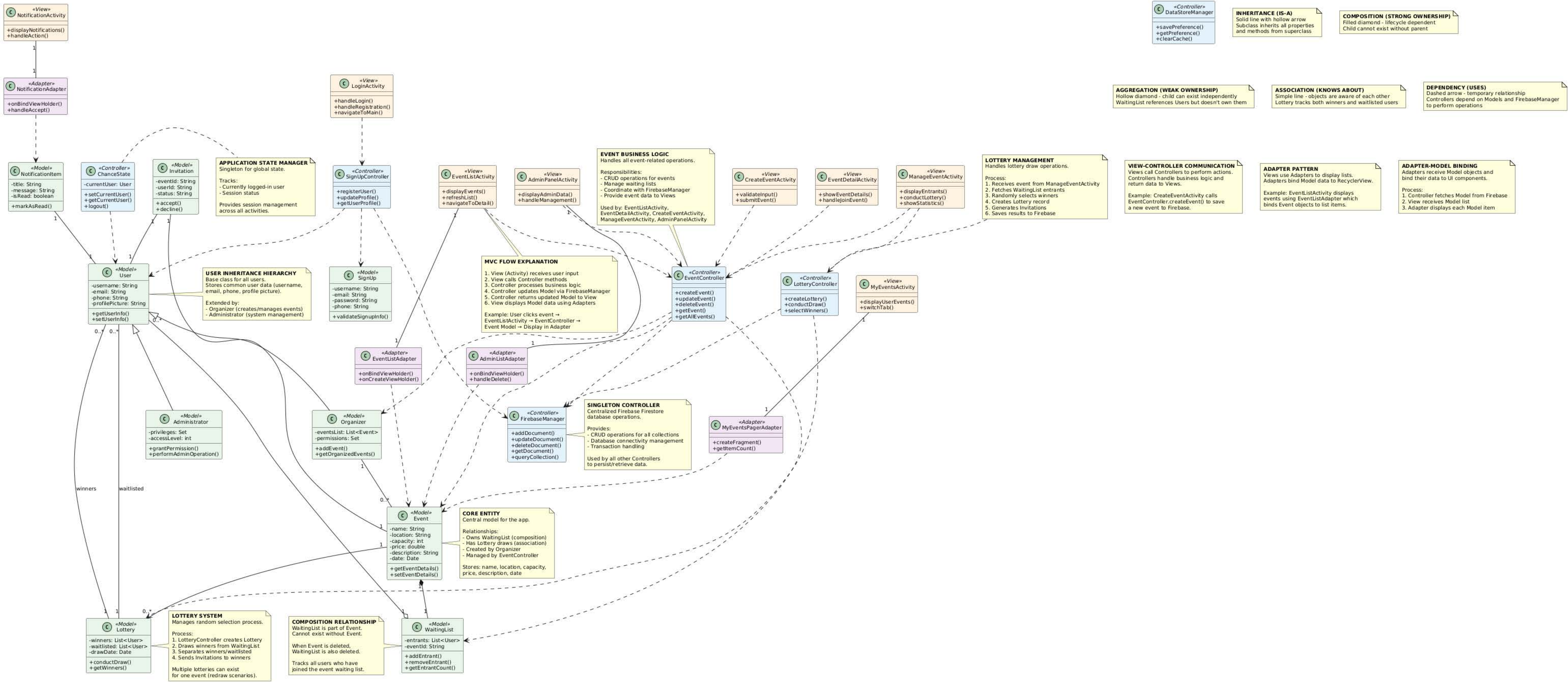


Chance App - UML Class Diagram



**LEGEND**

| Type       | Color  | Purpose                          |
|------------|--------|----------------------------------|
| Model      | Green  | Data & Business Objects          |
| Controller | Blue   | Business Logic & Data Management |
| View       | Orange | User Interface (Activities)      |
| Adapter    | Purple | RecyclerView List Display        |

**Relationship Types:**  
<|-- = Inheritance (IS-A relationship)  
•-- = Composition (Strong ownership, lifecycle dependent)  
o-- = Aggregation (Weak ownership, independent lifecycle)  
-> = Association (Objects know about each other)  
..> = Dependency (Temporary usage relationship)

**Key Design Patterns:**  
- MVC (Model-View-Controller) for separation of concerns  
- Singleton (FirebaseManager, ChanceState) for global access  
- Adapter Pattern (RecyclerView display) for list views  
- Repository Pattern (Controllers) for data operations

**Data Flow:**  
View → Controller → FirebaseManager → Firebase Database  
Firebase Database → FirebaseManager → Controller → Model → View