Design Amazon Notification System

Functional Requirements:

1. Notification Channels (Subscriber) : The system should support multiple notification

channels, such as email, SMS, push notifications, and in-app notifications. Each channel has its own delivery mechanism and requirements.

2. Product Types (Publisher) : Users can subscribe to different types of product, such as Iphone. Each product type may have specific content and type.

Observer Design Pattern

Define a one-to-many dependency between objects so that when one object changes state, all its dependents are notified and updated automatically.

Pros :

Open/Closed Principle. You can introduce new subscriber classes without having to change the publisher's code (and vice versa if there's a publisher interface). You can establish relations between objects at runtime.

Cons:

Subscribers are notified in random order.

Class Diagram