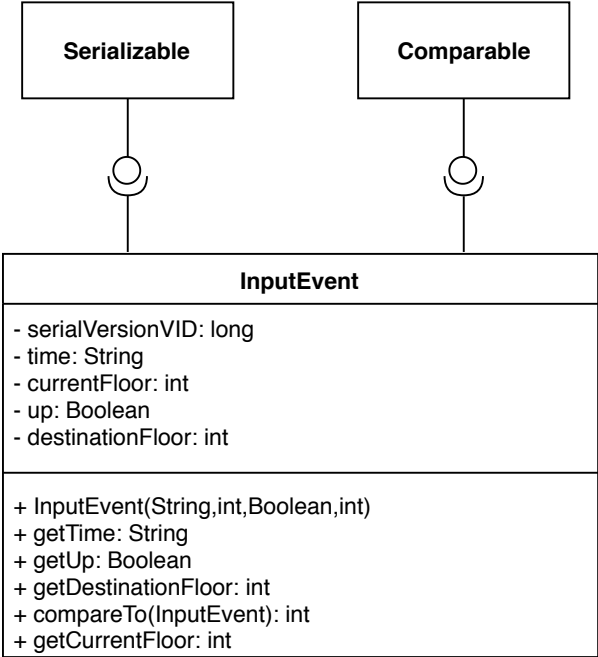## FloorSubsystem

- sendReceive: DatagramSocket
- SEND_PORT: int
- RECEIVE_PORT: int
- INPUT_PATH: String
- currentLine: int
- eventList: ArrayList<InputEvent>
- BYTE_SIZE: int
+ floorNum: int
+ upButton: boolean
+ downButton: boolean
- doorOpen: boolean
- doorClosed: boolean
- upLamp: boolean
- downLamp: boolean
+ elevatorPresent: boolean

+ FloorSubsystem(int)
+ getCurrentFloor: int
+ isElevatorPresent: boolean
+ readInputEvent: void
+ eventListToByteArray: byte[]
+ sendEventList: void

Scheduler

- FLOOR_COUNT: int
- ELEVATOR_COUNT: int
- eventList: ArrayList<InputEvent>
- upRequests: ArrayList<InputEvent>
- downRequests: ArrayList<InputEvent>
- elevatorTaskQueue: ArrayList<ArrayList<Integer>>
- currentPositionList: ArrayList<Integer>
- sendPacket: DatagramPacket
- Direction: enum
- directionList: ArrayList<Direction>
- BYTE_SIZE: int
- FLOOR_RECEIVE_PORT:int
- ELEVATOR_RECEIVE_PORT: int
- RECEIVE_PORT: int
- sendSocket: DatagramSocket
- floorReceiveSocket: DatagramSocket
- elevatorReceiveSocket: DatagramSocket

+ Scheduler()
+ receiveInputEventList: void
+ receiveFromElevator: void
- byteArrayToList(byte[]): ArrayList(InputEvent)
+ processRequests: void
+ taskListToByteArray(int): byte[]
+ sendTask(int): void

Serializable

Comparable

InputEvent

- serialVersionVID: long
- time: String
- currentFloor: int
- up: Boolean
- destinationFloor: int

+ InputEvent(String,int,Boolean,int)
+ getTime: String
+ getUp: Boolean
+ getDestinationFloor: int
+ compareTo(InputEvent): int
+ getCurrentFloor: int

ElevatorSubSystem

- elevatorNumber: int
+ elevatorLamp: ArrayList<Boolean>
+ buttonList: ArrayList<Boolean>
- Byte_Size: int
- nextFloorList: ArrayList<Integer>
- timeBtwFloors: int
- doorDelay: int
- doorOpen: Boolean
- currentFloor: int
- nextFloor: int
- goingUP: Boolean
- goingDown: Boolean
- GROUND_FLOOR: int
- sendPacket: DatagramPacket
- receivePacket: DatagramPacket
- sendSocket: DatagramSocket
- receiveSocket: DatagramSocket
- RECEIVE_PORT: int

+ ElevatorSubSystem(int,int)
+ elevatorState: void
+ runElevator: void
+ howManyFloor: int
+ runMotor: void
+ openDoor: void
+ closeDoor: void
+ buttonPushed(int): void
+ elevatorOpenDoorAtFloor(int): void
+ elevatorCloseDoorAtFloor(int): void
+ updateGoing_UporDOWN: void
+ updateNextFloor: void
+ receiveTaskList: void
- byteArrayToList(byte[]): ArrayList<Integer>
+ getSendPacket: DatagramPacket
+ getReceivePacket: DatagramPacket
+ setSendPacket(DatagramPacket): void
+ setReceivePacket(DatagramPacket): void
+ getSendSocket: DatagramSocket
+ getReceiveSocket: DatagramSocket
+ setSendSocket(DatagramSocket): void
+ setReceiveSocket(DatagramSocket): void
+ getButtonList: ArrayList<Boolean>
+ getElevatorLamp: ArrayList<Boolean>
+ setButtonList(ArrayList<Boolean>): void
+ setElevatorLamp(ArrayList<Boolean>): void
+ getTimerBtwFloors: int
+ getDoorOpen: Boolean
+ setDoorOpen(Boolean): void
+ getElevatorNumber: int
+ setElevatorNumber(int): void
+ getCurrentFloor: int
+ setCurrentFloor(int): void
+ getNextFloor: int
+ setNextFloor(int): int
+ isGoingUP: Boolean
+ setGoingUP(Boolean): void
+ isGoingDown: Boolean
+ setGoingDown(Boolean): void
+ toString: String