Society Management System

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Abstract: Being a human, there are three necessities of life: food, clothing, and shelter. Nowadays lots of applications are developed for clothing and foods where we can order online 24*7. People are struggling and working too hard to complete their needs and requirements so they think all things should be quick, easy and automatic and hence we propose a solution for easy and faster management of societies. Our society management system deals with many functions such as daily notices, monthly meetings, cultural events, miscellaneous contacts for their daily needs, domestic help, committee calendars, complaint section, automatic bill generation etc.[4]. It also maintains parking issues, cultural events and funds, emergency funds and add them automatically in the bill.

Keywords: Security, transparency, digitization.

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I. Introduction

Android is an independent operating system which is easy to use and becoming more popular, affordable and provides a reliable, efficient and smarter way to communicate with people who are in long distance or in their busy schedules[4]. Urbanization will bring numerous challenges for the decision makers in providing various services and fulfillment of infrastructure needs[1]. Generally, in all societies, they maintain their records using the pen paper system but sometimes it is more hectic and difficult to maintain and manage all records. These days world moving towards a technology so everything that is going on is done using technology hence we are developing an application which is helping to maintain records easily and we move one step ahead towards a technological world. People having a very busy schedule towards their work, everyone having different working hours and holidays so they are unaware of what is held in their societies like events, meetings etc. This problem is solved by using this application. There is transparency in transactions and works.

II. Related Work

In 2016, Muhammad Barbar et al[1], present research paper on A Secured Data Management Scheme for Smart Societies in Industrial Internet of Things Environment which centers around Smart social orders and their expanding interest for quality-arranged administrations and framework in an Industrial Internet of Things (IIoT) worldview. Brilliant urbanization faces various difficulties. Among them, verified vitality Demand Side Management (DSM) is of specific concern.

In April 2016, Rutuja Vatharkar et al[2], has proposed the research paper which centers around the investigation of the execution of an Android Application for the board of Residential society capacities.

These capacities gain the colossal commitment of everyday city life. Private social orders need to manage numerous capacities which incorporate Electricity, Water supply, Security, Day to day protests and numerous different things. Ordinarily in different social orders correspondence with respect to these exercises happens through conventional methods for correspondence. This may prompt ill-advised passing on of data because of missing of straightforwardness. To dodge such clashes and to oversee and keep up every day society capacities computerization of these errands is required.

In, May 2018, Rahul Bhagwat et al [3], has proposed the answer for pass on that this arrangement of keeping up society is made in such a way in this way, that the most well-known issue looked by private social orders is settled. This framework is a cloud-based framework to deal with the day-to-day exercises of any
helpful lodging society. They need the coordination between the individual administration social orders combined with the sellers which give these administrations so the fitting comfort can be given. The primary usefulness of this venture is that there are internet charging and bookkeeping (installment portal incorporation, salary and cost following, and so on.). In this framework, the bills, receipts, and vouchers are made in a simple way additionally the framework is client companion.

In 2012, Bin Peng et al[4], has proposed the research paper on The Android Application Development Collage Challenge which urges understudies to structure and execute their applications on the Android stage. Thusly, it offers the understudies a chance to demonstrate their imagination and find out about the advancement of Android applications. The impact of the challenge is continuing expanding, and understudies from more colleges and districts partake in the challenge. In this paper, they present the association of such a challenge.

In December 2015, Shivganga Gavhane et al[5], introduce research paper on Study of Implementation of Society Management System. This is an investigation of research paper for Multipurpose Android Based Mobile Notifier, Google cloud informing, Android application identified with warning framework.

III. Aim And Objective

A. Aim:
The aim of the proposed system is integrating multiple application into one single Android application into one single Android application for managing society’s audits, bills issues of communication. The main aim of this system is to provide an Android application for society members that manages all the problem faced by a society that can be resolved by digitization. It should be generic for any society with minor customization.

B. Objective:
The following are the detail objectives of the system
- To implement a management system for auditing the yearly collection of maintenance bills & expenditure.
- To maintain transparency.
- To visualize the availability of parking slots.
- To notify important issues & complaints about the existing problems (water, cleanliness)
- Emergency alerts in situations of catastrophe

IV. Existing System

In the current framework, all the work is done physically. The notice board is traditional. Hence there is the problem of unreachable information & more time consuming [5]. Also, the auditing is done using files which is not transparent and is prone to frauds [4]. Parking payment and allotment. It is time consuming and personally maintaining record will have to sometimes compromise his own time[5]. No measures of security or emergency.

V. Proposed System

In the proposed system all the above drawbacks are released in one single android application. Android was chosen because it is the most popular platform and more user friendly.

Efficient Auditing: All the auditing will be done on the backend and the final amount in the society fund will be displayed. The only input will be the maintenance amount paid and the amount was withdrawn and the defaulters list will be displayed ensuring complete transparency.
- Parking availability display: Parking slot available will be shown and booked slots will be filled for easy understanding.
- The virtual notice board: It will be implemented so that notice can be is used from anywhere & will be available to everyone having the application. Two different logins will be provided to ensure the authenticity of the Notice. This will also make the entire process paperless.
- Alert Button: There will be an Alert Button implemented that will notify all the system users about any emergency/catastrophe. In the building society.
  For e.g.: (fire, robbery, and earthquake)

VI. Scope

Elevation in a project such as paying maintenance online through some payment apps like phonePe or googlePay,[2]
Society members can able to chat like what's app groups for better user experience are passed on as a future scope to work upon.[2]
VII. Methodology

The society management system consists of 4 modules:

1. Auditing
2. Parking
3. Alert button
4. Notice board
5.

![Fig6.1: System Architecture](image)

1. Auditing Module
   - User module & Admin module maintains a maintenance list of all the flats in a society.
   - Admin maintains maintenance list of all the flats in a society.
   - The user will get a prompt on UI about their pending maintenance payment & user will pay predefined maintenance amounts
   - Admin manually clicks on respective name flats.
   - Automatically name will get removed from a check list of pending if maintenance is paid.
   - A user who missed to the maintenance amount then the automatically amount will get added in the next month with interest
   - Maintenance paid amount will get calculate and deduct from the main maintenance spend amount.
   - The audit report will be generated by the entire annual transaction.

2. Parking
   This UI displays a detailed chart of the parking slot status to the user. So, accordingly, they can book parking slots.
   - Blue – User can book this place Blue
   - Rent - User will get the parking space on the rental basis
   - Visitor – Each visitor will be allocated mins/hrs for which he/she can use this parking slot.

3. Security
   - The security feature is provided when pressed in case of any crisis or danger sends auto SMS will get sent to a predefined number with the room number.

4. Text options
   - We are replacing traditional ways of informing people through a physical notice board with a virtual notice board
   - The user can drop the complaint and other users can like the complaint if they are facing the same problem.

VIII. Conclusion

We proposed an Android application for housing society management to maintain transparency between society members and management and to minimize the paperwork load. It also helps to reduce the efforts for manually communicating with each society member for providing notifications and important information.

IX. Challenges

This is very boring to go and visit various housing societies to understand its bylaws and its manual work and to understand their daily requirement. Every housing societies have their own rules for handling work.
According to need to these housing society, it will be very challenging to meet all the requirement of housing societies within less time.

**References**


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