# Lab Inventory Management System

## Sequence and State Diagram

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Group: 3
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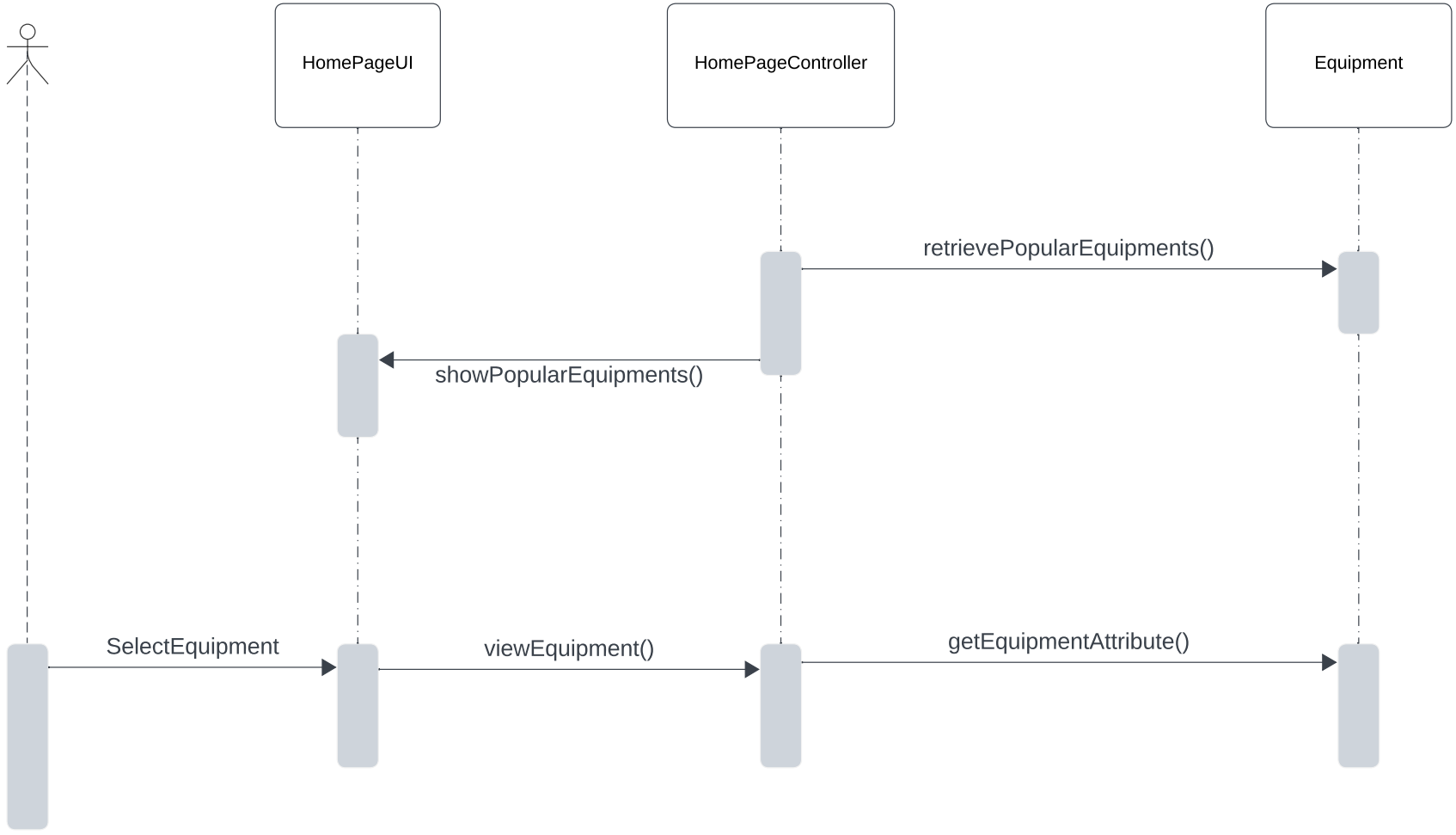
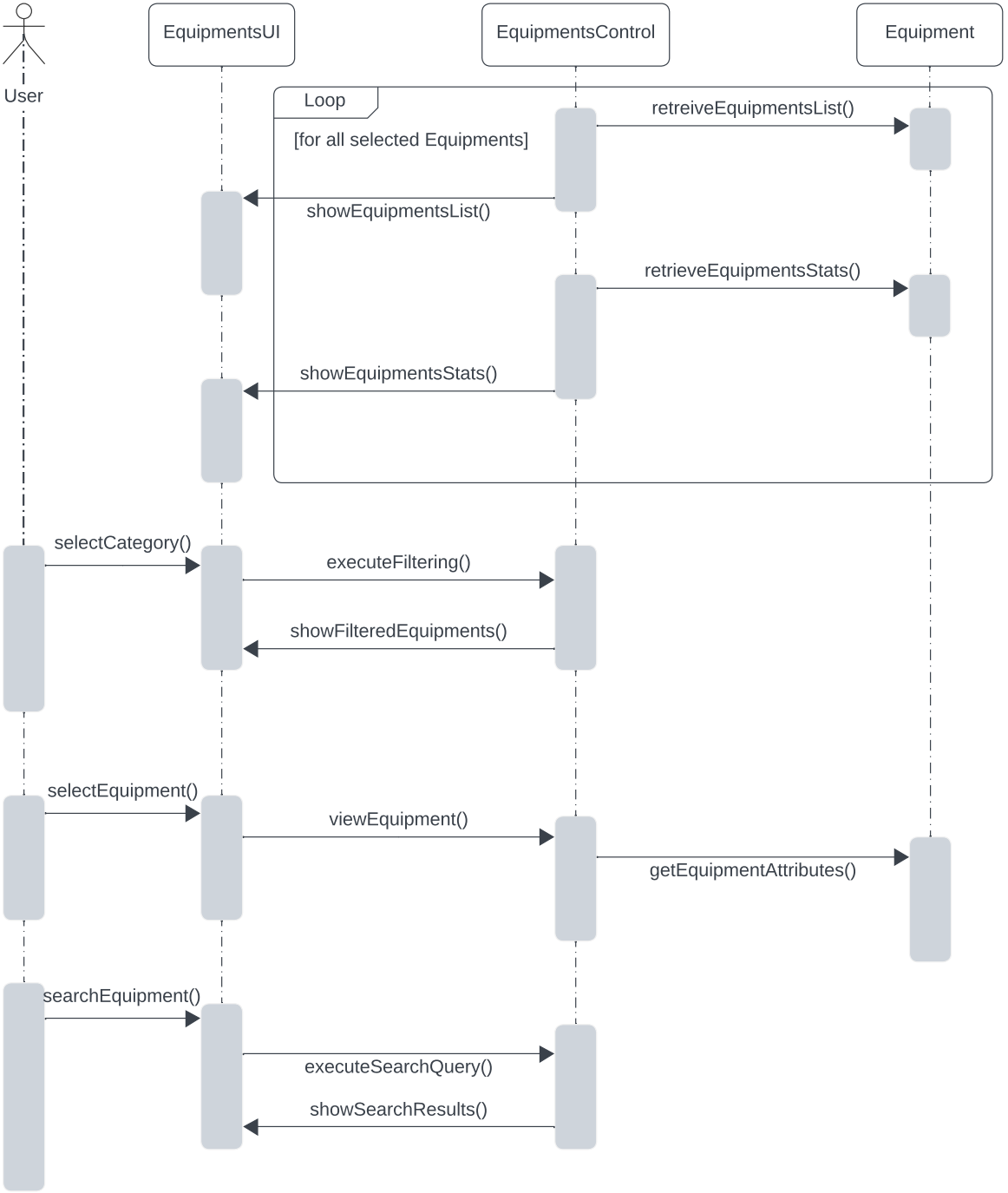
# Sequence Diagram

