

## CSE 214

### Online on Creational Pattern

**Time: 25 minutes**

You are building a cross-platform notification library. The library needs to send notifications via different channels: **SMS**, **Email**, and **Push Notification**. All channels implement a common interface **Notification** with a method **notifyUser()**.

The client application will specify the communication channel as a string (e.g., "SMS"). Your system must decide which class to instantiate and return the object to the client. The client should not need to know the specific class names (like **SMSNotification**), only the interface.

**Task:** Implement the design such that adding a new notification type (e.g., "SlackMessage") in the future would require minimal changes to the existing codebase.