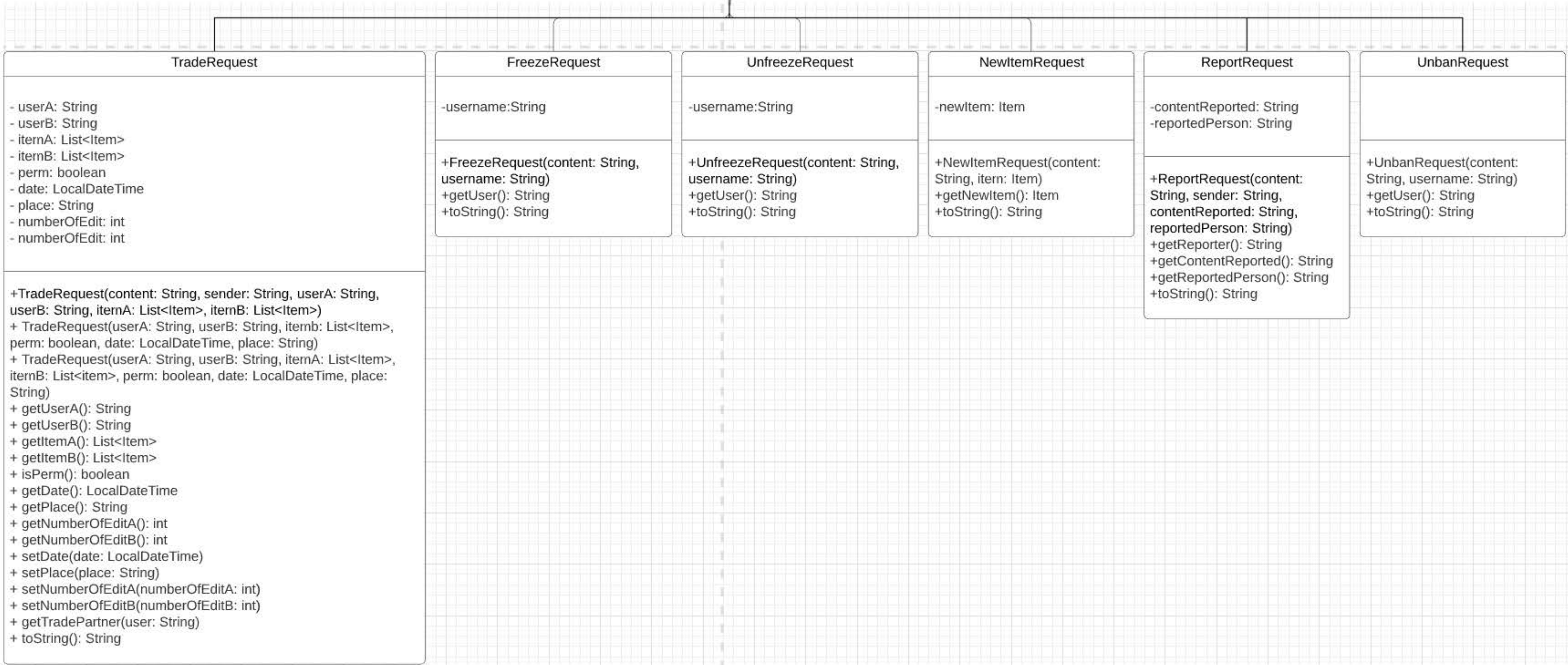
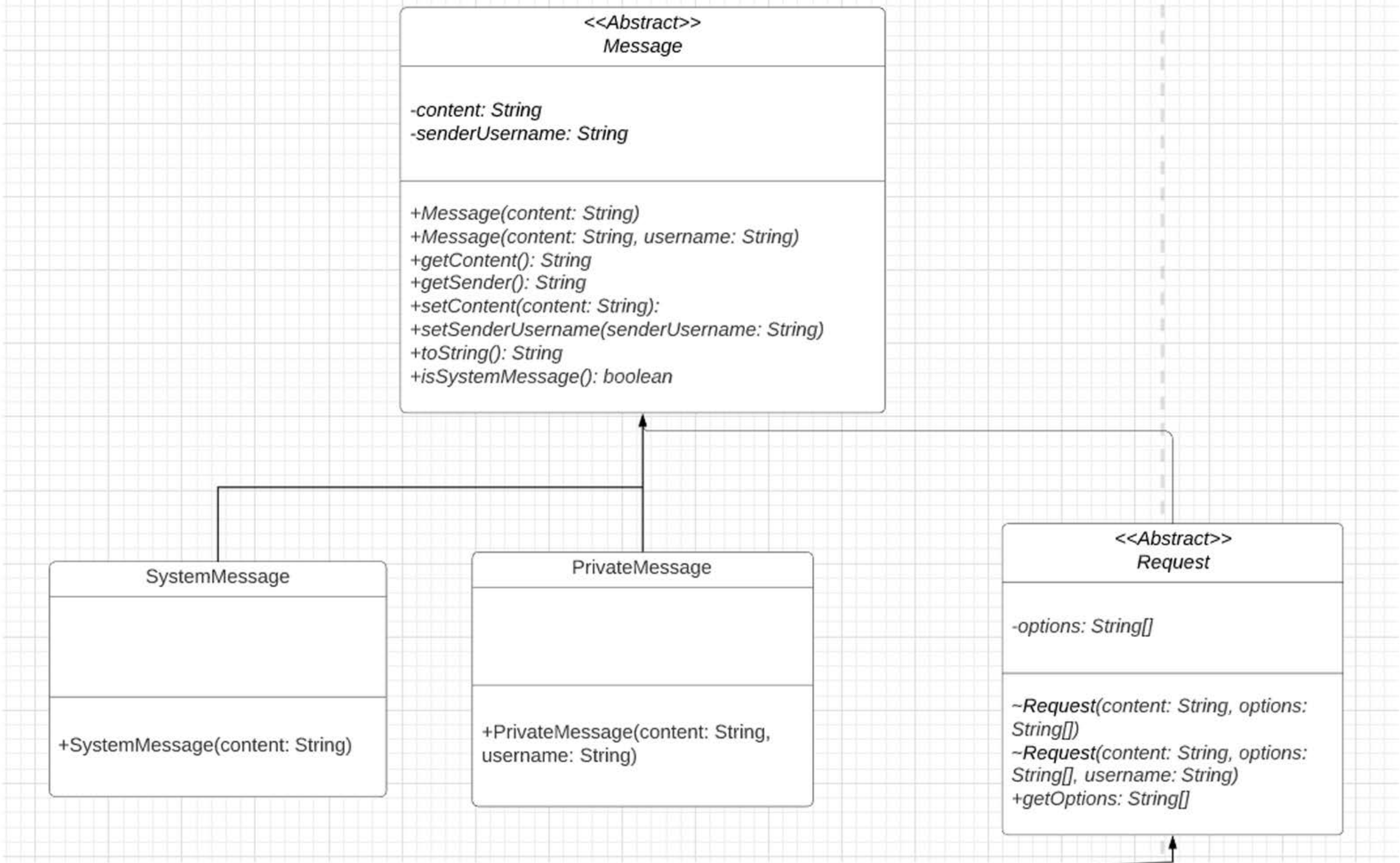


