**Business Problem/Scenario:**

The Erasmus Student Network (ESN) organizes a variety of events for international students, such as welcome weeks, cultural trips, workshops, and social gatherings. Managing these events effectively, including participant registration, event scheduling, resource allocation, and communication, can be challenging.

**Functional Requirement:**

The Event Management System shall allow ESN sections to:

* **Create and manage events:**
  + Define event details: name, date/time, location, description, target audience, capacity.
  + Set registration deadlines and fees (if applicable).
  + Assign event organizers and volunteers.
  + Create custom registration forms with relevant questions (e.g., dietary restrictions, interests).
* **Manage event registrations:**
  + Allow students to easily register for events online.
  + Track registrations and generate attendance lists.
  + Send automated email reminders and notifications to participants.
  + Handle cancellations and waiting lists.
* **Manage event resources:**
  + Allocate and track resources such as venues, equipment, and transportation.
  + Create budgets and track event expenses.
* **Communicate with participants:**
  + Send mass emails and announcements related to events.
  + Create online forums or chat groups for event discussions.
* **Generate reports:**
  + Produce reports on event attendance, revenue, and expenses.
  + Analyze event data to identify trends and improve future events.

**OOP Concepts to Demonstrate:**

* **Inheritance:** Create base classes for events (e.g., "Event" class) and inherit from it to create specific event types (e.g., "Workshop," "Trip," "Social").
* **Polymorphism:** Implement different registration and communication methods for different event types.
* **Encapsulation:** Encapsulate event data (e.g., registration details, participant information) within event objects.
* **Abstraction:** Define abstract classes or interfaces to represent common functionalities across different event types.

This functional requirement addresses key aspects of event management for ESN, including event creation, registration, resource management, and communication. By implementing these functionalities, your application will help ESN sections streamline their event planning and improve the overall experience for international students.