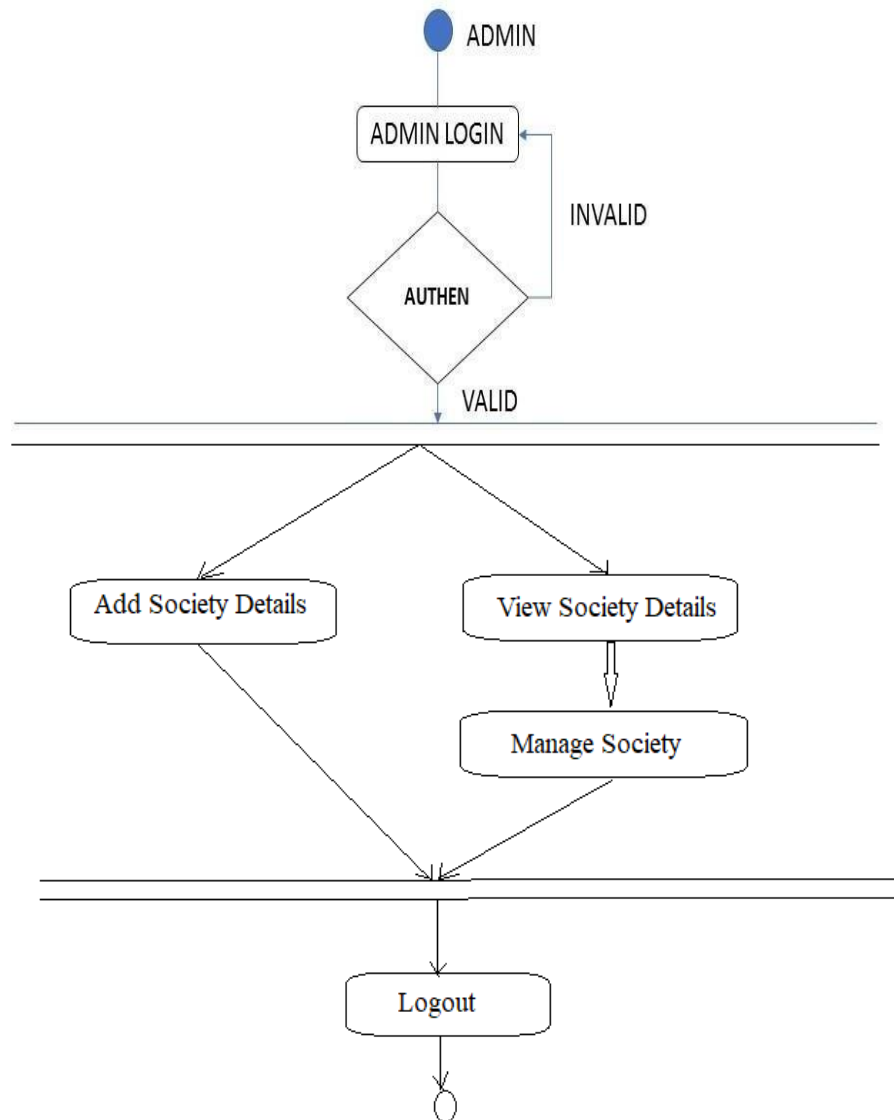## Activity Diagram

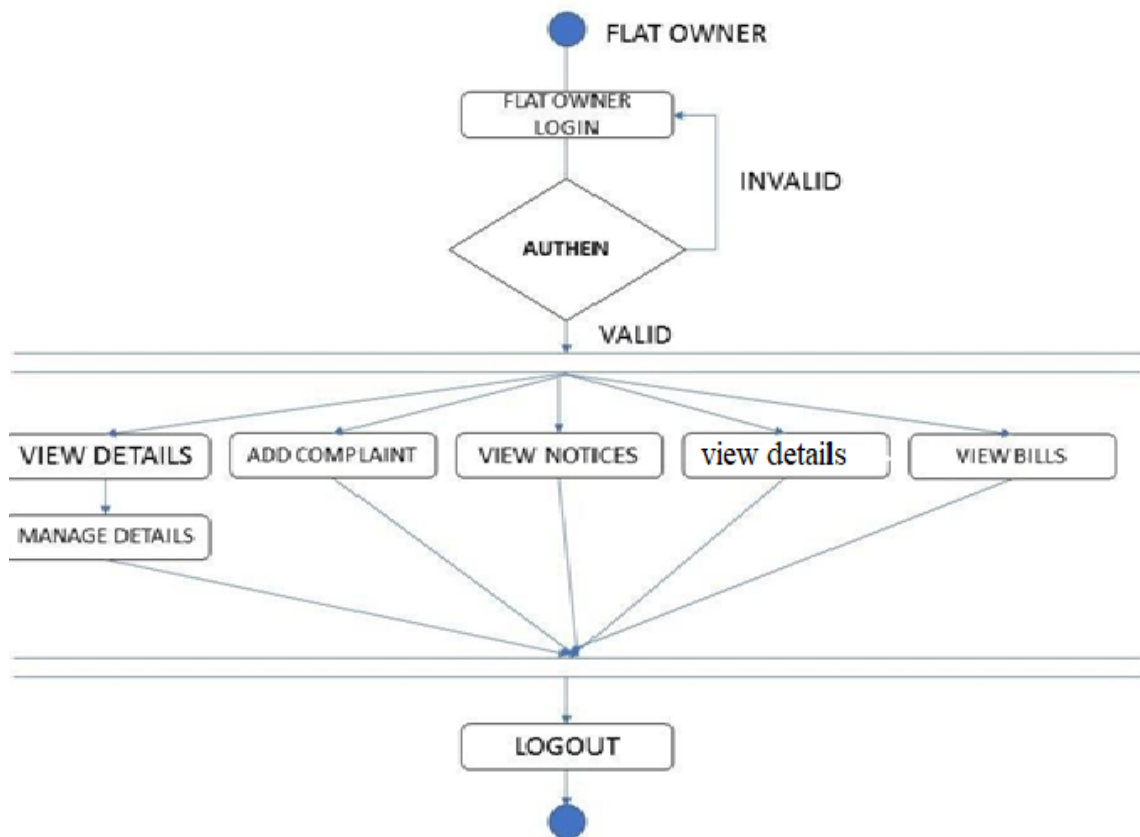