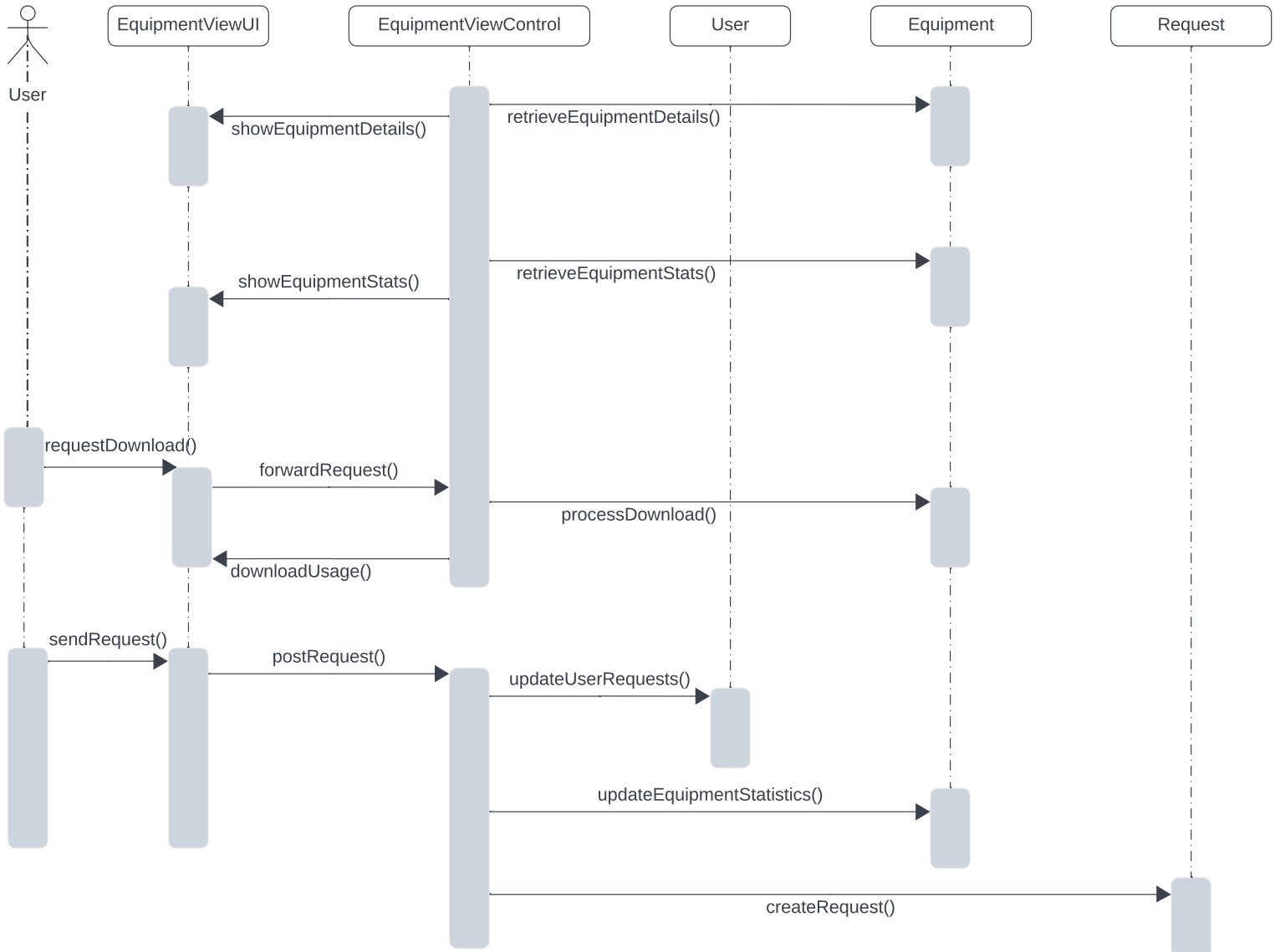
# HomePage


HomePageUI
HomePageController
Equipment
retrievePopularEquipments()
showPopularEquipments()
SelectEquipment
viewEquipment()
getEquipmentAttribute()

