Collaboration, & Sequence, & State Diagram
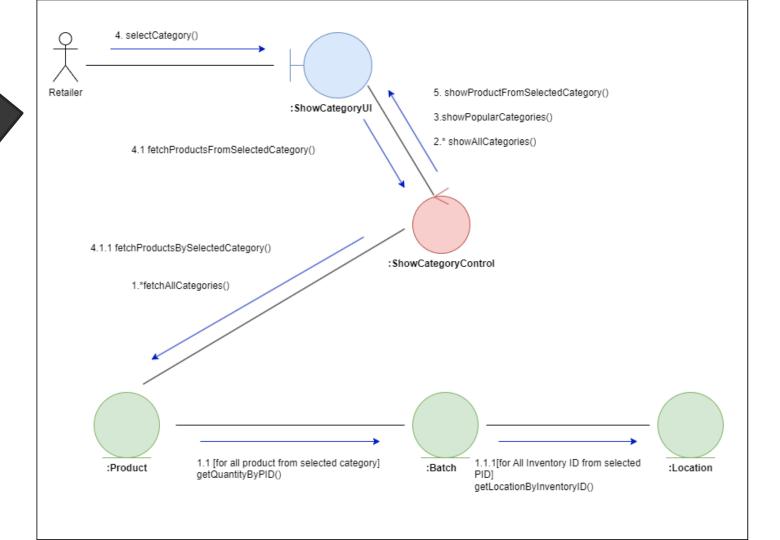
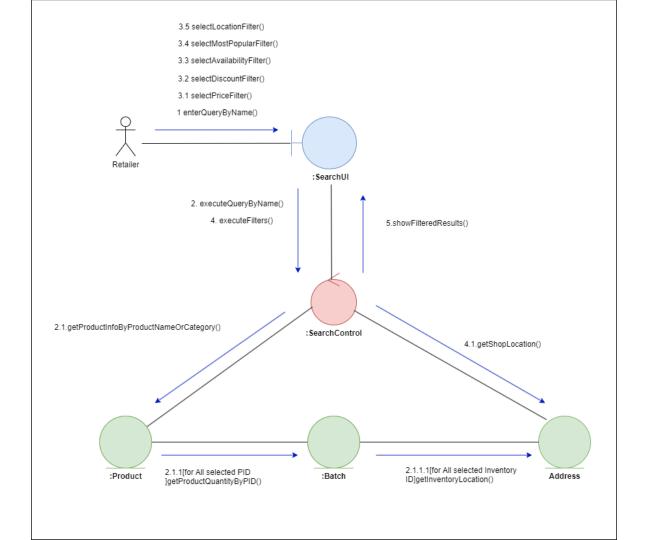# TABLE OF CONTENTS

COLLABORATION DIAGRAM

Roll : 1905101
MD. Sadik Hossain Shanto

HOME
(Retailer)

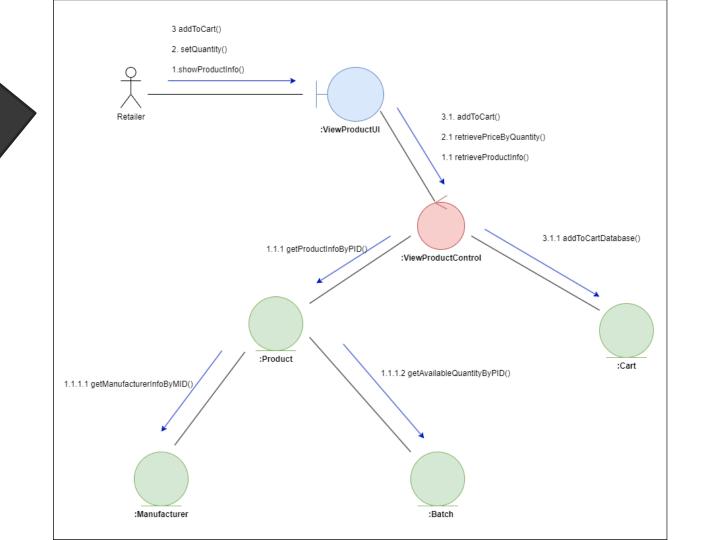Retailer

:HomePage UI

6.1 showSuggestedCategories()
4.showDiscountedProducts()
2. showShopInfo()

1.* getShopInfoBySID()

6. sendSuggestedCategory()

:Shop

:DataAnalytics

:HomePageControl

5.* getCategorySuggestion()

3.* getDiscountedProductList()

5.1. getSellCountByCategory()

:Batch

3.1 [for all discounted batches]
getProductInfoByPID()

:Product

5.1.1 [for each PID]
getCategoriesByPID()

:SingleProductQuantity

[5.1.1.1 [for each filtered category ID]
getCategoryNames()

:Category

Show Categories
(Retailer)

Retailer

4. selectCategory()

:ShowCategoryUI

5. showProductFromSelectedCategory()

3.showPopularCategories()

2.* showAllCategories()

4.1 fetchProductsFromSelectedCategory()

