

EventHub

Your Ultimate Event Planning Companion AI

1. Project Overview

EventHub is a smart, user-centric event planning application that simplifies and streamlines the process of organizing events of any scale — from intimate gatherings to large public events. The platform empowers users to create events, manage guest lists, send invites, facilitate ticket booking, and receive AI-based recommendations for vendors, dates, and venues. With real-time communication tools and a clean, responsive user interface, EventHub provides an all-in-one solution for efficient and hassle-free event management.

2. Business Needs

- Event organizers often juggle multiple tools for communication, invitations, ticketing, and scheduling.
- Difficulty in coordinating with guests and vendors can lead to inefficient event planning.
- Lack of personalization and insights hinders the ability to host engaging and memorable events.

EventHub addresses these challenges by consolidating all essential event planning functions into a single intelligent platform, enhancing efficiency, engagement, and user satisfaction.

3. Functional Requirements

User Authentication

- Secure signup and login with JWT-based session handling.
- Profile management with event history tracking.

Event Management

- Create, edit, and delete events with complete details (title, date, time, location, description).
- Categorize events into upcoming, past, or hosted.

Guest Management

- Invite guests via email or contact import.
- Track RSVPs and manage guest lists.
- Send event reminders and updates.

Ticket Booking

- Offer free and paid ticket options with seat availability tracking.
- Provide booking confirmation or failure notifications.
- Manage attendee count effectively.

Communication Tools

- Enable in-app chat and announcements between hosts and guests.
- Send real-time notifications for event updates and changes.

Calendar & Notifications

- Calendar view for scheduling and tracking events.
- Email and push notifications for reminders, RSVPs, and updates.

AI Recommendations

- Suggest event dates based on guest availability.
- Recommend suitable venues and vendors based on event type and location.

Social Features

- Allow users to follow others, share event ideas, and discover public events.

4. Non-Functional Requirements

- **Security:** Implement secure APIs using JWT and ensure proper data encryption.
- **Performance:** Ensure fast response times for API calls and user interface interactions.
- **Scalability:** Design the system to support a growing user base and large-scale events.
- **Usability:** Create a clean, intuitive UI using Tailwind CSS with a mobile-first responsive design.
- **Availability:** Ensure reliable hosting and regular backups to maintain high uptime.

- **Maintainability:** Follow modular architecture and best practices to ensure a well-documented and maintainable codebase.

5. Project Scope

Included in Scope:

- Full-stack development using React and Node.js.
- Event creation, guest management, ticketing, and real-time communication.
- AI-based recommendations for dates and vendors.
- Notification system, calendar integration, and public event discovery.

Excluded from Scope:

- Physical event logistics such as venue booking or food services.
- Integration with external ticketing platforms (e.g., Eventbrite).

6. Success Criteria

- Deployment of a fully functional MVP.
- Smooth and consistent user experience across devices.
- Complete implementation of all core functionalities.
- Real-time RSVP and messaging features fully operational.
- Minimum of 90% test coverage with low bug rate.
- Creation of a successful demo and project walkthrough.

Purpose of this BRD

- **Define Project Scope:** Clearly outline functionalities and limitations.
- **Identify Business Needs:** Align development with real-world problems.
- **Guide Solution Development:** Ensure alignment between requirements and implementation.
- **Facilitate Communication:** Keep all stakeholders aligned on the project's direction.

Benefits of this BRD

- Creates a shared understanding between technical and non-technical teams.
- Reduces miscommunication and scope creep.
- Helps streamline the development process with clearly defined priorities.
- Increases the likelihood of successful project delivery.