US-10: Purchase Item - Sequence Diagram

Buyer | **Listing Page** | **Purchase Service** | **Auth Service** | **Database** | **Notification Service** | **Seller**

1: clickBuy(listingId)

2: initiatePurchase(listingId, buyerId)

3: verifyLogin(buyerId)

4: isLoggedIn: true

5: confirmationDetails ()

6: displayConfirmation()

9: INSERT INTO offers ()

10: offerId

7: confirmPurchase()

8: createPurchaseOffer(listingId, buyerId, price)

11: offerCreated (status='pending')

12: pendingConfirmation

Buyer waits for seller response

13: notifySeller()

14: sendNotification(seller, 'New purchase offer')

15: reviewOffer(offerId)

alt [offer accepted]

16a: acceptOffer(offerId)

17a: UPDATE listings

18a: success

19a: INSERT INTO transactions ()

20a: transactionId

21a: notifyUsers()

22a: sendNotification(buyer, 'Purchase successful')

23a: sendNotification(seller, 'Item sold')

[offer rejected]

16b: rejectOffer(offerId, reason)

17b: notifyBuyer(buyerId, 'offer_rejected', reason)

18b: sendNotification(buyer, 'Offer rejected')