Project Report On **Society Management System**

ACKNOWLEDGEMENT

I extend my deepest appreciation to my esteemed guide, Mr. XYZ for providing me with the possibility to complete this project with the right guidance and advice.

Special gratitude I give to my respected head of the division Mr.XYZ, for allowing me to use the facilities available and also help me to coordinate my project

Furthermore, I would also like to acknowledge with much appreciation the crucial role of faculty members on this occasion.

Last but not least, I would like to thank friends who help me to assemble the parts and gave a suggestion about the project.

Abstract

In this society management system all the society categorize by the number of blocks and flats. The people who lives in flats they may be a owner of flat or tenant of flat. In this era, people are very hectic schedule, so they do not have time for complain small problem related to flat. We have developed the system for society member they can make complain form any where any time and we resolve the Complain as soon as possible. In this system people can easily find address of the flat by providing member name.

Introduction

Society Management System is a platform that provide interface between member of society and society management.

A society management system effectively manages and handles all the functioning of a society. The software system can store the data of various flat owners and their family members. The system also maintains and calculates the society maintenance as well as electricity bill automatically in individual flat bill. The system needs an administrator to input various flat owner data and billing amounts into it. The rest of the work is done by the system on its own. It calculates various associated costs, adds them up and provides a bill accordingly.

- > The two main users involved in this system are
 - 1. User(i.e. member of society)
 - 2. Admin

Advantages:

- It helps the society secretary to handle and manage flat owner's data.
- It helps them manage society funds.
- It brings transparency and efficiency in the working of housing societies.

Disadvantages:

- The system can only handle single society.
- The system does not include bank payment, dd, cheque status.

Applications:

• To be used in housing societies.

Feasibility study

Whenever we design a new system, normally the management will ask for a feasibility report of the new system. The management wants to know the technicalities and cost involved in creation of new system.

- Technical feasibility
- Economic feasibility
- Physical feasibility

Technical feasibility:

Technical feasibility involves study to establish the technical capability of the system being created to accomplish all requirements to the user. The system should be capable of handling the proposed volume of data and provide users and operating environment to increase their efficiency.

For example, system should be capable of handling the proposed volume of data and provide users.

Economic feasibility:

Economic feasibility involves study to establish the cost benefit analysis. Money spent on the system must be recorded in the form of benefit from the system. The benefits are of two types:

Tangible benefits:

- Saving man labor to do tedious tasks saves time.

Intangible benefits:

- Improves the quality of organization.

Physical feasibility:

It involves study to establish the time responses of the new system being created. For e.g., if the new system takes more than one day to prepare crucial finance statement for the management, wherever it was required in an hour, the system fails to provide the same.

It should be clearly establish that the new system requirements in the form of time responses would be completely met with. It may call for increase in cost. If the required cost is sacrificed then the purpose of the new system may not be achieved even if it was found to be technically feasible.

Scope of the Project

The proposed system will affect or interface with the user (society member) and administrator.

The system works and fulfills all the functionalities as per the proposed system.

It will provide reduced response time against the queries made by different users.

This project is based on PHP language with MYSQL database which manage Society with flat and Owner of flat detail. SMS provide interface between member of society and society management.

All possible features such as verification, validation, security, user friendliness etc have been considered.

The different types of modules present in this project are

- 1. Admin
- 2. User

Admin:

- Dashboard: In this section, admin can see all detail in brief like Total flats, Total bills, Total Allotment, Total Visitor, Unresolved Complain, In progress Complain , Resolved Complain and Total Complain.
- 2. Flats: In this section, admin can manage flats (Add/Update).
- 3. **Allotment**: In this section, admin can manage the allotment (Add/Update).
- 4. Bills: In this section, the admin can manage bills (Add/Update).
- 5. **View Complain:** In this section, the admin can view the complain of society member and response the complain and change the status of complain according to complain status.
- 6. **Visitors:** In this section admin, can mange visitors (Add/Update) and visitor mange incoming and outgoing details of visitors.

- 7. **Search:** In this section admin, can search allotment of flats and visitor of society by flats number and by name and mobile number of visitor respectively.
- 8. **Reports:** In this section admin can view how much allotment has been done in particular period and also view how many visitor visit in a society in particular periods.

Admin can also update his profile, change the password and recover the password.

User (Society Member):

- 1. **Dashboard**: It is welcome page for society members.
- 2. **View Bill**: In this section, user can view his/her own society charges which will generated by admin per month.
- 3. **Visitor**: In this section, user can view detail of visitor who visited in his/her own flat.
- 4. **Complain**: In this section, user can raise the complain and view the complain status which is provided by society admin
- 5. Search: In this section, user can search visitor who visited in his/her flats
- 6. **Reports**: In this section, user can view how many visitor visit in a flats in particular periods.

Software & Hardware requirements

✓ Any Version of browser after Mozilla Firefox 4.0, Internet Explorer 6.0, chrome

Hardware requirements:

- ✓ Any processor after Pentium 4.
- ✓ Any version of Windows XP or later.
- ✓ Processor speed: 2.0 GHz
- ✓ RAM: 1GB
- ✓ Hard disk: 40GB to 80 GB

Software requirements:

✓ Database : MySQL✓ Server : Apache✓ Frontend : HTML

✓ Scripting Language : JavaScript

✓ IDE : Sublime✓ Technology : PHP

System Design

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization.

Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data

Unified Modelling Language Diagrams (UML):

- The unified modelling language allows the software engineer to express an analysis model using the modelling notation that is governed by a set of syntactic semantic and pragmatic rules.
- A UML system is represented using five different views that describe the system from distinctly different perspective. Each view is defined by a set of diagram, which is as follows.

User Model View

- i. This view represents the system from the users perspective.
- ii. The analysis representation describes a usage scenario from the end-users perspective.

Structural model view

- ◆ In this model the data and functionality are arrived from inside the system.
- This model view models the static structures.

Behavioural Model View

◆ It represents the dynamic of behavioural as parts of the system, depicting the interactions of collection between various structural elements described in the user model and structural model view.

Implementation Model View

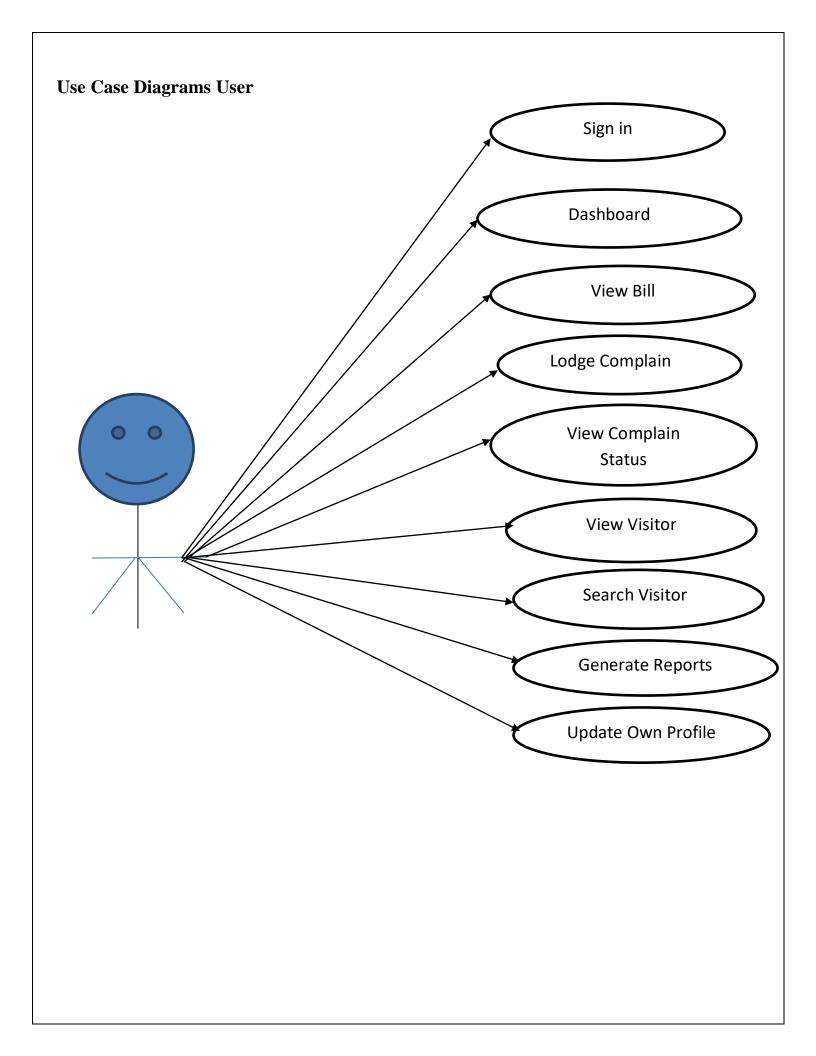
• In this the structural and behavioural as parts of the system are represented as they are to be built.