:ShowCategoryControl

4.1.1 fetchProductsBySelectedCategory()

1.*fetchAllCategories()

:Product

1.1 [for all product from selected category]
getQuantityByPID()

:Batch

1.1.1[for All Inventory ID from selected
PID]
getLocationByInventoryID()

:Location

Search & Filter (Retailer)

3.5 selectLocationFilter()

3.4 selectMostPopularFilter()

3.3 selectAvailabilityFilter()

3.2 selectDiscountFilter()

3.1 selectPriceFilter()

1 enterQueryByName()

Retailer

:SearchUI

2. executeQueryByName()

4. executeFilters()

5.showFilteredResults()

:SearchControl

2.1.getProductInfoByProductNameOrCategory()

4.1.getShopLocation()

:Product

2.1.1[for All selected PID]getProductQuantityByPID()

:Batch

2.1.1.1[for All selected Inventory ID]getInventoryLocation()

Address

Add
to Cart
(Retailer)

Retailer

3 addToCart()

2. setQuantity()

1.showProductInfo()

:ViewProductUI

3.1. addToCart()

2.1 retrievePriceByQuantity()

1.1 retrieveProductInfo()

:ViewProductControl

3.1.1 addToCartDatabase()

1.1.1 getProductInfoByPID()

:Product

:Cart

1.1.1.1 getManufacturerInfoByMID()

1.1.1.2 getAvailableQuantityByPID()

:Manufacturer

:Batch

Cart
(Retailer)

Retailer

10. applyVoucher()
9. removeProduct()
8. changeQuantity()

:CartUI

10.1 applyVoucher()
9.1 removeProduct()
8.1 retrievePriceForUpdatedQuantity()

11.showDecreasedPriceByAppliedVoucher()
7. showDeliveryFee()
4. showVoucherInfo()
2. showCart()

:Voucher

3.* retrieveVoucherInfo()

:CartControl

5.* getShopLocation()

9.1.1 RemoveProductFromCart()
1* retrieveCartInfoBySID()

6.* calculateDeliveryFee()

:Address

:Cart

1.1.1.1 [for All Inventory ID]
getLocation()

1.1 [for All PID from selected SID]
getProductInfo()

:Batch

1.1.1 getLocationOfProductsInventory()

:Product

Confirm Order (Retailer)

Retailer

5.2 confirmOrder()
5.1 selectPaymentMethod()

:ConfirmOrderUI

6. confirmOrder()

2. showCart()
4. showPaymentMethods()

3.* retrieveAvailablePaymentMethods()

1.* getCartBySID()

:PaymentMethod

:Cart

:ConfirmOrderControl

6.1 updateOrderDatabase()

6.3 updateSignleProductQuantityDatabase()

6.2 updateOrderFragmentDatabase()

:Order

:SingleProductQuantity

:OrderFragment

Pay
Later
(Retailer)

Order History & Rating (Retailer)

Retailer

5.2 setRatingByPID()
5.1 setReviewByPID()
4. hideOrderHistoryByOrderID()
3.moreInfo()

:OrderHistoryUI

6.updateReviewAndRating()
4.1. hideOrderHistoryByOrderID()
3.1. retrieveMoreInfoOfProductByPID()

2. showOrderHistory()

:OrderHistoryControl

4.1.1 hideOrderHistoryByOrderID()

1.* retrieveOrderHistoryBySID()

6.1 updateReviewAndRating()

:Order

1.1 [for each selected order ID]
getOrderInfo()

:OrderFragment

1.1.1 [for each selected Order ID]
getProductInfo()

:SingleProductQuantity

View Inventory List (Manufacturer)

Manufacturer

5. selectProduct()
3. selectInventory()

:ViewInventoryListUI

6. showBatchInfoByPID()
4. showProductListOfSelectedInventory()
2. showInventoryList()

3.1 getProductListAndBatchInfoByIID()

:ViewInventoryControl

3.1.1 getProductListAndBatchInfoByIID()
1.* getInventoryInfoByMID()

:Batch

3.1.1.1
fetchProductListAndBatchInfoByIID()

:Inventory

1.1 [for each selected IID]
getLocation()

:Address

3.1.1.1.1 [for each PID]
getProductInfo()

:Product

Adding Inventory (Manufacturer)

Manufacturer

1.4 setInventoryType()

1.3 setInventoryCapacity()

1.2 setInventoryAddress()

1.1 setInventoryName()

:AddInventoryUI

3. showConfirmationMessage()

2. addInventoryByMID()

:AddInventoryControl

2.1 addToInventoryDatabaseByMID()

2.1.1 updateInventoryLocationByInventoryID()

:Address

:Inventory

Give
Lease
(Manufacturer)

4.2 setTotalDayForLease()
4.1 selectRentPerDay()
3. selectInventory()

Manufacturer

:GiveLeaseUI

6.showSuccessMessage()
3.1 showSetInformationDialougeBox()
2. showEmptyInventoryList()

5. addRentalInventory()

:GiveLeaseControl

5.1 addToRentalInventoryDatabse()

1.* getEmptyInventoryList()

