

UMPLE CODE (see in project wiki)

```
// BEHAVIOR COMMENTS
```

// =========

- // ManageEventActivity handles both event creation and editing.
- // In edit mode, it uses a temporary reference to the existing Event object (`eventToEdit`).
- // This is not a true 1–1 ownership it's just a transient link for editing, so we do NOT model it as a strong UML association.
- // The activity depends on OrganizerViewModel and CategoryViewModel to fetch and update event and category data,
- // but the ViewModels do not store a reference to the activity, so the relationships are one-sided.
- // OrganizerDashboardActivity launches ManageEventActivity for editing or creating events.
- // This is not a persistent relationship, just a usage dependency.

// We only include meaningful fields like `organizerId`, `selectedCategoryId`, and `isEditMode` that represent //persistent state or logic. UI-specific components (EditTexts, Buttons, etc.) are intentionally excluded to keep //the diagram focused on structure and behavior, not layout.

```
// ======= MODELS =======

class Event {
    String eventld;
    String organizerld;
    String name;
    String description;
    String categoryld;
    double fee;
    long eventStart;
    long eventEnd;

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

```
class Category {
 String categoryld;
 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
class ParticipantAccount {
 isA UserAccount;
// ====== REPOSITORIES ======
class EventRepository {
 // Repository manages many Events
 1 -- * Event;
class RegistrationRepository {
 // Repository manages many Registrations
 1 -- * Registration;
class AdminViewModel {
 DatabaseReference userRef;
 1 -- * UserAccount;
class OrganizerViewModel {
 EventRepository eventRepo;
 1 -- 1 EventRepository;
class RegistrationViewModel {
```

```
Registration Repository\ 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;
```