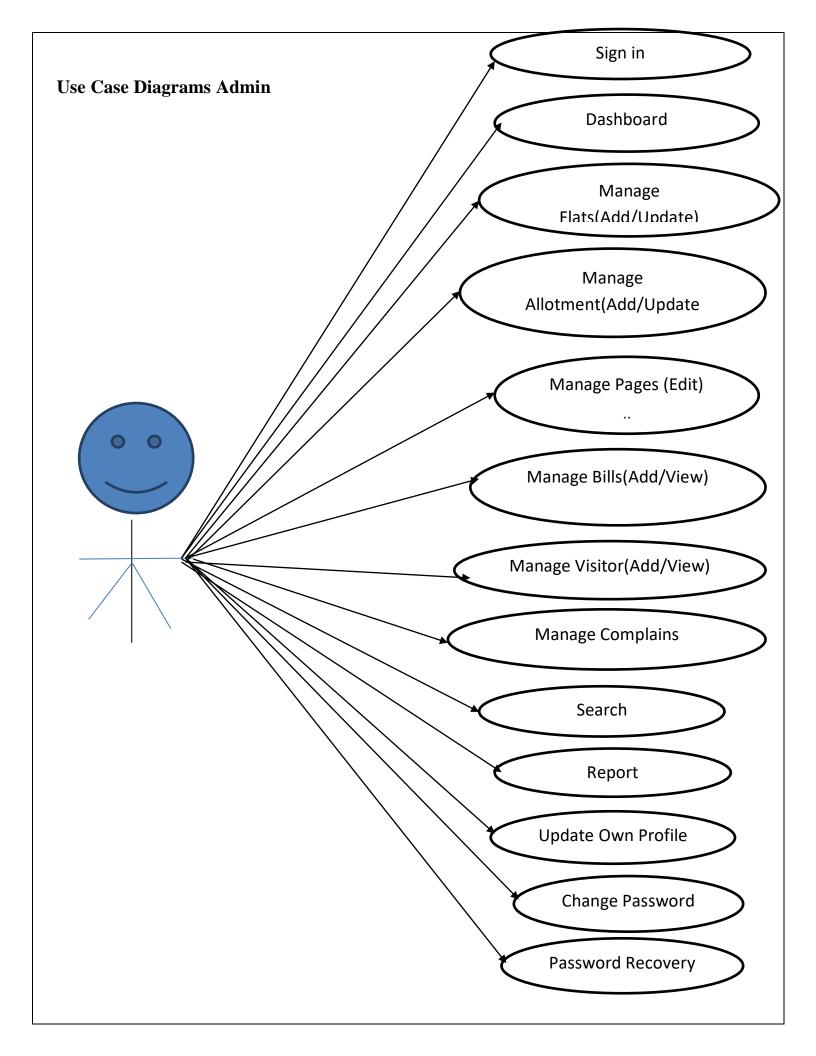
Environmental Model View

In this the structural and behavioural aspects of the environment in which the system is to be implemented are represented.

UML is specifically constructed through two different domains they are

- UML Analysis modelling, which focuses on the user model and structural model views of the system?
- UML design modelling, which focuses on the behavioural modelling,
 implementation modelling and environmental model views.





ENTITY-RELATIONSHIP Diagrams

E-R (Entity-Relationship) Diagram is used to represents the relationship between entities in the table.

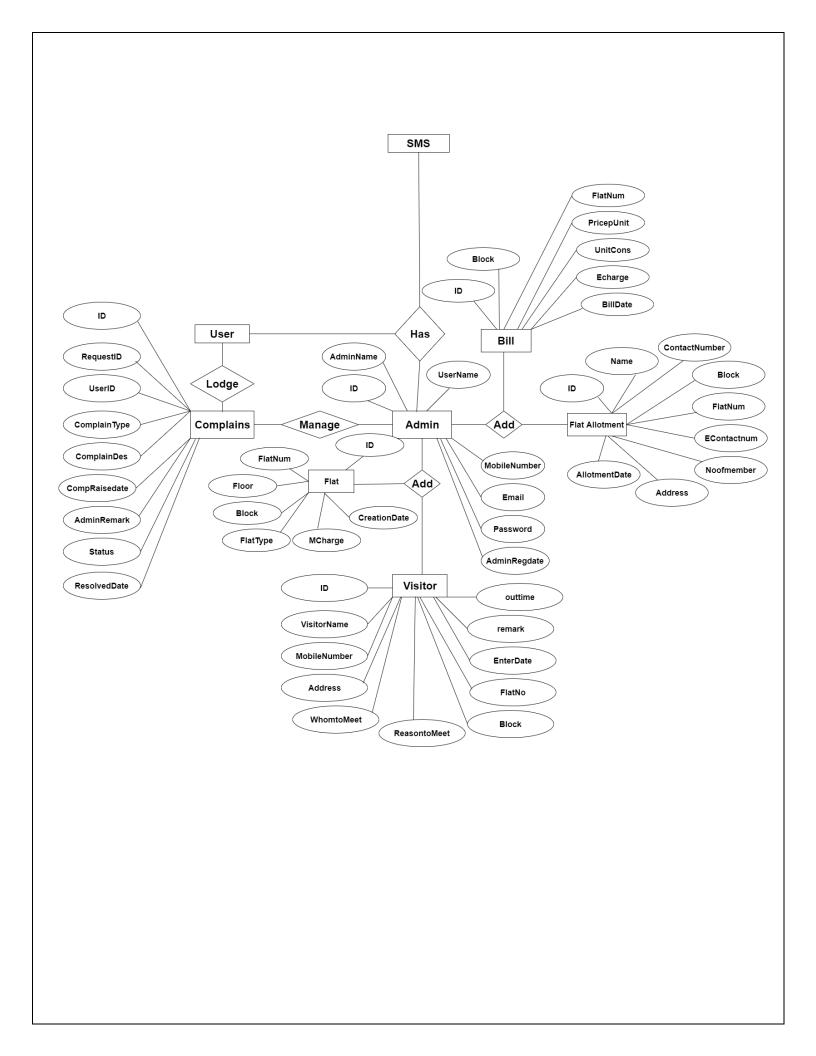
The symbols used in E-R diagrams are:

<u>SYMBOL</u>	<u>PURPOSE</u>
	Represents Entity sets.
	Represent attributes.
	Represent Relationship Sets.
	Line represents flow

Structured analysis is a set of tools and techniques that the analyst.

