## Passenger - start\_floor: int - dest\_floor: int - timestep\_req: int - current\_floor: int - is\_on\_elevator: bool - press\_open\_button: bool - press\_close\_button: bool - obstructs\_door: bool - going\_up: bool - elev\_num: int + hasArrived(): bool

1...n

+ update():

## MainWindow

- \*ui: UI:QMainWindow
- num\_floors: int
- num\_elev: int
- num\_pass: int
- passengers: Passenger[\*]
- elevators: Elevator[\*]
- timer: QTimer
- curr\_ts: int
- connectAllSlots()
- disconnectAllSlots()
- resetAllBoxes()
- resetPassBoxes()
- disableAllButtons()
- enableAllButtons()
- outputLog()
- setUpSim()
- checkAllPassengersArrived(): bool
- moveElevators()
- movePassengers()
- assignElevators()
- getOnElevator(int, int)
- getOffElevator()
- requestElevator()
- submitSim()
- submitPass()
- startSim()
- stopSim()
- pauseSim()
- contSim()
- advanceTimestep()
- fire()
- powerOutage()
- help()

Elevator

- current floor: int
- num\_passengers: int
- going\_up: bool
- MAX CAP: int
- + moveUp()
- + moveUp()
- + checkCapacity(): bool

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