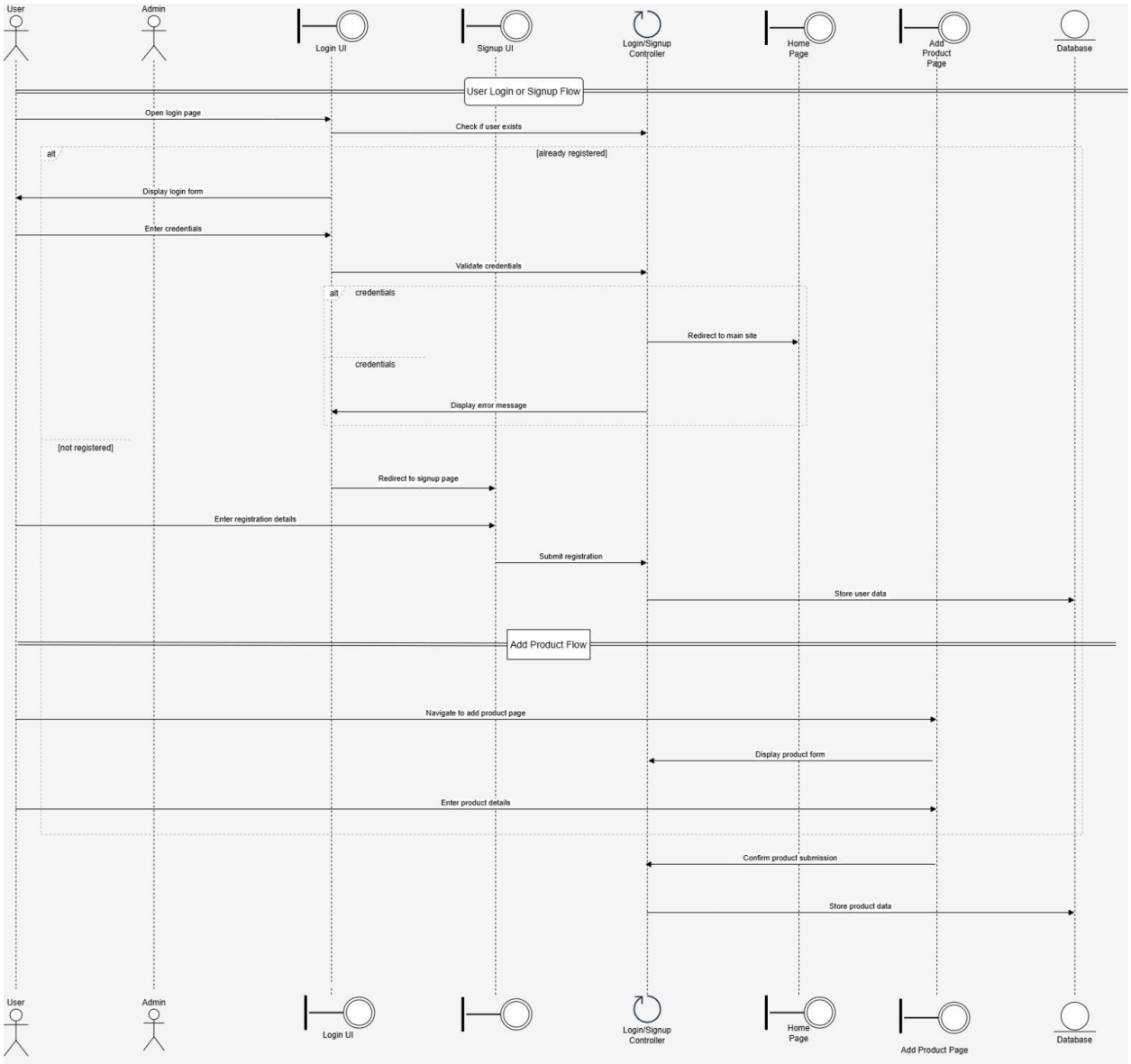