entities



<<abstract>>

Trade

- startDate: LocalDateTime
- traderBItemsToTrade: List<Item>
- traderAItemsToTrade: List<Item>
- traderA: String
- traderB: String
- failed: boolean
- traderAConfirmTimes: int
- traderBConfirmTimes: int
- creationDate: LocalDateTime

+ Trade(traderA: String, traderB: String, traderAItemsToTrade: List<Item>, traderBItemsToTrade: List<Item>, LocalDateTime startDate)
+ getCreationDate()
+ getFailed()
+ setFailed()
+ getTraderAConfirmTimes()
+ getTraderBConfirmTimes()
+ addTraderBConfirmTimes()
+ addTraderBConfirmTimes()
+ getCompleted()
+ getStartDate()
+ getTraderAItemsToTrade()
+ getTraderBItemsToTrade()
+ getTraderA()
+ getTraderB()
+ setConfirm(traderName: String, confirmation: boolean)
+ isBorrowed(traderName: String)
+ isLent(traderName: String)
+ tradingPartner(traderName: String)
+ needToConfirmMeetingOne(traderName: String)
+ toString()
+ equals()

TempTrade

- finishDate: LocalDateTime

+ TempTrade(traderA: String, traderB: String, userAItemsToTrade: List<Item>, userBItemsToTrade: List<Item>, startDate: LocalDateTime)
+ daysLeft()
+ needToConfirmMeetingTwo(traderName: String))
+ getCompleted()
+ setConfirm(traderName: String, confirmation: boolean)
+ toString()

PermTrade

+ PermTrade(traderA: String, traderB: String, userAItemsToTrade: List<Item>, userBItemsToTrade: List<Item>, startDate: LocalDateTime)
+ daysLeft()
+ getCompleted()
+ setConfirm(traderName: String, confirmation: boolean)

GlobalWishlist

- wishMap: Map<String, List<String>>

+ GlobalWishlist()
+ addWish(itemid: String, userid: String): void
+ removeWish(itemid: String, userid: String): void
+ removeItem(itemid: String): void
+ isItemWanted(itemid: String): boolean
+ getFirstInterestedUser(itemid: String): String
+ getAllInterestedUsers(itemid: String): List<String>
+ toString(): String

Item

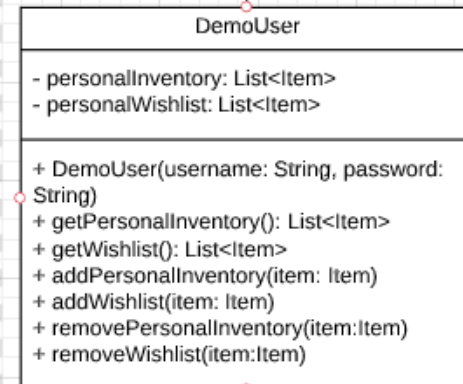
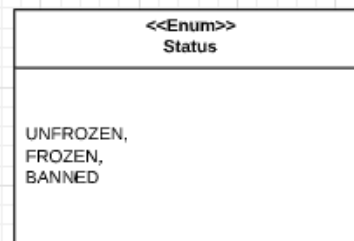
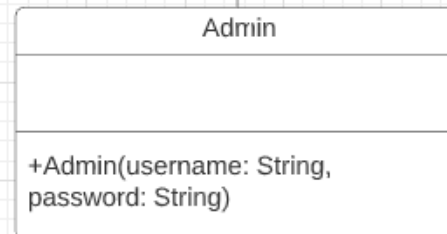
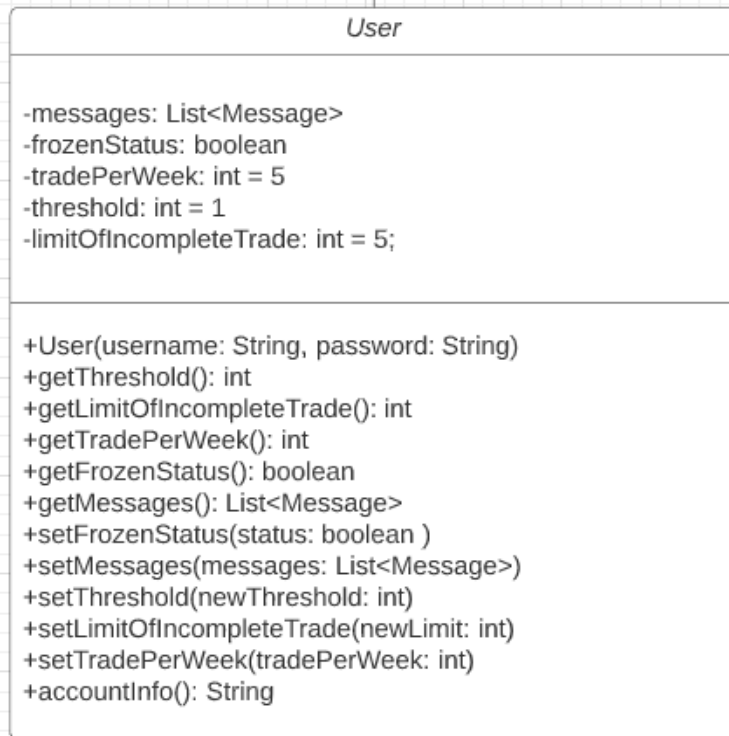
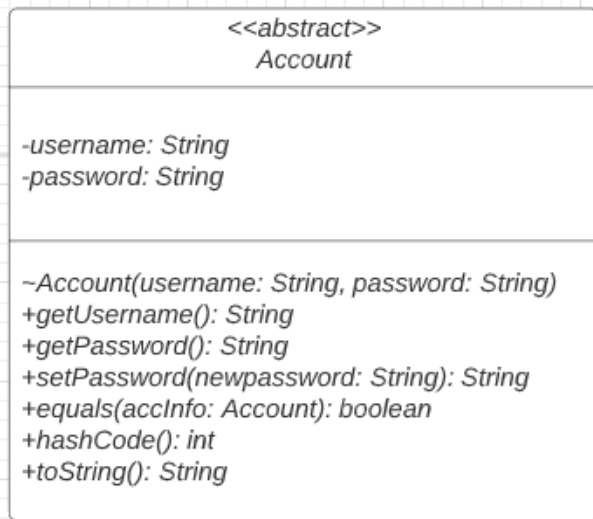
-itemID: String
-description: String
-name: String
-ownerName: String

