Passenger -← take-+ targetFloor: int 0...MaxTakingPeopleNum + currentFloor: int + pressButton(): void 0...MaxTakingPeopleNum sendMsg ControlHub AssignTasks→ + Elevators: list[Elevator] + MaxFloor: int + Running: bool + CallRequest: list[tuple(int, enum, bool)] + Running: bool + CallElevator(): void + ShutDown(): void ElevatorUI + ElevatorId: int + CurrentFloor: int + MaxFloor: int + State: enum + Direction: int + FloorButton: list[QPushButton] + UpdatePosition(tuple(int, int)): void + HighlightFloorButton(int, bool): void

+ UpdateState(enum, enum): void

+ OpenDoor(): void + CloseDoor(): void

ElevatorSystemUI

+ MaxFloor: int

+ UpdateUI(): void

+ ElevatorSystem: ControlHub

+ UpButtons: list[QPushButton]

+ UpdateHighlightButton(): void

+ UpdateState(enum, enum): void

+ ResetButton: QPushButton

+ DownButton: list[QPushButton]

+ Elevators: list[Elevator]

Elevator

- + ElevatorId: int
- + CurrentFloor: int
- + Direction: enum
- + MaxFloor: int
- + RemainOpenTime: int
- + CallDirection: enum
- + DestinationFloors: list[tuple(int, enum)]
- + CurrentDestination: list[tuple(int, enum)]
- + Running: bool
- + Delt: float
- + Finished: bool
- + State: enum
- + Car: tuple(float, float)
- + UpdateDestination(): void
- + Reset(): void
- + StartRun(): void
- + AddDestination(int, enum): void
- + ResortDestination(): void
- + OpenDoor(): void
- + CloseDoor(): void
- + Stop(): void
- + Move(): void