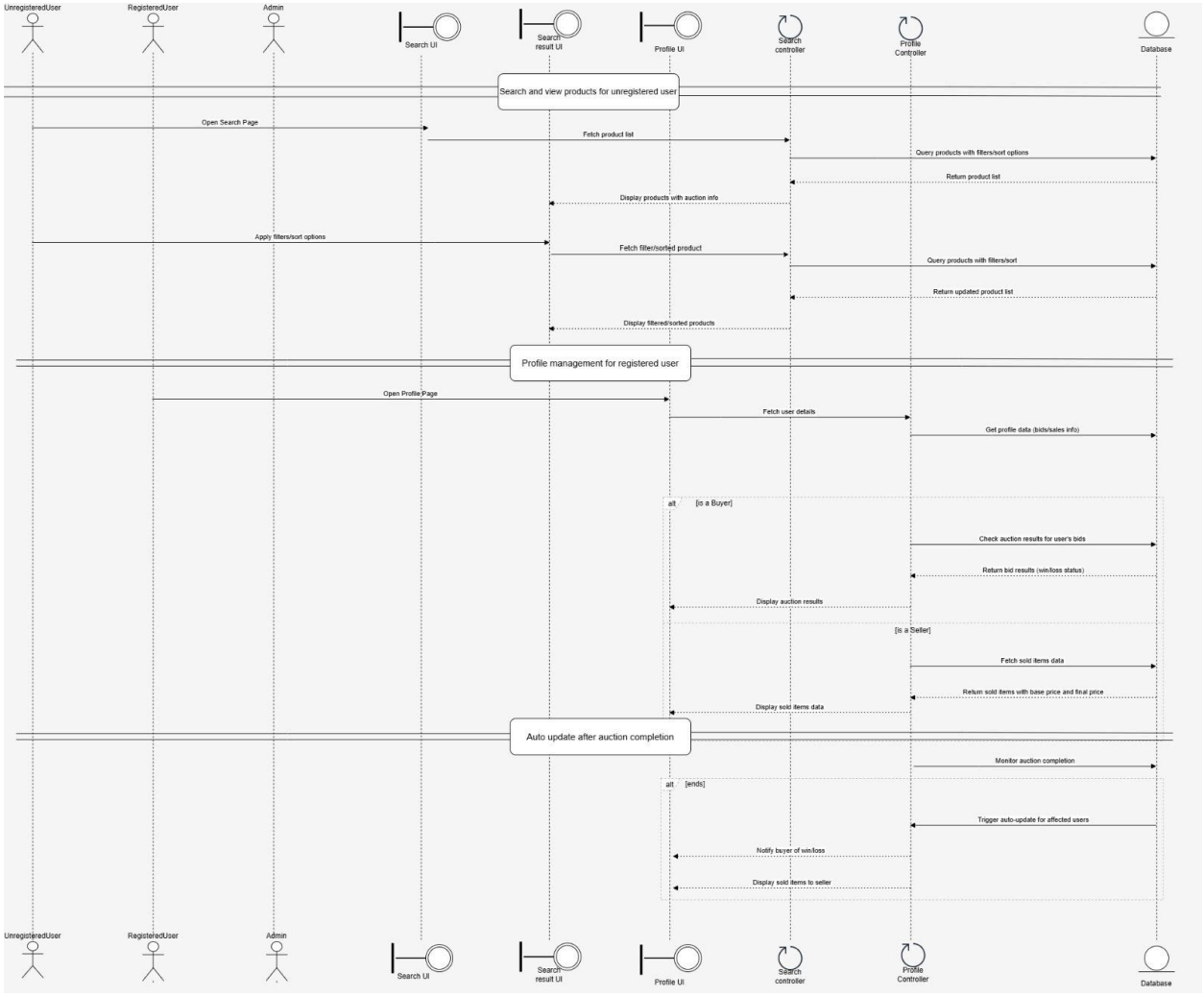
Title: Online Auction System