+Item(name: String, ownerName: String, description: String)
+setOwnerName
(newOwnerName: String): void
+toString():String
+setItemID(String): void
+getItemID():String
+getDescription(): String
+getName(): String
+getOwnerName(): String
+isEqual(item: Item): boolean

GlobalInventory

-itemMap: Map<String, Item>
-itemCollection: List<String>

+ GlobalInventory()
+ getItemMap():<String,Item>
+ setItemMap(): void
+ addItemToIdCollection
(itemID:String):void
+ getIdCollection(): List<String>
+ getItem(itemID: String): Item
+ getItemByIndex(index: int):Item
+ removeItem(itemID: String):void
+ getNumOfItem():int
+ containsKey(itemID: String)
:boolean
+ toString():String
+ addItem
(itemID: String, item: Item):void
+isEmpty():boolean



Use_cases

userManager

- allUsers: Map<String, User>

```
+ userManager(allUsers: Map<String, User>)
+ login(username: String, password: String) : boolean
+ createUser(username: String, password: String) : boolean
+ changePassword(username: String, password: String) : void
+ getUserData(): Map<String, User>
+ isValidUser(username: String) : boolean
+ toString() : String
+ getCanTrade(user: String, borrowedTimes: int, lendTimes: int, numIncomplete: int,
numTradesMadeThisWeek: int) : boolean
+ getCanTradesIgnoreBorrowLoans(username: String, numIncomplete: int,
numTradesMadeThisWeek: int) : boolean
+ getUserMessages(username: String) : List<Message>
+ setUserMessages(username: String, message: List<Message>) : void
+ getUserInfo(username: String)
+ getUserInfo(username: String) : String
+ getUserFrozenStatus(username: String) : boolean
+ getUserIsBanned(username: String): boolean
+ getUserThreshold(username: String) : int
+ addUserMessage(username: String, message: Message) : void
+ setLimitOfIncompleteTrades(newLimit: int) : void
+ setWeeklyTradesForOneUser(username: String, newTradesPerWeek: int) : void
+ removeUser(username: String) : void
+ setLimitOfIncompleteTrades(newLimit: int) : void
+ setLimitOfIncompleteTradesForOneUser(username: String, newLimit: int) : void
+ setNewThreshold(newThreshold: int) : void
+ setNewThresholdForOneUser(username: String, newThreshold: int) : void
```


GlobalWishlistGateway

+ wishlist: GlobalWishlist

+ GlobalWishlistGateway(filepath: String)
+ writeToFile (filepath: String, wishlistItems2: GlobalWishList)
+ readFromFile (filepath: String): GlobalWishlist
+ getWishlistItems(): GlobalWishList

AdminAccountGateways

-filePath: String
-adminMap: Map<String, Admin>

+AdminAccountGateways (filePath:String)
+readFromFile(): void
+saveToFile(adminMap: map<String,Admin>): void
+getAdminMap(): map<String, Admin>
+ beginAdminMap(): void

AdminMessageGateway

+ messages: List<Message>

+ AdminMessageGateway(filepath: String)
+ writeToFile (filepath: String, adminMessages: List
<Message>): void
+ readFromFile (filepath: String): List<Message>
+ getMessages(): List<Message>

GlobalInventoryGateways

- filePath: String
- globalInventoryManager: GlobalInventoryManager
- globalInventory: GlobalInventory

+GlobalInventoryGateways(filePath:String)
+writeToFile(globalInventory: GlobalInventory): void
+getGlobalInventory(): GlobalInventory

UserTradesGateway

+ userTrades: Map<String, List <Trade>>

+ UserTradesGateway(filepath: String):
+ writeToFile (filepath: String, userTrades: Map <String, List
<Trade>>): void
+ readFromFile (filepath: String): Map<String, List<Trade>>
+ getUserTrades(): map<String, list<Trade>>