:Rental

:Inventory

Take Lease (Manufacturer)

Manufacturer

5.2 confirm()
5.1 selectDaysForRental()
4. selectInventory()
3. applyLocationFiltrer()

:TakeLeaseUI

7.showSuccessMessage()
4.1 showRentalDialogueBox()
3.1 showRentalInventoriesByLocation()
2. showRentalInventories()

6. updateRentalInfo()

:TakeLeaseControl

6.1 updateRentalDatabase()
1.* fetchAvailableRentalInventories()

:Address

1.1 fetchLocationsByIID()

:Rental

Lease Management (Manufacturer)

6. removeLeasedInventory()
3.3 showPreviouslyLeased()
3.2 showCurrentlyLeasedNotTaken()
3.1 showCurrentlyLeasedAndTaken()

Manufacturer

:LeaseManagementUI

5. showResultsFromFilters()
2. showRentalInformation()

6.1 removeFromRentalDatabaseByRentalID()
4.applyFilter()

:LeaseManagementControl

6.1.1 updateRentalDatabase()
1.* fetchRentalInformation()

:Manufacturer

1.1 [for each Owner ID and Rent ID]
getManufacturerInfo()

:Rental

Shift Product (Manufacturer)

Manufacturer

6. confirm()
5. selectBatchesAndDoScreening()
4. selectProduct()
3. selectInventoryWhereToShift()
1. shiftProduct()

:ShiftProductUI

4.1 showBatchInfoByPID()
2. showInventoryList()

6.1 addToShipmentTable()
3.1 getProductListAndBatchByIID()
1.1 fetchOtherInventoriesByIID()

:ShiftProductControl

6.1.1 updateShipmentTable()
3.1.1 getProductListAndBatchByIID()
1.1.1 getOtherInventoriesByIID()

:Shipment

6.1.1.1 addToShipmentDatabase()

:Inventory

1.1.1.1[for each selected IID]
getLocation()

:Address

3.1.1.1 fetchBatchInfoByIID()

:Batch

3.1.1.1.1 [for each PID]
getProductInfo()

:Product

Restock
(Manufacturer)

6. confirm()
5. selectBatchesAndDoScreening()
4. selectProduct()
3. selectInventory()
1. restock()

Manufacturer

:RestockUI

4.1 showBatchInfoByPID()
2. showInventoryList()

6.1 addToShipmentTable()
3.1 getProductListAndBatchByIID()
1.1 fetchOtherInventoriesByIID()

:RestockControl

6.1.1 updateShipmentTable()
3.1.1 getProductListAndBatchByIID()
1.1.1 getOtherInventoriesByIID()

:Shipment

6.1.1.1 addToShipmentDatabase()

:Inventory

1.1.1.1[for each selected IID]
getLocation()

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3.1.1.1 fetchBatchInfoByIID()

:Batch

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getProductInfo()

:Product

Product Screening (Manufacturer)

Manufacturer

1.3 setDiscount()
1.2 setMinimumUnitForDiscount()
1.1 setBasePrice()

:ProductScreeningUI

3. showConfirmation()

2.updateProductTable()

:ProductScreeningControl

2.1. updateProductTableDatabase()

:Product

Batch
Screening
(Manufacturer)

1.2 giveSale()
1.1 addToMarketplace()

:BatchScreeningUI

3. showConfirmation()

2.updateBatchTable()

:BatchScreeningControl

2.1. updateBatchTableDatabase()

:Batch

View Production House (Manufacturer)

Manufacturer

5. selectProduct()
3. selectProductionHouse()

:ViewProductionHouseUI

6. showBatchInfoByPID()
4. showProductListOfSelectedProductionHouse()
2. showProductionHouseList()

3.1 getProductListAndBatchInfoByPHID()

:ViewProductionHouseControl

3.1.1 getProductListAndBatchInfoByPHID()
1.* getProductionHouseInfoByMID()

:Batch

3.1.1.1
fetchProductListAndBatchInfoByPHID()

:ProductionHouse

1.1 [for each selected PHID]
getLocation()

:Address

3.1.1.1.1 [for each PID]
getProductInfo()

:Product

Adding Production House (Manufacturer)

1.4 setProductionHouseType()

1.3 setProductionHouseCapacity()

1.2 setProductionHouseAddress()

1.1 setProductionHouseName()

Manufacturer

:AddProductionHouseUI

3. showConfirmationMessage()

2. addProductionHouseByMID()

:AddProductionHouseControl

2.1
addToProductionHouseDatabaseByMID()

:Address

2.1.1
updateProductionHouseLocationByInventoryID()

:ProductionHouse

Add New Product (Manufacturer)

Manufacturer

3.7 setMinimumQuantityForDiscount()
3.6 addDescription()
3.5 setUnitPrice()
3.4 selectCategory()
3.3 addEstimaatedWeight()
3.2.addImage()
3.1.enterName()

:AddNewProductUI

5. showConfirmationMessage()
2. updateSelectCategory()

4.. updateProductDatabase()

