

# Software Engineering Project: Event Management System

## Chosen Approach: Agile Methodology

### What is Agile?

Agile is an iterative and incremental software development approach. Instead of developing everything upfront, Agile focuses on:

- Small iterations (called sprints),
- Continuous feedback,
- Flexibility for changing requirements,
- Delivering working software in every cycle.

### Why Agile for Event Management System?

**Changing Requirements** Event systems often need updates (new types of events, ticketing rules, integrations). Agile handles changes smoothly.

**Incremental Delivery** | we can build core features (event listing, booking) first, then add extras (payment gateways, analytics).

**Customer Feedback** Users/admins can test features early & give feedback make the booking flow easier

**Team Collaboration** developers, designers & stakeholders can work together closely in short cycles.

# Requirements Determination

## Functional Requirements (FR)

1. User Registration & Login.
2. Browse Events (list, filter, search).
3. Event Booking & Ticket Purchase.
4. Admin Panel for Event Management (CRUD).
6. Booking Confirmation
7. User Dashboard (My Bookings, Profile).
8. Event Analytics for Admin.

## Non-Functional Requirements (NFR)

1. Performance: System should handle 150 concurrent users.
2. Scalability: Able to add new features without major redesign.
3. Security: Data encryption, secure payment processing.
4. Usability: Mobile-friendly UI/UX.
5. Reliability 99.9% uptime.
6. Maintainability: Code must follow best practices for easy updates.
7. Response Time: Pages should load under 3 seconds.