UserGateway

- mapOfUsers: Map<String, User>

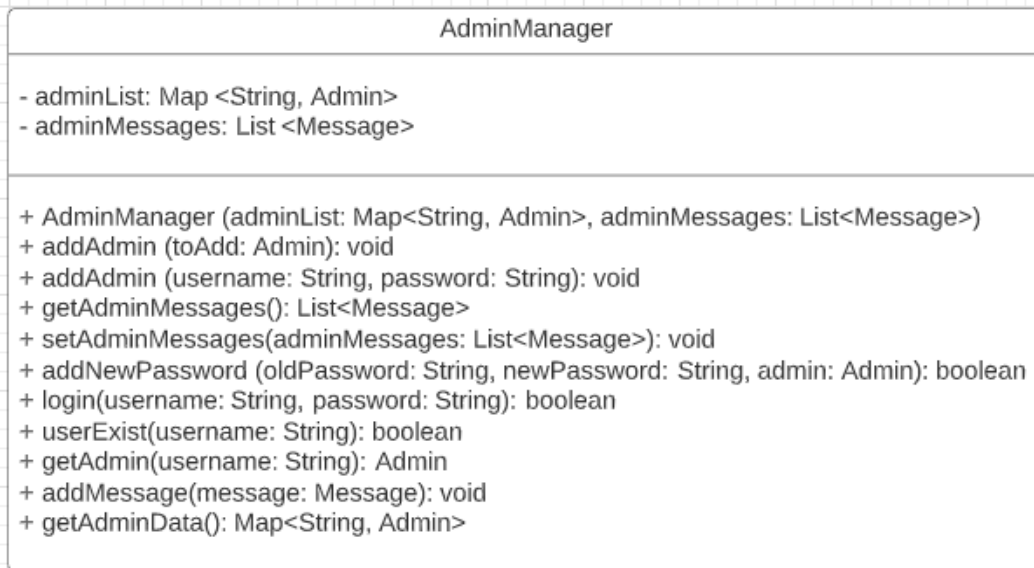
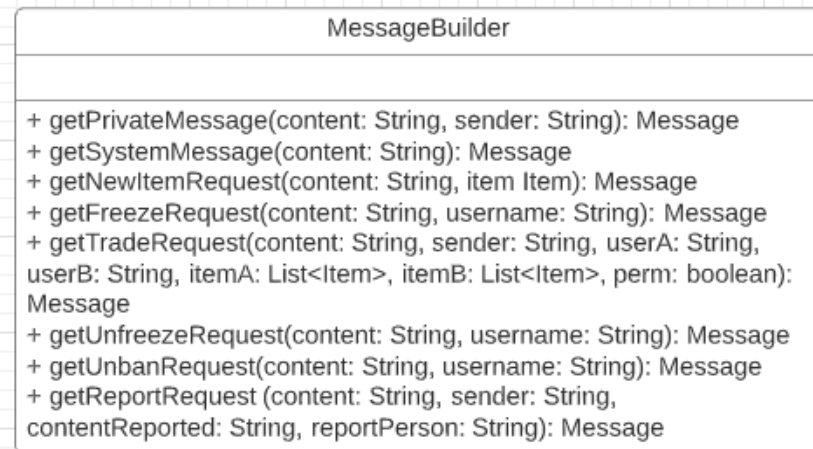
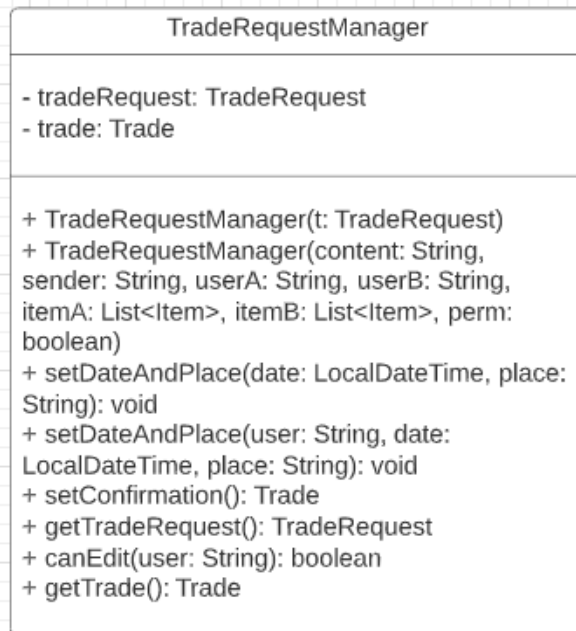
+ UserGateway(filepath: String)
+ readFromFile(filepath: String): Map<String, User>
+ writeToFile(filepath: String, userObjects: Map<String, User>): void
+ getMapOfUsers(): Map<String, User>

GlobalWishlistManager
- globalWishlist: GlobalWishlist
+ GlobalWishlistManager(globalWishlist GlobalWishlist) + addWish(itemid: String, userid: String): void + removeWish(itemid String, userid String): void + removeItem(itemid: String): void + isItemWanted(itemid: String): boolean + userWhoWants(allItems: List<Item>): List<String> + getAllInterestedUsers(itemid: String): list<String> +userWhoWants(allItems: List<Item>): List<String> + getPersonWishlist(userID: String): List<String> + getGlobalWishlistData(): GlobalWishlist + getInterestedItems(List<Item>: allItems, userB: String): List<String>

TradeManager
- tradeHistory: Map<String, List<Trade>>
+ TradeManager(tradeHistory: Map<String, List<Trade>>) + getTradeHistory(username: String): List<Trade> + getRecentTrade(username: String): Trade[] + getBorrowedTimes(username: String): int +getLendTimes(username: String): int +getFrequentTradingPartners(username: String): String[] - count(list: List<String>, item: String) int +addTrade(trade: Trade): void +tradesToConfirm(username: String): List<Trade> +getIncompleteTimes(username: String): int +numberOfTradesCreatedThisWeek(username: String): int +setConfirm(username: String, trade: Trade, status: boolean): void +removeTrade(trade: Trade): void +getUnstartTrades(username: String): List<Trade> +getTradeDate(): Map<String, List<Trade>>

DemoUserManager
- demoUser DemoUser
+ DemoUserManager(username: String, password: String) + getUserInventory(): List<Item> + getUserWishlist(): List<Item> + addDemoWishlistaddDemoWishlist(item: Item): void + addToInventory(item: Item): void + setPassword (password: String): void

DemoUserManager
- demoUser DemoUser
+ DemoUserManager(username: String, password: String) + getUserInventory(): List<Item> + getUserWishlist(): List<Item> + addDemoWishlistaddDemoWishlist(item: Item): void + addToInventory(item: Item): void + setPassword (password: String): void



gateways

GlobalWishlistGateway

+ wishlist: GlobalWishlist

+ GlobalWishlistGateway(filepath: String)
+ writeToFile (filepath: String, wishlistItems2: GlobalWishList)
+ readFromFile (filepath: String): GlobalWishlist
+ getWishlistItems(): GlobalWishList

AdminAccountGateways

-filePath: String
-adminMap: Map<String, Admin>

+AdminAccountGateways (filePath:String)
+readFromFile(): void
+saveToFile(adminMap: map<String,Admin>): void
+getAdminMap(): map<String, Admin>
+ beginAdminMap(): void

AdminMessageGateway

+ messages: List<Message>

+ AdminMessageGateway(filepath: String)
+ writeToFile (filepath: String, adminMessages: List
<Message>): void
+ readFromFile (filepath: String): List<Message>
+ getMessages(): List<Message>

GlobalInventoryGateways

- filePath: String
- globalInventoryManager: GlobalInventoryManager
- globalInventory: GlobalInventory

+GlobalInventoryGateways(filePath:String)
+writeToFile(globalInventory: GlobalInventory): void
+getGlobalInventory(): GlobalInventory

UserTradesGateway

+ userTrades: Map<String, List <Trade>>

+ UserTradesGateway(filepath: String):
+ writeToFile (filepath: String, userTrades: Map <String, List
<Trade>>): void
+ readFromFile (filepath: String): Map<String, List<Trade>>
+ getUserTrades(): map<String, list<Trade>>

UserGateway

- mapOfUsers: Map<String, User>

+ UserGateway(filepath: String)
+ readFromFile(filepath: String): Map<String, User>
+ writeToFile(filepath: String, userObjects: Map<String, User>): void
+ getMapOfUsers(): Map<String, User>

adminGUI

AdminBrowsingUsersController

- users: UserManager
- browse: AdminBrowsingUsersPresenter
- globalInventory: GlobalInventoryManager
- user: String
- lendingLimit: boolean
- weeklyLimit: boolean
- incompleteLimit: boolean
- allLimit: boolean

