Names: Serafino Pampena,

Yijia Jiang

Christopher Velasquez-Chavez

Dara Cinema is looking to expand its customer base, particularly among younger audiences. To achieve this, they plan to develop a **reservation application** that enhances the movie-going experience with a VIP touch.

The app will allow clients to:

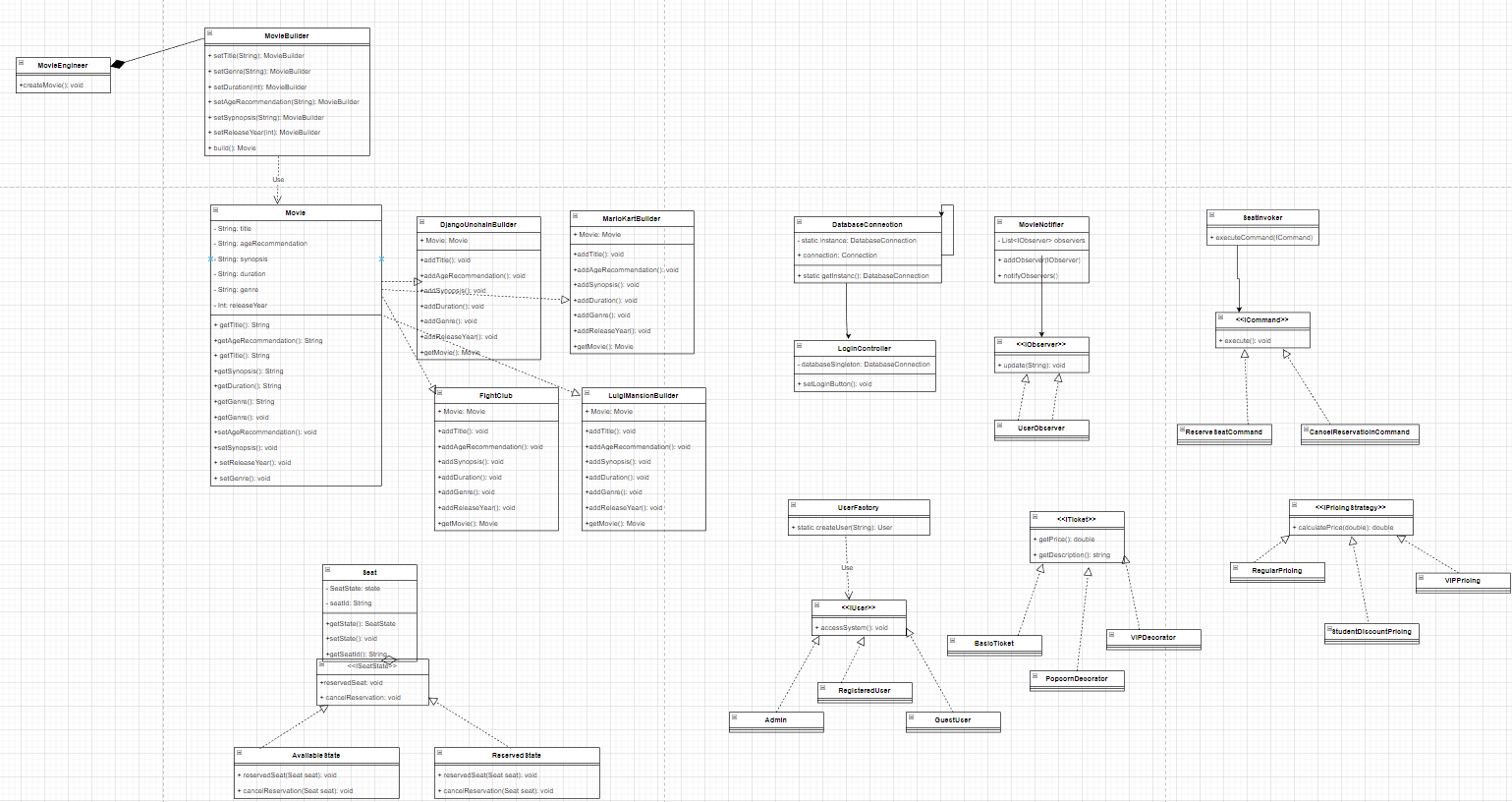
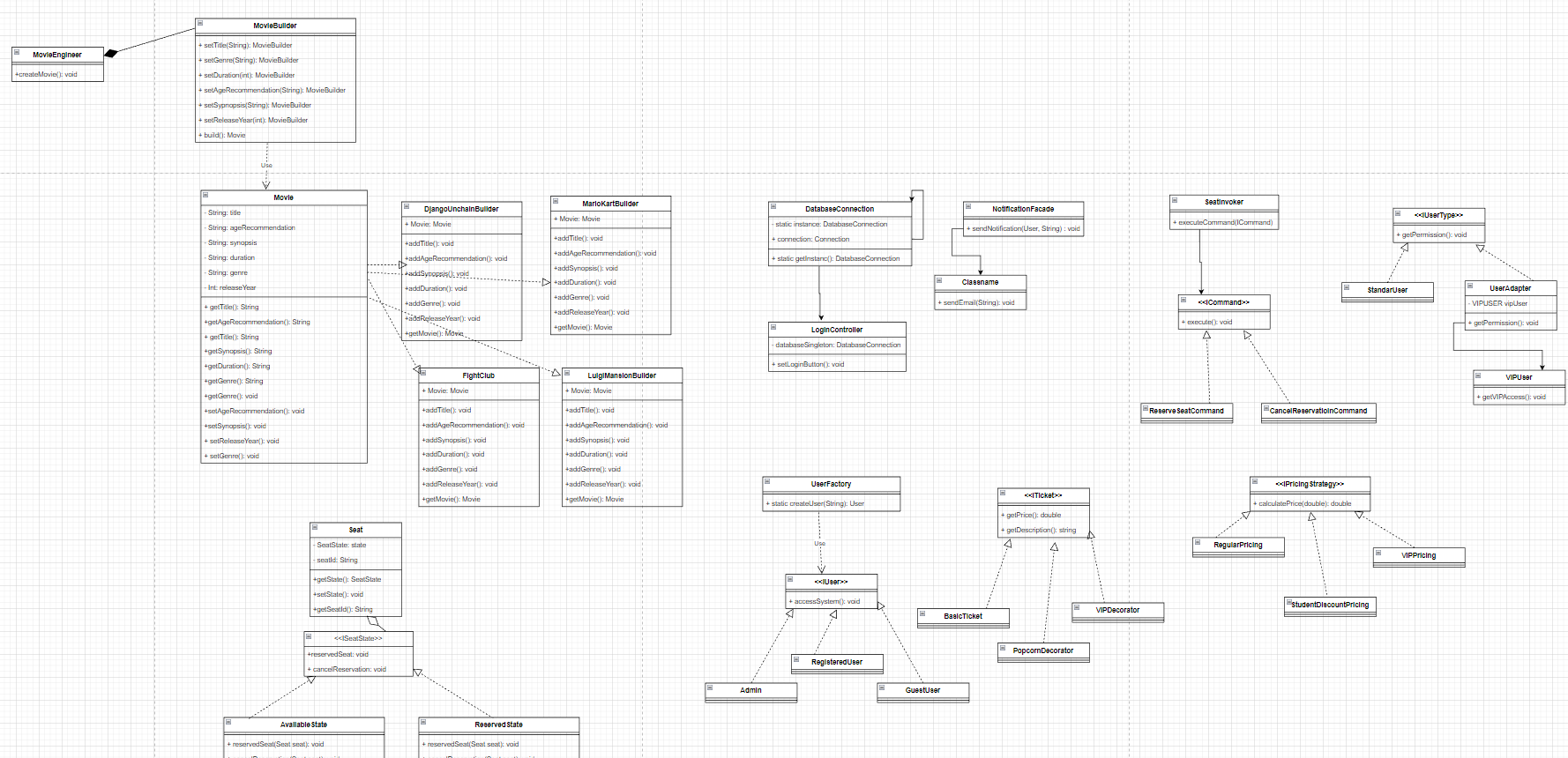
* **Reserve seats** in advance.
* **Apply discounts** to their bookings.
* **Order food and drinks** directly from the app.
* **Receive notifications** about schedule changes, promotions, or special events.

Additionally, the cinema owner requires an **admin dashboard** to manage movie listings, track reservations, and monitor customer engagement.

This project will help Dara Cinema modernize its services, attract younger audiences, and provide a seamless, high-end movie experience.

Design patterns chosen:

* Builder to create each movie made.
* State for the user to select a seat when ordering.
* Factory to create the users.
* Singleton for the database connection.
* Facade to notify the user for any changes in the movie.
* Decorator for the tickets to add extra benefits like popcorn.
* Command also for the seat reservation.
* Strategy for the final pricing like student discount, VIP package or the regular price.
* Adapter design pattern for users like VIP



Use case Diagram:

