#### **UML for GUI: RegularUser Trading Menu**

#### RegularUserTradingMenuGUI

- rootPanel: JPanel
- requestATradeButton: JButton
- respondToTradeRequestsButton: JButton
- viewOpenTradesButton: JButton
- viewClosedTradesButton: JButton confirmThatATradeButton: JButton
- seeTopThreeMostButton: JButton
- viewTransactionsThatHaveButton: JButton
- suggestionForTheMostButton: JButton
- backButton: JButton
- + RegularUserTradingMenuGUI(guiD: GUIDemo, atc: RegularUserTradingMenuController, sm: SystemMessage, maxNumTransactionAWeek: int ,numLentBeforeBorrow: int
- , idC: RegularUserIDChecker, guest: boolean) - suggestionForTheMostReasonableTrade(guest: boolean
- guiD: GUIDemo, sm: SystemMessage, atc:
- RegularUserTradingMenuController): void - seeTopThreePartners(atc:
- RegularUserTradingMenuController, sm:
- SystemMessage,guiD: GUIDemo, guest: boolean): void confirmATradeIsCompleted(atc:
- RegularUserTradingMenuController, sm:
- SystemMessage, idC: RegularUserIDChecker, guiD: GUIDemo, guest: boolean): void
- viewTrades(sm: SystemMessage, trades: List<Trade>, type: String, guiD: GUIDemo, guest: boolean): void
- respondToTradeRequest(atc: RegularUserTradingMenuController, sm:
- SystemMessage,maxNumTransactionAWeek: int , idC :RegularUserIDChecker, guiD: GUIDemo, guest: boolean):
- requestATrade(atc: RegularUserTradingMenuController , sm: SystemMessage, maxNumTransactionAWeek: int , idC: RegularUserIDChecker, numLentBeforeBorrow: int, guiD: GUIDemo,guest: boolean): void + run(guiD: GUIDemo, atc:
- RegularUserTradingMenuController, sm: SystemMessage, maxNumTransactionAWeek: int .numLentBeforeBorrow: int idC: RegularUserIDChecker, guest: boolean): void

UML for GUI: RegularUser

Searching Menu

RegularUserSearchingMenuGUI

+RegularUserSearchingMenuGUI(guiDemo: GUIDemo, guest:

+run(guiDemo: GUIDemo, guest: Boolean, sm: SystemMessage): void

rootPanel: JPanel

backButton: JButton

searchingItemsButton: JButton

searchingUsersButton: JButton

- searchingTradesButton: JButton

searchingMeetingsButton:JButton

Boolean, sm: SystemMessage): void

#### twoWayTradeRadioButton: JRadioButton

RespondToTradeRequestsWindow

- oneWayTradeRadioButton: JRadioButton
- permanentRadioButton: JRadioButton
- temporaryRadioButton: JRadioButton
- cancelButton JButton
- nextButton: JButton rootPanel: JPanel
- + RespondToTradeRequestsWindow( str: String, idC:
- RegularUserIDChecker, atc:
- RegularUserTradingMenuController guiD: GUIDemo, sm: SystemMessage)
- respondToTradeRequestOK( idC: RegularUserIDChecker, atc:
- RegularUserTradingMenuController, guiD: GUIDemo, sm: SystemMessage): void
- + run( str: String, idC: RegularUserIDChecker, atc: RegularUserTradingMenuControlle
- guiD: GUIDemo, sm: SystemMessage): void

#### RequestTradeWindow

- JRadioButton oneWayTradeRadioButton:
- JRadioButton twoWayTradeRadioButton:
- JRadioButton permanentRadioButton: JRadioButton temporaryRadioButton:
- JButton cancelButton:
- JButton nextButton:
- JPanel rootPanel:
- + RequestTradeWindow(idC: RegularUserIDChecker, guiD:GUIDemo, atc: RegularUserTradingMenuController, sm:SystemMessage, numLentBeforeBorrow: int)
- + run(idC: RegularUserIDChecker, guiD:GUIDemo, atc: RegularUserTradingMenuController, sm:SystemMessage, numLentBeforeBorrow: int): void
- requestATrade(idC: RegularUserIDChecker,
- guiD:GUIDemo, atc: RegularUserTradingMenuController, sm:SystemMessage, numLentBeforeBorrow: int): void

### Confirm Trade Complete Window

- tradeld: JTextField
- checkButton: JButton
- cancelButton: JButton
- rootPanel: JPanel
- + ConfirmTradeCompleteWindow(idC:
- RegularUserIDChecker, atc:
- RegularUserTradingMenuController
- guiD: GUIDemo, sm: SystemMessage) - checkTradeComplete(idC: RegularUserIDChecker,
- atc: RegularUserTradingMenuController, guiD: GUIDemo, sm: SystemMessage): void
- + run(idC: RegularUserIDChecker, atc:

RegularUserTradingMenuController,

guiD: GUIDemo, sm: SystemMessage): void

#### OneWayTradeWindow

- thisUser:JTextField
- otherUser:JTextField item:JTextField
- cancelButton:JButton
- requestButton:JButton rootPanel:JPanel
- + OneWayTradeWindow(idC: RegularUserIDChecker,
- guiD:GUIDemo, atc: RegularUserTradingMenuController,
- sm:SystemMessage, numLentBeforeBorrow: int, tradeType: String)
- + run((dC: RegularUserIDChecker, guiD:GUIDemo, atc: RegularUserTradingMenuController
- sm:SystemMessage, numLentBeforeBorrow: int, tradeType: String): void requestOneWayTrade(idC: RegularUserIDChecker,
- guiD:GUIDemo, atc: RegularUserTradingMenuController,
- sm:SystemMessage, numLentBeforeBorrow: int, tradeType: String): void

#### TwoWayTradeWindow

- JTextField userid1:
- JTextField item1:
- JTextField item2:
- + TwoWayTradeWindow(idC: RegularUserIDChecker, quiD:GUIDemo, atc:
- sm:SystemMessage, numLentBeforeBorrow: int,
- tradeType: String) + run(idC: RegularUserIDChecker, guiD:GUIDemo, atc:
- sm:SystemMessage, numLentBeforeBorrow: int, tradeType: String):void
- -requestTwoWayTrade(idC: RegularUserIDChecker, guiD:GUIDemo, atc:
- sm:SystemMessage, numLentBeforeBorrow: int, tradeType: String): void

- JTextField userid2:
- JButton cancelButton: JButton requestButton:
- JPanel panel:
- RegularUserTradingMenuController,
- RegularUserTradingMenuController,
- RegularUserTradingMenuController,

# RegularUserSearchingItemsSubMenuGUI

- filterByCategoryButton:JButton
- rootPanel:JPanel
- searchItemByNameButton:JButton

+ run(regularUserSearchingMenuController:

SystemMessage, idC: regularUserIDChecker): void

- searchItemByIdButton:JButton sortByNumberOfButton:JButton
- backButton:JButton
- + RegularUserSearchingMenuController(regularUserSearchingMenuController: RegularUserSearchingMenuController, guiDemo: GUIDemo, systemMessage: SystemMessage, idC: regularUserIDChecker): void

# RegularUserSearchingMeetingSubMenuGUI

RegularUserSearchingMenuController, guiDemo: GUIDemo, systemMessage:

- rootPanel:JPanel
- sortByDateButton:JButton incompleteMeetingButton:JButton
- completeMeetingButton:JButton backButton:JButton
- + RegularUserSearchingMeetingSubMenuGUI(regualrUserSearchingMenuController: RegularUserSearchingMenuController, guiDemo: GUIDemo, systemMessage: Systemmessage): void
- + run(regualrUserSearchingMenuController: RegularUserSearchingMenuController, guiDemo: GUIDemo, systemMessage: Systemmessage): void

### RegularUserSearchingUsersSubMenuGUI

- rootPanel:JPanel recentTradeUserButton:JButton
- frequentTradeUserButton:JButton sortUserBvRatingButton:JButton
- backButton:JButton
- + RegularUserSearchingUsersSubMenuGUI(regularUserSearchingMenuController: RegularUserSearchingMenuController, guiDemo: GUIDemo, systemMessage: SystemMessage): void
- + run(regularUserSearchingMenuController: RegularUserSearchingMenuController, guiDemo: GUIDemo, systemMessage: SystemMessage): void

## RegularUserSearchingTradesSubMenuGUI

- rootPanel:JPanel incompleteTradesButton:JButton
- completeTradesButton:JButton
- backButton:JButton
- + RegularUserSearchingTradesSubMenuGUI(regularUserSearchingMenuController: RegularUserSearchingMenuController, guiDemo: GUIDemo, systemMessage: SystemMessage): void
- + run(RegularUserSearchingTradesSubMenuGUI: RegularUserSearchingMenuController, guiDemo: GUIDemo, systemMessage: SystemMessage): void

### **UML for GUI: RegularUser Meeting Menu**

#### RegularUserMeetingMenuGUI

- rootPanel: JPanel
- suggestOrConfirmTPButton: JButton
- backButton JButton: - confirmTheMeetingTookButton: JButton
- seeconfirmedMeetingsButton: JButton
- + RegularUserMeetingMenuGUI(guiD: GUIDemo, mmc: RegularUserMeetingMenuController, sm:
- SystemMessage, maxNumTPEdits: int , idC: RegularUserIDChecker,
- dtc: RegularUserDateTimeChecker, guest: boolean) seeConfirmedMeetings(guest: boolean, guiD:
- GUIDemo, sm: SystemMessage, mmc: RegularUserMeetingMenuController): void - confirmTheMeetingTookPlace(guest: boolean, guiD:
- GUIDemo, sm: SystemMessage, mmc: RegularUserMeetingMenuController, maxNumTPEdits: int, idC: RegularUserIDChecker): void
- suggestOrConfirmTP( guest: boolean, guiD: GUIDemo, sm: SystemMessage, mmc: RegularUserMeetingMenuController, maxNumTPEdits: int, dtc: RegularUserDateTimeChecker, idC:
- RegularUserIDChecker): void editAndConfirmMeetingTP( guiD: GUIDemo, mmc: RegularUserMeetingMenuController, sm:
- SystemMessage,maxEditTP: int, dtc: RegularUserDateTimeChecker, idc: RegularUserIDChecker): void -confirmMeetingTookPlace
- (mmc: RegularUserMeetingMenuController, sm: SystemMessage, maxEditsTP: int, idc: RegularUserIDChecker, guiD: GUIDemo): void + run(guiD: GUIDemo, mmc:
- RegularUserMeetingMenuController, sm: SystemMessage, maxNumTPEdits: int , idC: RegularUserIDChecker, dtc: RegularUserDateTimeChecker, guest: boolean):