+AdminBrowsingUsersController(system: UserManager, globalInventory: GlobalInventoryManager): void
+initialize(location: URL, resources: ResourceBundle): void
- search(): void
- incompleteLimit(): void
- weeklyLimit(): void
- ban(): void
- freeze(): void
- lending(): void
- undoDelete(): void
- optionInput(): void
- exit(): void

AdminBrowsingUsersController

+ optionPrompt(): String
+ invalidName(): String
+ enterValuePrompt(): String
+ banStateChangeSuccess(): String
+ freezeStateChangeSuccess(): String
+ weeklyLimitChangeSuccess(): String
+ incompleteLimitChangeSuccess(): String
+ thresholdChangeSuccess(): String
+ wrongFormat(): String
+ deletedItemRestored(): String
+ enterUsername(): String
+ searchText(): String
+ banUnbanText(): String
+ freezeText(): String
+ incompleteText(): String
+ weeklyText(): String
+ lendingText(): String
+ enterText(): String
+ thresholdText(): String
+ exitText(): String
+ undoText(): String

AdminNewPasswordController

- admin: Admin;
- adminGUIPresenter: AdminGUIPresenter
- adminManager: AdminManager
- userManager: UserManager
- resultOfPasswordChangeLabel: Label
- addNewPasswordButton: Button
- exitButton: Button
- newPasswordTextField: TextField
- confirmNewPasswordField: TextField

+AdminNewPasswordController(admin: Admin, adminManager: AdminManager, userManager: UserManager)
+initialize(location: URL, resources: ResourceBundle)

AdminGUIPresenter

+adminBrowsingWindow():String
+adminAccountWindow(): String
+adminPasswordChangeWindow(): String
+adminAccountCreationWindow(): String
+adminTradeUndoSearchWindow(): String
+undoUserTradeWindow():String
+adminMessageWindow(): String
+InvalidUserNameLabel(): String
+userNameCannotBeEmpty():String
+passwordCannotBeEmpty(): String
+newPasswordCreated(admin: Admin): String
+newAdminCreated(): String
+newAdminCreated(): String
+AdminCreationFailed(): String
+newPasswordNotSaved(): String
+exitButton(): String
+searchButtonText(): String
+saveChangeButtonText():String
+adminCreationButtonText(): String
+adminChangePasswordButton(): String
+messageInboxButton(): String
+adminAccountButton(): String
+userBrowsingButton(): String
+tradeUndoButton(): String
+deleteSelectedTradeButton(): String
+newAdminButton(): String

UndoUnstartedTradeMenuController

-deleteTradeButton: Button
-exitButton: Button
-tableView: TableView<Trade>
-column1: TableColumn<Trade, String>
-column2: TableColumn<Trade, String>
-column3: TableColumn<Trade, ArrayList<Item>>
-column4: TableColumn<Trade, ArrayList<Item>>
-column5: TableColumn<Trade, LocalDateTime>
-currentUserName: String
-adminGUIPresenter: AdminGUIPresenter
-userManager: UserManager
-tradeManager: TradeManager

+UndoUnstartedTradeMenuController(currentUserName: String, tradeManager: TradeManager, userManager: UserManager)
+initialize(location: URL, resources: ResourceBundle)

TradeUndoController

-adminGUIPresenter: AdminGUIPresenter
-tradeManager: TradeManager
-userManager: UserManager
-invalidUserLabel: Label
-goBackButton: Button
-searchUserButton: Button
-userNameField: TextField

+AdminController(
tradeManager: TradeManager,
userManager: UserManager)
+initialize(location: URL, resources:
ResourceBundle)

AdminController

-messageInboxButton: Button
- manageAdminAccountButton:Button
-userBrowsingButton:Button
-tradeUndoButton: Button
-exitButton:Button
-admin: Admin;

-adminGUIPresenter:AdminGUIPresenter
-adminManager: AdminManager
-tradeManager: TradeManager

-userManager: UserManager
- globalInventoryManager: GlobalInventoryManager

-AdminAccountFXML: String
-TradeUndoFXML: String
-AdminMessageGUI: String
-AdminBrowsing: String

+AdminController(admin: Admin, adminManager: AdminManager, userManager: UserManager, globalInventoryManager: GlobalInventoryManager, tradeManager: TradeManager)
+initialize(location: URL, resources: ResourceBundle)

AdminAccountController

-changePassWordButton: Button
-adminCreationButton:Button
-exitButton:Button
-admin: Admin;
-adminGUIPresenter:AdminGUIPresenter
-adminManager: AdminManager
-userManager: UserManager
-NewPasswordFXML: String
-NewAdminFXML: String

+AdminAccountController(admin: Admin, adminManager: AdminManager, userManager: UserManager)
+initialize(location: URL, resources: ResourceBundle)

AdminNewAdminController

-admin: Admin;
-adminGUIPresenter:AdminGUIPresenter
-adminManager: AdminManager
-userManager: UserManager
-resultOfCreationLabel: Label
-addNewAdminButton: Button
-exitButton: Button
-newAdminUserNameTextField: TextField
-newAdminPasswordTextField: TextField

+AdminNewAdminController(admin: Admin, adminManager: AdminManager, userManager: UserManager)
+initialize(location: URL, resources: ResourceBundle)

messagereplyGUI



UserMessageReplyGUI

+ UserMessageReplyGUI(adminManager: AdminManager, globalInventoryManager: GlobalInventoryManager, tradeManager: TradeManager, userManager: UserManager, accountUsername: String)
+ getMessage(): List<Message>
+ saveMessage(messages: List<Message>)

AdminMessageReplyGUI

+ AdminMessageReplySystem(adminManager: AdminManager, globalInventoryManager: GlobalInventoryManager, userManager: UserManager, accountUsername: String)
+ getMessage(): List<Message>
+ saveMessage(messages: List<Message>)

MakeReportGUI

- title: Label
- messageContent: Label
- button1: Button
- button2: Button
- userInput: TextField

- messageReplyPresenter: MessageReplyPresenter
- message: Message
- adminManager: AdminManager ;
- accountName: String

+ MakeReportGUI(message: Message, adminManager: AdminManager, accountName: String)
+ initialize(location: URL, resources: ResourceBundle)

TradeRequestCannotConfirmGUI

- title: Label
- button1: Button
- button2: Button
- messageContent: Label

- tradeRequestManager: TradeRequestManager
- messages: List<Message>
- userManager: UserManager
- messageReplyPresenter: MessageReplyPresenter