:AddNewProductControl

1.* fetchAllCategories()

4.1 AddToProductDatabase()

:Category

:Product

Add New Batch (Manufacturer)

Manufacturer

5. confirm()
4.4 setQuantity()
4.3 setExpiryDate()
4.1 setManufacturingDate()
3. selectProduct()

:AddNewBatchUI

2. showProductList()

6. updateBatchTable()

:AddNewBatchControl

7. addToBatchDatabase()

1.* getProductListByMID()

:Batch

:Product

Order History (Manufacturer)

Manufacturer

4.4 sortByDeliveryDateFilter()
4.3 selectDeliveryDateFilter()
4.2 selectDeliveryStatusFilter()
4.1 selectShopNameFilter()
3. showMoreDetailsByOrderID()

:OrderHistoryUI

6. showOrderInfoByFilter()
2. showOrderHistory()

5. getOrderInfoByFilter()
3.1 getMoreOrderDetailsByOrderID()

:OrderHistoryControl

3.1.1 fetchMoreOrderDetailsByOrderID()

1.* getOrderHistoryByMID()

:SingleProductQuantity

:Order

:OrderFragment

1.1 [for each Order ID of MID]
getOrderDetails()

1.1.1 [for each Order ID]
fetchRetailerInfo()

:Shop

Data
Analytics
(Manufacturer)

Sequence Diagram

Roll : 1905118

Sabah Ahmed

Homepage
(Retailer)

Show Categories (Retailer)

Search & Filter (Retailer)

Add to Cart (Retailer)
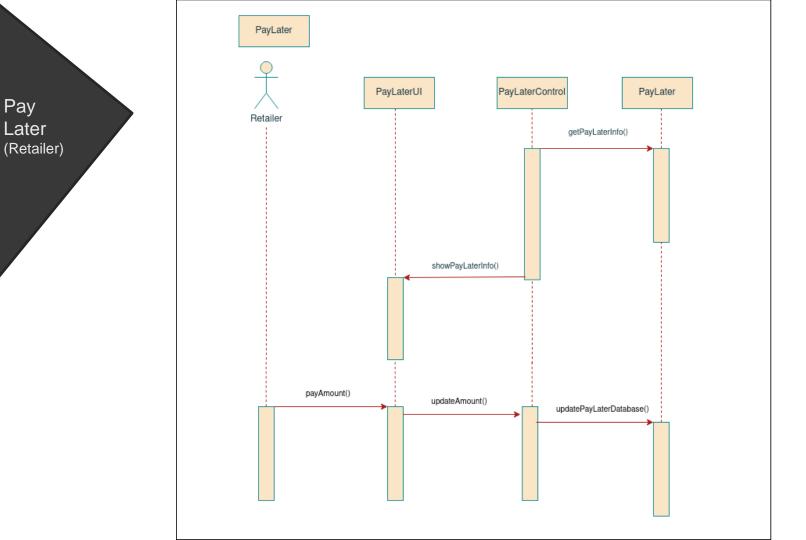
Cart (Retailer)

Confirm Order (Retailer)
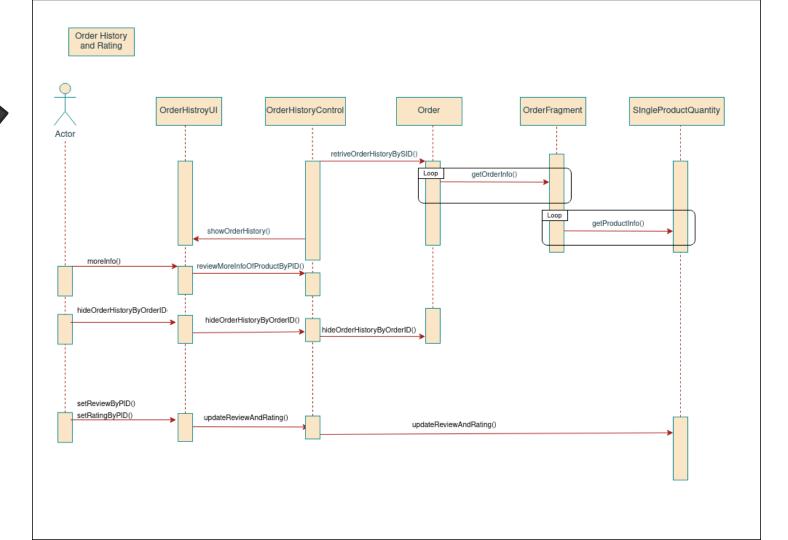
Pay Later (Retailer)
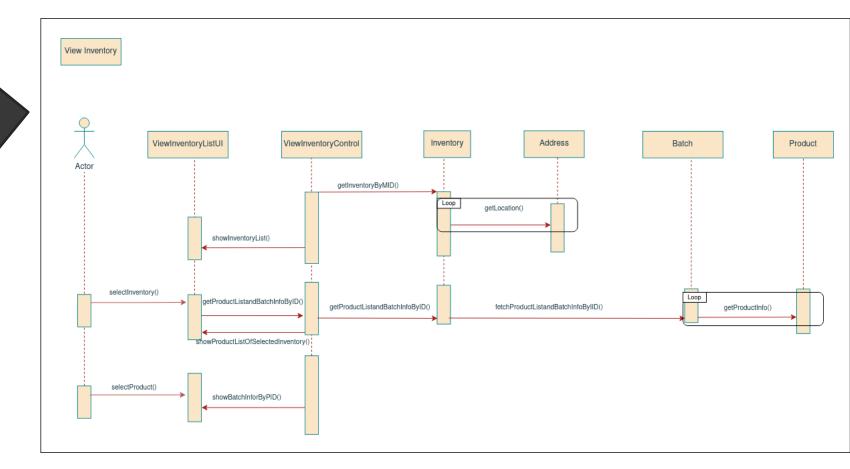
Order History & Rating (Retailer)

