Product Requirements Document (PRD) - Event Management System

1. Introduction

This document outlines the features and functionalities of the Event Management System, designed to streamline event organization, content creation, social media management, logistics, and student attendance tracking. The system will cater to various user roles including Students, Team Admins, and specialized teams like Social Media, Content, Organising, and Logistics.

2. Goals

- Improve efficiency in event planning and execution.
- Centralize content creation and social media outreach.
- Automate student attendance tracking.
- Enhance communication and collaboration among teams.
- Provide a robust and scalable platform for managing multiple events.

3. User Roles

- **User (Student):** Registers, logs in, provides attendance.
- **Team Admin:** Manages students, disciplinary actions, and oversees team activities.
- **Social Media Team:** Creates and schedules social media posts.
- **Content Team:** Drafts speeches, generates documentation, and writes posts.
- **Organising Team:** Plans events, manages ideas, and schedules meetings.
- **Logistics Team:** Handles feedback, analyzes social media, manages online events, and coordinates attendance logistics.

4. Features & Modules

4.1. Core Modules

4.1.1. User Authentication Module

- **Description:** Handles user registration, login, and session management for all user types.
- **Features:**
    - User (Student) Registration
    - Login (Student, Team Admin)
    - Password Reset/Recovery
    - Role-based Access Control (RBAC)

4.1.2. Attendance Module

- **Description:** Manages student attendance for events, including real-time tracking and post-event entry.
- **Features:**
  - QR Code Generation for attendance
  - Real-time attendance capture
  - Fetch event entries and automatic generation of attendance
  - Attendance tracking for Walk-in entries
  - Integration with Student profiles

4.1.3. Student Management (Under Team Admin)

- **Description:** Allows Team Admins to manage student profiles and related disciplinary actions.
- **Features:**
  - View Student List
  - Manage Student Profiles
  - Record Disciplinary Actions

4.2. Team Specific Modules

4.2.1. Social Media Team Section

- **Description:** Tools for managing and scheduling social media content.
- **Sub-modules:**
  - **Post Generation (Text/Image/Video):**
    - Create new social media posts with various media types.
    - Drafting and editing functionalities.
  - **Post Reworking:**
    - Ability to modify existing posts.
    - Version control for posts.
  - **Post Scheduling:**
    - Schedule posts for future publication dates and times.
    - Calendar view for scheduled posts.
    - Automatic reminders for post sceduling

4.2.2. Content Team Section

- **Description:** Facilitates content creation and documentation for events.
- **Sub-modules:**
  - **Speech Draft Section:**
    - Collaborative drafting and editing of speeches.
    - Version history for drafts.
  - **Write Up Posts:**

- - - Create blog posts, articles, or other written content related to events.
    - Content editor with rich text formatting.
  - **Documentation Generator:**
    - Generate event-related documentation (e.g., event briefs, reports, summaries).
    - Automatic content documentation generation

4.2.3. Organising Team Section

- **Description:** Tools for event planning, idea management, and meeting coordination.
- **Sub-modules:**
  - **Event Planning:**
    - Create and manage event details (dates, venues, descriptions).
    - Task assignment and tracking for event sub-tasks.
    - Milestone tracking.
  - **Idea Box:**
    - Platform for submitting and managing event ideas.
    - Voting and commenting on ideas.
  - **Meeting Scheduler:**
    - Schedule team meetings.
    - Send invites and track RSVPs.
    - Integrate with calendar applications.
  - **Hiring Portal:**
    - Get entries for hiring of student
    - Divide and categorize by team names
    - Select , unselect or Maybe and option to transfer to other team

4.2.4. Logistics Team Section

- **Description:** Manages post-event analysis, online event coordination, and attendance logistics.
- **Sub-modules:**
  - **Feedback & Post Analyzer:**
    - Collect and analyze event feedback (surveys, comments).
    - Analyze social media mentions and engagement related to events.
    - Generate reports on event performance.
  - **Online Event Analyzer:**
    - Monitor and analyze data from online events (e.g., participant numbers, engagement rates).
    - Integration with online streaming/meeting platforms (if applicable).
  - **Attendance Logistic:**
    - Coordinate physical attendance logistics (e.g., check-in desk setup, volunteer management).

■ Provide real-time attendance data to event organizers.

5. Technical Stack

- **Frontend Framework:** Next.js (with React)
- **Backend Runtime:** Node.js
- **Web Framework:** Express.js
- **Database:** MongoDB
- **ORM/ODM:** Prisma (for data modeling and database interaction, even with MongoDB
- **Monorepo Management:** Turborepo

6. Architecture Overview (Conceptual)

The system will leverage a monorepo structure using Turborepo to manage multiple applications (e.g., frontend, backend API, shared libraries) within a single repository.

- **Frontend (Next.js):** Responsible for the user interface, interacting with the backend API.
- **Backend API (Node.js/Express.js):** Handles business logic, data persistence, authentication, and communication with the database.
- **Database (MongoDB):** Stores all application data.
- **Prisma:** Used for defining data models and interacting with MongoDB

7. Future Enhancements (Out of Scope for Initial Release)

- Payment Gateway Integration for ticket sales.
- Push Notifications for event updates.
- Advanced Analytics Dashboards.
- Integration with third-party social media platforms for direct publishing.

8. Conclusion

This PRD provides a comprehensive overview of the Event Management System, detailing its features, modules, and the proposed technical stack. The system aims to significantly improve the efficiency and effectiveness of event management processes.