# Ocp\_Act32

## OCP Activity 32: Message Sender System

### ⋆ Objective:

Understand the Open/Closed Principle:

"Software entities (classes, modules, functions) should be **open for extension**, but **closed for modification**."

#### Scenario:

You're creating a system that sends messages. Right now, it only sends emails. Soon, you'll need to support more methods like SMS or push notifications — but you don't want to keep changing the original message-sending logic every time.

#### Instructions:

- 1. Create an abstract class or interface called MessageSender:
  - Include a method send (message)
- 2. Create a class EmailSender that:
  - Inherits from MessageSender
  - o Implements the send() method to print:
     "Sending email: [message]"
- 3. Create another class SMSSender that:
  - Inherits from MessageSender
  - o Implements send() to print:
    "Sending SMS: [message]"
- 4. Create a function send\_notification(sender, message) that:
  - Calls sender.send(message)
- 5. Test by calling the function with both sender types.

#### Note:

- Give me your best output
- Add what you think is needed