View
Inventory
List
(Manufacturer)
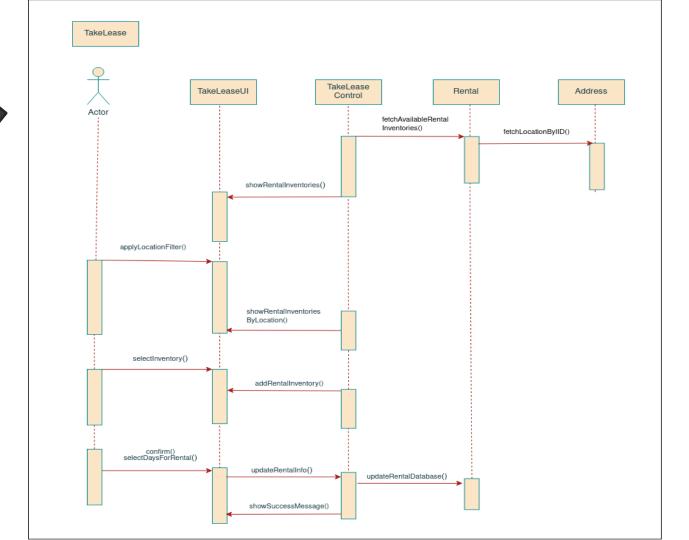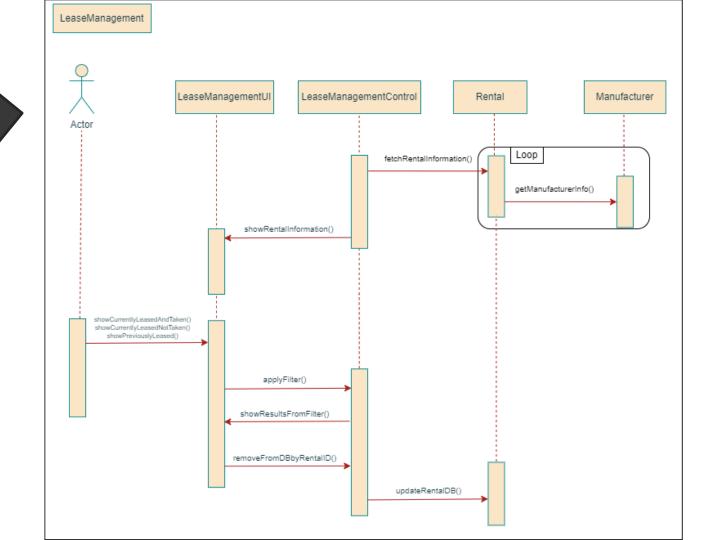
Give Lease (Manufacturer)

Take
Lease
(Manufacturer)

Lease
Management
(Manufacturer)

LeaseManagement

Actor

LeaseManagementUI

LeaseManagementControl

Rental

Manufacturer

fetchRentalInformation()

Loop

getManufacturerInfo()

showRentalInformation()

showCurrentlyLeasedAndTaken()
showCurrentlyLeasedNotTaken()
showPreviouslyLeased()

applyFilter()

showResultsFromFilter()

removeFromDBbyRentalID()

updateRentalDB()
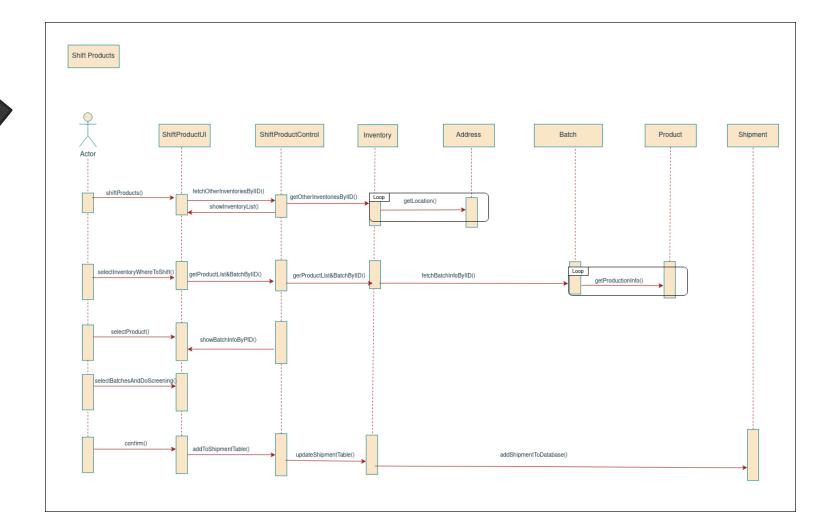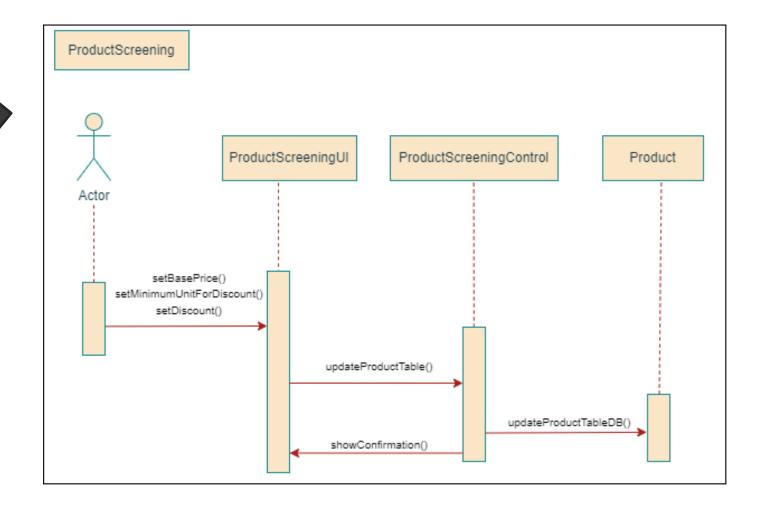
Shift Products (Manufacturer)
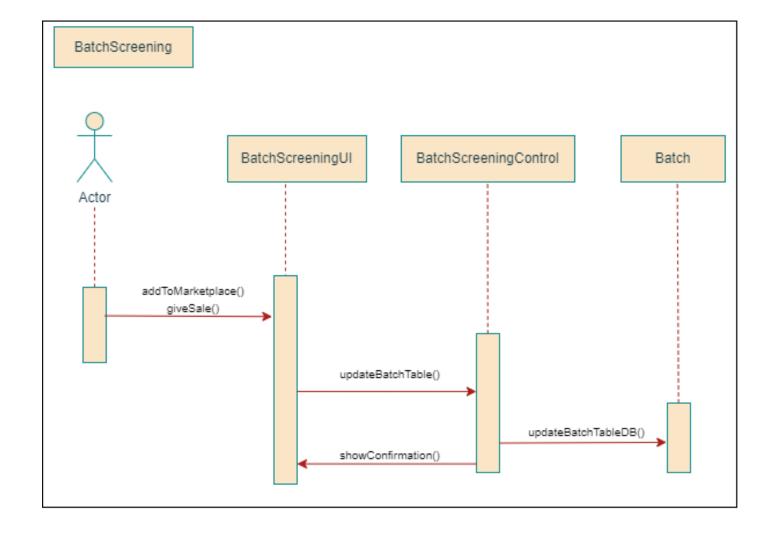
Restock Products (Manufacturer)

Product Screening (Manufacturer)

ProductScreening

Actor — ProductScreeningUI — ProductScreeningControl — Product

setBasePrice()
setMinimumUnitForDiscount()
setDiscount()

updateProductTable()

updateProductTableDB()

showConfirmation()
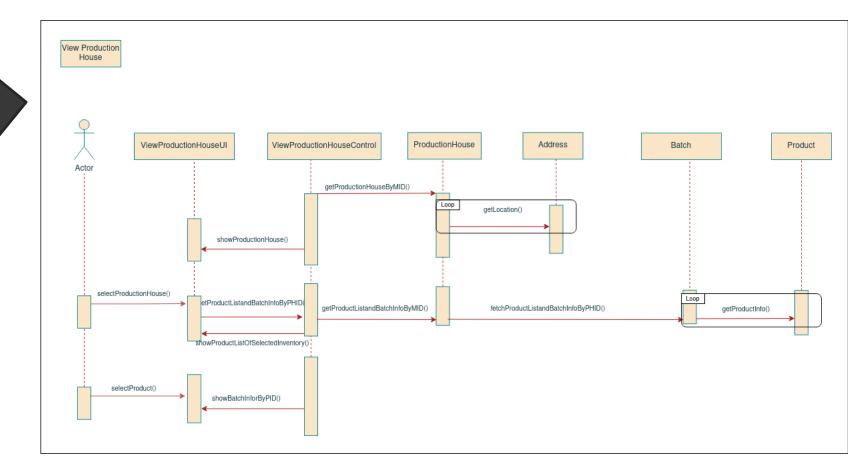
Batch
Screening
(Manufacturer)

