# **Non-Functional Requirements**

#### 1. Performance

- 1.1. The system must support at least 500 concurrent users without performance degradation.
- 1.2. Event listings must load within 5 seconds for 95% of users under normal load.
- 1.3. The platform should handle up to 300 ticket purchases per minute during peak periods.

# 2. Scalability

- 2.1. The platform must be scalable to accommodate increasing user traffic and data as the user base grows.
- 2.2. It should support the addition of new features without significant downtime or performance impact.

### 3. Availability

- 3.1. The system must have an uptime of 99.9% annually.
- 3.2. Planned maintenance windows must be announced at least 48 hours in advance and occur during non-peak hours.

# 4. Reliability

- 4.1. Data entered by users (e.g., event details, attendee information) must be stored without loss.
- 4.2. In the event of a failure, the system must recover within 5 minutes.

### 5. Security

- 5.1. All user data must be encrypted at rest and in transit.
- 5.2. The system must comply with GDPR, PCI-DSS, and other applicable data protection regulations.
- 5.3. Regular security audits and penetration tests must be conducted to identify vulnerabilities.

# 6. Usability

- 6.1. The platform must have an intuitive and user-friendly interface with clear navigation.
- 6.2. User onboarding for new organizers or attendees should take no longer than 5 minutes.
- 6.3. The design must adhere to accessibility standards.

# 7. Maintainability

- 7.1. The codebase should be modular and well-documented to simplify updates and bug fixes.
- 7.2. The platform must allow for hotfixes to be deployed without disrupting active users.
- 7.3. Third-party dependencies should be kept up-to-date and monitored for vulnerabilities.

#### 8. Portability

- 8.1. EVENTHUB must be accessible via modern browsers (Chrome, Firefox, Edge, Safari) and operating systems.
- 8.2. Mobile apps must be compatible with the latest two major versions of iOS and Android.

# 9. Backup and Disaster Recovery

- 9.1. User and event data must be backed up daily and retained for at least 30 days.
- 9.2. A disaster recovery plan must ensure the platform can be fully restored within 24 hours.

#### 10. Localization

- 10.1. The system should support regional date, time, and currency formats.
- 10.2. Texts should be easily translatable into multiple languages without requiring code changes.

# 11. Interoperability

- 11.1. The platform must integrate seamlessly with third-party tools like payment gateways, email marketing systems, and social media platforms.
- 11.2. Support APIs for external integrations, allowing event data to be pulled or pushed to other systems.

# 12. Analytics and Monitoring

- 12.1. Real-time monitoring of system health, user activity, and ticket sales must be enabled.
- 12.2. Logs must be maintained for all critical actions, accessible for auditing purposes for up to 90 days.

# 13. Compliance

- 13.1. The platform must adhere to all local laws and regulations in the regions it operates (e.g., tax regulations, anti-spam laws).
- 13.2. All emails sent through the platform must comply with CAN-SPAM and other similar regulations.

### 14. Energy Efficiency

14.1. The platform must optimize server usage to reduce energy consumption and environmental impact.

### 15. Flexibility

15.1. The platform must allow customization of event pages and features to meet the unique needs of different organizers.