Floor **Automail - Static Design Model [Group 6 Thurs 12:00]** floorNum: int isLocked = false: boolean · lockedBy: LinkedList<Robot> MailPool **ItemComparator** + lockBy(robot: Robot): void + unlockedBy(robot: Robot): void + waitingFor(robot: Robot): boolean loadItem(r: ListIterator<Robot>): void compare(i1: Item, i2: Item): int · lock(): void loadFood(robot: Robot): void · unlock(): void + isLocked(): boolean + toString: String creates creates MailGenerator Simulation Automail allMail: Map<Integer, ArrayList<Item>> DELIVER_FOOD: boolean creates creates creates MAIL_DELIVERED: ArrayList<Item> robot: [Robot] generateAllMail(): void **Building** + addToMailPool(): void setUpProperties(): Properties - generateFood(): FoodItem printStatistics(automail: Automail): void floors: ArrayList<Floor> + generateMailandFood(): void - lockFloorBy(robot: Robot, floorTobeLocked: int): void + unlockFloorBy(robot: Robot, floorTobeUnlocked: int): void + isLocked(floorNum: int): void creates +toString(): String creates Robot + attachments: LinkedList<Attachment> deliveringFood: boolean <<Abstract>> + regularItemsDelivered = 0: int <<Abstract>> Item <<enumeration>> + foodItemsDelivered = 0: int Attachment State + weightRegularItemsDelivered = 0: int # destination_floor: int is in + weightFoodItemsDelivered = 0: int has · CAPACITY = 1: int **DELIVERING** # id: String + foodTubeAttachmentCount = 0: int · INDIVIDUAL_MAX_WEIGHT = 2000: int # arrivalTime:int WAITIING · items: LinkedList<Item> # weight:int RETURNING + PRIORITY_LEVEL = 1: int + operate(): void + addnewItem(newItem: Item): void - count: int + attachFoodTube(): void + deliverItem(): void - hashMap: Map<Integer, Integer> + detachFoodTube(): void + getItems(): LinkedList<Item> setDestination(): void + getQuantity(): int getIdTube(): String + hashCode(): int + IsEmpty(): boolean changeState(): void + addToHand(mailItem: MailItem): void + addToRegularTube(mailitem: MailItem): void + addToFoodTube(mailItem: FoodItem): void Extends Extends + isEmpty(): boolean Extends + equals(anotherRobot: Robot): boolean <<Abstract>> Hand Tube FoodItem MailItem addNewItem(newItem: Item): void + addNewItem(newItem: Item): void toString(): String toString(): String + deliverItem(): void

Please Note: Only created or edited classes, methods and attributes are incorporated within the diagram. Information regarding the original design of mail only delivery is present but not included in this design

+ toString(): String

+ addNewItem(item: newItem): void + deliverItem():void + toString():String

Extends

+ CAPACITY = 3: int

Extends

+ addNewItem(Item: newItem): void + toString(): String

FoodTube