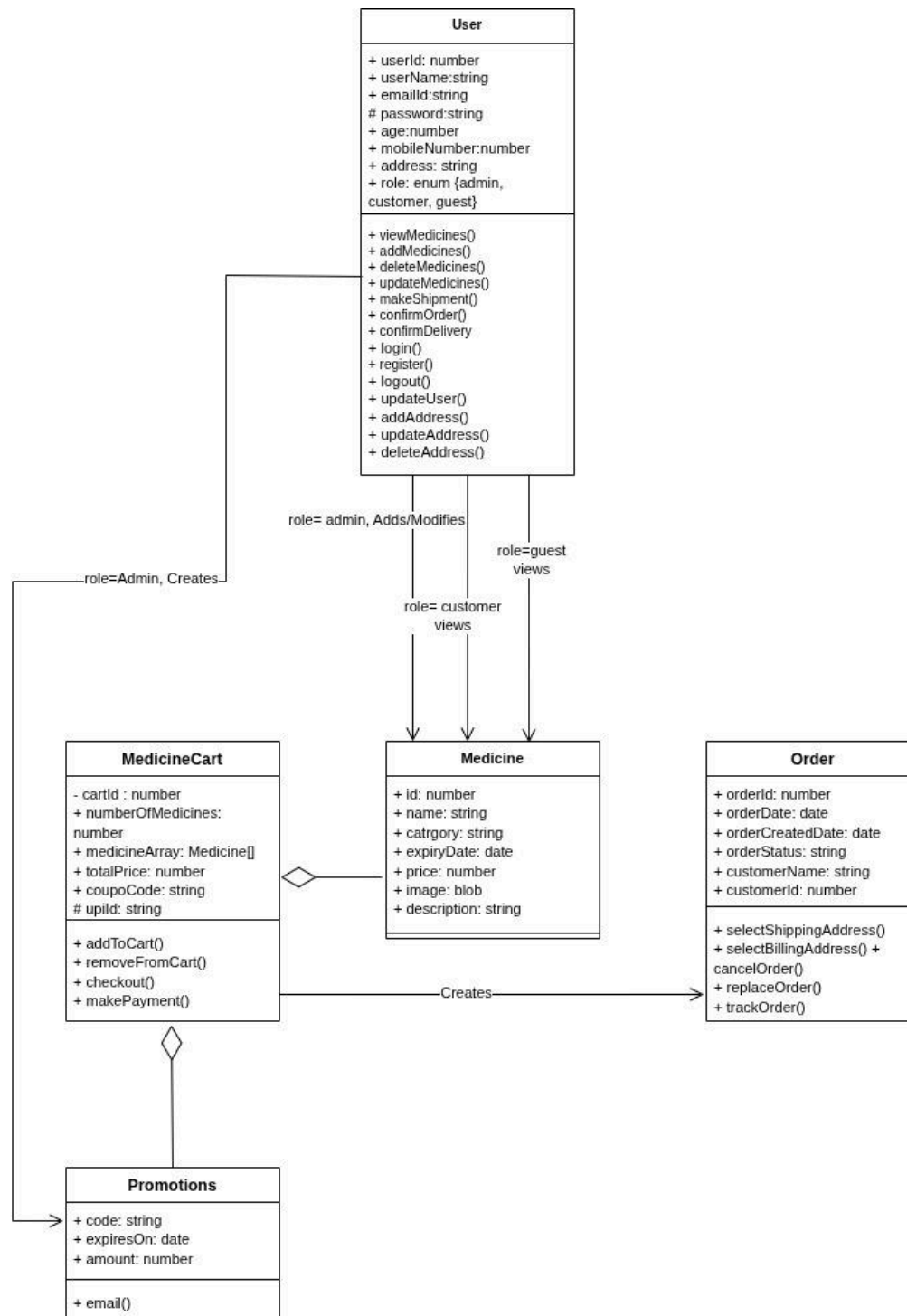


Medicine Delivery Application



Medicine delivery e-commerce application allows the user to order medicines online and get it delivered to their respective location.

Image above is the Class Diagram for the Medicine Delivery Application which shows the static structure of the system, and provides the relationship between the classes and how they interact with each other.

Classes Used

1) User

It represents all users in the system — Admins, Customers, and Guests — distinguished by the role attribute.

- Attributes - userId, userName, password, age, mobileNumber, address, role = enum{'admin', 'customer', 'guest'}
- Methods- viewMedicine(), addMedicine(), deleteMedicine(), updateMedicine(), makeShipment(), confirmOrder(), confirmDelivery(), login(), logout(), addAddress(), updateAddress(), deleteAddress(), updateUser(), viewMedicine(), register()

2) Medicine

It represents the medicine items available for purchase.

- Attributes: id, name, description, category, expiryDate, price, image

3) MedicineCart

It manages medicines selected by a user before placing an order.

- Attributes: cartId, noOfMedicines, medicineArray, totalPrice, couponCode, upId
- Methods: addToCart(), removeFromCart(), checkout(), makePayment()

4) Order

It represents a user's order once items are purchased from the cart.

- Attributes: orderId, orderDate, orderCreatedDate, orderStatus, customername, customerId
- Methods: selectShippingAddress(), selectBillingAddress(), cancelOrder, replaceOrder(), trackOrder()

5) Promotions

It represents discount or promotional offers that can be applied during checkout.

- Attributes: code, expiresOn, amount
- Methods: email()

Relationships:

- 1) All users can view medicines; Admins can add, delete, or update medicines.
- 2) Users are associated with Order, a user owns or operates a medicine cart.
- 3) Users are associated with Order, a user creates and manages their orders.
- 4) MedicineCart has a composition relationship with Medicine, a cart can contain one or more medicines.
- 5) MedicineCart is aggregated with Promotions, cart can use Promotions like couponCode,
- 6) Users are associated with MedicineCart, users can add/remove items from cart, proceed to checkout and make payment but Promotions can exist independently of a cart.
- 7) Order is associated with User, as each order is related to a user.
- 8) Order is associated with Medicine, as each order can have multiple medicines handled by MedicineCart
- 9) GuestUser can only view Medicines
- 10) Users can View and order medicines
- 11) Users can view the orders they have placed