Flatcare Household Administrator

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Abstract- The system is a web based application that allows multiple accesses concurrently. A web portal is an efficient way to carry on daily household activities. Flatcare makes all this possible just by accessing your laptops or even by just a touch on our Smartphone.
The system must maintain a central base of information.

- *The system should provide all the information about residents and building employees which should be accessible.*
- *The system should provide a medium for residents to lodge complains.*
- *Residents should be able to view track building security guards, value added service, payment gateway, parking management, social media, infrastructure management and many more.*

In the current approach employed by most apartments, residents have no communication medium between other residents and committee members within the community, also there is no passage of information. This causes an inconvenience to all the residents.
The proposed system is to develop a web portal which connects the residents of the apartment. All the above mentioned issues of communication, reminders, accessibility are dealt with in this.
The expected functionalities of the 'to be system' is to be an online system which allows online transactions that makes it convenient to carry out everyday activities such as paying bills, booking party halls, parking spaces, notifications for events, SMS alerts, polling for committee elections and so on.

Keywords- Apartment management system; web portal; online system
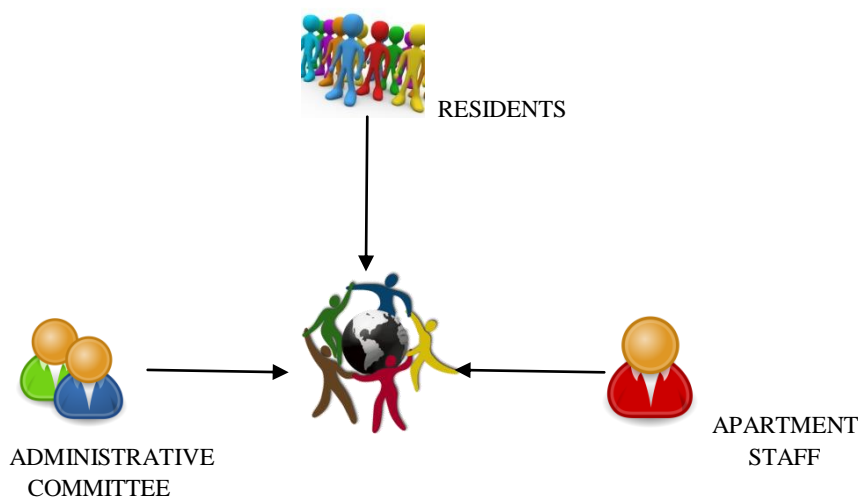
I.   INTRODUCTION

A web portal architecture for implementation in apartments is described in this paper. The requirements of the Flatcare Household Administrator is a tool to be built for a local building wishing to automate many of the interactions between residents, committee and apartment management staff. In addition to just handling maintenance money exchange, the system

must keep track of the entire services apartment offers to its residents such as maintenance, basic inspection and facility management and so on.

It is critical that any apartment has to be able to control the expenses of the apartment management and also have an efficient, organised manner of communication for various apartment related activities. Managers complain that residents often forget to pay the maintenance on time, and some of them are even difficult when it comes to communicating or being localized. An on-line system which improves the communication between property managers and residents will serve as a reminder for making on-line payments obligations and in case of delays, and to warn them about it, instantly. Residents complain that managers are slow in problem solving and sometimes they are difficult to localise. An online system to make request about maintenance problems allows managers to be more effective to solve the problem and the central management to be able to plan expenses, to contract or hire some services at the best price.

The overall goals of the system are to keep track of resident's maintenance requests, bookings, resident information, event calendar, parking management, electoral ballot, staff tracking, SMS alerts, chat forum and so on.

II. EXISTING SYSTEM

This web application is developed for easy communication between the residents and the managers within all apartment communities. Presently, the records and operations are dealt with manually to keep track of resident information, staff information, bookings, and building costs on a daily basis which is inconvenient. Obtaining such information quickly is time consuming. To solve this issue, it is necessary to come up with alternatives.

Based on these requirements and the already pre-existing Apartment Management System, the Flatcare Household Administrator has been created. The Apartment Management System has been explained in several sources.

Why use a web portal? Web Portals appeared in the late 1990s as a new type of Internet website architecture specifically designed to provide personalized online services. Web portals offer a single point of access to a wide range of information, applications and services in a single environment, thus enabling and facilitating the collaboration and interaction between users in such a way that all the services could be adapted to the preferences or necessities of each user. Web portals provide a suitable work environment to be built for any organization. Companies establish and advance their web portals to complement, find an alternative or expanding their services to their customers, and may even have the goal of providing new services to new customers. The need of developing and maintaining Web portals is to achieve in attracting new users and maintain existing ones by providing a gateway to information and internet services.

An extensive survey into the system architecture and an appliance control interface for an Apartment Management System (AMS) architecture and a non expensive interface have been proposed. The results are converted into a WEB SERVER, which can build a Facility-Management System (FiMS) to fit an extensive variety of apartments without expensive customizing.

III.   Requirements
Functional Requirements
The FHA system will be password-protected. FHA will be a multi-user system where every user must log in and is a single administrator controlled system. FHA needs to perform the following functions:
Residents to the manager system:
(1) Facility bookings.
(2) Request a maintenance petition.
(3) Complaints.
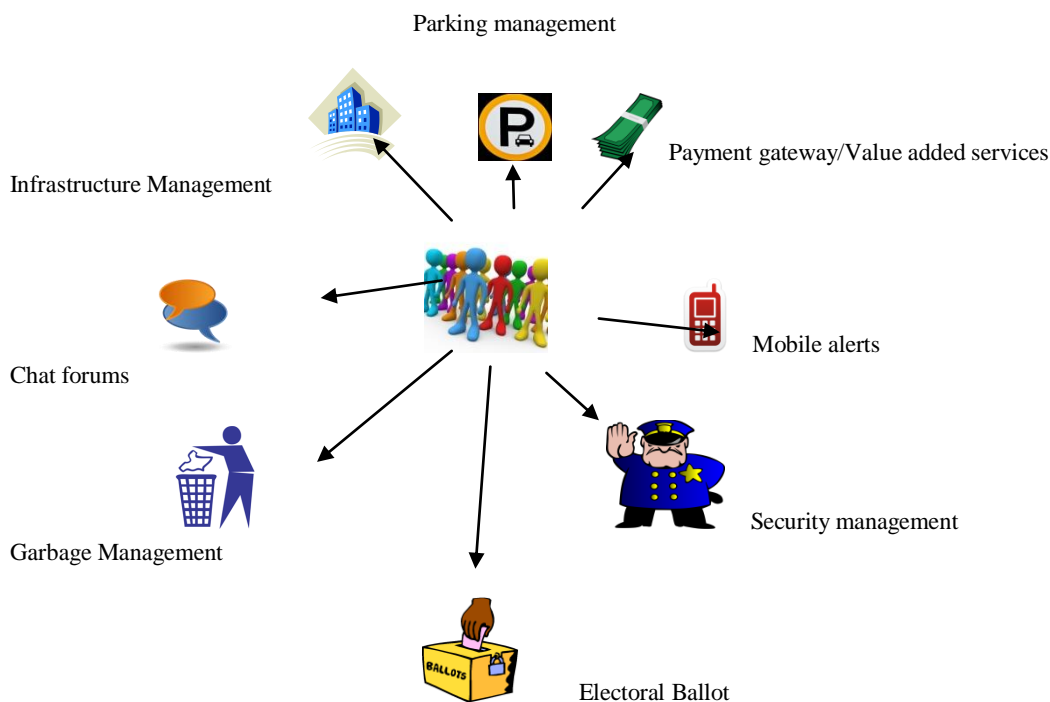(4) Pay the maintenance and other dues on-line.
(5) Request staff help.

Manager System to the residents
(1) Add a new resident and make and managing his/her contract.
(2) Warn and report any resident about his/her payment dues.
(3) Report any interesting information (new services, invitations, introductions,etc)

Non-functional requirements
Requirements based on usability, reliability, supportability, performance, security, recovery, interface, implementation, operation, and legal.
(1) The system will be a screen-based application.
(2 The system will be password-protected. (Security)
(3)) Menus should be organized in a hierarchical manner (usability)

Parking management

Payment gateway/Value added services

Infrastructure Management

Chat forums

Mobile alerts

Garbage Management

Security management

Electoral Ballot

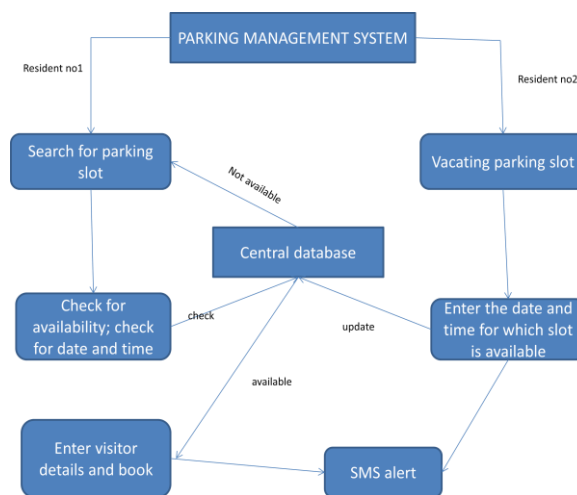**Examples of system input/output**

a. Example of system input for booking:

(1) A resident checks availability of apartment facility such as banquet hall.

(2) Based on the need, if available the facility is booked.

(3) Confirms booking.

 OUTPUT: Confirmation alert is sent to the user, the administrator informed and required facility is booked.

b. Example of system input for parking management:

(1) A resident updates his/her parking slot as empty for a period of time.

(2) Another resident checks for available parking slot for visitor.

(3) Books the slot for the given time frame.

OUTPUT: An alert is sent to both the residents and a reminder is sent to vacate the parking slot within the allotted time which is depicted in the following figure:

Software and/or hardware involved

Development tools –
- ✓ Windows platform as the operating system.
- ✓ Apache as the server.
- ✓ MySQL as the database.
- ✓ PHP as the scripting language.

IV.   CONCLUSION

This is relatively simple to understand and implement. It fulfils all the current requirements of apartment management. The system is very user-friendly and a person with basic computer skills can easily use the system. New features can be added into the system as per user requirement. FHA is very flexible in that aspect. It is economical as well in the long run, requiring less manpower and money.