

**EventMate** is an **AI-powered event planning and scheduling application** built using Java.

The main goal is to **simplify and automate event planning** — whether it's a **birthday, wedding, conference, or corporate meet** — by helping users:

- Plan events based on their **budget, preferences, and guest count**
- Suggest suitable **venues, decorators, caterers, and entertainment options**
- Automatically **generate schedules** (timelines, reminders, vendor coordination)
- Use **AI recommendations** to improve efficiency, cost, and timing.

In short, **EventMate acts like a personal event assistant**, powered by AI, that helps users plan, organize, and manage their events seamlessly.

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## Core Modules to Design

### 1. User Module

- User Registration & Login
- Manage profile and preferences (event type, budget range, location)
- Create new event (enter event details: date, time, theme, budget, guest count)
- View and manage past or upcoming events
- Receive AI-based recommendations for services (venue, catering, etc.)
- View event schedule and reminders

### 2. AI Recommendation Module

- This is the **core intelligent module** of EventMate
- Uses rule-based or machine learning logic to:
  - Suggest best **venues** based on event type, date, and budget
  - Recommend **vendors** (decorator, photographer, caterer, etc.)
  - Generate **optimized event schedules** (timing for each task)

- Suggest **cost optimization tips**
- Example:  
If event = “Birthday”, budget = ₹30,000 → AI suggests a nearby banquet hall, decorator, and cake vendor package within budget.

### **3. Event Planning Module**

- Collect event details from user (type, date, location, guest count)
- Generate a structured **event plan**:
  - Task list (venue booking, decoration, food, invitation, entertainment)
  - Vendor allocation
  - Budget breakdown
- Allow user to edit or update tasks manually

### **4. Scheduler Module**

- Create automatic schedules and reminders:
  - Task timelines (e.g., “Book venue by Oct 25”, “Order cake by Oct 28”)
  - Reminders via email or notification
- Display in **calendar view or timeline**
- Option to reschedule or modify event timeline

### **5. Vendor Management Module**

- Vendor registration & login (for decorators, caterers, venues, etc.)
- Add service details (category, price, availability, ratings)
- Accept or reject event requests
- View event calendar for their assigned bookings

## **6. Admin Module**

- Manage all users and vendors (approve, suspend, or verify)
- Monitor active and completed events
- Manage service categories and database of vendors
- View reports and analytics (most booked venues, top-rated vendors, etc.)
- Oversee AI recommendation rules and update database

## **7. Payment & Budget Module (Optional)**

- Manage total budget allocation per event
- Track expenses and generate reports
- Online payment or wallet integration (optional)