## RegularUserSuggestMeetingWindow

contentPane: JPanel

void

- buttonOK JButton:
- buttonCancel: JButton
- textArea1: JTextArea meetingNum: JTextField tradeld: JTextField
- + RegularUserSuggestMeetingWindow(str: String, mmc: RegularUserMeetingMenuController, sm:
- SystemMessage, maxEditsTP: int, guiD: GUIDemo, idc: RegularUserIDChecker) - onOK (mmc:RegularUserMeetingMenuController,
- sm: SystemMessage, maxEditsTP:int , guiD: GUIDemo, idc: RegularUserIDChecker): void - onCancel(guiD: GUIDemo): void + run(str: String, mmc:

RegularUserMeetingMenuController, sm:

# idc: RegularUserIDChecker): void

SystemMessage, maxEditsTP: int, guiD: GUIDemo,

- comboBox1:JComboBox
- rootPanel:JPanel
- RegaulrUserSearchingMenuController, systemMessage: SystemMessage,
- guiDemo: GUIDemo): void + run(smc: RegaulrÚserSearchingMenuController, systemMessage SystemMessage, guiDemo: GUIDemo): void

- JLabel JLabel
- textField:JTextField cancelButton:JButton
- + RegularUserSearchingWindow(inputName: String, guiDemo: GUIDemo,
- RegularUserSearchingMenuController, idC: RegularUserIDChecker): void + run(inputName: String, guiDemo: GUIDemo, systemMessage: SystemMessage, regularUserSearchingMenuController

### EditMeetingWindow

RegularUserCheckMeetingWindow

+ RegularUserCheckMeetingWindow(guiD: GUIDemo, str:

- editTP( tradeIdInS: String, idc: RegularUserIDChecker,

RegularUserMeetingMenuController, maxEditsTP: int, sm:

meetingNum: int , maxEditsTP: int , sm:

RegularUserMeetingMenuController, maxEditsTP: int , sm:

RegularUserDateTimeChecker, maxEditsTP: int, sm:

String, mmc: RegularUserMeetingMenuController,

mmc: RegularUserMeetingMenuController, dtc:

-confirmTP(idc: RegularUserIDChecker, mmc:

RegularUserMeetingMenuController, tradeId: int,

RegularUserMeetingMenuController, tradeId: int,

meetingNum: int, idc: RegularUserIDChecker, dtc:

RegularUserDateTimeChecker, maxEditsTP: int, sm:

maxEditsTP: int, sm: SystemMessage,

dtc: RegularUserDateTimeChecker, idc:

SystemMessage, guiD: GUIDemo): void

SystemMessage, guiD: GUIDemo ): void

SystemMessage , guiD: GUIDemo): void

SystemMessage, guiD: GUIDemo): void

dtc: RegularUserDateTimeChecker, idc:

+ run (guiD: GUIDemo, str: String, mmc:

contentPane: JPanel

meetingNum: JTextField

- back: JButton

- edit: JButton

- confirm: JButton

tradeld: JTextField

- textArea1: JTextArea

RegularUserIDChecker)

editTimeAndPlace(mmc:

confirmTimeAndPlace( mmc:

RegularUserIDChecker): void

place: JTextField

SystemMessage,

- minute: JTextField hour: JTextField
- day: JTextField
- month: JTextField year: JTextField

void

- cancelButton: JButton - OKButton: JButton rootPanel: JPanel
- + EditMeetingWindow( tradeId: int, meetingNum: int , idc: RegularUserIDChecker, dtc: RegularUserDateTimeChecker, mmc: RegularUserMeetingMenuController, maxEditsTP: int ,
- guiD: GUIDemo, sm: SystemMessage) - editMeetingOk( idc: RegularUserIDChecker, dtc: RegularUserDateTimeChecker, mmc:
- RegularUserMeetingMenuController, tradeld: int, meetingNum: int , maxEditsTP: int , guiD: GUIDemo, sm: SystemMessage): void

+ run(tradeId: int, meetingNum: int, idc:

RegularUserIDChecker, dtc: RegularUserDateTimeChecker, mmc: RegularUserMeetingMenuController, maxEditsTP: int, guiD: GUIDemo, sm:S ystemMessage):

# RegularUserSearchingItemByCatWindow

- cancelButton:JButton searchButton:JButton
- + RegularUserSearchingItemByCatWindwo(smc:

- RegularUserSearchingWindow
- rootPanel:JPanel
- confirmButton:JButton
- systemMessage: SystemMessage, regularUserSearchingMenuController:
- $Regular User Searching Menu Controller, \ id C: \ Regular User ID Checker): \ void$