Project Charter-EventFlow Event Management System

PROJECT NAME	PROJECT MANAGERS	Team Name
Event Management System "EventFlow"	*Bassey Elliot* *Souravdeep Durgesh Singh* *Wangchen Peng*	**EventFlow Team**

PROJECT OVERVIEW

PROBLEM OR ISSUE	*"Organizations and individuals struggle with the end-to-end management of event planning, marketing, and execution. This leads to inefficient ticketing, fragmented communication, poor attendee engagement, and lost revenue opportunities."*
PURPOSE OF PROJECT	*"To design and develop an integrated Event Management System, "EventFlow," that streamlines the entire event lifecycle—from registration and payment to attendee networking and post-event analysis—providing a seamless experience for organizers and attendees."*
BUSINESS CASE	*"The project will significantly reduce administrative costs by automating manual processes (e.g., registration, reminders). It will increase revenue through higher ticket sales driven by improved advertising, a streamlined payment gateway, and features that boost attendee satisfaction and retention. The project is projected to deliver a 141% ROI with a payback period of 15 months."*
GOALS / METRICS	***Goal 1: Reduce event registration processing time by 75% within 6 months of launch.*** ***Goal 2: Achieve a user satisfaction score of 4.5/5 from both organizers and attendees.*** ***Goal 3: Increase average revenue per event by 15% through up-selling and advertising features.*** ***Goal 4: Support 10,000 concurrent users on the platform without performance degradation.***
EXPECTED DELIVERABLES	*1.* ***Final Deliverable:*** *Fully functional EventFlow web and mobile application.* *2.* ***Interim Deliverables:*** *Project Charter, Project Plan, Communications Plan, Risk Management Plan, System Design Document, Prototype, Test Plan & Reports, User Training Materials, Final Project Report.*

PROJECT SCOPE

WITHIN SCOPE	• **Functional:** Ticketing & registration, payment gateway integration, automated reminders (email/SMS), internal advertising, interactive venue maps, AI-powered session recommendation engine ("Help me select a session"), and attendee networking portal. • **Technical:** Secure cloud hosting, database design, responsive web application, iOS and Android mobile apps. • **Training:** In-person training sessions for client administrators and a user guide for attendees.
OUTSIDE OF SCOPE	• Provision of on-site hardware (e.g., ticketing scanners). • Development of the core payment gateway (integration only). • Creation of physical advertising materials. • 24/7 post-launch customer support. • Online/video-based training modules for administrators. • Transportation and accommodation booking for attendees.

TENTATIVE SCHEDULE

KEY MILESTONE	START	FINISH
Form Project Team / Preliminary Review / Scope	3 Oct 2025	10 Oct 2025
Finalize Project Plan / Charter / Kick Off	10 Oct 2025	17 Oct 2025
Define Phase	17 Oct 2025	31 Oct 2025
Planning Phase	31 Oct 2025	14 Nov 2025
Executing Phase	14 Nov 2025	28 Nov 2025
Project Summary Report and Close Out	28 Nov 2025	5 Dec 2025

RESOURCES

PROJECT TEAM	• **Project Managers:** Bassey Elliot, Souravdeep Durgesh Singh, Wangchen Peng • **Back-end Developers (3):** For payment, ticketing, database, and API development. • **Front-end Developers (2):** For responsive web and mobile app interfaces. • **UI/UX Designer (1):** For user experience design and prototyping. • **QA/Test Engineers (2):** For functional, performance, and user acceptance testing. • **DevOps Engineer (1):** For cloud infrastructure, CI/CD pipeline, and deployment.
SUPPORT RESOURCES	• **Payment Gateway APIs** (e.g., Stripe, PayPal) • **Cloud Hosting Platform** (e.g., AWS, Google Cloud) • **Mapping API** (e.g., Google Maps, Mapbox) • **Email/SMS Service** (e.g., SendGrid, Twilio) • **Security & Compliance Consultants** (for data protection and PCI DSS compliance) • **AI/ML Framework Access** (e.g., for the session recommendation engine)
SPECIAL NEEDS	• **Cross-Platform Mobile Development Framework** (e.g., React Native, Flutter) • **Load Testing Tools & Expertise** (to validate 10,000 concurrent user goal)

COSTS

COST TYPE	VENDOR / LABOR NAMES	RATE	QTY	AMOUNT
Labor (ex Development cost)	Back-end Developers	$60/hour	3 persons × 960 hours	$172,800
Labor	Front-end Developers	$55/hour	2 persons × 960 hours	$105,600
Labor	UI/UX Designer	$50/hour	1 person × 640 hours	$32,000
Labor	QA/Test Engineers	$45/hour	2 persons	$72,000

