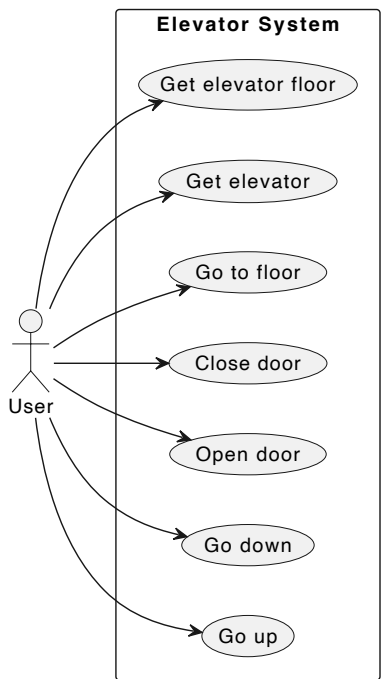


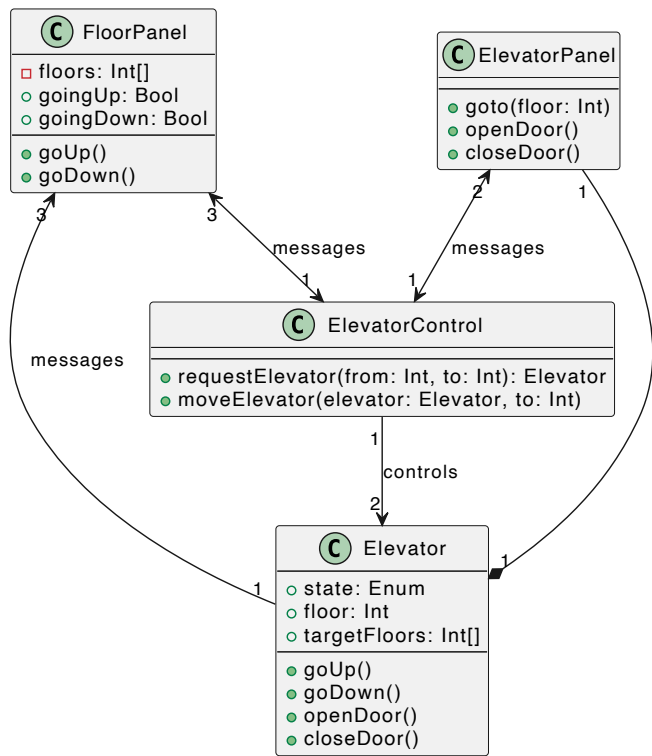
# Elevator System Requirement

## Diagrams

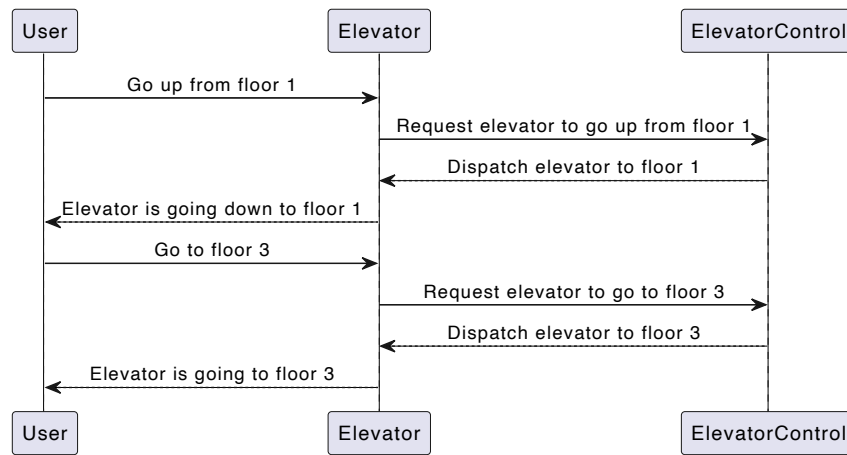
### Use Case Diagram



### Class Diagram



### Sequence Diagram



## Requirements

- R1: UI
  - R1.1: Floor Panel
    - R1.1.1: A user should know the current floor and moving direction of each of the two elevators at any time
    - R1.1.2: A user should be able to request for an elevator to go up/down by pressing the button on each of the three floor panel
    - R1.1.3: A user should know which elevator is being dispatched him/her
  - R1.2: Elevator Panel
    - R1.2.1: A user should be able to know which floor he/she is currently on and the moving direction of the elevator at any time
    - R1.2.2: A user should be able to see all the target floors of the elevator at any time
    - R1.2.1: A user should be able to select a floor by pressing the button on the elevator panel
    - R1.2.2: A user should be able to open/close the door by pressing the button on the elevator panel
- R2: Control
  - R2.1: Elevator
    - R2.1.1: The elevator should be able to move up/down as requested by the user
    - R2.1.2: The elevator should be able to open/close the door as requested by the user when the elevator is at a floor
  - R2.2: System
    - R2.2.1: The system should be able to dispatch the elevator to the floor where the user is waiting
    - R2.2.2: The system should be able to dispatch the elevator to the floor where the user is going
    - R2.2.3: The system should be able to handle multiple requests from different users at the same time
  - R2.3: Panel

- R2.3.1: Invalid button presses should take no effect