**Capstone Project - 1**

**Problem Statement 1:**

**Scenario:** In many residential communities, residents often rely on outdated methods of communication, such as paper notices on bulletin boards, emails, or word of mouth, to stay informed about important updates. For instance, a neighbourhood might need to notify residents about a planned water shutoff, a scheduled community clean-up day, or an upcoming neighbourhood watch meeting. These traditional methods can result in missed information or delayed updates, leading to confusion and frustration among residents. For example, if a community event is announced via email but a resident doesn't check their inbox regularly, they might miss the event entirely. This lack of effective communication can contribute to a sense of disconnection and dissatisfaction within the community.

|  |  |  |  |
| --- | --- | --- | --- |
| **Group No.** | **Learner 1** | **Learner 2** | **Project Number** |
| 1 | B N Sai Praveen | Himanshu Prasad | 1 |

**Date:** 3rd April

**Agenda:** Discussion on project, key features, abstract, functional requirement

* **Name**: - Society Management System (SMS)
* **Key features**: -
* **Emergency Alerts & Notifications** – Real-time updates for urgent issues like water shutoffs, power outages, or security concerns.
* **Event Calendar** – Residents can Register to events, receive reminders, and even suggest new events.
* **Maintenance Request** – Residents can report issues (broken streetlights, leaks, etc.) and track repair status.

**Community Engagement Features**

* **Polls & Surveys** – Get feedback on community decisions (e.g., new park equipment, events, security improvements etc).

**Security Features**

* **Secure Login & User Roles** – Residents and admins get different access levels.
* **Emergency Services** **(Global API)** – Emergency contacts like doctor number, plumber number etc.

**Abstract – Society Management System (SMS)**

The Society Management System (SMS) is a modern, API-driven, multi-tenant Community Management Platform designed to enhance communication, security, and engagement within residential societies. It acts as a centralized hub where administrators and residents can efficiently manage daily community activities, ensuring seamless interactions and a well-connected neighbourhood.

For administrators, SMS provides powerful tools to approve post notices, manage society profiles, and handle complaints. It enables event planning, visitor management, emergency contact configuration, and community decision-making through polls and surveys. Admins can also track resident participation, oversee marketplace listings, and maintain service request logs for seamless society operations.

For residents, SMS serves as an interactive platform to stay updated on community announcements, report maintenance issues, access emergency contacts, and participate in events and discussions. They can engage in community polls, list or browse items in the marketplace, pre-register visitors, and provide feedback on society matters. The system ensures a secure login mechanism, enabling different access levels for residents and admins, maintaining privacy and data security.

By integrating an event calendar, a digital bulletin board, and emergency services, SMS fosters a stronger sense of community while ensuring efficient and transparent society management.

**Functional Requirements**

**1️) Emergency Alerts & Notifications**

* The system shall allow admins to send real-time alerts for emergencies like water shutoffs, power outages, or security issues.
* The system shall maintain a history of past alerts for residents to review.

**2️) Event Calendar**

* Admins can **create, update, and delete events** in the community calendar.
* Residents can respond (Y/N) for events and receive **reminders** via notifications.
* Residents can **suggest new events**, and admins can approve them.
* The system shall display **upcoming and past events** in an organized format.

**3️) Bulletin Board**

* Admins and residents can **post community news, lost & found items, and local promotions.**
* Posts must be **categorized** (e.g., Lost & Found, Announcements, General News).
* Admins shall have the ability to **moderate and remove inappropriate posts.**

**4️) Maintenance Request**

* Residents can submit **maintenance requests** (e.g., broken lights, leaks).
* Admins can **assign, track, and update** the status of maintenance requests.
* Residents shall receive **real-time updates** on their requests.
* The system should allow residents to **attach images or videos** for better issue reporting.

**5) Polls & Surveys**

* Admins can create **polls and surveys** to gather community feedback.
* Residents can **vote and view poll results** once completed.
* The system shall allow **anonymous voting** if enabled by admins.
* Survey data shall be stored for analysis by community admins.

**6) Secure Login & User Roles**

* Residents and admins must **register and log in securely**
* The system shall enforce **role-based access** (Admins can manage users, while Residents have limited access).

**7) Emergency Services (Global API)**

* The system shall provide a **directory of emergency contacts** (e.g., doctors, plumbers, security).
* Residents should be able to **search for and call nearby emergency services**.
* The system can integrate with **Google Maps API** to show the nearest hospitals, police stations, services etc
* Emergency contacts should be **updated regularly** by admins.

**Date: -** 4th April

**Agenda: -** draw Use case diagram and class diagram

**Use case Diagram**

A diagram of a social management system

AI-generated content may be incorrect.