To develop a new kind of a system:

The traditional approach focuses on the cost benefit and feasibility analysis, Project management, and hardware and software selection a personal considerations.



DATABASE DESIGN

The data in the system has to be stored and retrieved from database. Designing the database is part of system design. Data elements and data structures to be stored have been identified at analysis stage. They are structured and put together to design the data storage and retrieval system.

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make database access easy, quick, inexpensive and flexible for the user. Relationships are established between the data items and unnecessary data items are removed. Normalization is done to get an internal consistency of data and to have minimum redundancy and maximum stability. This ensures minimizing data storage required, minimizing chances of data inconsistencies and optimizing for updates. The MS Access database has been chosen for developing the relevant databases.

Society Management System (SMS) contains 7 MySQL tables :

tbladmin table Structure: This table store the admin login and personal Details.

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	ID 🔊	int(10)			No	None		AUTO_INCREMENT
2	AdminName	varchar(120)	utf8mb4_general_ci		Yes	NULL		
3	UserName	varchar(120)	utf8mb4_general_ci		Yes	NULL		
4	MobileNumber	bigint(10)			Yes	NULL		
5	Email	varchar(200)	utf8mb4_general_ci		Yes	NULL		
6	Password	varchar(200)	utf8mb4_general_ci		Yes	NULL		
7	AdminRegdate	timestamp			Yes	current_timestamp()		

tblallotment table Structure: This table store the allotment detail of flats.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID 🔑	int(10)			No	None		AUTO_INCREMENT
2	Name	varchar(200)	utf8mb4_general_ci		Yes	NULL		
3	ContactNumber	bigint(10)			Yes	NULL		
4	Block 🔊	varchar(10)	utf8mb4_general_ci		Yes	NULL		
5	FlatNum 🔊	int(10)			Yes	NULL		
6	EContactnum	bigint(10)			Yes	NULL		
7	Noofmember	int(10)			Yes	NULL		
8	Address	mediumtext	utf8mb4_general_ci		Yes			
9	AllotmentDate	timestamp			Yes	current_timestamp()		

tblbill table Structure: This table store the bill detail of flats.

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	ID 🔊	int(10)			No	None		AUTO_INCREMENT
2	Block 🔊	varchar(20)	utf8mb4_general_ci		Yes	NULL		
3	FlatNum 🔊	int(10)			Yes	NULL		
4	PricepUnit	int(10)			Yes	NULL		
5	UnitCons	int(10)			Yes	NULL		
6	Echarge	varchar(50)	utf8mb4_general_ci		Yes	NULL		
7	BillDate	timestamp			Yes	current_timestamp()		

tblblocks table Structure: This table store the blocks of society.

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	ID 🔊	int(10)			No	None		AUTO_INCREMENT
2	BlockName	varchar(25)	utf8mb4_general_ci		Yes	NULL		

tblflat table Structure: This table store the flats details of society.

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	ID 🔊	int(10)			No	None		AUTO_INCREMENT
2	FlatNum	int(50)			Yes	NULL		
3	Floor	varchar(50)	utf8mb4_general_ci		Yes	NULL		
4	Block	varchar(50)	utf8mb4_general_ci		Yes	NULL		
5	FlatType	varchar(120)	utf8mb4_general_ci		Yes	NULL		
6	MCharge	varchar(200)	utf8mb4_general_ci		Yes	NULL		
7	CreationDate	timestamp			Yes	current_timestamp()		

tblvisitor table Structure: This table store the details of visitors who visit in flats.

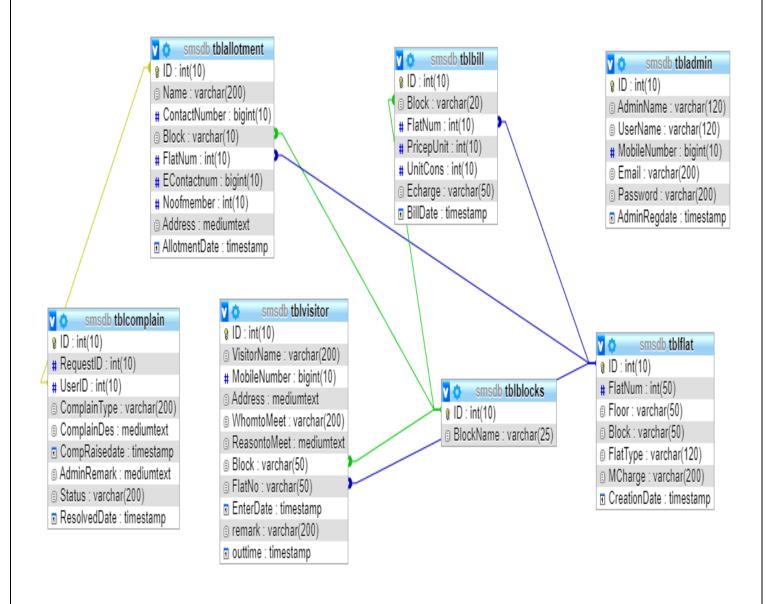
#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	ID 🔑	int(10)			No	None		AUTO_INCREMENT
2	VisitorName	varchar(200)	utf8mb4_general_ci		Yes	NULL		
3	MobileNumber	bigint(10)			Yes	NULL		
4	Address	mediumtext	utf8mb4_general_ci		Yes			
5	WhomtoMeet	varchar(200)	utf8mb4_general_ci		Yes	NULL		
6	ReasontoMeet	mediumtext	utf8mb4_general_ci		Yes			
7	Block 🔊	varchar(50)	utf8mb4_general_ci		Yes	NULL		
8	FlatNo 🔊	varchar(50)	utf8mb4_general_ci		Yes	NULL		
9	EnterDate	timestamp			Yes	current_timestamp()		
10	remark	varchar(200)	utf8mb4_general_ci		Yes	NULL		
11	outtime	timestamp			Yes	NULL		ON UPDATE CURRENT_TIMESTAMP()

tblcomplain table Structure: This table store the details of complains.

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	ID 🔑	int(10)			No	None		AUTO_INCREMENT
2	RequestID	int(10)			Yes	NULL		
3	UserID	int(10)			Yes	NULL		
4	ComplainType	varchar(200)	utf8mb4_general_ci		Yes	NULL		
5	ComplainDes	mediumtext	utf8mb4_general_ci		Yes			
6	CompRaisedate	timestamp			Yes	current_timestamp()		
7	AdminRemark	mediumtext	utf8mb4_general_ci		Yes			
8	Status	varchar(200)	utf8mb4_general_ci		Yes	NULL	·	
9	ResolvedDate	timestamp			Yes	NULL	·	ON UPDATE CURRENT_TIMESTAMP()

Class Diagram:

The class diagram shows a set of classes, interfaces, collaborations and their relationships.



SYSTEM TESTING

SOFTWARE TESTING TECHNIQUES:

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, designing and coding.

TESTING OBJECTIVES:

- 1. Testing is process of executing a program with the intent of finding an error.
- 2. A good test case design is one that has a probability of finding an as yet undiscovered error.
- 3. A successful test is one that uncovers an as yet undiscovered error.

These above objectives imply a dramatic change in view port.

Testing cannot show the absence of defects, it can only show that software errors are present.

There are three types of testing strategies

- 1. Unit test
- 2. Integration test
- 3. Performance test

Unit Testing:

Unit testing focuses verification efforts on the smallest unit of software design module. The unit test is always white box oriented. The tests that occur as part of unit testing are testing the module interface, examining the local data structures, testing the boundary conditions, execution all the independent paths and testing error-handling paths.

