<<User>> - username : String - password : String - dateCreated : LocalDate + User(username: String, password: String) + User(username: String, password: String, date: String) + toString() : String + getUsername() : String + getPassword() : String + getDateCreated() : LocalDate + setUsername(username: String): void

+setPassword(password: String): void

Admin borrowedItems: List<Integer> isApproved : boolean - wishlist : List<Integer> - trades: HashMap<Integer, LocalDate> + Admin(username: String, password: String) - frozen : boolean + Admin(username: String, password: String, flagged : boolean date: String, isApproved: boolean) requestToUnfreeze : boolean + setApproved(approved: boolean) : void inactive : boolean + isApproved() : boolean - numLent : int + toString() : String - numBorrowed : int numIncomplete : int - homeCity : String + Trader(username: String, password: String) + toString() : String + isFrozen() : boolean

Loginable + checkUsername(username: String): + login(username: String, password: String) : boolean + changePassword(username: String, password: String) : void

+ setNumLent(numLent: int) : void + getNumBorrowed() : int setNumBorrowed(numBorrowed: int): void · isFlagged() : boolean + setFlagged(flagged: boolean) : void + isRequestToUnfreeze() : boolean + setRequestToUnfreeze(requestToUnfreeze: boolean) : void + getWishlist() : List<Integer> + aetNumIncomplete() : int setNumIncomplete(numIncomplete: int): void + getTrades() : HashMap<Integer, LocalDate> + addTrades(id: int, createdDate: LocalDate): void + removeTrade(id: int) : void + setInactive(inactive: boolean) : void + getInactive() : boolean + getHomeCity() : String + setHomeCity(newHomeCity: String): void

AdminActions

- admins : HashMap<String, Admin>

+ AdminActions(admins: HashMap<String, Admin>)

+ checkUsername(username: String) : boolean

+ getRequestedAdmins() : ArrayList<String>

+ getIdentifier() : String

+ login(username: String, password: String) : boolean

+ newAdmin(username: String, password: String): void

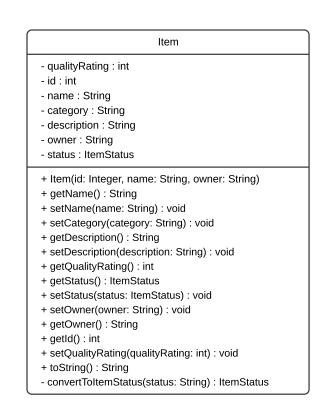
+ approveAdmin(username: String, approved: boolean): void

+ changePassword(username: String, password: String): void

+ setFrozen(frozen: boolean) : void

+ getNumLent() : int

Thia is the same as the classes on the left but not covered in arrows



TraderManager # users : HashMap<String, Trader> · weeklvLimit : int - maxInComplete : int - moreLend : int + TraderManager(users: HashMap<String, Trader>, weeklyLimit: int, maxInComplete: int, moreLend: int) + login(username: String, password: String) : boolean + getListOfFlagged() : List<String> + aetAllReauestsToUnfreeze() : List<Strina> + checkUsername(username: String) : boolean + getTraders() : ArrayList<String> + getTraderInfo(username: String) : String + newTrader(username: String, password: String): void + addTrader(t: Trader) : void + containTrader(username: String): boolean + freezeAccount(username: String) : boolean + unfreezeAccount(username: String): boolean + getWishlistIds(username: String): List<Integer> + addToWishlist(username: String, id: Integer) : void + getIsFrozen(username: String): boolean + getReguestToUnfreeze(username: String): boolean + setRequestToUnfreeze(username: String, setting: boolean): void + exceedWeeklyLimit(user: String, createDate: LocalDate) : boolean