BatchScreening
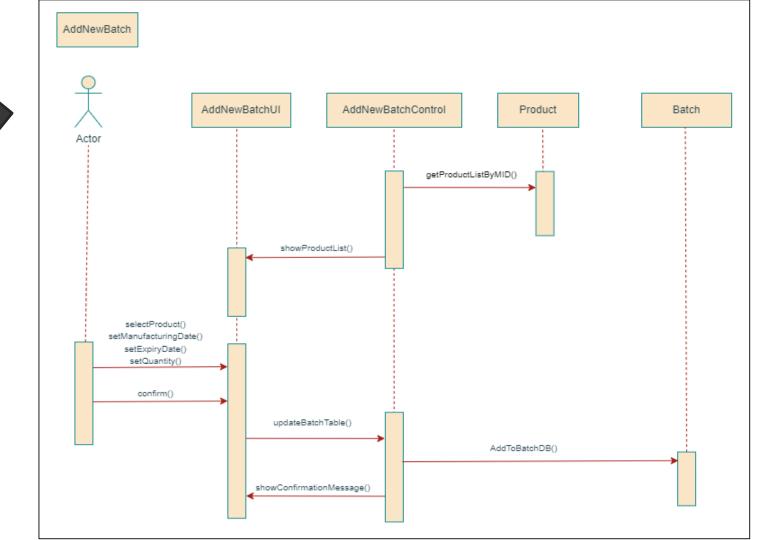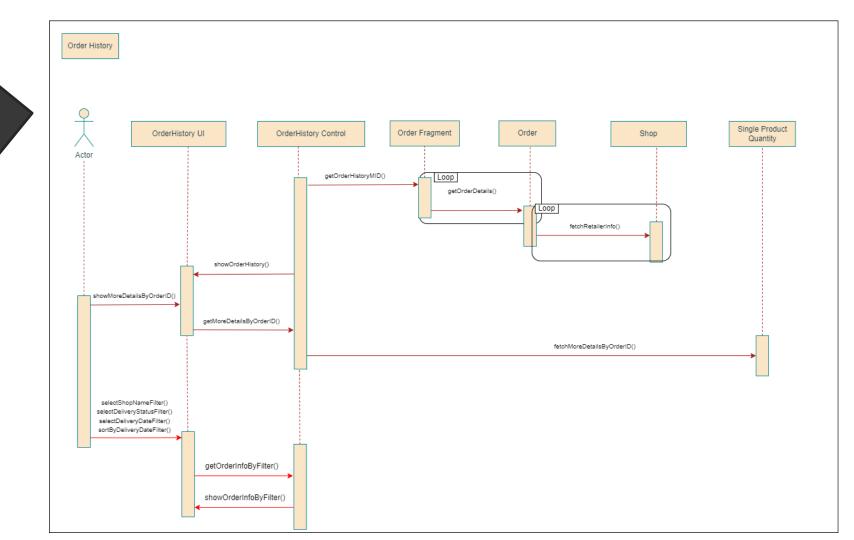
Actor

BatchScreeningUI

BatchScreeningControl

Batch

addToMarketplace()
giveSale()

updateBatchTable()

updateBatchTableDB()

showConfirmation()

Add New Products (Manufacturer)

Add
New
Batch
(Manufacturer)

AddNewBatch

Actor

AddNewBatchUI

AddNewBatchControl

Product

Batch

getProductListByMID()

showProductList()

selectProduct()
setManufacturingDate()
setExpiryDate()
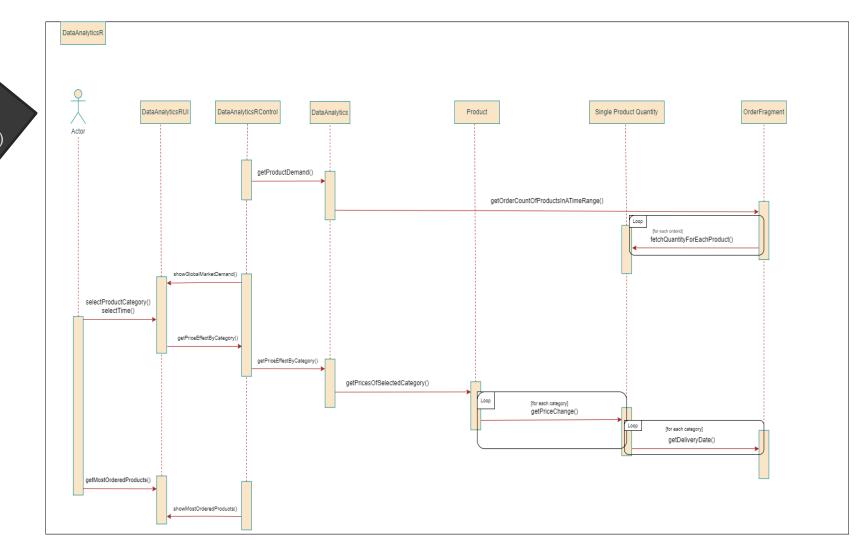setQuantity()

confirm()

updateBatchTable()

AddToBatchDB()

showConfirmationMessage()

