COMMUNITYUNITY: VOLUNTEER EVENT &

LOGISTICS PLATFORM

The domain of the Project: Full Stack Development

Team Mentors (and their designation**):**

Prasanna Kundu sir: Software Engineer, Full Stack Instructor

Technologies: MERN Stack, React, FastAPI, PostgreSQL, Neo4j (Graph DB), JavaScript, Java Spring Boot, Electron, Next.js, SQLite, React Native

Team Members:

Ms Vasanthi Kondreddy

Period of the project

April 2025 to September 2025

Declaration

The project titled "COMMUNITYUNITY: VOLUNTEER EVENT &LOGISTICS PLATFORM" has been mentored by Prasanna Kundu sir, organised by SURE Trust, from April 2025 to September2025, for the benefit of the educated unemployed rural youth for gaining hands-on experience in working on industry relevant projects that would take them closer to the prospective employer. I declare that to the best of my knowledge the members of the team mentioned below, have worked on it successfully and enhanced their practical knowledge in the domain.

Team Members:

1. Ms. Vasanthi Kondreddy

Prasanna kundu

Mentor's Name   **Mentor's Name**

Prasanna Kundu sir: Software engineer.

Full stack instructor|Mernstackdeveloper

Prof. Radhakumari

Executive Director & Founder

SURE Trust

Innovative &Entrepreneurship Hub for Educated Rural Youth (SURE Trust -IERY)

Table of contents

Executive Summary

This project aims to simplify coordination between volunteers, organizers, and administrators for community events. It leverages real-time communication, role-based access, and cloud deployment to deliver a scalable and responsive platform.

.

Introduction

- **Background:** Community events often suffer from a lack of structured coordination tools.

- **Problem Statement:** Manual tracking of volunteers, logistics, and announcements leads to inefficiency.

- **Scope:** Web-based platform accessible across devices.

- **Innovation:** Real-time updates, role-based dashboards, and mobile responsiveness.

Project Objectives

- Build a secure, role-based coordination system

- Enable real-time announcements and task tracking

- Provide mobile-friendly access for all users

- Deploy the platform using cloud infrastructure

Methodology and Results

- **Technologies Used:**

  o Frontend: React.js, Tailwind CSS

  o Backend: Node.js, Express.js

  o Database: MongoDB Atlas

  o Real-Time: Socket.IO

  o Deployment: AWS (frontend and backend)

- **Architecture:** MERN stack with RESTful APIs and Socket.IO integration

- **Screenshots:** Included in GitHub repo

- **GitHub Link:** https://github.com/vasanthikondreddy/CommunityUnity

Social / Industry Relevance

- *Empowers NGOs and community groups with digital tools*

- *Reduces manual coordination overhead*

- *Demonstrates real-world application of full stack development*

Learning & Reflection

- **Technical Skills:**
    - Role-based access control
    - Real-time data flow with Socket.IO
    - Cloud deployment and environment configuration
- **Experience:**
    - Hands-on debugging and iterative improvement
    - UI/UX polish for mobile users
    - Collaboration and documentation for internship readiness

Conclusion & Future Scope

- **Achievements:**
    - o Fully functional platform with real-time features
    - o Secure and scalable architecture
    - o Mobile-responsive design
- **Future Scope:**
    - o Push notifications
    - o Multi-language support
    - o Analytics dashboard for organizers

Innovative &Entrepreneurship Hub for Educated Rural Youth (SURE Trust -IERY)