**Figure 1: Admin Activity Diagram**

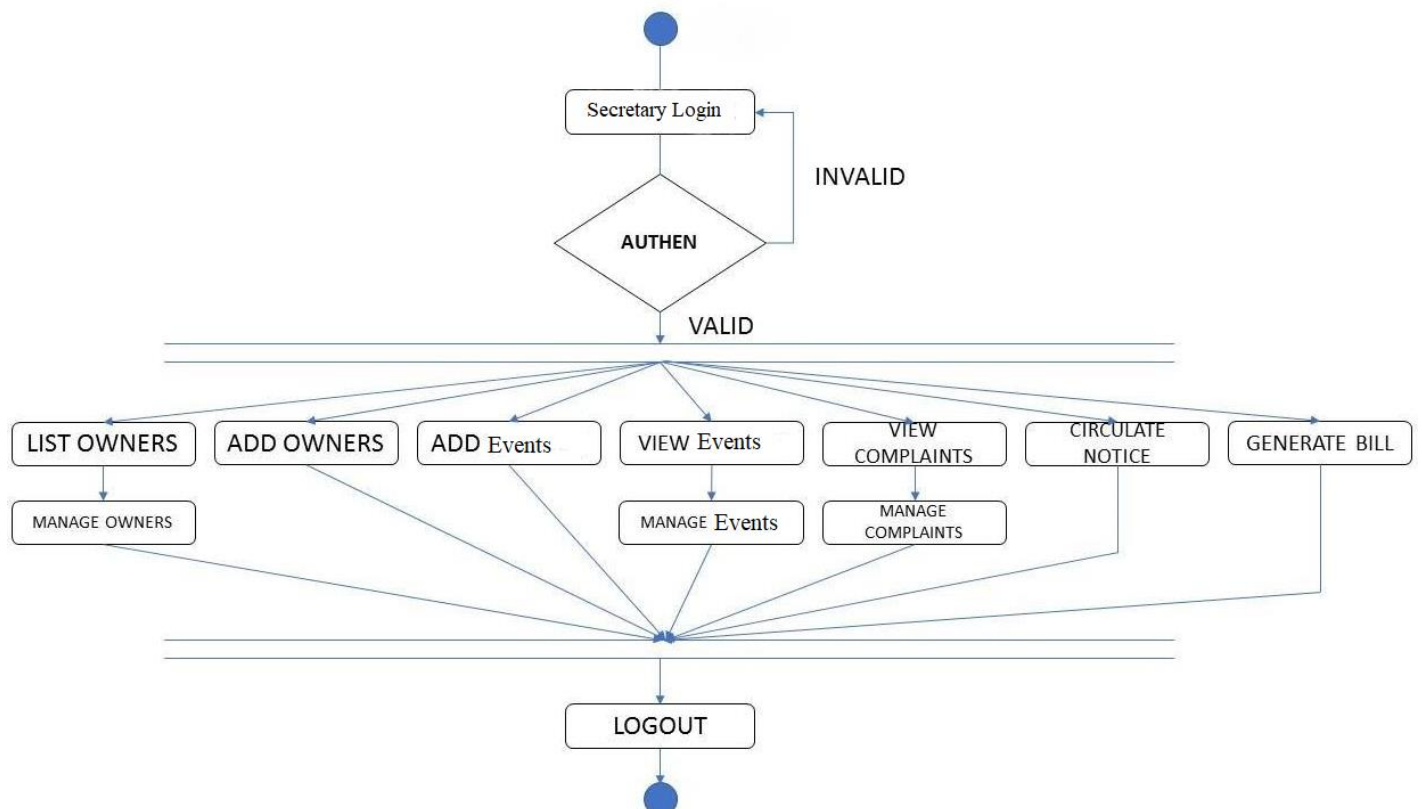