Scheduler **Elevator** brokenElevators: ArrayList<Integer> receivePacket: DatagramPacket elevatorAndTheirPorts: Map<Integer, Integer> timeBetweenFloors: long receivePacket23: DatagramPacket - floorButtonsLamps: Map<Integer, Boolean> sendPacket: DatagramPacket timeToLoadUnload: long sendAndReceiveSocket: DatagramSocket - elevatorNum: int insideElevatorQueue: ArrayList<InputData> data: byte[] requestQueue receivePacket69: DatagramPacket - prevCurrentFloor: int receiveSocket69: DatagramSocket floorButtons: Map<Integer, Boolean> InputData requestQueue: ArrayList<InputData> - initialFloor: int 1...n receiveSocket23: DatagramSocket - closeDoorFaultByFloor: Map<Integer, Boolean> elevatorIsStuck: boolean noMoreRequests: boolean doorNotOpenError: boolean elevatorsExecutingInstructions: boolean - output: Output timeOfRequest: long numOfCars: int - firstRequest: boolean isDirectionUp: boolean elevatorsInfo: Map<Integer, int[]> - sendAndReceiveSocket: DatagramSocket carRequest: int noMoreRequests: boolean Scheduler(int): doorNotCloseError: boolean - floorQueues: Map<Integer, ArrayList<InputData>> receiveElevatorStatus(): int elevatorStuckError: boolean - numOfPeopleInsideElev: int sendFloorAcknowledgement(): void - createElevatorStuckFault: boolean · InputData(long, int, boolean, int, boolean, boolean, boolean): elevatorAndTheirPortsPut(int, int): void openDoorFaultByFloor: Map<Integer, Boolean> getCarRequest(): int getNumOfCars(): int elevatorQueue - direction: String getFloor(): int - getRequestQueue(): ArrayList<InputData> sendPacket: DatagramPacket isDirectionUp(): boolean - saveElevatorStatus(String): void requestQueue: ArrayList<InputData> getTimeOfRequest(): long getReceivePacket69(): DatagramPacket newCurrentFloor: int compareTo(InputData): int main(String[]): void «create» - doorOpen: boolean getDoorNotOpenError(): boolean receiveInstructionFromFloor(): void - motorMoving: boolean + setElevatorStuckError(boolean): void · isNoMoreRequests(): boolean - numOfPeopleServiced: int toString(): String translateStringInstruction(String, boolean): void - data: byte[] getElevatorStuckError(): boolean getReceivePacket23(): DatagramPacket getDoorNotCloseError(): boolean getElevatorInfo(): Map<Integer, int[]> Elevator(int, int, String, int, long, long): getIsDirectionUp(): Boolean getElevatorForRequest(): int sleep(long): void sendToElevators(): void saveReceivedMessage(String): void addBrokenElevator(int): void + isElevatorIsStuck(): boolean closeSockets(): void elevatorMoveTiming(): void - setMotorMoving(Boolean): void - startElevator(boolean): void - sendStatus(): void Output setFloorButton(Integer, Boolean): void Output(): receiveInstruction(): void printElevatorStuckFault(): void closeSocket(): void - printDoorError(int, boolean): void prepareStatus(): String - printElevatorFloorRequest(int): void setDoorOpen(Boolean): void printDirection(int, boolean): void getMotorMoving(): Boolean - printFloor(int, int): void ⊦ getDoorOpen(): Boolean printDestinationReached(int): void getSizeOfRequestQueue(): int printUserTransition(int, int): void + main(String[]): void printTimeElapsed(long): void + moveElevator(int): int - printDoorFixed(int): void + stopElevator(boolean): void - printStuckError(int): void isNoMoreRequests(): boolean - printDoorUpdate(int, boolean): void setFloorButtonLamps(Integer, Boolean): void getReceivePacket(): DatagramPacket getIsStuck(): boolean - getRequestQueue(): ArrayList<InputData>

Floor directionLamp: String sendReceiveSocket: DatagramSocket elevatorQueue: ArrayList<InputData> requestDownButton: boolean requestDownButtonLamp: boolean receivePacket: DatagramPacket requestUpButtonLamp: boolean requestUpButton: boolean sendPacket: DatagramPacket + Floor(): + setRequestDownButton(Boolean): void + main(String[]): void + setDirectionLamp(String): void - getReceivePacket(): DatagramPacket convertToBool(int): boolean + getDirectionLamp(): String initiateFloor(): void getRequestDownButton(): Boolean handleInputErrors(int, int, String, int, int, int): boolean + isGoingUp(String): boolean + printInputData(ArrayList<InputData>): void - getRequestUpButtonLamp(): Boolean + setRequestUpButtonLamp(Boolean): void + setRequestUpButton(Boolean): void readData(String): void + receiveAcknowledgement(): void getSendPacket(): DatagramPacket - getRequestDownButtonLamp(): Boolean getRequestUpButton(): Boolean

- setRequestDownButtonLamp(Boolean): void

- sendInstruction(InputData, Boolean): void

+ getElevatorQueue(): ArrayList<InputData>

+ closeSocket(): void