

Online 3

Time: 25 minutes

You are tasked with creating a notification system for a banking platform that supports multiple mediums such as email, SMS, and mobile app notifications. This system must allow customers to choose their preferred notification channel for receiving alerts, such as transaction updates (incoming/outgoing), low balance warnings, and promotional offers.

Customers should have the flexibility to switch their preferred notification channel dynamically without impacting the underlying logic that processes and dispatches these notifications. The system should be designed with extensibility in mind, making it easy to integrate new channels, such as WhatsApp, voice calls, or push notifications, without requiring changes to the existing codebase.

Each notification channel must handle its own specific formatting and sending logic independently, ensuring a clear separation of responsibilities. Despite the diversity of channels, all notifications must maintain a consistent structure and content to provide a uniform experience across different mediums.