Integration Testing:

Integration testing is a systematic technique or construction the program structure while at the same time conducting tests to uncover errors associated with interfacing. Scope of testing summarizes the specific functional, performance, and internal design characteristics that are to be tested. It employs top-down testing and bottom-up testing methods for this case.

Performance Testing:

Timing for both read and update transactions should be gathered to determine whether system functions are being performed in an acceptable timeframe.

Output Screen of Project

Home Page





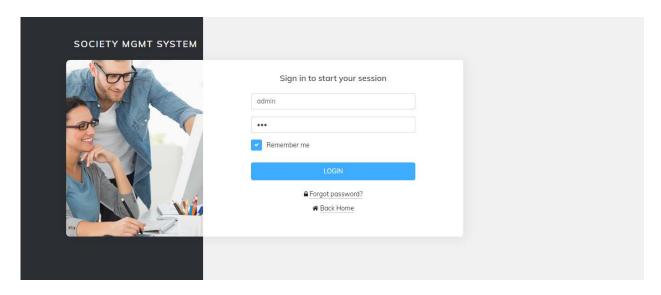




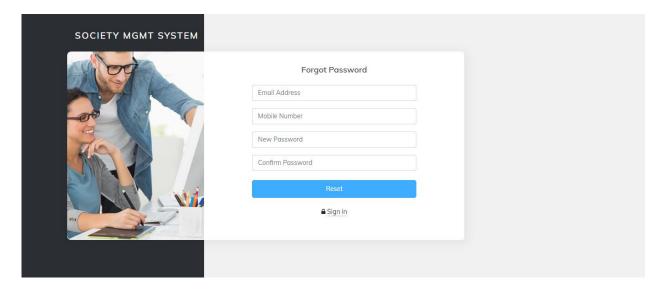


Society Management System

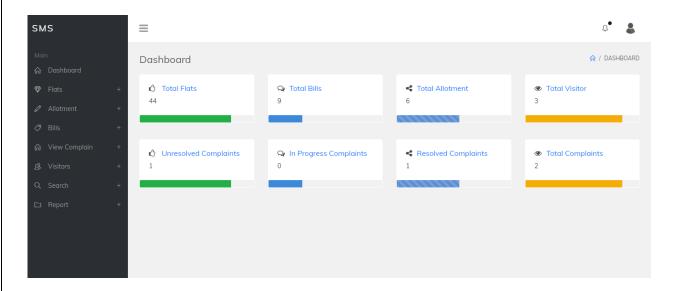
Admin Login



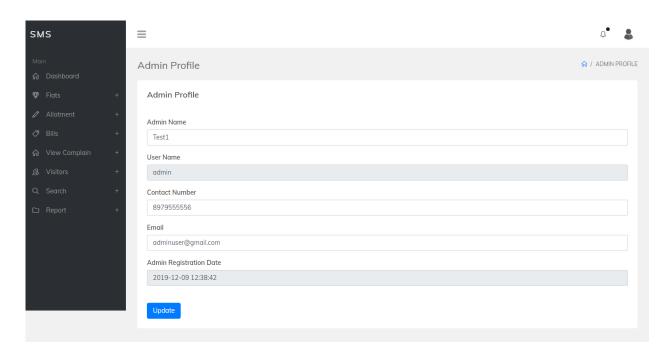
Forgot Password



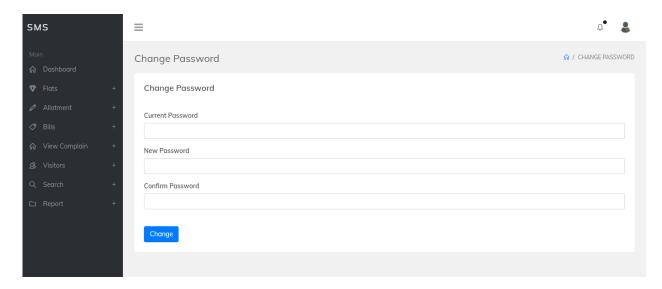
Dashboard