+ removeTradeFromTraders(id: int, firstUser: String, secondUser: String) : void

+ getWeeklyLimit(): int

+ getMoreLend() : int

+ getIdentifier() : String

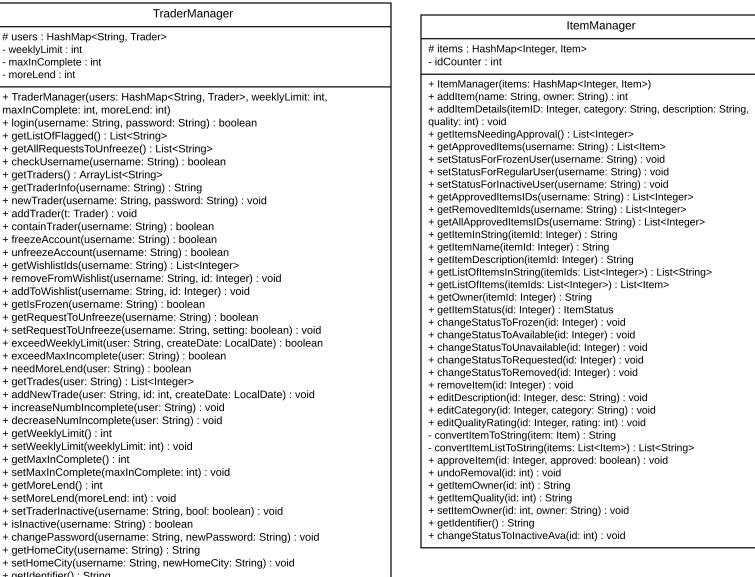
+ flagUser(username: String): void

+ unFlagUser(username: String) : void

+ increaseNumLent(username: String) : void

+ increaseNumBorrowed(username: String) : void

ItemStatus



Manager

+ getIdentifier() : String

 tradeDate : LocalDate - lastTradeDate : LocalDate - location : String - lastLocation : String - tradeStatus : String - returnLocation : String - lastReturnLocation : Sting returnDate : LocalDate - lastReturnDate : LocalDate numberOfEdits : HashMap<String, Integer> - isAgreed : HashMap<String, Boolean> - isConfirmed : HashMap<String, Boolean> - isReturned : HashMap<String, Boolean> - isPermanent : boolean - canBeUndone : boolean + Meeting(tradeId: int) + toString() : String + getTradeDate() : LocalDate + setTradeDate(tradeDate: LocalDate): void + getLastTradeDate() : LocalDate + getLocation() : String + setLocation(location: String) : void + getLastLocation() : String + resetLastInfo() : void + getTradeStatus() : String + setTradeStatus(tradeStatus: String) : void + getIsAgreed(): HashMap<String, Boolean> + getIsConfirmed(): HashMap<String, Boolean> + getNumberOfEdits() : HashMap<String, Integer> + setNumberOfEdits(numberOfEdits: HashMap<String, Integer>) : void + setIsAgreed(isAgreed: HashMap<String, Boolean>): void + increaseNumberOfEdits(user: String) : void + decreaseNumberOfEdits(user: String) : void + setAgree(trader: String, agree: Boolean) : void + setConfirm(trader: String, confirm: Boolean) : void + getTradeId() : int + getReturnLocation() : String + setReturnLocation(returnLocation: String) : void + getLastReturnLocation() : String + getReturnDate() : LocalDate + setReturnDate(returnDate: LocalDate) : void + getLastReturnDate() : LocalDate + isPermanent() : boolean + setPermanent(permanent: boolean) : void + getIsReturned() : HashMap<String, Boolean> + setReturn(trader: String, isReturn: Boolean) : void + getCanBeUndone() : boolean + isEdited() : boolean + isAgreed(username: String) : boolean + hasConfirmed(username: String) : boolean + setBothConfirm(b: boolean) : void + bothDisagree() : void

Trade_ - initiator : String - receiver : String - items : List<Integer> - isPermanent : boolean - isCompleted : boolean tradeType : String - createdDate : LocalDate + Trade(id: Integer, initiator: String, receiver: String, tradeType: String, isPermanent: boolean) + toString() : String + isPermanent() : boolean + getId() : int + getItems() : List<Integer> + setItems(items: List<Integer>) : void + setCompleted(isCompleted: Boolean): void + getCompleted() : boolean + getTradeType() : String + getInitiator() : String + aetReceiver() : Strina + getCreatedDate() : LocalDate + getOtherTrader(username: String) : String TradeManager

tradeInventory : HashMap<Integer, Trade>

boolean, items: List<Integer>): Integer

+ removeFromInventory(id: int) : void

+ getDateCreated(id: int) : LocalDate

+ isTradePermanent(id: int) : boolean

+ getOtherTrader(id: int, username: String) : String

+ setTradeCompleted(id: int): void

+ getTradeType(id: int) : String

+ getItems(id: int) : List<Integer>

+ getIdentifier() : String

+ isMaxEditsReached(id: int) : boolean

+ getIdentifier() : String

+ addToTradeInventory(trade: Trade) : void

TradeManager(tradeInventory: HashMap<Integer, Trade>)

+ getIncompleteTrades(trades: List<Integer>) : List<Integer>

counter : int

MeetingManager meetings: HashMap<Integer, Meeting> + MeetingManager(meetings: HashMap<Integer, Meeting>) + getMeeting(id: int) : Meeting + getOnGoingMeetings(tradelds: List<Integer>) List<Integer> + getMeetingDescription(id: int) : String + createMeeting(tradeId: int, initiator: String, receiver: String, isPermanent: boolean) : boolean + setMeetingInfo(id: int. tradeDate: LocalDate, returnDate LocalDate, location: String, returnLocation: String): void + getMeetingStatus(id: Integer) : String + removeMeeting(id: int) : boolean + editLocation(id: int, location: String) : void + editDate(id: int. date: LocalDate) : void + increaseNumEdit(user: String, id: int) : void + isValid(user: String, id: int) : boolean + confirmMeeting(id: int, username: String) : boolean · checkAllConfirmed(id: int): boolean + agreeOnTrade(id: int, username: String) : boolean - checkAllAgreed(id: int) : boolean - checkAllReturned(id: int) : boolean + containMeeting(id: int) : boolean undoEdit(id: int, user: String) : void + undoAgree(id: int, user: String) : void + canUndoAgree(id: int, username: String) : boolean + canUndoConfirm(id: int, username: String) : boolean + undoConfirm(id: int, user: String) : void + meetingCanBeUndone(id: int) : boolean + getEdits(id: int) : HashMap<String, Integer> + getMeetingDate(id: int) : String + getMeetingLocation(id: int) : String + getEditsLeft(id: int, username: String) : Integer + hasAgreed(id: int, username: String) : boolean + bothAgreed(id: int) : boolean + hasConfirmed(id: int, username: String) : boolean + bothConfirmed(id: int) : boolean + setReturnInfo(id: int) : void + setMeetingCompleted(id: int) : void + getReturnLocation(id: int) : String + getReturnDate(id: int) : String + setBothDisagree(id: int) : void