+ TradeRequestCannotConfirmGUI(tradeRequestManager: TradeRequestManager, userManager: UserManager, messages: List<Message>)
+ initialize(location: URL, resources: ResourceBundle)

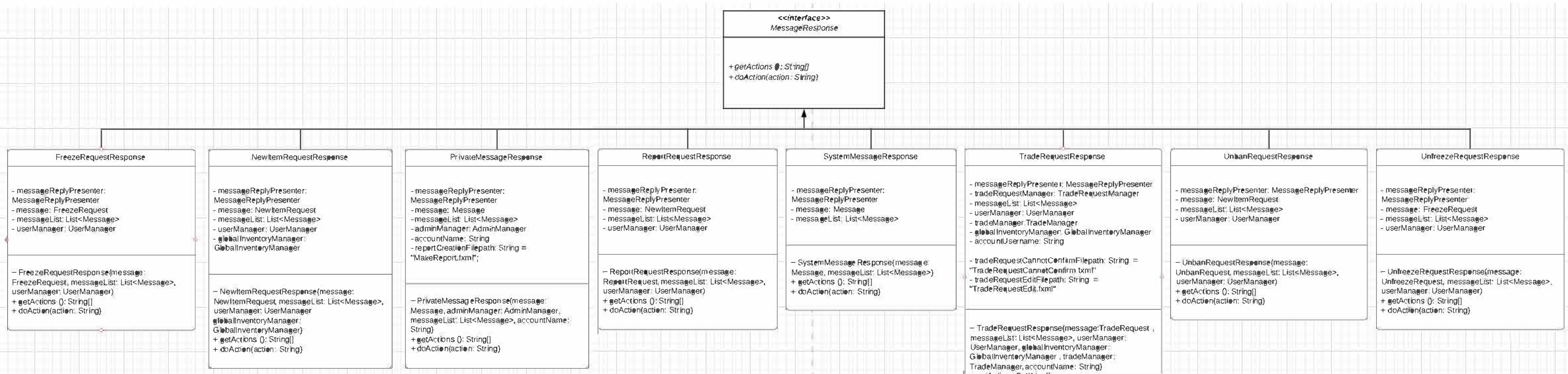
TradeRequestEditGUI

- title: Label
- button1: Button
- button2: Button
- dateLabel: Label
- placeLabel: Label
- dateTextField: TextField
- placeTextField: TextField
- tradeRequestManager: TradeRequestManager
- accountUsername: String
- userManager: UserManager
- messages: List<Message>
- messageReplyPresenter: MessageReplyPresenter

+ TradeRequestEditGUI(tradeRequestManager: TradeRequestManager, userManager: UserManager, messages: List<Message>, accountUsername: String)
+ initialize(location: URL, resources: ResourceBundle)

MessageReplyPresenter

+MessageReplyPresenter()
+printNoMessages() String
+messageString(m: Message): String
+messageStringSideBar(m: Message, index: int)
+systemMessageAction(): String[]
+privateMessageAction(): String[]
+tradeRequestWarning(): String
+tradeRequestCancel(): String
+requestAction(m: Request): String[]
+exit(): String
+success(): String
+error(): String
+delete(): String
+confirm(): String
+emptyString(): String
+instructions(): String
+reportPrompt(): String
+messageContent(m: Message): String
+report(): String
+reportTitle(): String
+reportReasonEmpty(): String
+reportSuccess(): String
+titleTradeRequestCannotConfirm(): String
+tradeRequestCannotConfirmPrompt(m : TradeRequest): String
+keep(): String
+edit(): String
+titleTradeRequestEdit(): String
+datePrompt(oldDate: String): String
+placePrompt(oldPlace: String): String
+wrongFormat(): String
+enterDateInPast(): String
+noEdit(): String



mainMenuGUI

StartScreen

- mainMenuPresenter MainMenuPresenter
- mainMenuFXMLFile String

+ start(primaryStage: Stage): void
+ main(args: String[]): void

UseCaseBuilder

+ getAdminManager AdminManager(adminList: Map<String, Admin>, messageList: List<Message>): AdminManager
+ getTradeManager TradeManager(tradeList: Map<String, List<Trade>>): TradeManager
+ getGlobalInventoryManager
GlobalInventoryManager(globalInventory: GlobalInventory):
GlobalInventoryManager
+ getGlobalWishlistManager(globalWishlist: GlobalWishList):
GlobalWishlistManager
+ getDemoUserManager(username: String, password: String):
DemoUserManager

<<enumeration>> SelectedOption

USER_LOGIN
USER_SIGNUP
ADMIN_LOGIN
DEMO_LOGIN

GateWayBuilder

+ getAdminAccountGateways(filepath: String):
AdminAccountGateways
+ getAdminMessageGateways(filepath: String):
AdminMessageGateway
+ getUserGateway(filepath: String): UserGateway
+ getUserTradesGateway(filepath: String): UserTradesGateway
+ getGlobalWishlistGateway(filepath: String):
GlobalWishlistGateway
+ getGlobalInventoryGateways(filepath: String):
GlobalInventoryGateways

MainMenuPresenter

+ printExit(): void
+ corruptedData(): return String
+ userLoginOption(): return String
+ userSignUpOption(): return String
+ adminLoginOption(): return String
+ demoLoginOption(): return String
+ exitOption(): return String
+ savingError(): return String
+ failedLogin(): return String
+ login(): return String
+ returnToMainMenu(): return String
+ signUp(): return String
+ stringReset(): return String
+ takenOrInvalidUsername(): return String
+ successfulAccountCreation(): return String
+ wrongLogin(): return String
+ programName(): return String