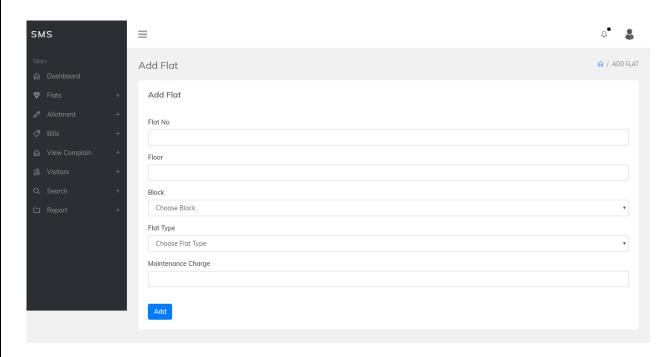
Admin Profile



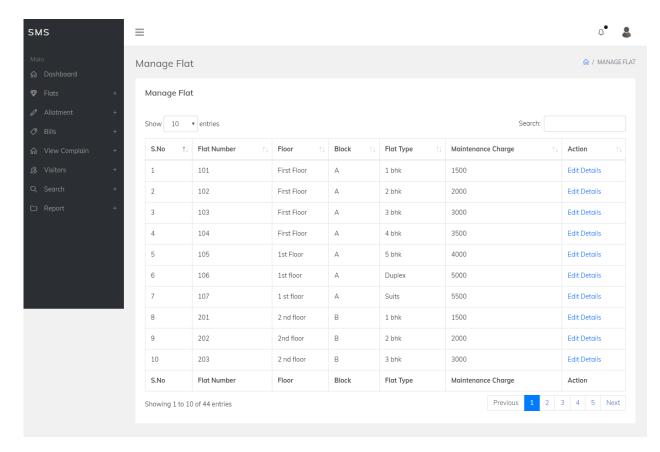
Change Password



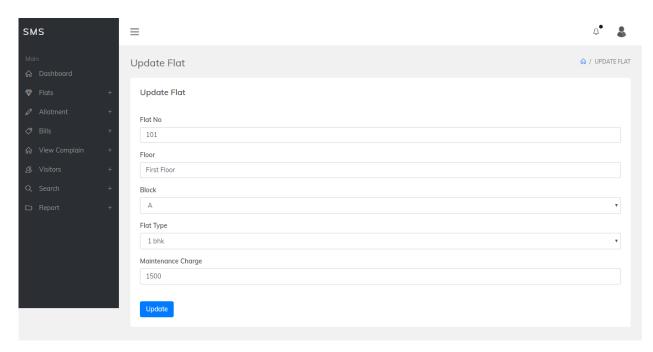
Add Flats



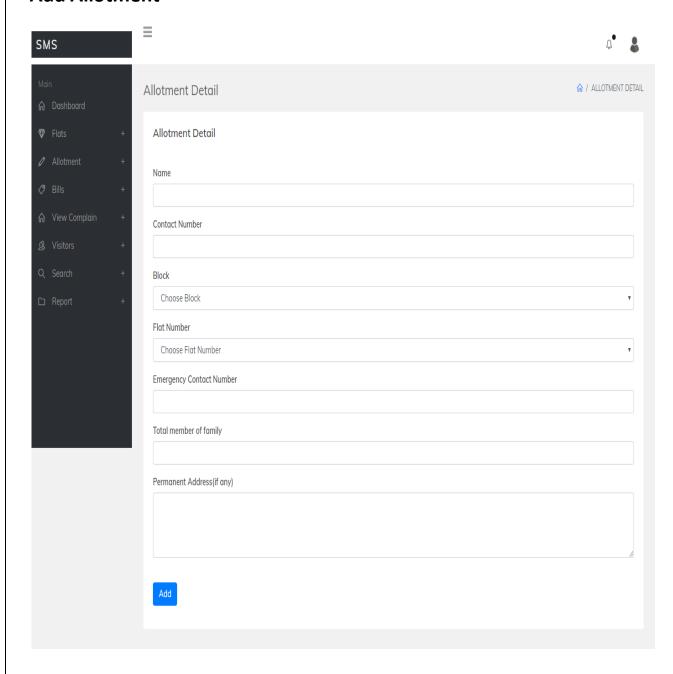
Manage Flat



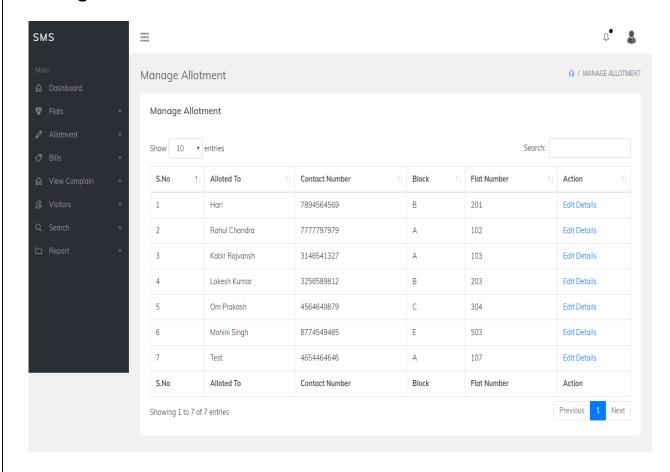
Update Flat



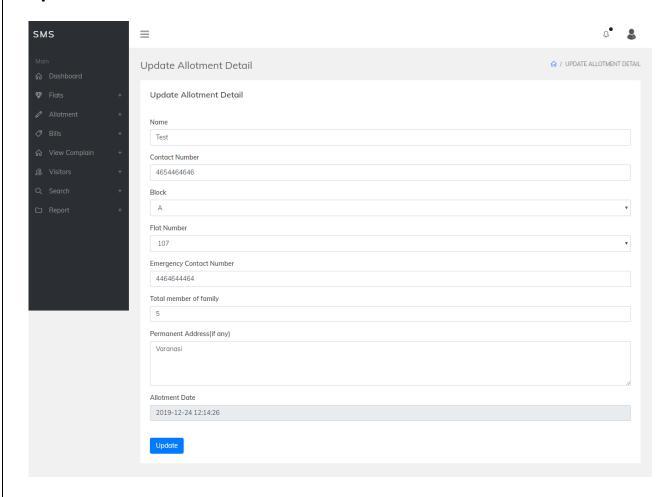
Add Allotment



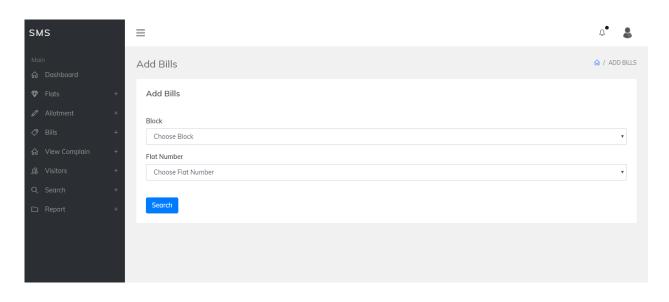
Manage Allotment

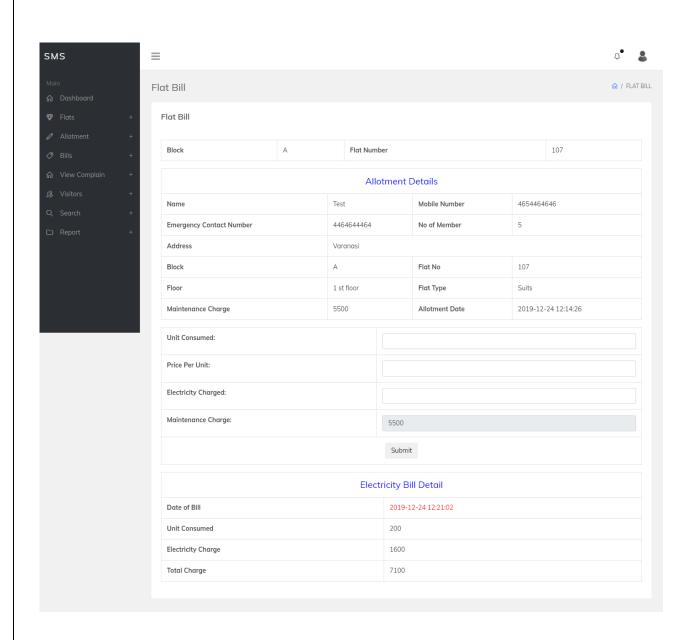


Update Allotment

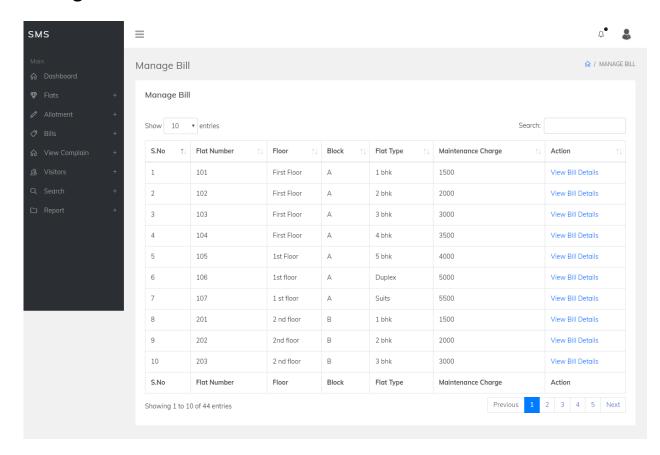


Add Bills

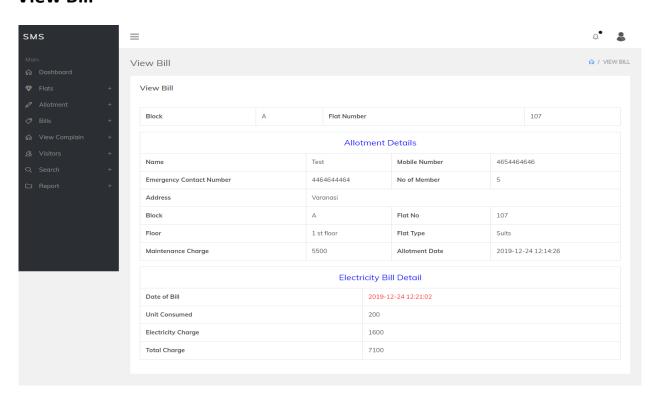




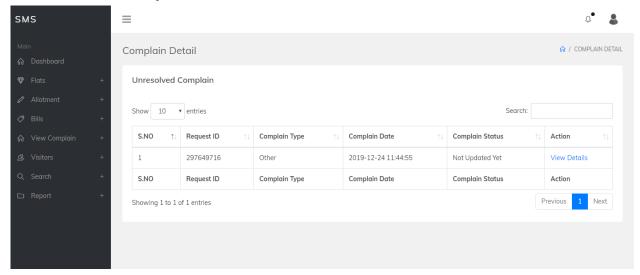
Manage Bill



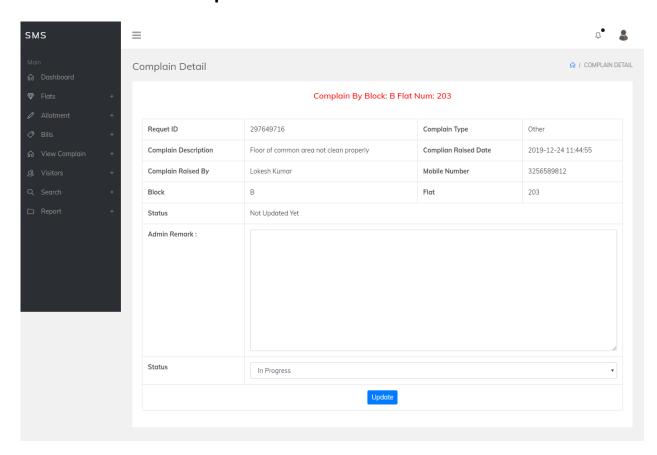
View Bill



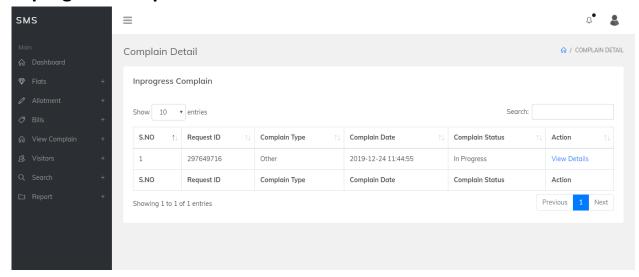
Unresolved Complain



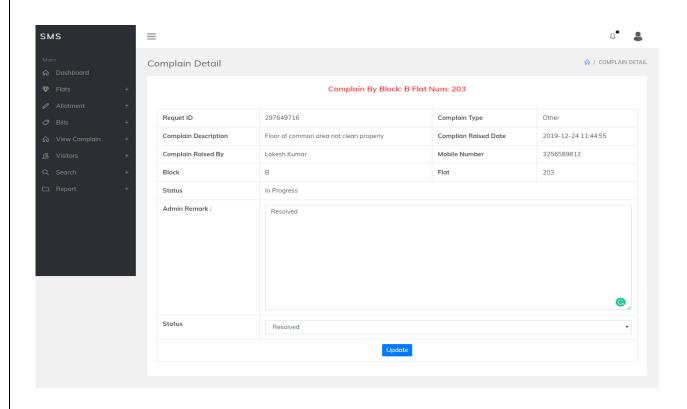
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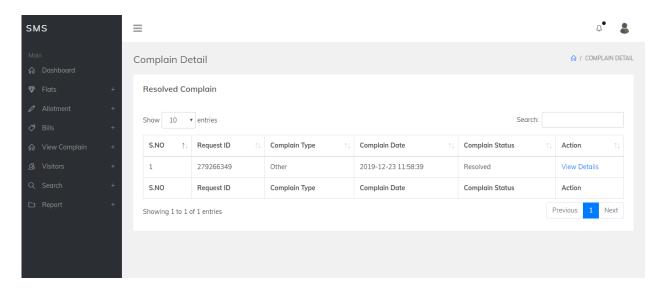
In progress Complain