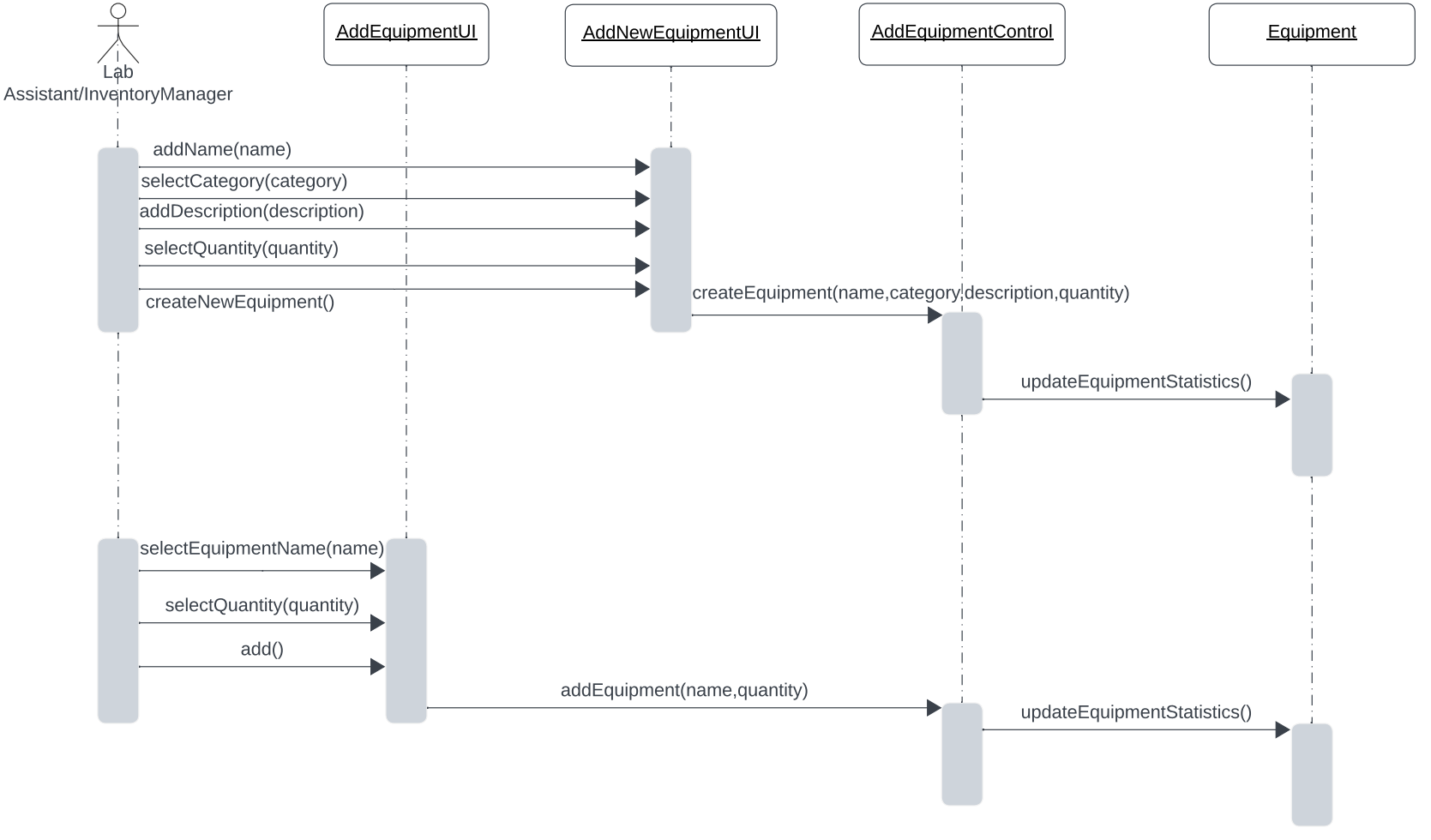
# EquipmentsView



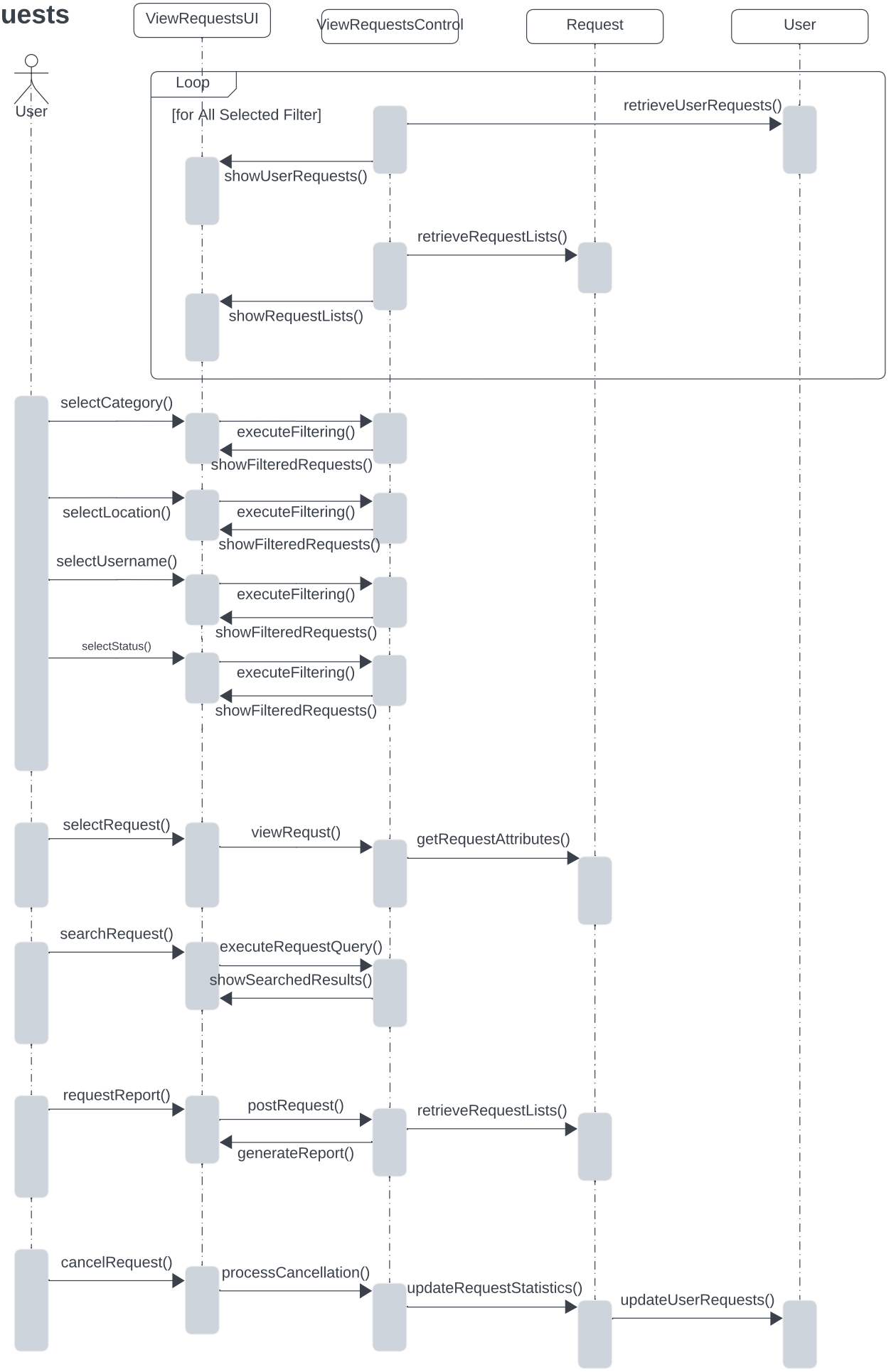
# IndividualEquipment



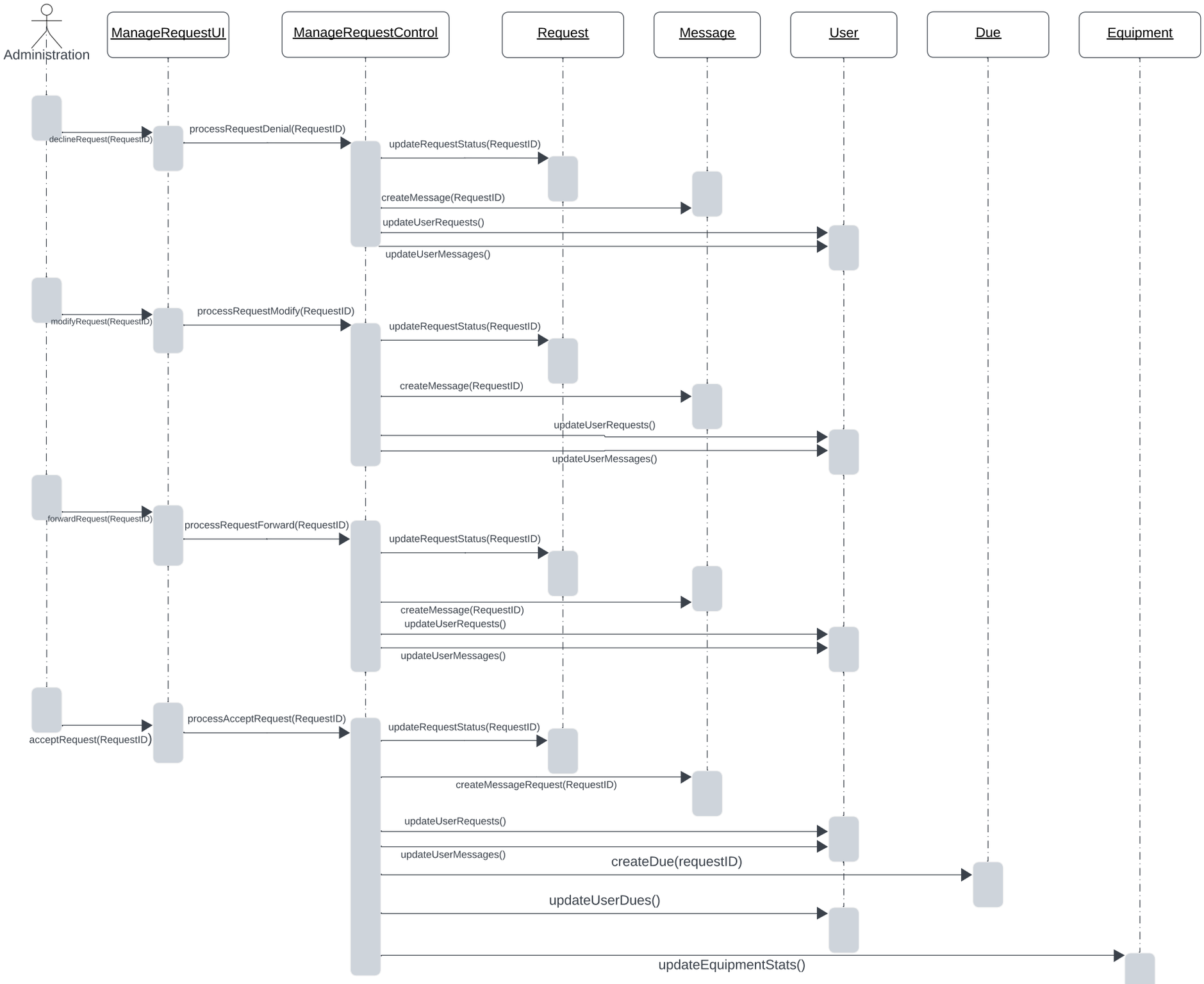
# AddEquipment



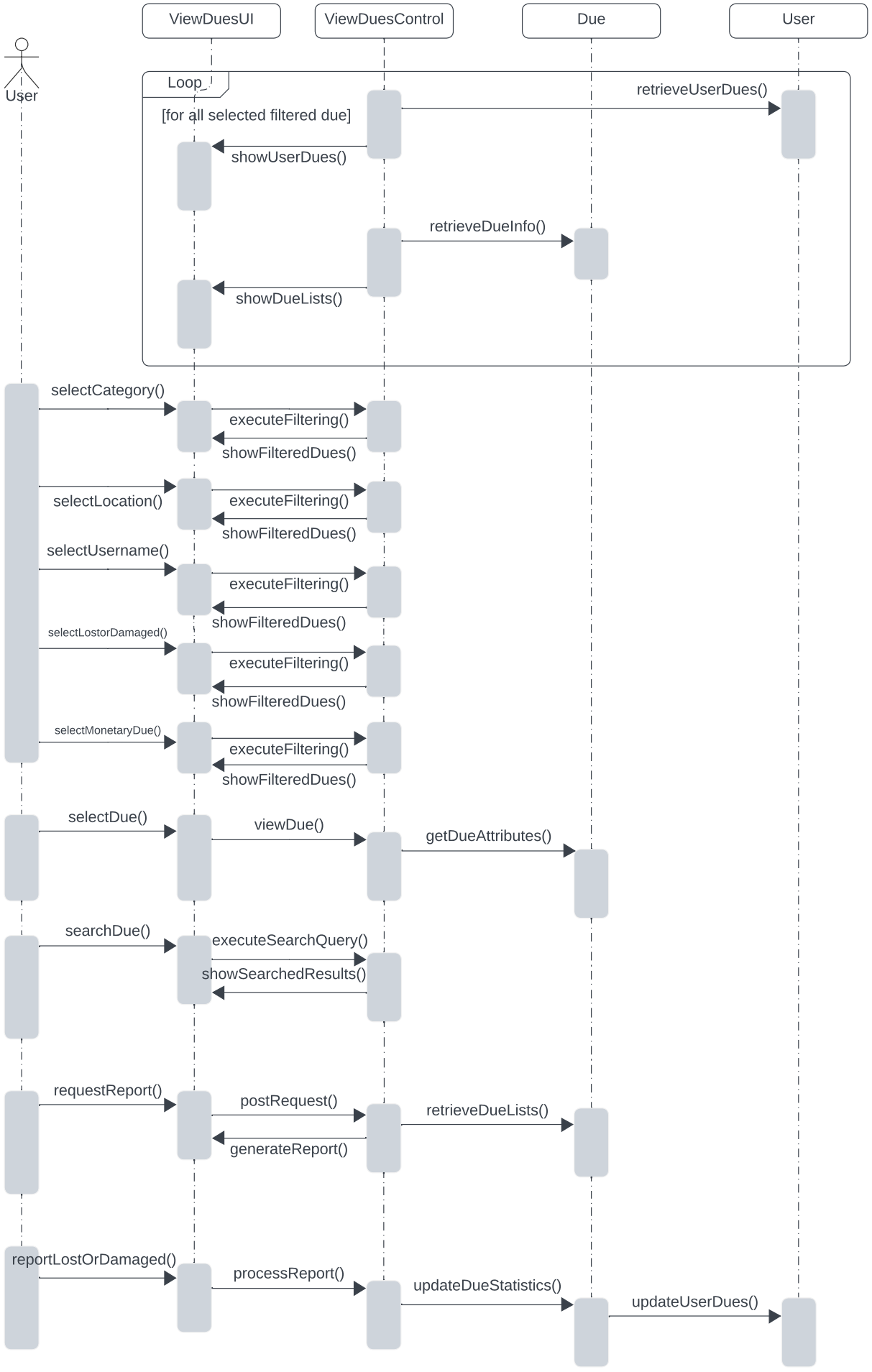
# ViewRequests



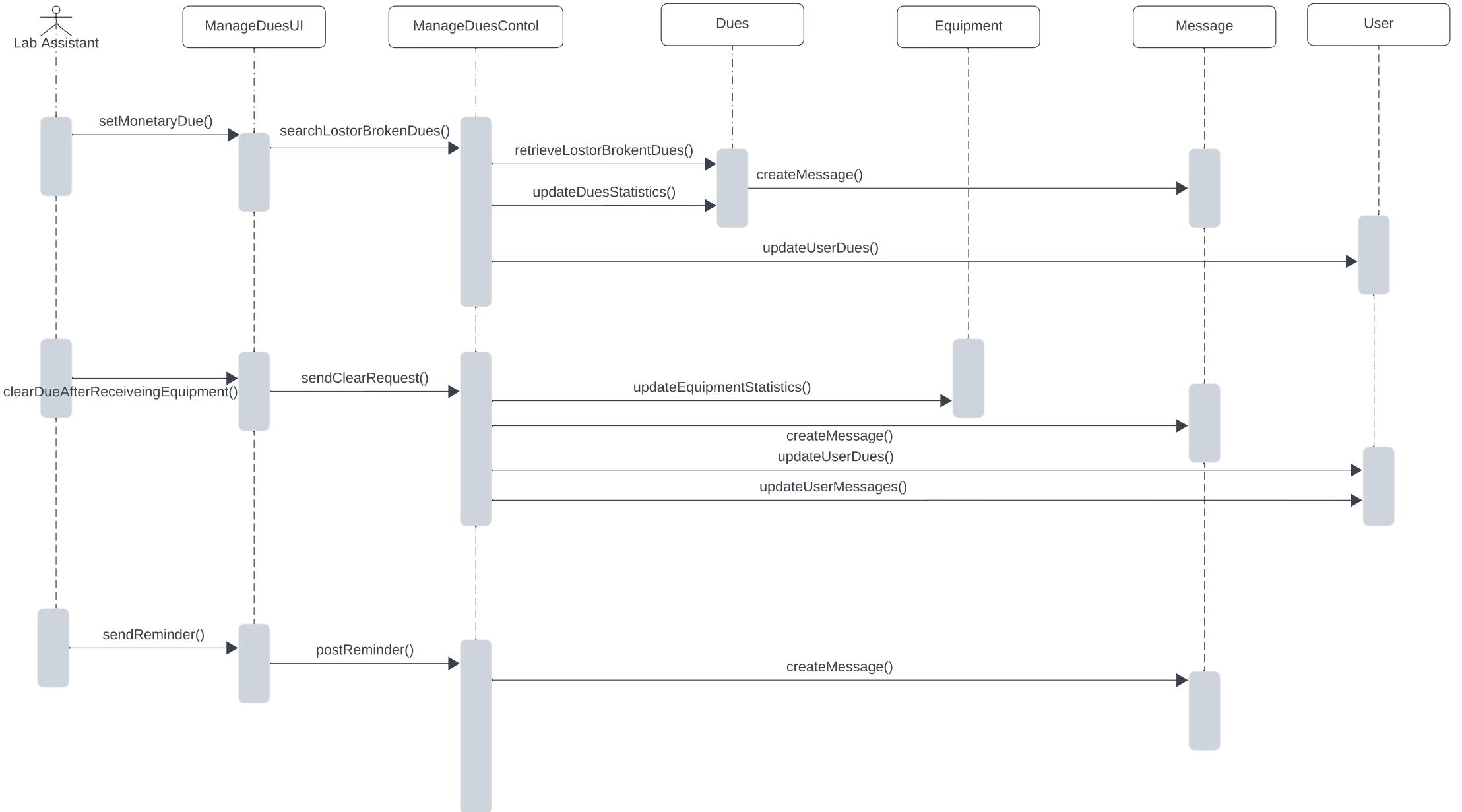
# ManageRequest



# ViewDues

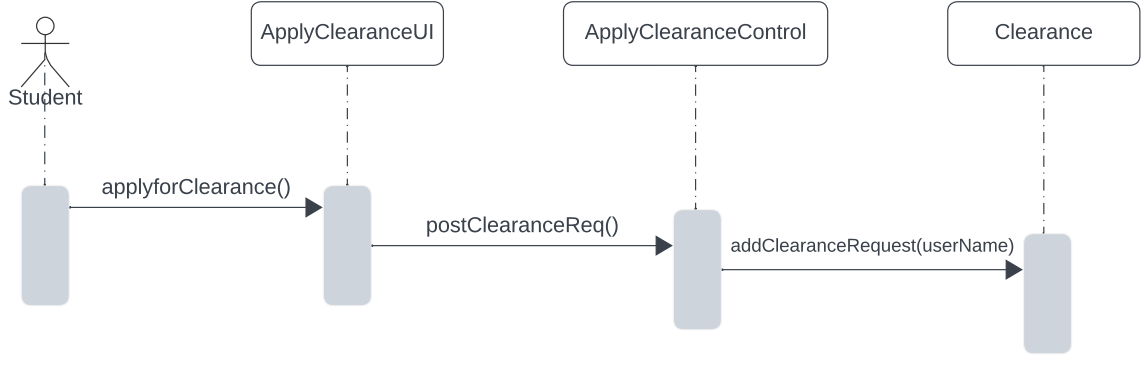

ViewDuesUI
ViewDuesControl
Due
User
User
Loop
[for all selected filtered due]
retrieveUserDues()
showUserDues()
retrieveDueInfo()
showDueLists()
selectCategory()
executeFiltering()
showFilteredDues()
selectLocation()
executeFiltering()
showFilteredDues()
selectUsername()
executeFiltering()
showFilteredDues()
selectLostorDamaged()
executeFiltering()
showFilteredDues()
selectMonetaryDue()
executeFiltering()
showFilteredDues()
selectDue()
viewDue()
getDueAttributes()
searchDue()
executeSearchQuery()
showSearchedResults()
requestReport()
postRequest()
retrieveDueLists()
generateReport()
reportLostOrDamaged()
processReport()
updateDueStatistics()
updateUserDues()