SEQUENCE DIAGRAMS

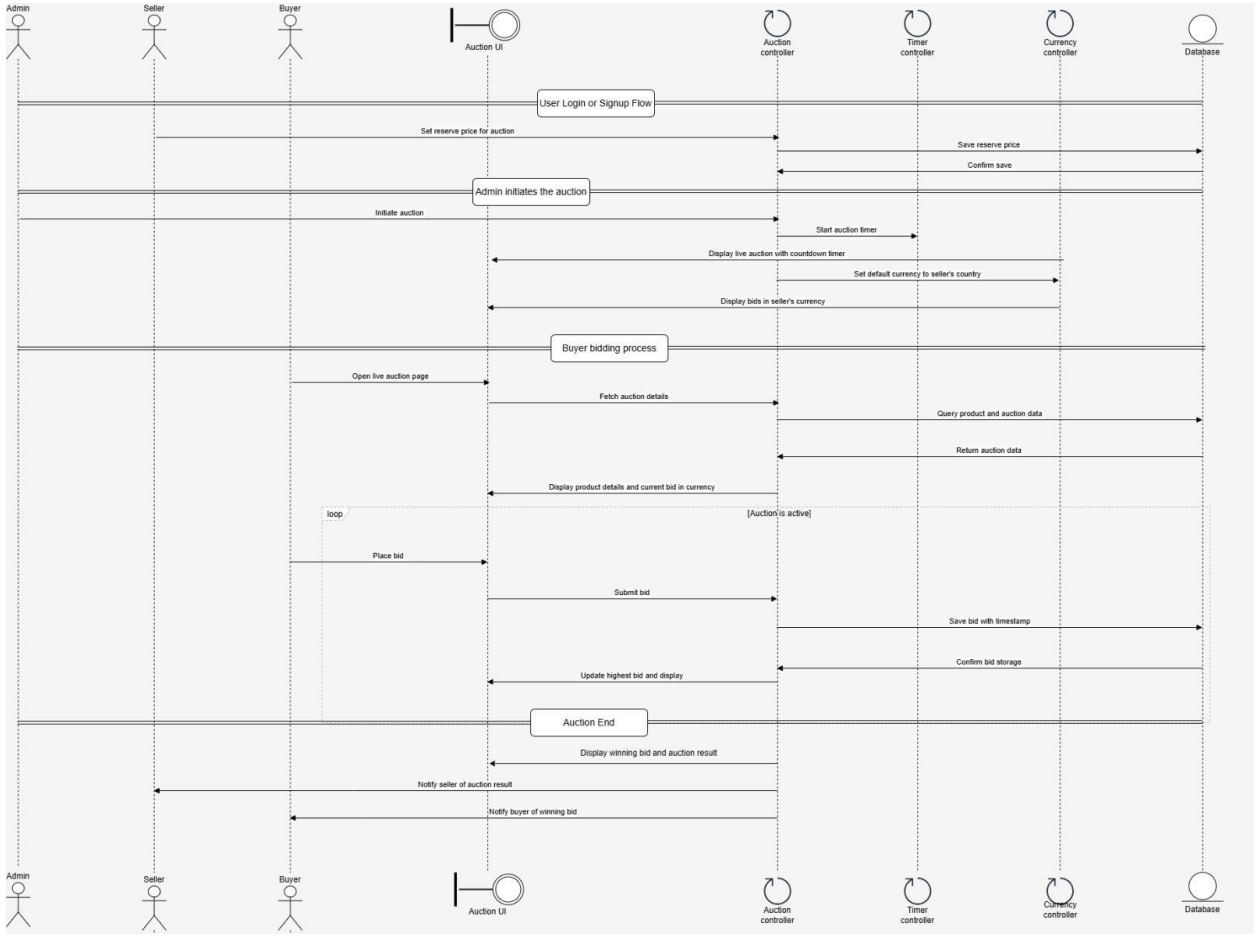
SPRINT 1.