			× 800 hours	
Labor	DevOps Engineer	$65/hour	1 person × 960 hours	$62,400
Supplies	Cloud Hosting (AWS)	$3,000/month	6 months	$18,000
Supplies	Third-party API Licenses & Fees	$2,000/month	6 months	$12,000
Miscellaneous	Software Licenses, Training Materials, Contingency	Lump Sum	1	$5,000
			TOTAL COSTS	**$479,800**

TYPE OF BENEFIT	BASIS OF ESTIMATE	ESTIMATED BENEFIT AMOUNT
Specific Cost Savings	Automation of manual registration and reminder processes reduces administrative overhead, equivalent to 3 full-time staff ($60,000/year each).	$180,000/year
Enhanced Revenues	Increased ticket sales and sponsorship opportunities through targeted advertising and upsell features, achieving a 15% revenue increase per event.	$150,000/year
Higher Productivity (Soft)	Streamlined workflows for organizers and a seamless experience for attendees reduce time spent on coordination and problem-solving.	Significant (Not Quantified)
Better Decision Making	Data analytics from the platform provide insights into attendee preferences, enabling better event planning and marketing strategies.	Significant (Not Quantified)
Less Maintenance	Modern cloud-native architecture reduces ongoing maintenance costs compared to legacy systems.	$30,000/year
Other Costs Avoided	Avoids costs associated with using multiple disparate systems for ticketing, communication, and payment processing.	$25,000/year
		$385,000+/year

COST BASIS OF ESTIMATE

- **Cloud Hosting Estimate:**

The cloud hosting estimate was calculated using the AWS Pricing Calculator, based on the standard infrastructure required to run a mid-sized event management platform. This includes EC2 application servers, RDS relational database, S3 storage for event media, CloudFront CDN for content delivery, Elastic Load Balancer, autoscaling groups, daily backups, and CloudWatch monitoring. Usage assumptions reflect system performance support for up to 10,000 concurrent users over a 6-month period, using AWS's publicly available pricing tiers.

- **Third-Party API Licenses & Fees Estimate:**

The estimate for third-party API costs was based on published pricing tiers from Twilio (SMS notifications), SendGrid (email delivery), Google Maps API (venue mapping), and Stripe/PayPal (payment processing). Monthly usage assumptions include approximately 15,000 SMS messages, 30,000 email sends, standard map loads per event, and typical payment-processing volumes for medium-sized events. These assumptions were applied over a 6-month period to determine the estimated API expenditure.

Financial Summary / Business Case

Payback Period, NPV Analysis	**Payback period:** ~15 months (the $479,800 initial cost is recovered by ~$385,000 per year in benefits). **NPV:** (3 years at 10%) ≈ $478,000 (positive). **Conclusion:** The project is financially attractive. If benefits continue beyond three years, NPV will increase further.
Non-financial Considerations	**Compliance & privacy:** PCI-DSS, PIPEDA/GDPR, audit trails **Security:** encryption (at rest/in transit), MFA, least-privilege IAM **Accessibility & UX:** WCAG 2.1 AA / AODA, mobile-first **Scalability & reliability:** autoscaling, load testing, monitoring/alerts **Change management & training:** onboarding, quick-start guides **Data governance:** retention, export, deletion (reduce vendor lock-in)

RISKS, CONSTRAINTS, AND ASSUMPTIONS

RISKS	• Payment gateway/vendor delays • Security breach or data loss • Peak-load performance issues • Third-party API outages/rate limits • Scope creep (time/budget overrun) • Low user adoption / change resistance
CONSTRAINTS	• Budget cap: ≤ $480,000 • Fixed timeline: ~18 weeks with hard pilot date • Resourcing: limited B/E, F/E, QA, DevOps, UX capacity • External deps: payment, email/SMS, maps APIs, provider quotas • Compliance/security gates: PCI-DSS, PIPEDA/GDPR reviews before go-live • App store approvals required for mobile builds • Data availability/quality from stakeholders • Scope limited to MVP (change requests go through control process)
ASSUMPTIONS	• Funding is approved and released on schedule. • Required API keys, sandboxes, and cloud resources are available. • Stakeholders are available for reviews/UAT within planned windows. • Source data is provided in agreed formats and of usable quality. • Solution is fully cloud-hosted (no on-prem requirements). • Security/privacy reviews and approvals can be completed within the timeline. • App Store/Play approvals fit within the built-in buffer. • Pilot users are engaged and training materials are sufficient for adoption.

PREPARED BY	TITLE
Bassey Elliot	Project manager
Souravdeep Durgesh Singh	Project Manager
Wangchen Peng	Project Manager