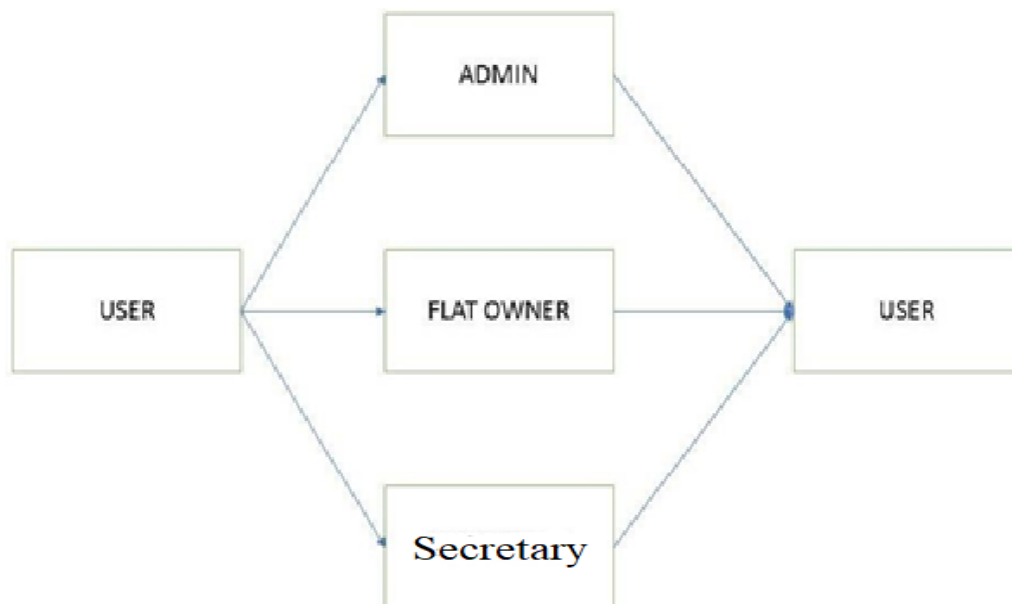**Figure 2: House Owner Activity Diagram**