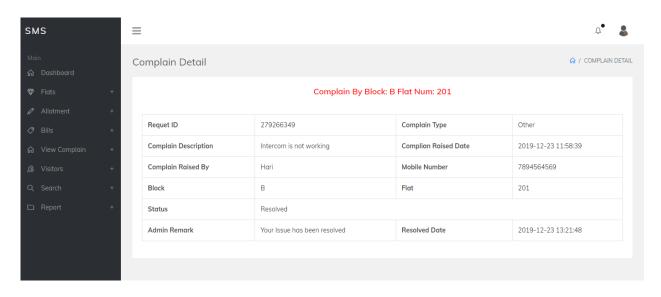
View in progress complain



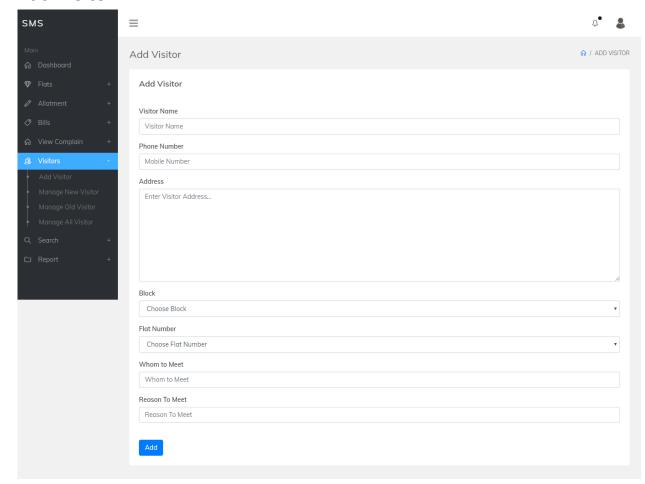
Resolved Complain



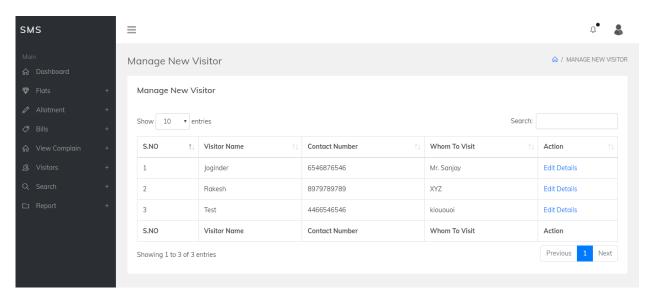
View Resolved Complain



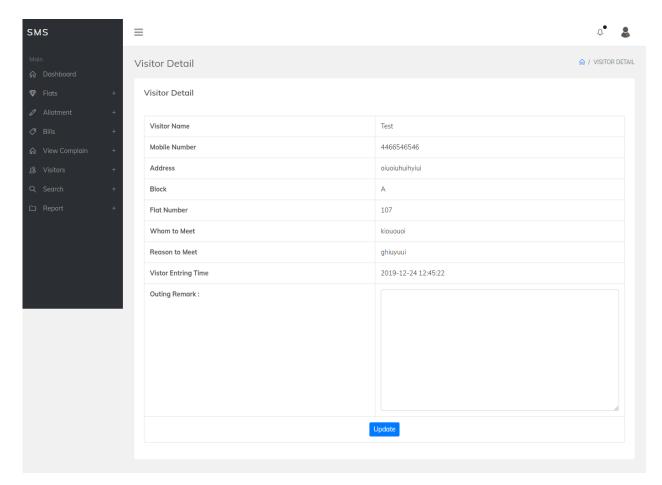
Add Visitor



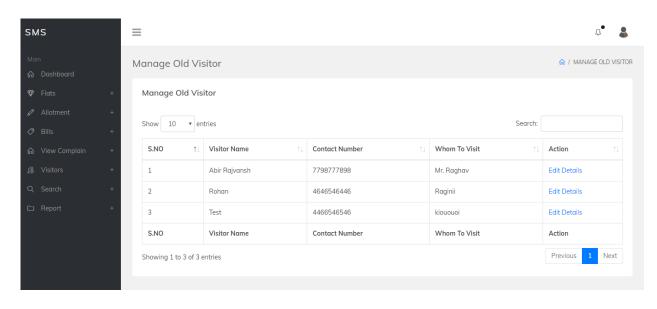
Manage New Visitor



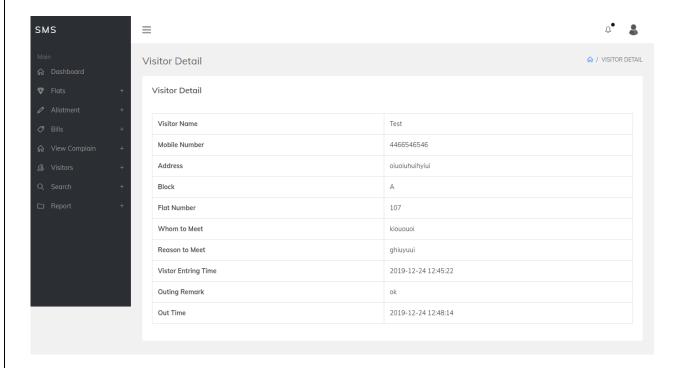
Update New Visitor



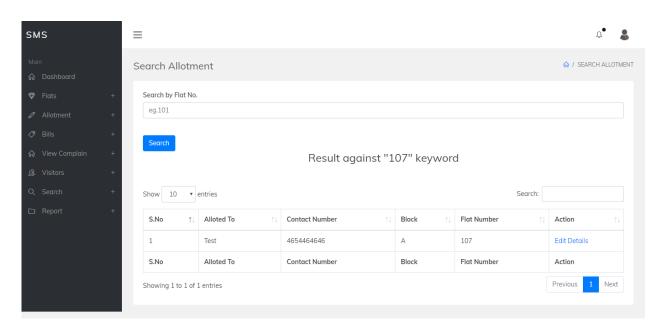
Manage Old Visitor



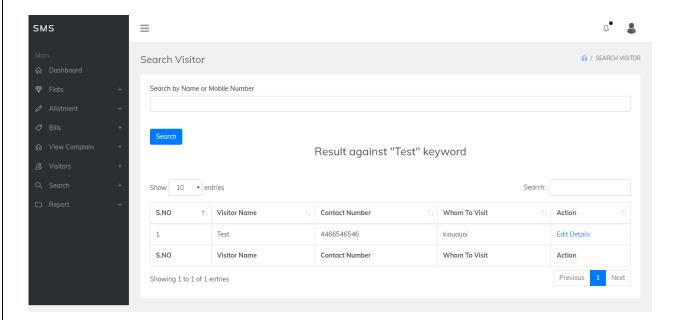
View Old Visitor



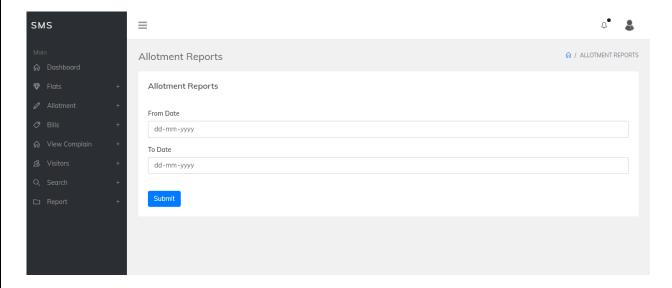
Search Allotment



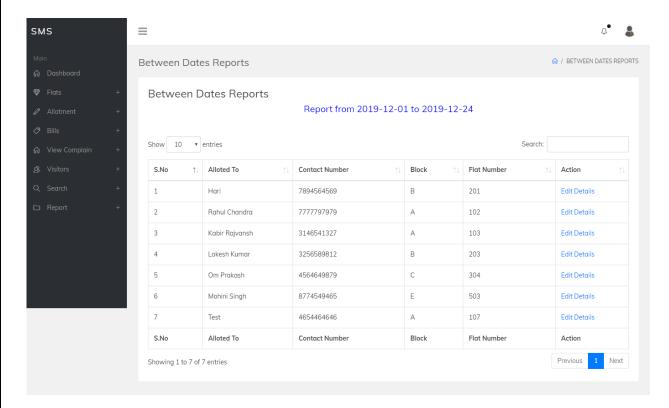
Search Visitor



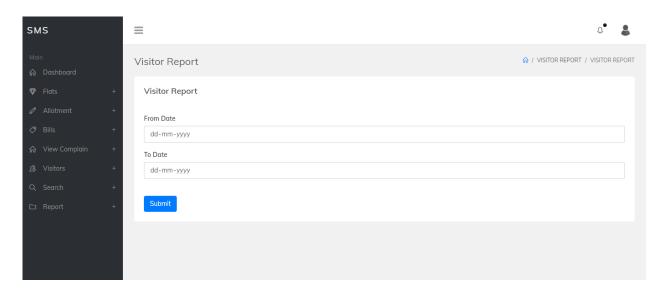
Allotment Reports



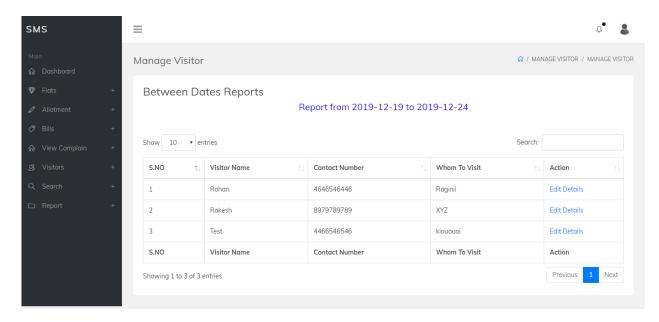
View Between Dates Report of allotment