Order History (Manufacturer)
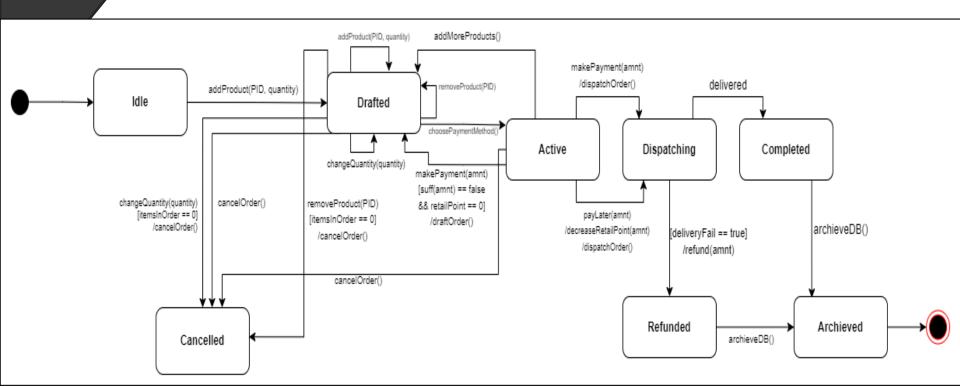
Data Analysis (Manufacturer)
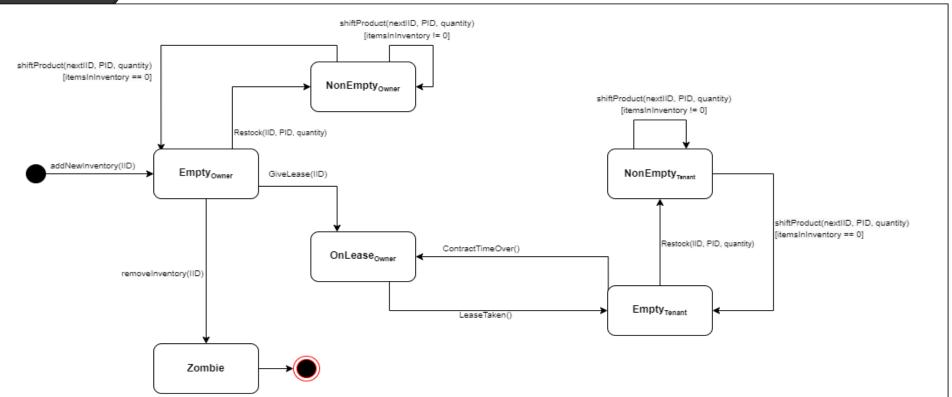
Data
Analysis
(Manufacturer)

State Diagram

Order State

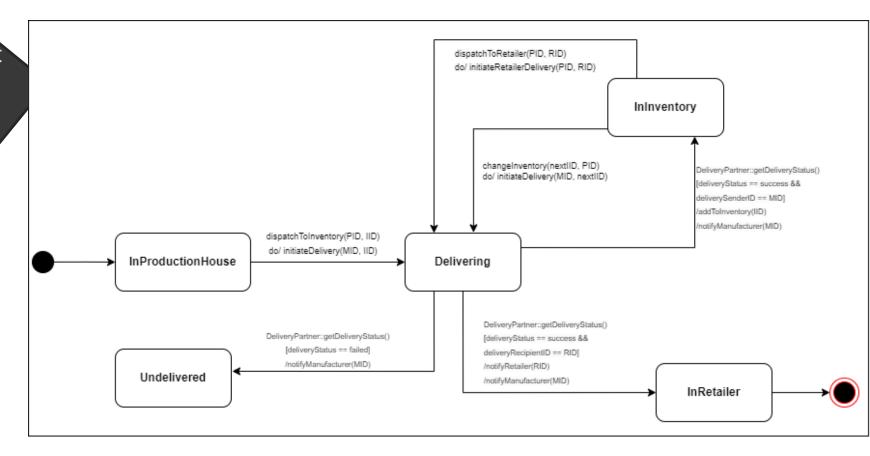Product
Where-
abouts

InInventory

dispatchToRetailer(PID, RID)
do/ initiateRetailerDelivery(PID, RID)

changeInventory(nextIID, PID)
do/ initiateDelivery(MID, nextIID)

DeliveryPartner::getDeliveryStatus()
[deliveryStatus == success &&
deliverySenderID == MID]
/addToInventory(IID)
/notifyManufacturer(MID)

dispatchToInventory(PID, IID)
do/ initiateDelivery(MID, IID)

InProductionHouse

Delivering

DeliveryPartner::getDeliveryStatus()
[deliveryStatus == success &&
deliveryRecipientID == RID]
/notifyRetailer(RID)
/notifyManufacturer(MID)

DeliveryPartner::getDeliveryStatus()
[deliveryStatus == failed]
/notifyManufacturer(MID)

Undelivered

InRetailer

THANK YOU

1905093	Soumya Swagata biswas
1905097	Abrar mahmuD
1905101	mD. sADik Hossain shanto
1905105	shahriar raj
1905115	Tahsin Wahid
1905118	Sabah ahmed