# ManageDues

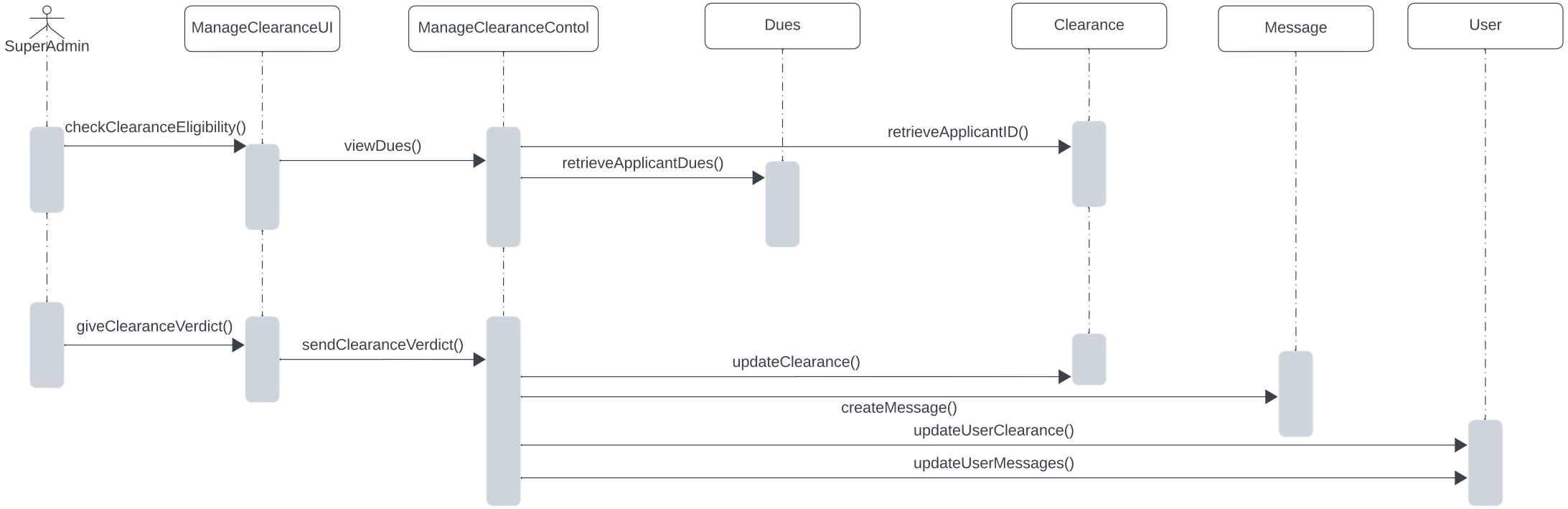

Lab Assistant
ManageDuesUI
ManageDuesContol
Dues
Equipment
Message
User
setMonetaryDue()
searchLostorBrokenDues()
retrieveLostorBrokentDues()
createMessage()
updateDuesStatistics()
updateUserDues()
clearDueAfterReceiveingEquipment()
sendClearRequest()
updateEquipmentStatistics()
createMessage()
updateUserDues()
updateUserMessages()
sendReminder()
postReminder()
createMessage()