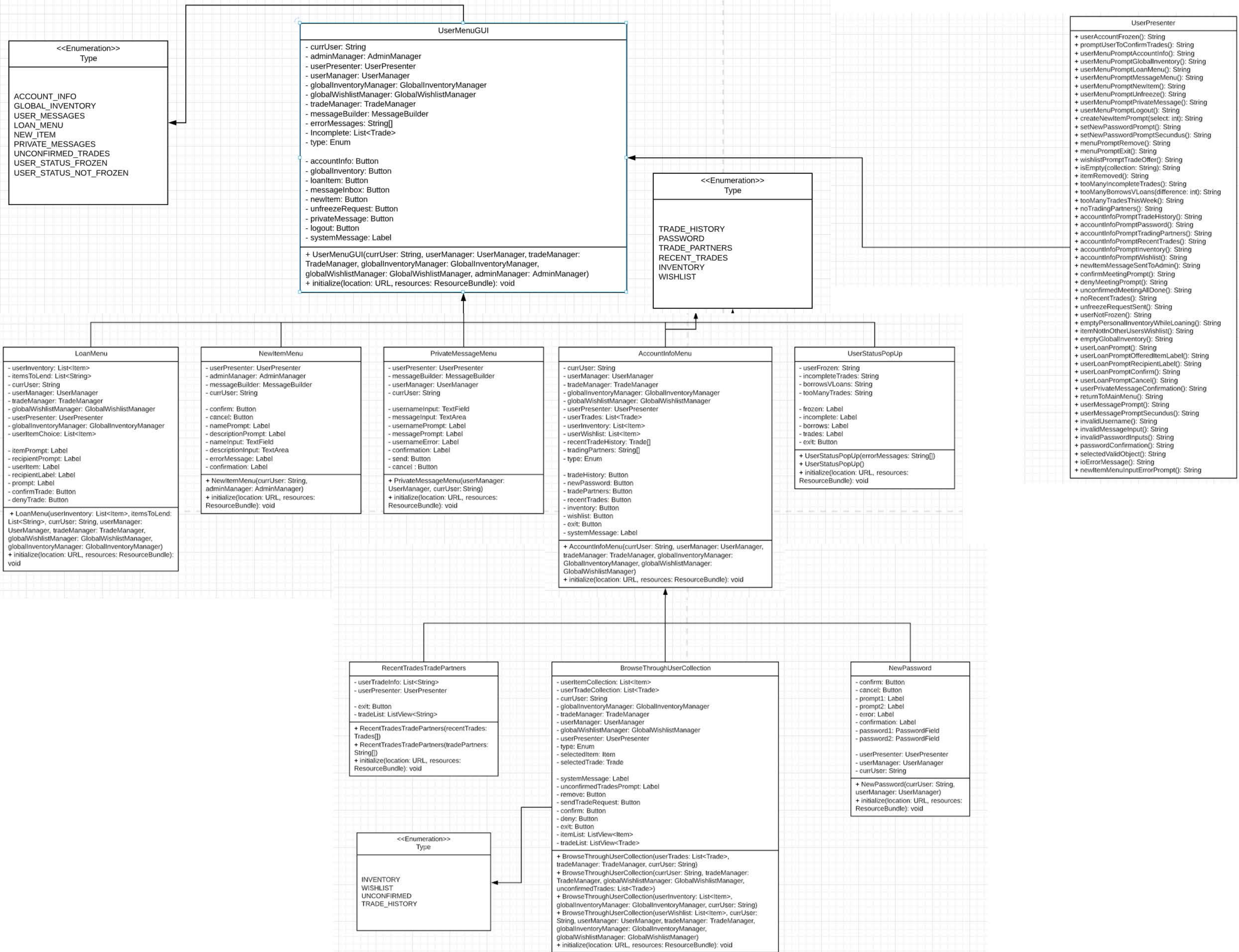
MainMenuController

- userLoginButton: Button
 - userSignUpButton: Button
 - adminLoginButton: Button
 - demoLoginButton: Button
 - exitButton: Button
 - errorMessage: Label
 - adminManager: AdminManager
 - userManager: UserManager
 - tradeManager: TradeManager
 - globalInventoryManager: GlobalInventoryManager
 - globalWishListManager: GlobalWishListManager
 - loginFXMLFile: String
 - adminFilePath: String
 - userFilePath: String
 - globalInventoryFilePath: String
 - adminMessagesFilePath: String
 - globalWishlistFilePath: String
 - tradeFilePath: String
 - dataFolderPath: String
 - adminAccountGateways: AdminAccountGateways
 - userGateway: UserGateway
 - globalInventoryGateways: GlobalInventoryGateways
 - adminMessageGateway: AdminMessageGateway
 - mainMenuPresenter: MainMenuPresenter
-
- + goToOtherScene(otherScene: String, selectedOption SelectedOption): void
 - userLoginButtonPressed(): void
 - userSignUpButtonPressed(): void
 - adminLoginButtonPressed(): void
 - programDemoButtonPressed(): void
 - closeButtonIsPushed(): void
 - + initialize(location: URL, resources: ResourceBundle): void
 - deserialize(): void
 - serialize(): void
 - deleteFile(fileToDelete: String): boolean

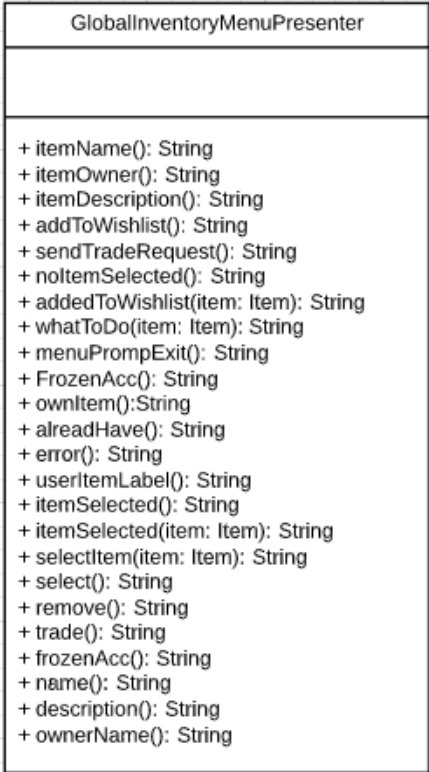
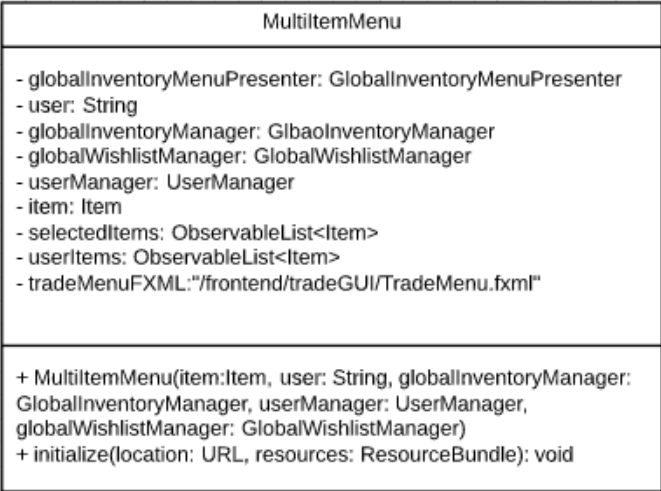
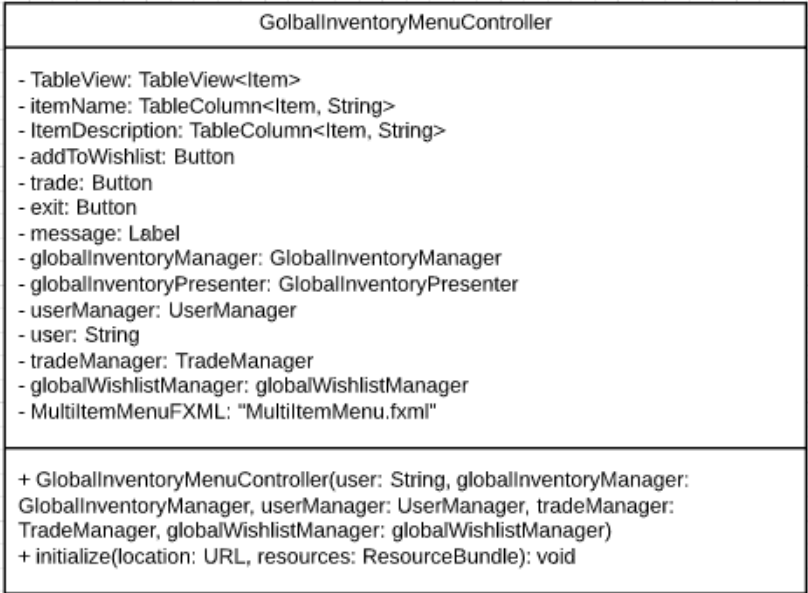
LoginController

