

```
class Event {
    String eventId;
    String organizerId;
    String name;
    String description;
    String categoryId;
    double fee;
    long eventStart;
    long eventEnd;

    // Each Event refers to exactly one Category
    // 1 -- 1 Category;
}
```

```

class Category {
    String categoryId;
    String name;
    String description;
}

class Registration {
    String registrationId;
    String eventId;
    String participantId;
    String organizerId;
    String status; // "pending", "approved", "rejected"
    long timestamp;
    // Each Registration refers to one Event and one ParticipantAccount
    1 -- 1 Event;
    1 -- 1 ParticipantAccount;
}

class RegistrationForm {
    String firstName;
    String lastName;
    String username;
    String email;
    String phone;
    String password;
    String confirmPassword;
    boolean isOrganizer;
    String companyName;
}

// ===== ACCOUNTS =====
class UserAccount {
    String userID;
    String firstName;
    String lastName;
    String username;
    String email;
    String phoneNumber;
    String role;
}

class AdminAccount {
    isA UserAccount;
}

class OrganizerAccount {
    isA UserAccount;
    String companyName;

    // Each OrganizerAccount can own many Events
    1 -- * Event;
}

class ParticipantAccount {
    isA UserAccount;
}

// ===== REPOSITORIES =====
class EventRepository {
    // Repository manages many Events
    1 -- * Event;
}

class RegistrationRepository {
    // Repository manages many Registrations
    1 -- * Registration;
}

// ===== VIEWMODELS =====
class AdminViewModel {
    DatabaseReference userRef;
    1 -- * UserAccount;
}

class OrganizerViewModel {
    EventRepository eventRepo;
    1 -- 1 EventRepository;
}

class RegistrationViewModel {
    RegistrationRepository repository;
    LiveData<List<Registration>> pendingRegistrations;
    void loadPendingRegistrations(String organizerId);
    LiveData<List<Registration>> getPendingRegistrations();
    1 -- 1 RegistrationRepository;
}

class ParticipantViewModel {
}

class CategoryViewModel {
    DatabaseReference dbRef;
    1 -- * Category;
}

// ===== SERVICES =====
class LoginService {
    FirebaseAuth mAuth;
    DatabaseReference usersRef;
}

// ===== ACTIVITIES =====
class AppCompatActivity {}

class AdminDashboardActivity {
    isA AppCompatActivity;
    1 -- 1 AdminViewModel;
}

class OrganizerDashboardActivity {
    isA AppCompatActivity;
    1 -- 1 OrganizerViewModel;
    1 -- 1 RegistrationViewModel;
}

class ParticipantDashboardActivity {
    isA AppCompatActivity;
    1 -- 1 ParticipantViewModel;
}

class ManageCategoriesActivity {
    isA AppCompatActivity;
    1 -- 1 CategoryViewModel;
}

class ManageEventActivity {
    isA AppCompatActivity;
    boolean isEditMode;
    Event eventToEdit;
    String organizerId;
    String selectedCategoryId;
    List<Category> categoryList;
    1 -- 1 OrganizerViewModel;
    1 -- 1 CategoryViewModel;
}

class CreateAccountActivity {
    isA AppCompatActivity;
    1 -- 1 RegistrationForm;
}

class LoginActivity {
    isA AppCompatActivity;
    1 -- 1 LoginService;
}

class MainActivity {
    isA AppCompatActivity;
}

```