# CheckStorage

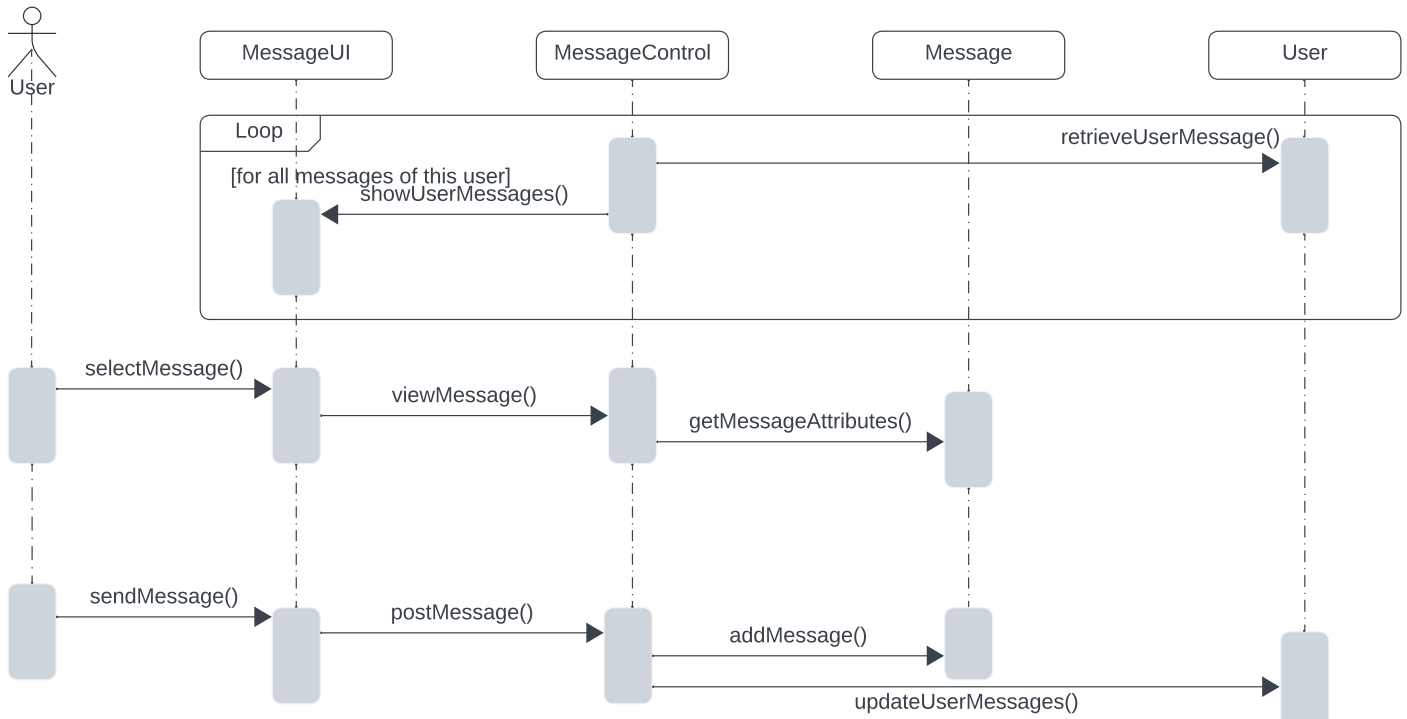
# ClearanceApply



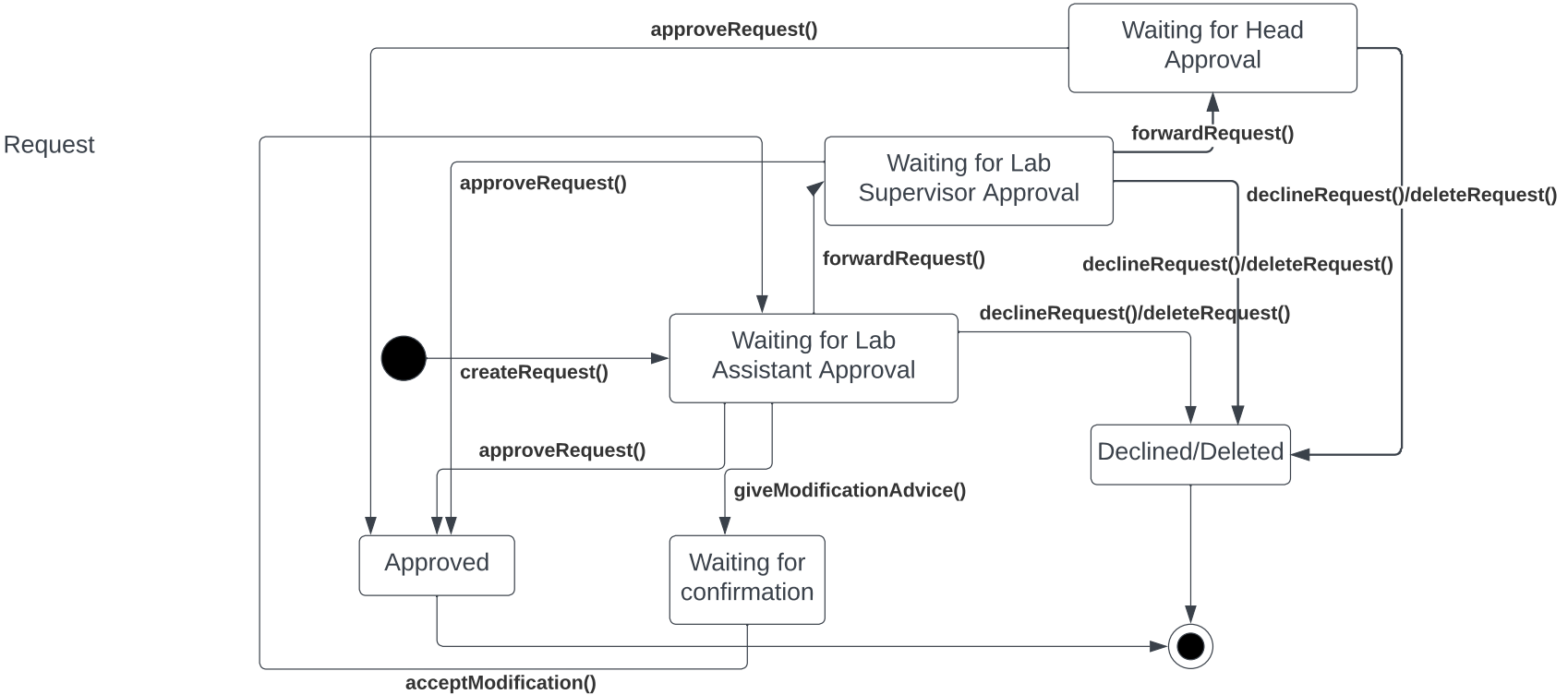
## ManageClearance



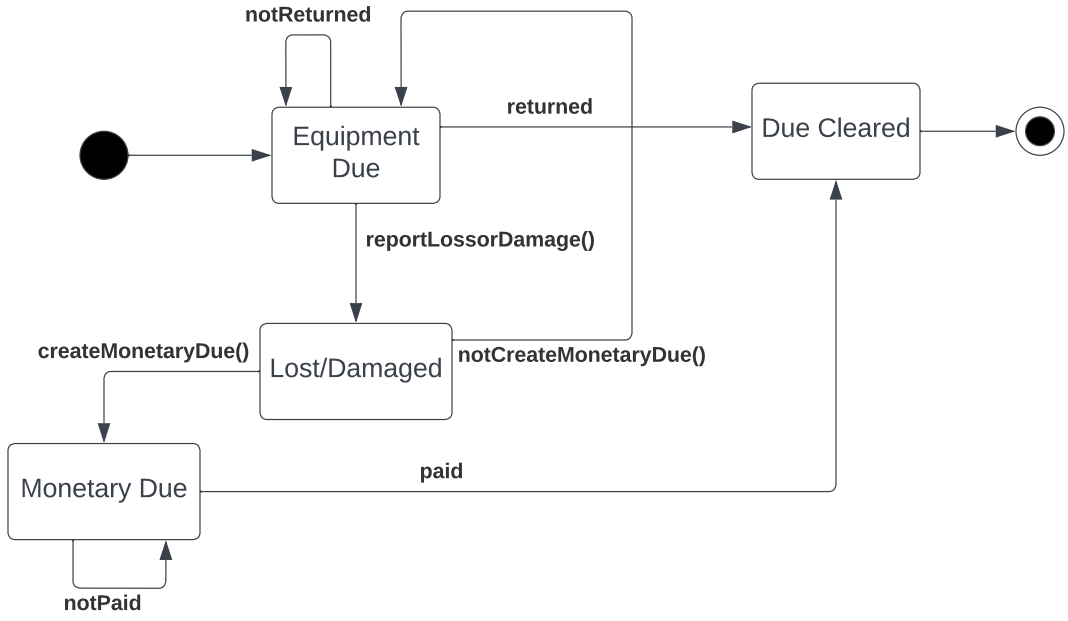
# Messaging


User
MessageUI
MessageControl
Message
User
Loop
[for all messages of this user]
showUserMessages()
retrieveUserMessage()
selectMessage()
viewMessage()
getMessageAttributes()
sendMessage()
postMessage()
addMessage()
updateUserMessages()

