

Project Proposal

**CommunityBoard: A Social Platform**

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| --- | --- | --- | --- | --- | --- | --- |
| **Only for course Teacher** | | | | | | |
|  | | **Needs Improvement** | **Developing** | **Sufficient** | **Above Average** | **Total Mark** |
| **Allocate mark & Percentage** | | **25%** | **50%** | **75%** | **100%** | **25** |
| **Understanding/Analysis** | **7** |  |  |  |  |  |
| **Implementation** | **8** |  |  |  |  |  |
| **Report Writing** | **10** |  |  |  |  |  |
| **Total obtained mark** | | | | | |  |
| **Comments** |  | | | | | |

**Semester:** Spring 2025

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**Batch:** 37th  **Section:** D1  **Course Code:** SE331

**Course Name:** Software Engineering Design Capstone Project

**Course Teacher Name:** Foysal Khandakar Joy

**Designation:** Lecturer, Department of Software Engineering

**Submission Date:** 17/04/2025

**Project Overview**

CommunityBoard is a hybrid platform designed to serve as both a **digital notice board** and a **social space** for members of a local or niche community. It offers users a centralized place to stay informed, share updates, express themselves, and engage with their peers in meaningful ways.

**Objective**

1. **Centralize Community Information:** Provide a reliable digital hub for announcements, alerts, and local updates that are easy to access and organized.
2. **Foster Community Engagement:** Encourage users to interact, share thoughts, and contribute content that reflects the spirit, culture, and interests of their community.
3. **Enhance Social Connectivity:** Enable meaningful connections between users through shared media, discussion threads, and direct messaging.
4. **Promote User Expression and Creativity:** Give users tools to share photos, opinions, and personal stories, promoting a sense of ownership and identity within the platform.
5. **Support Event and Resource Sharing:** Facilitate the promotion of events, services, and opportunities, making it easier for members to participate, contribute, and benefit from shared resources.

**Key Features**

1. Authentication & User Management

* User registration with Email verification
* Role-based access: User, Admin

1. **Digital Notice Board**

* **Bulletin Posts:** Official announcements, event notices, local alerts, and important updates from community admins or trusted users.
* **Categorized Listings:** Sections for events, lost & found, job postings, services, housing, etc.
* **Pin-to-Top Notices:** Prioritized visibility for urgent or high-importance messages.

**3. Community Feed**

* **User Posts:** Members can share thoughts, questions, updates, or opinions in a timeline-style feed.
* **Photo Sharing:** Users upload and share images from events, daily life, creative work, etc.
* **Reactions & Comments:** Interact through likes, reactions, and threaded comments to spark discussions.

**4. Media Gallery**

* **Community Albums:** Event-specific or theme-based galleries curated by users or moderators.
* **Personal Galleries:** Each user can curate their own collection of shared images and memories.

**5. Discover & Connect**

* **User Profiles:** Personalized profiles with bio, images, and recent posts.
* **Tags & Interests:** Follow tags or topics to tailor your feed.
* **Private Messaging:** Direct communication between users for collaboration or friendly chats.

**6. Moderation & Customization**

* **Admin Tools:** Role-based access to manage content, pin posts, remove spam, and more.
* **Custom Themes:** Options to personalize the look and feel of your board/community.
* **Privacy Controls:** Users manage who can view their posts and images.

**Technology Stack**

* Frontend: Tailwind
* Backend: Express.js with Nodejs
* Database: MongoDB
* Authentication: JWT, OAuth2, Email OTP

**Database Entities**

* User (id, email, password, role, phone, verified, created\_at)
* Profile (user\_id, address, date\_of\_birth, ID\_proof\_url)

**Conclusion**

CommunityBoard is more than just a digital notice board—it's a dynamic platform designed to inform, connect, and inspire. By seamlessly combining practical communication tools with social sharing features, it empowers communities to stay updated, express themselves, and build stronger relationships. Whether it’s spreading news, organizing events, or simply sharing life’s moments, CommunityBoard provides a welcoming, interactive space where everyone has a voice and every connection matters. It’s where information meets interaction—creating vibrant, engaged communities, one post at a time.