Figure 3: Secretary Activity Diagram

Data Flow Diagram

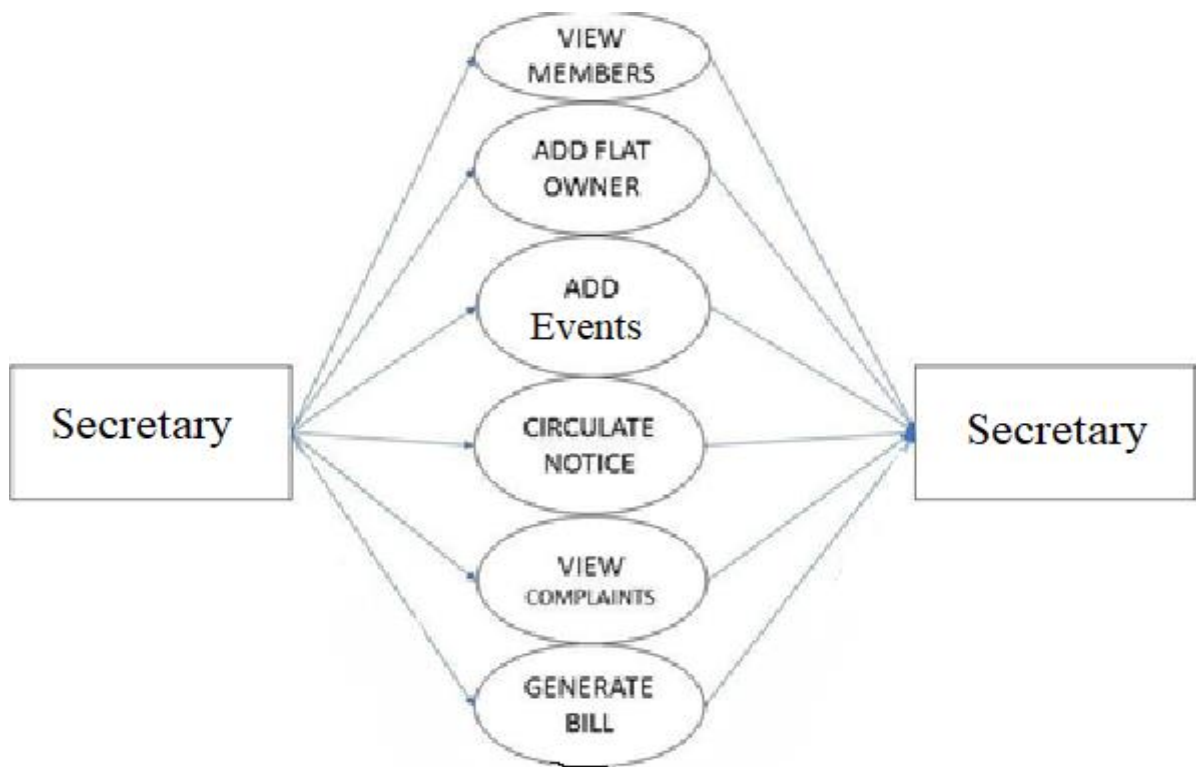**Figure 4: Level 0 Data Flow Diagram**

Figure 5: Level 1 Data Flow Diagram

Figure 6: Level 2 Data Flow Diagram for Secretary
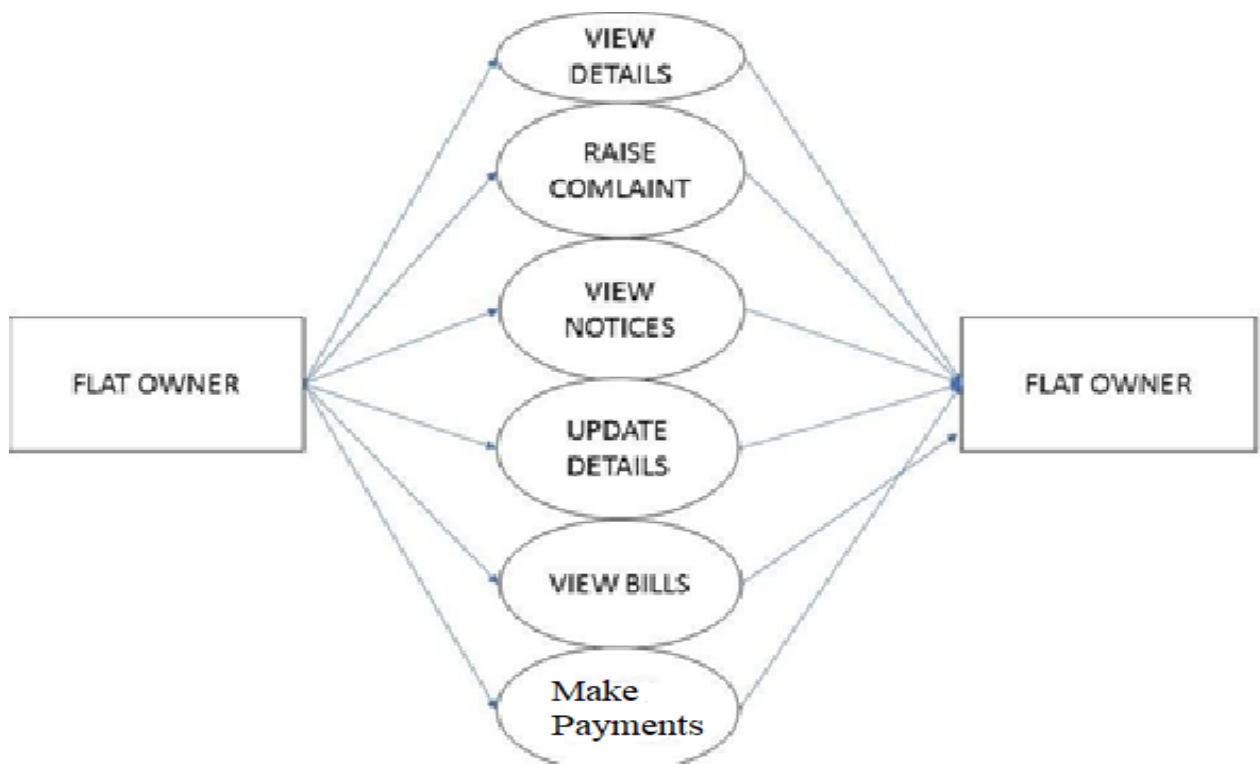
Figure 7: Level 2 Data Flow Diagram for Flat owner