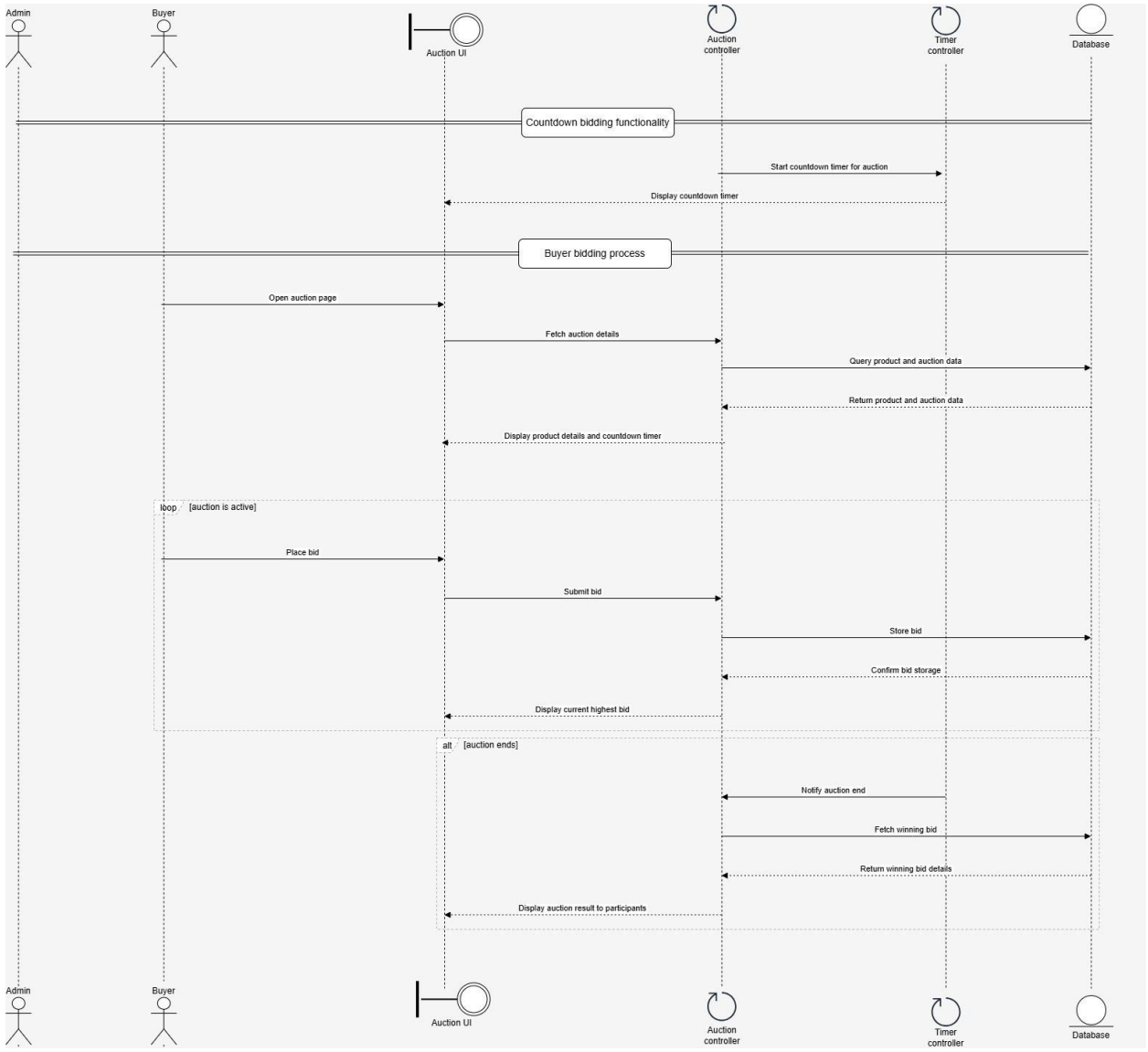
SPRINT 2.


UnregisteredUser
RegisteredUser
Admin
Search UI
Search result UI
Profile UI
Search controller
Profile Controller
Database
Search and view products for unregistered user
Open Search Page
Fetch product list
Query products with filters/sort options
Return product list
Display products with auction info
Apply filters/sort options
Fetch filter/sorted product
Query products with filters/sort
Return updated product list
Display filtered/sorted products
Profile management for registered user
Open Profile Page
Fetch user details
Get profile data (bids/sales info)
alt
[is a Buyer]
Check auction results for user's bids
Return bid results (win/loss status)
Display auction results
[is a Seller]
Fetch sold items data
Return sold items with base price and final price
Display sold items data
Auto update after auction completion
Monitor auction completion
alt
[ends]
Trigger auto-update for affected users
Notify buyer of win/loss
Display sold items to seller

