Functional Requirements

1. User Registration and Authentication

- 1.1. Users must be able to register with an email address, phone number, or third-party authentication (e.g., Google, Facebook).
- 1.2. Users must be able to log in with their credentials and reset their password if forgotten.
- 1.3. Support for role-based access control, such as Event Organizer, Attendee, and Admin roles.

2. Event Creation and Management

- 2.1. Event organizers must be able to create events by providing details such as title, description, date, time, venue, and event category.
- 2.2. The platform must allow organizers to upload images, videos, and other media for event promotion.
- 2.3. Organizers must be able to set ticket pricing, availability, and sales start/end dates.
- 2.4. Support for recurring events with customizable schedules.
- 2.5. Provide a dashboard for organizers to manage and edit their events.

3. Event Listing and Discovery

- 3.1. Display all events in a searchable and filterable listing, with filters for categories, location, date, price range, and popularity.
- 3.2. Support for a personalized event recommendation system based on user preferences and past activities.
- 3.3. Allow users to save favorite events or bookmark them for later viewing.
- 3.4. Provide a map view for events to visualize nearby options.

4. Ticketing System

- 4.1. Provide an integrated ticketing system where attendees can purchase tickets securely using multiple payment options (credit card, PayPal, etc.).
- 4.2. Generate e-tickets with QR codes for easy entry at the event.
- 4.3. Support discount codes, promotions, and group ticket purchases.
- 4.4. Enable organizers to track ticket sales and attendee counts in real time.

5. Attendee Networking and Engagement

- 5.1. Offer attendees a platform to connect, network, and chat before, during, and after the event.
- 5.2. Enable attendees to join event-specific forums or chat groups.
- 5.3. Support for interactive features like live polls, Q&A sessions, and surveys during the event.
- 5.4. Provide feedback collection tools for attendee's post-event.

6. Notifications and Updates

Functional Requirements for EVENTHUB

- 6.1. Send real-time notifications about event updates, schedule changes, or new announcements.
- 6.2. Allow attendees to opt-in for reminders for upcoming events or sessions.
- 6.3. Notify organizers about important updates, such as ticket sales milestones.

7. Analytics and Reporting

- 7.1. Provide detailed analytics dashboards for organizers, including ticket sales, attendee demographics, and engagement metrics.
- 7.2. Generate downloadable reports in formats like PDF or CSV.
- 7.3. Provide heatmaps for attendee interactions and activity at events.

8. Admin Panel

- 8.1. Allow administrators to manage user accounts, events, and platform settings.
- 8.2. Enable content moderation to review and approve events before publishing.
- 8.3. Provide tools for resolving disputes, issuing refunds, or suspending accounts if necessary.

9. Mobile Accessibility

- 9.1. Support responsive design for mobile and tablet users.
- 9.2. Offer native mobile apps for iOS and Android with all core functionalities.

10. Security and Privacy

- 10.1. Use SSL encryption for secure transactions and data transfers.
- 10.2. Ensure GDPR and other regional data privacy compliance.
- 10.3. Provide two-factor authentication for enhanced account security.

11. Multilingual and Multi-Currency Support

- 11.1. Offer the platform in multiple languages to cater to global users.
- 11.2. Allow ticket purchases in various currencies with accurate exchange rates.

12. Support and Help Center

- 12.1. Provide a help center with FAQs, guides, and tutorials for users.
- 12.2. Offer 24/7 customer support through live chat, email, or phone.
- 12.3. Allow users to raise tickets for technical issues or disputes.