Class Diagram

SocietyName

pk	SId
	SName
	Address
	City
	PinCode
	NoHouses
	Image
	EntryDate
	Status

BillsAndPayments

pk	MId
	WaterBill
	ElectricityBill
	RegularFund
	AddedOnDate
fk	UId
	PaymentId
	PaymentDate
	PaymentStatus

Users

pk	UId
	FName
	LName
	Email
	Password
	MobileNo
	BDate
	Members
	BlockNo
	HouseNo
	Image
	EntryDate
fk	SId
fk	EId
	Role

ComplaintBox

pk	CId
fk	UId
	Description
	Reply
	ComplaintDate
	CloseDate
	Status

Notice Board

pk	NId
fk	UId
	NoticeDate
	NoticeSubject
	NoticeDetails
	Status

Events

pk	EId
	EventSubject
	EventDetails
	EventOccation
	EventDate
	EventVenueDetails
	EventExpenditure
	Status

Figure 8: Class Diagram

IACSD

Use Case Diagram

Figure 9: Use Case Diagram

IACSD
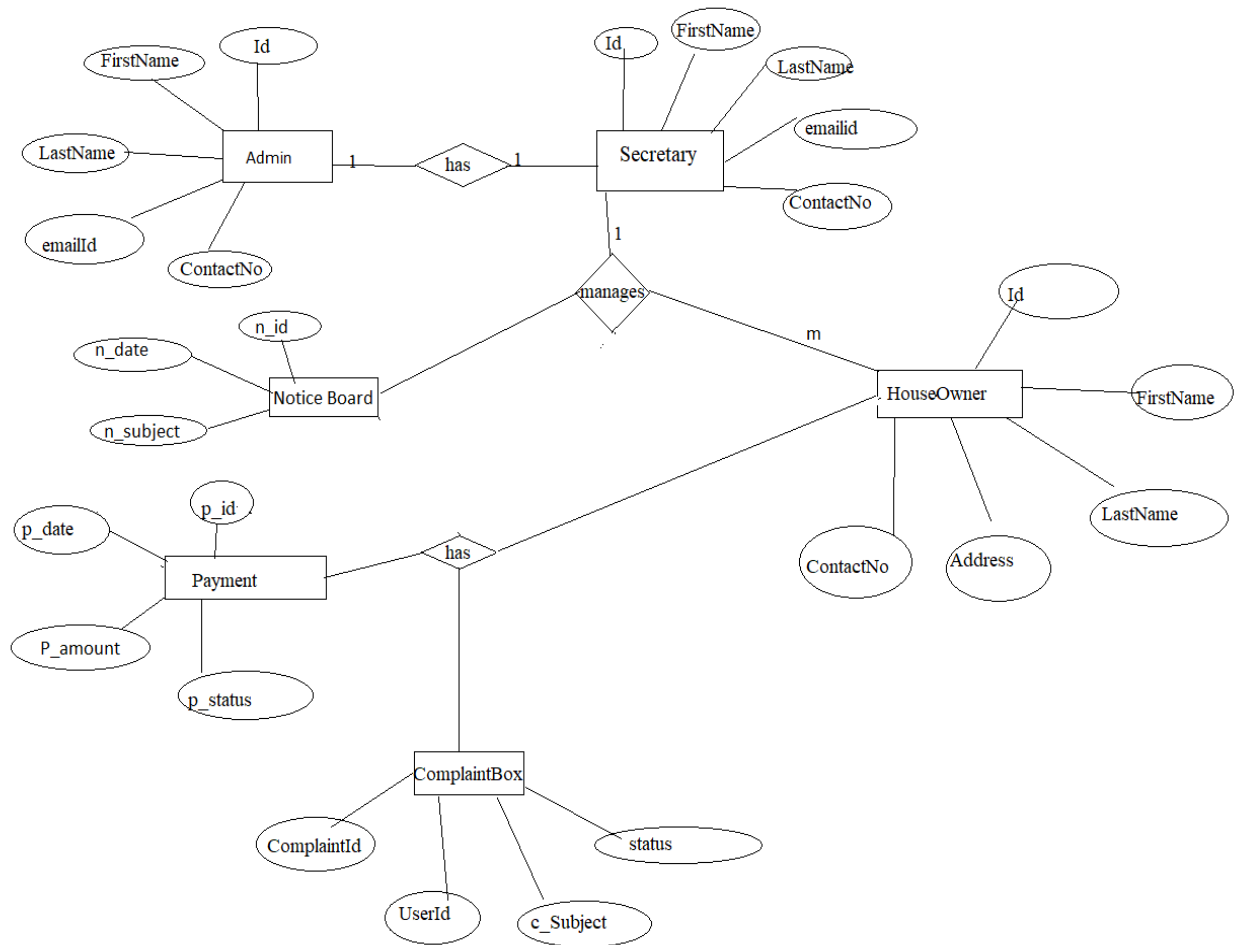
ER Diagram:

Figure 10: ER Diagram

5.Table Structure

Role :

Name	Type	Extra
Id	int	Primary & Auto-increments
Role	Varchar	

Society Names:

Name	Type	Extra
SId	int	Primary & Auto-increments
Sname	Varchar	Unique
Address	Varchar	
City	Varchar	
PinCode	int	
NoHouses	int	
Image	Varchar	
EntryDate	DATETIME	
Active	Boolean	

User Names:

Name	Type	Extra
UId	int	Primary & Auto-increments
FName	Varchar	
LName	Varchar	
Email	Varchar	Unique
Password	varchar	
Mobile	int	Unique
BDate	DATETIME	
Members	Varchar	
BlockNo	Varchar	
HouseNo	Varchar	Unique
Image	Varchar	
EntryDate	DATETIME	
SId	int	FK
RoleId	int	FK

MaintenanceBills And Payment:

Name	Type	Extra
MId	int	Primary & Auto-increment