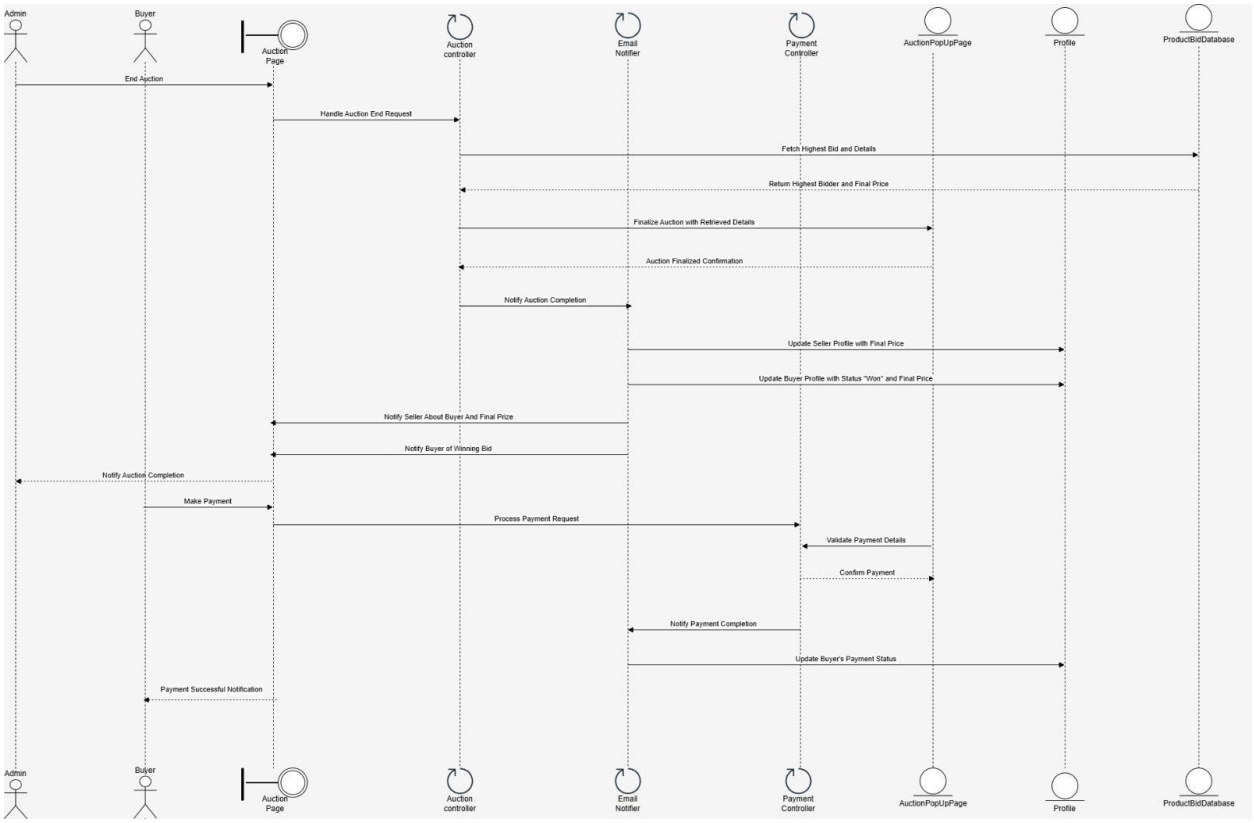
SPRINT 3a.


Admin
Seller
Buyer
Auction UI
Auction controller
Timer controller
Currency controller
Database
User Login or Signup Flow
Set reserve price for auction
Save reserve price
Confirm save
Admin initiates the auction
Initiate auction
Start auction timer
Display live auction with countdown timer
Set default currency to seller's country
Display bids in seller's currency
Buyer bidding process
Open live auction page
Fetch auction details
Query product and auction data
Return auction data
Display product details and current bid in currency
loop
[Auction is active]
Place bid
Submit bid
Save bid with timestamp
Confirm bid storage
Update highest bid and display
Auction End
Display winning bid and auction result
Notify seller of auction result
Notify buyer of winning bid