- username: Textfield
 - password: TextField
 - loginButton: Button
 - exitButton: Button
 - errorMessage: Label
 - userSelectedOption: SelectedOption
 - mainMenuPresenter: MainMenuPresenter
 - userManager: UserManager
 - tradeManager: TradeManager
 - adminManager: AdminManager
 - globalInventoryManager: GlobalInventoryManager
 - globalWishlistManager: GlobalWishlistManager
 - userMenuGUIFile: String
 - adminMenuGUIFile: String
 - demoMenuGUIFile: String
 - bannedUserMenuGUIFile: String
 - OpenMenu: enum
-
- + LoginController(selectedOption SelectedOption, userManager UserManager, tradeManager TradeManager, adminManager AdminManager, globalInventoryManager GlobalInventoryManager, globalWishlistManager GlobalWishlistManager)
 - changeScreenButtonPushed(actionEvent ActionEvent): void
 - goToOtherScene(otherScene: String, MenuToOpen: OpenMenu, username: String): void
 - + initialize(location: URL, resources: ResourceBundle): void
 - userLogin(): void
 - userSignUp(): void
 - adminLogin(): void
 - programDemo(): void

userGUI



globalInventoryGUI



tradeGUI

TradeMenuMainController

- globalInventoryManager: GlobalInventoryManager
- allUsers: UserManager
- userA: String
- itemsToTradeB: List<Item>
- itemsToTradeA: List<Item>
- globalWishlistManager: GlobalWishlistManager
- userB: String
- titleScreen: Label
- timeOfTrade: TextField
- meetTrade: TextField
- typesOfTrade: MenuButton
- temporary: MenuItem
- permanent: MenuItem
- oneOrTwoWayTrade: MenuButton
- oneWayTrade: MenuItem
- twoWayTrade: MenuItem
- submit: Button
- returnToMainMenu: Button
- primaryDate: DatePicker
- filepath: String = "MultiTradeItemMenu.fxml"

+ TradeMenuMainController(globalInventoryManager: GlobalInventoryManager, globalWishlistManager: GlobalWishlistManager, allUsers: UserManager, itemsToTradeB: List<Item>, userA: String)
+ initialize(location: URL, resources: ResourceBundle): void

TradeMenu

+TRADE: String = "Trade"
+TRADELEND: String = "Trade lending"
+TRADETYPE: String = "What type of trade?"
+TEMP: String = "Temporary"
+PERM: String = "Permanent"
+ONETWOWAY: String = "Is it a one way or two way trade?"
+ONEWAY: String = "One way trade"
+TWOWAY: String = "Two way trade"
+SUBMIT: String = "Submit"
+SUCCESS: String = "Success"
+EXIT: String = "Exit the program"
+WRONGFORMAT: String = "Wrong format"
+ERROR: String = "You didn't complete the trade! Check if you're missing anything."
+NOITEMS: String = "Looks like you don't have any items to give to the other user, try again after adding items!"
+SUGGEST: String = "Here are a list of items that you should lend in the trade: "
+PASTDATE: String = "Entered a date in the past"
+INVENTORY_PROMPT: String = "Please select from your items the items you want to trade"
+SELECT_ITEM: String = "Items selected"

+ inventoryPrompt(username: String): String
+ itemSelected(itemName: String): String

TradeMenuMainLendController

- allUsers: UserManager
- userA: String
- itemsToTradeB: List<Item>
- itemsToTradeA: List<Item>
- userB: String
- titleScreen: Label
- timeOfTrade: TextField
- meetTrade: TextField
- typesOfTrade: MenuButton
- temporary: MenuItem
- permanent: MenuItem
- submit: Button
- returnToMainMenu: Button
- primaryDate: DatePicker

+ TradeMenuMainLendController(allUsers: UserManager, itemsToTradeA: List<Item>, userA: String, userB: String)
+ initialize(location: URL, resources: ResourceBundle): void

MultiTradeItemMenu

- globalInventoryMenuPresenter: GlobalInventoryMenuPresenter
- user: String
- globalInventoryManager: GlobalInventoryManager
- selectedItems: ObservableList<Item>
- userItems: ObservableList<Item>

- userItem: TableView<Item>
- itemName: TableColumn<Item, String>
- itemOwner: TableColumn<Item, String>
- itemDescription: TableColumn<Item, String>
- tradingitemName: TableColumn<Item, String>
- tradingitemOwner: TableColumn<Item, String>
- tradingitemDescription: TableColumn<Item, String>
- tradingItem: TableView<Item>
- select: Button
- remove: Button
- trade: Button
- title: Label
- message: Label
- userItemLabel: Label
- tradingItemLabel: Label
- exit: Button

+ MultiItemMenu(user: String, globalInventoryManager: GlobalInventoryManager)
+ initialize(location: URL, resources: ResourceBundle): void
+ getItems(): List<Item>