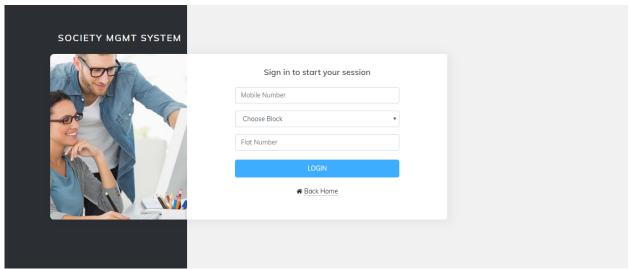
Visitor Report



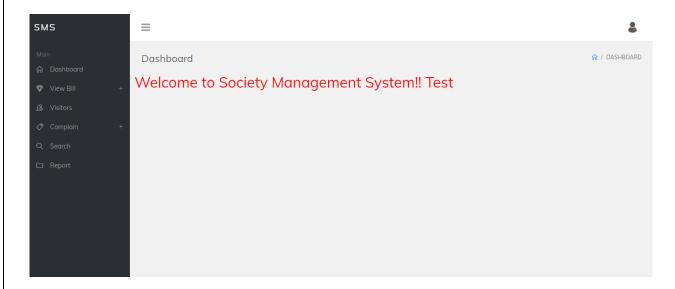
View Between Dates Reports of Visitor



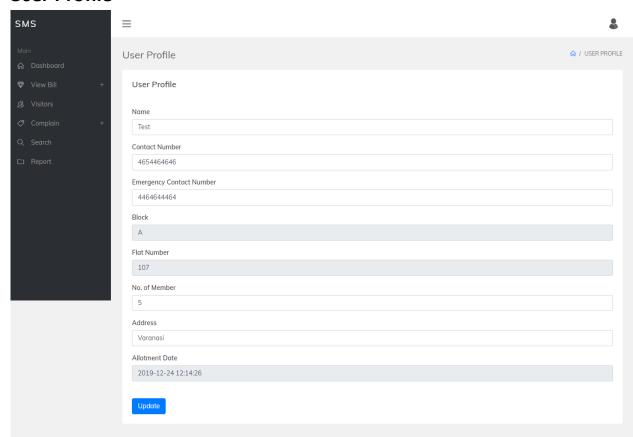
User Login



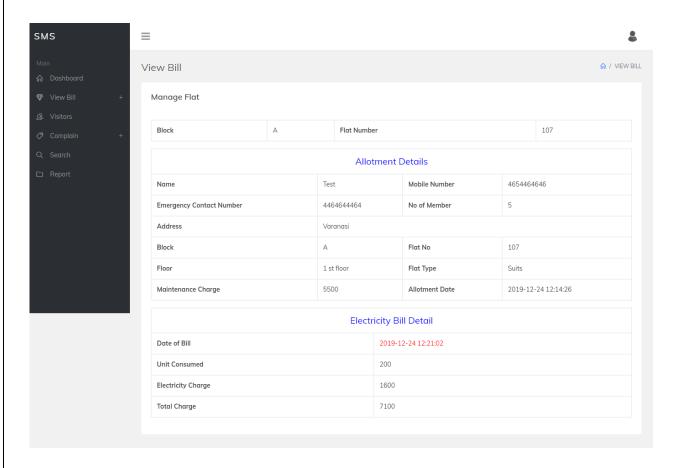
Dashboard



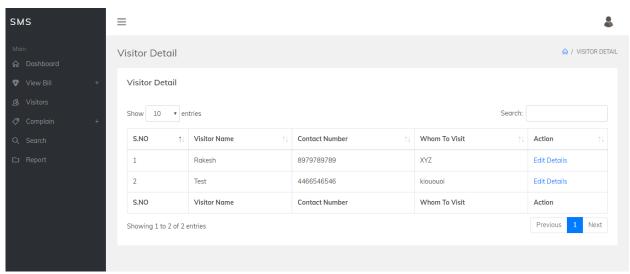
User Profile



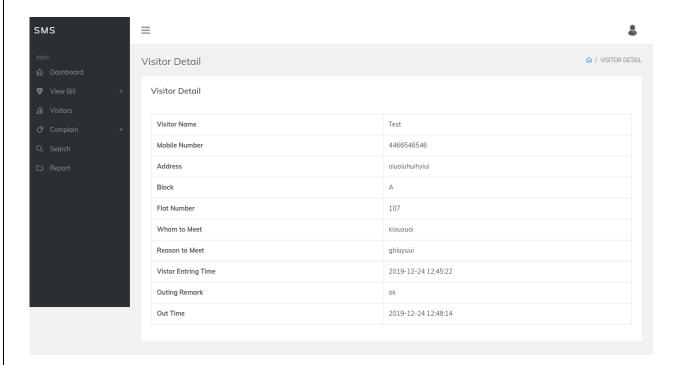
View Bill



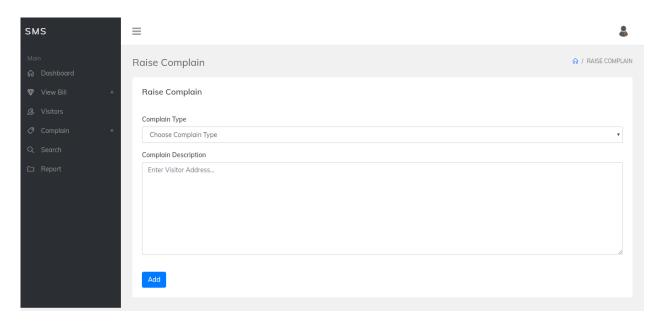
View Visitor List



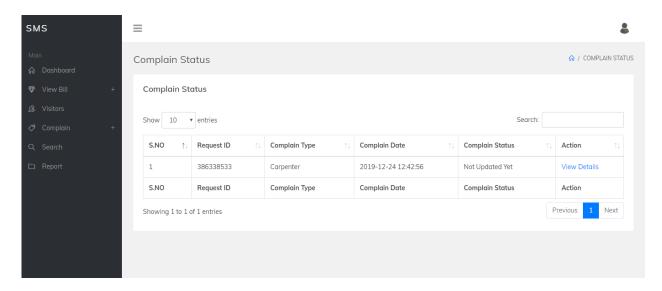
Detail of Visitor



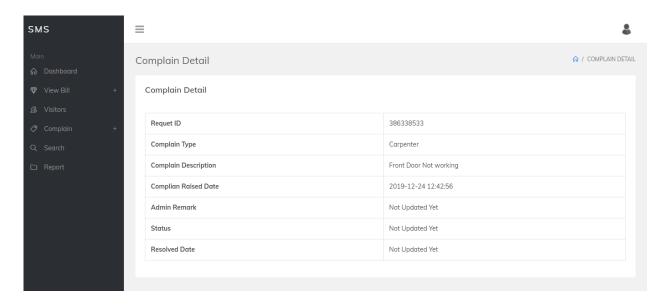
Raise Complain



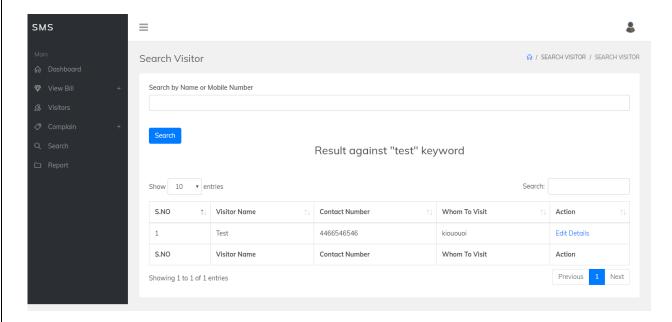
Complain Status



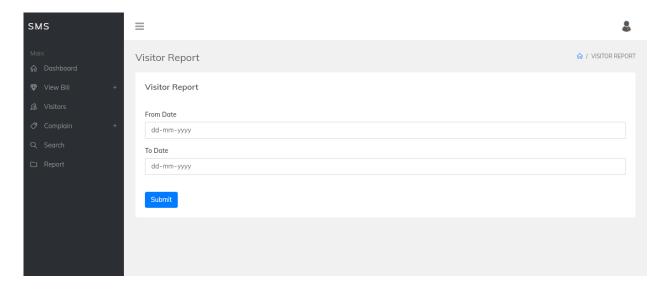
View detail of Complain



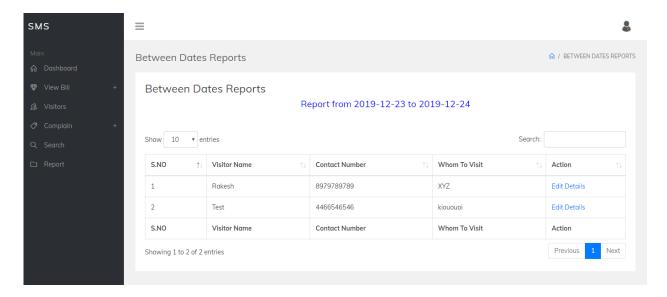
Search Visitor



Visitor Report



View Between Dates Report of visitor



Conclusion

The project titled as **Society Management System** was deeply studied and analyzed to design the code and implement. It was done under the guidance of the experienced project guide. All the current requirements and possibilities have been taken care during the project time.

Society Management System is a platform that provide interface between residence (user) of society and society management.

Society Management System provides the detail of society premises, visitor list and bills to the person who lives in the society.

Bibliography

For PHP

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- https://www.sitepoint.com/php/
- https://www.php.net/

For MySQL

- https://www.mysql.com/
- http://www.mysqltutorial.org

For XAMPP

https://www.apachefriends.org/download.html