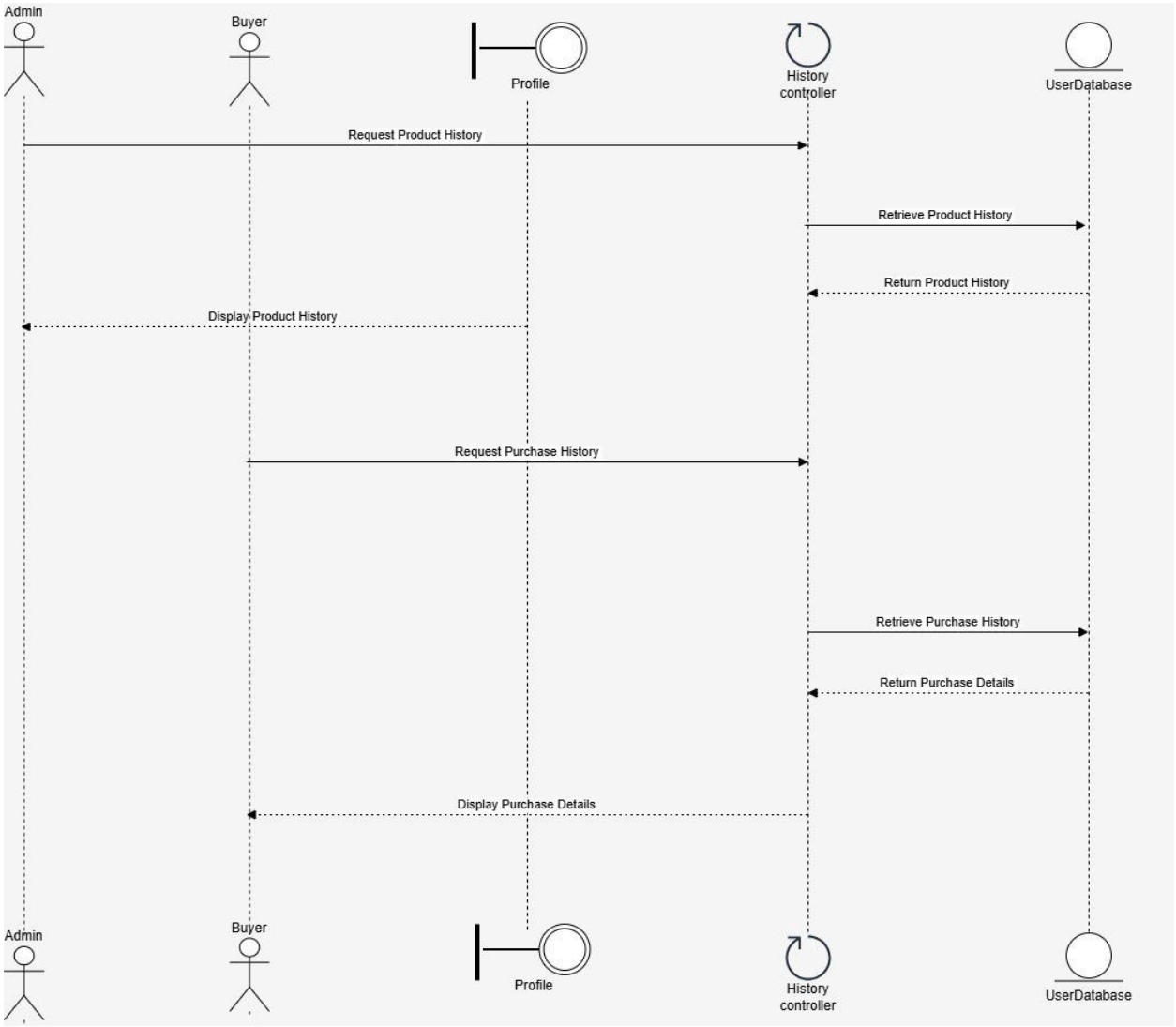
SPRINT 3b.


Admin
Buyer
Auction UI
Auction controller
Timer controller
Database
Countdown bidding functionality
Start countdown timer for auction
Display countdown timer
Buyer bidding process
Open auction page
Fetch auction details
Query product and auction data
Return product and auction data
Display product details and countdown timer
loop
[auction is active]
Place bid
Submit bid
Store bid
Confirm bid storage
Display current highest bid
alt
[auction ends]
Notify auction end
Fetch winning bid
Return winning bid details
Display auction result to participants
Admin
Buyer
Auction UI
Auction controller
Timer controller
Database

SPRINT 4.


Admin
Buyer
Auction Page
Auction controller
Email Notifier
Payment Controller
AuctionPopUpPage
Profile
ProductBidDatabase
End Auction
Handle Auction End Request
Fetch Highest Bid and Details
Return Highest Bidder and Final Price
Finalize Auction with Retrieved Details
Auction Finalized Confirmation
Notify Auction Completion
Update Seller Profile with Final Price
Update Buyer Profile with Status "Won" and Final Price
Notify Seller About Buyer And Final Prize
Notify Buyer of Winning Bid
Notify Auction Completion
Make Payment
Process Payment Request
Validate Payment Details
Confirm Payment
Notify Payment Completion
Update Buyer's Payment Status
Payment Successful Notification

SPRINT 5.


Admin
Buyer
Profile
History controller
UserDatabase
Request Product History
Retrieve Product History
Return Product History
Display Product History
Request Purchase History
Retrieve Purchase History
Return Purchase Details
Display Purchase Details
Admin
Buyer
Profile
History controller
UserDatabase