EventEase: AI-Powered Event Registration System

Project Type: B2C Salesforce CRM Implementation
Industry: Event Management / Education / Corporate Training

❖ Use Cases:

1. Event Management: Maintain a central database of events with details like date, venue, and capacity.
2. Attendee Registration: Capture registrations online or on-site; automated email confirmations.
3. AI-Powered Recommendations: Suggest relevant events to attendees based on their interests and past participation.
4. Reporting & Analytics: Dashboards for organizers to track attendance trends, popular events, and revenue.

❖ Phase 1

1. Executive Summary

Phase 1 validates the business need for EventEase and captures all information required for MVP development. Key outcomes include:

- Functional and non-functional requirements
- Stakeholder analysis
- Business process mapping

- Salesforce data model blueprint
- Security and compliance guidelines
- AppExchange evaluation
- Reporting and KPI framework
- AI MVP strategy
- Phase 2 decision log for sign-off

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2. Objectives and Scope

Primary Objective:

Centralize event registration, automate confirmations and reminders, provide efficient check-in, and generate actionable dashboards and AI-driven recommendations.

Scope for Phase 1:

- Requirement gathering and functional analysis
- Stakeholder analysis and RACI assignment
- As-Is and To-Be process mapping
- Data model and object relationships
- Security and sharing blueprint
- AppExchange research and recommendations
- Reporting & KPI planning
- AI MVP design
- Decision log for Phase 2 build

Out of Scope:

- Full Salesforce implementation of objects, flows, and LWCs
- Payment integration (deferred to Phase 2)

3. Requirements Gathering

Functional Requirements

- Online registration capturing Registration__c records linked to Event__c
- Instant confirmation email with ICS calendar attachment
- SMS reminders (T-7, T-1, T-0) for opted-in attendees
- QR code generation per registration for check-in
- Kiosk scanner (LWC) for event day check-in
- Waitlist management and capacity enforcement
- Admin dashboards for attendance, revenue, and funnel metrics
- Nightly rules-based recommendation engine

Non-Functional Requirements

- Registration response < 2 seconds
- Real-time dashboards for organizers and admins
- Security: FLS, audit trails, OWD principles
- Scalable for large events
- Maintainable metadata-driven design
- Compliance: consent capture, retention, GDPR/PII rules

Key Performance Indicators

- Registration completion rate ≥ 85%
- Registration → confirmation time < 1 minute
- Recommendation CTR ≥ 5%
- No-show reduction target 10% after reminders

4. Stakeholder Analysis

Personas

1. **Event Organizer:** Easy registration intake, attendee lists, automated confirmations, and daily digests.
2. **Administrator:** Dashboards for attendance, revenue, refunds, and compliance.
3. **Attendee:** Simple registration, confirmation with QR code, reminders via email/SMS.

RACI Overview

Activity	Responsible	Accountable	Consulted	Informed
Requirements gathering	BA	PO	Organizers, Admins	Sponsor
App evaluation	Tech Lead	PO	Security, Finance	Sponsor
Phase 2 implementation	Dev Team	Tech Lead	Organizers, Admins	Sponsor

5. Business Process Mapping

Current-State (As-Is)

- Registrations via Google Forms or third-party tools
- Manual export of attendee lists
- Manual confirmation emails
- On-site manual check-ins
- Reporting via Excel with delays and errors

❖ Target-State (To-Be)

1. Registration via web form → Registration__c creation

2. Payment capture (deferred MVP)
3. Instant confirmation email + QR code + ICS attachment
4. Automated reminders (T-7, T-1, T-0)
5. Event day: kiosk LWC scans QR → updates Checked_In__c
6. Post-event follow-up emails and AI recommendation scoring

Exception Handling

- Duplicate registrations → validation rule
- Capacity exceeded → waitlist entry
- Payment failure → pending status and notification

6. Data Model

➢ Core Objects

- **Event__c:** Name, Start/End DateTime, Timezone, Venue lookup, Capacity, Status, Topics, Price
- **Registration__c:** Attendee lookup/email, Event lookup, Status, Ticket Type, Payment Reference, QR code, Checked-In, Opt-in flags
- **Session__c (optional):** Event lookup, Start/End, Speaker, Capacity
- **Venue__c:** Name, Address, City, State, Country, Timezone, Capacity
- **Recommendation__c:** Attendee lookup, Event lookup, Score, Reason, Generated On

Relationships

- Event → Registration (1:M)

- Event → Session (1:M)
- Venue → Event (1:M)
- Contact → Registration (1:M)

7. Security and Sharing

- OWD Recommendations:
  - Event__c → Public Read-Only
  - Registration__c → Private
  - Session__c / Venue__c → Controlled by Parent
- Profiles & Permission Sets:
  - Administrator: Full access
  - Organizer: CRUD on Event__c, read Registration__c
  - Kiosk: Limited check-in permissions
  - Guest: Create Registration__c only
- Field-Level Security: Hide PII for unauthorized roles
- Sharing Rules: Share Registrations with Event Owner
- Audit & Logging: Track changes on Registration_Status, Checked_In, Payment_Ref
- Consent & Retention: Opt-in flags, retention policies, anonymization

8. Automations (Skeleton)

- Registration Orchestration Flow
- Reminder Flow
- Waitlist Promotion Flow
- Email/SMS templates with ICS attachment
- Nightly rules-based Recommendation job

9. Check-in & QR LWC

- Tokenized QR code stored in Registration__c
- Kiosk scanner LWC reads QR → validates → updates Registration__c
- Offline support deferred to Phase 2

10. AI MVP Strategy

- Rule-based scoring for top-N event recommendations
- Features: Topic overlap, popularity, recency, proximity, personal history
- Output: Recommendation__c records with score and reason
- Phase 2 Einstein ML integration planned

11. Reporting & Dashboards

- Reports: Attendance, registration funnel, revenue, waitlist/capacity
- Dashboards: Event overview, top events, registration funnel, check-in tracking
- Historical snapshots considered for Phase 2

12. AppExchange Evaluation

- SMS: Twilio for MVP
- Payments: Deferred; Stripe preferred if needed later

- Check-in: Build QR/LWC in-house
- Documents: Salesforce Files; external integrations optional

13. Risks & Mitigation

- Bot registration: CAPTCHA + rate limiting
- Payment failures: deferred
- Data privacy: FLS, OWD, audit logs
- Kiosk offline: Phase 2 support
- Scope creep: enforce sign-off

14. Proof of Concept (PoC) Plan

- Objective: Validate QR generation, confirmation email, recommendation job
- Scratch org: Minimal Event__c and Registration__c implementation
- Acceptance: QR scan updates check-in, email delivered, recommendations generated

15. Phase 1 Sign-off Decision Log

Decision Area	Options	Recommended Default
Payments in MVP	Include / Defer	Defer
Payment Provider	Stripe / Chargent	Stripe if needed later
SMS Provider	Twilio / Digital Engagement	Twilio
Check-in Approach	Build QR LWC / AppExchange	Build QR LWC
Experience Cloud Portal	Include / Defer	Defer
Event__c OWD	Public Read-Write / Read-Only	Read-Only
Timezone	Prioritize locales	Primary market (e.g., IST)
Multi-currency	Yes / No	Single currency

16. Acceptance Checklist

- Requirements, stakeholders, processes, data model, AppExchange evaluation completed
- Decision log filled & signed
- PoC plan approved
- Phase 2 scaffold prepared