Uid	int	Foreign Key
WaterBill	int	
ElectricityBill	int	
RegularFund	int	
AddedOnDate	DATETIME	
PaymentId	Varchar	Unique
PaymentDate	DATETIME	
PaymentStatus	Boolean	

ComplaintBox:

Name	Type	Extra
CId	int	Primary & Auto-increment
UId	int	Foreign Key
Description	Varchar	
Reply	Varchar	
ComplaintDate	DATETIME	
Status	Boolean	
CloseDate	DATETIME	

NoticeBoard:

Name	Type	Extra
NId	int	Primary & Auto-increment
UId	int	Foreign Key
NoticeDate	DATETIME	
NoticeSubject	Varchar	
NoticeDetails	Varchar	
Status	Boolean	

Events:

Name	Type	Extra
EId	int	Primary & Auto-increment
EventSubject	Varchar	
EventDetails	Varchar	
EventOccation	Varchar	
EventDate	DATETIME	
EventVenueDetails	Varchar	
EventExpenditure	int	
UId	int	Foreign Key
Status	Boolean	

6.Conclusion

Society management system puts forth the actual working of a society. Administration, management, payment calculation, complaint Management, Event Management, Notice Generating etc. similar to a society are the key features of our project. User can access services and functionalities from the society anywhere and anytime for their own comfort.

Future Scope

This project can be enhanced further by adding club house booking, online voting system, 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.

7.0 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).

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

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