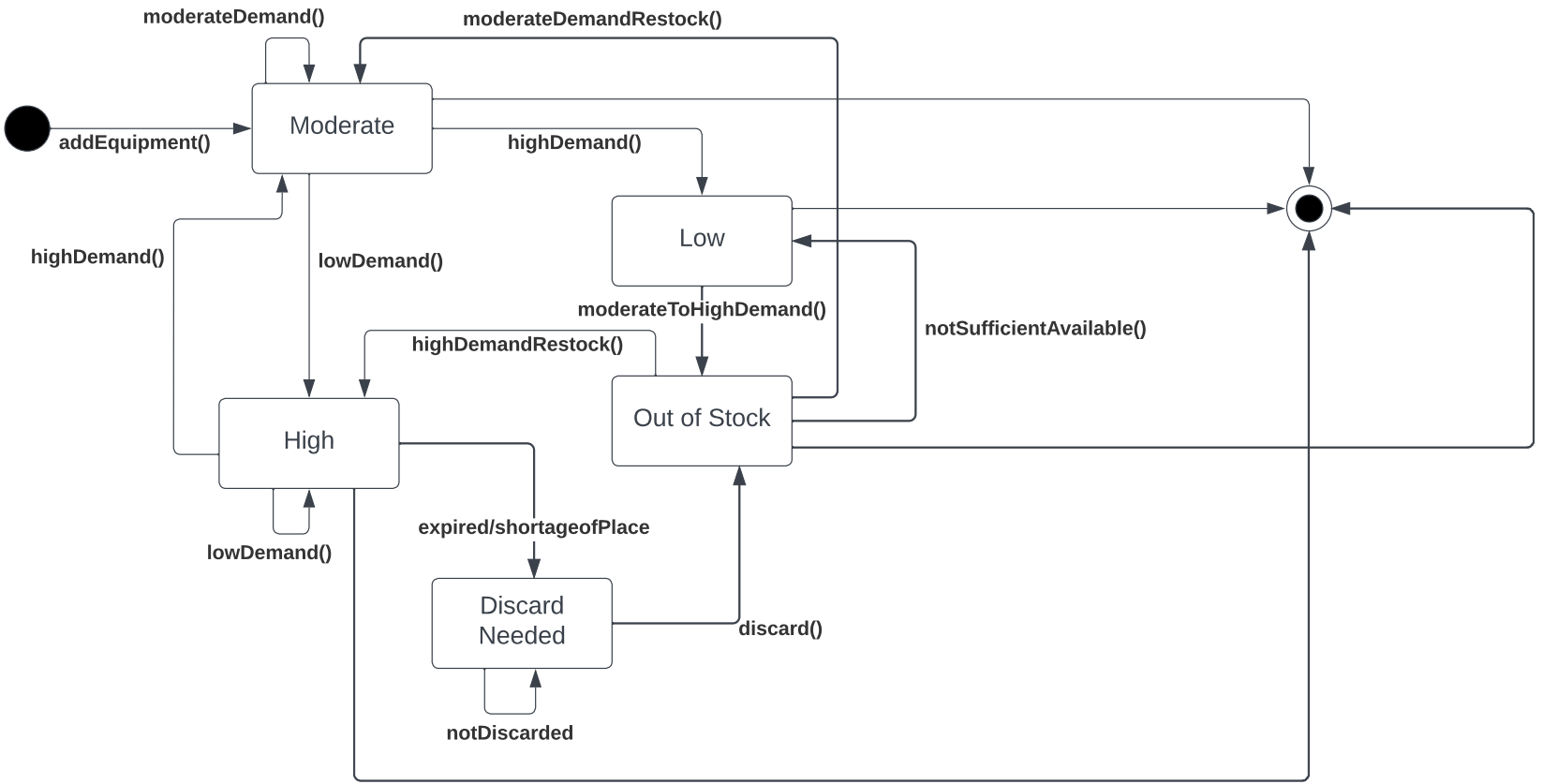
# State Diagram


Request
approveRequest()
Waiting for Head Approval
forwardRequest()
Waiting for Lab Supervisor Approval
approveRequest()
declineRequest()/deleteRequest()
forwardRequest()
declineRequest()/deleteRequest()
declineRequest()/deleteRequest()
Waiting for Lab Assistant Approval
createRequest()
approveRequest()
Declined/Deleted
giveModificationAdvice()
Approved
Waiting for confirmation
acceptModification()

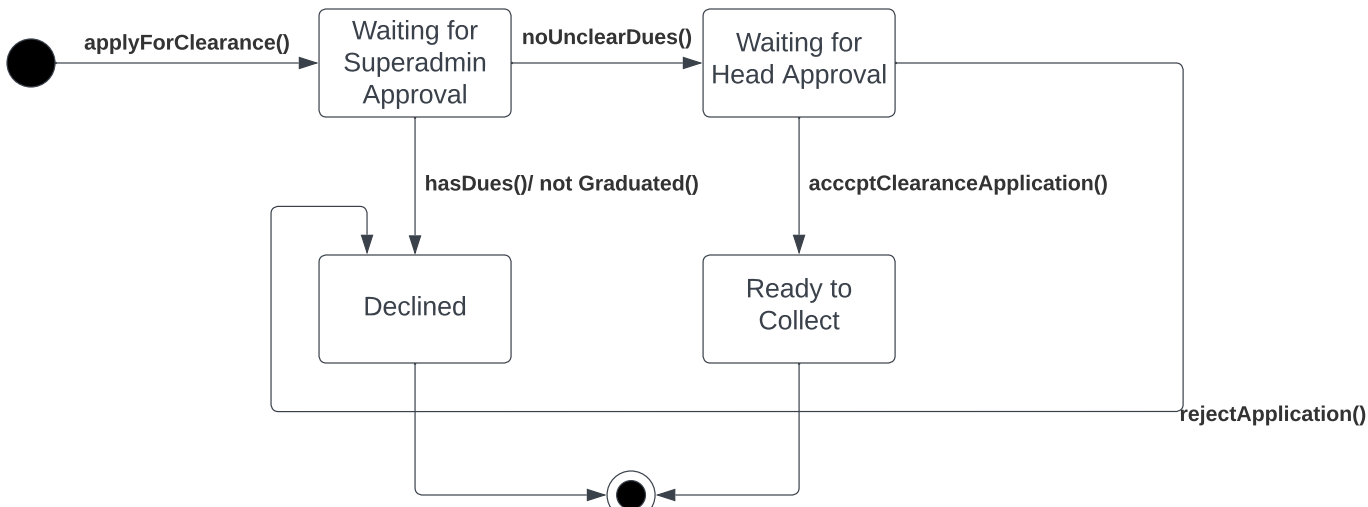
Dues


notReturned
Equipment Due
returned
Due Cleared
reportLossorDamage()
createMonetaryDue()
Lost/Damaged
notCreateMonetaryDue()
Monetary Due
paid
notPaid

Equipment Storage



Clearance


applyForClearance()
Waiting for Superadmin Approval
noUnclearDues()
Waiting for Head Approval
hasDues()/ not Graduated()
accceptClearanceApplication()
Declined
Ready to Collect
rejectApplication()