Next Couple Videos

Add the 'mongoose-update-if-current' module into the Orders model

Fix up some tests - we are creating some Tickets in the Orders service without providing them an ID

Fix up some route handlers - we are publishing events around orders but not providing the version of the order

Create Order Route Handler

Run a query to find the ticket the user is trying to order

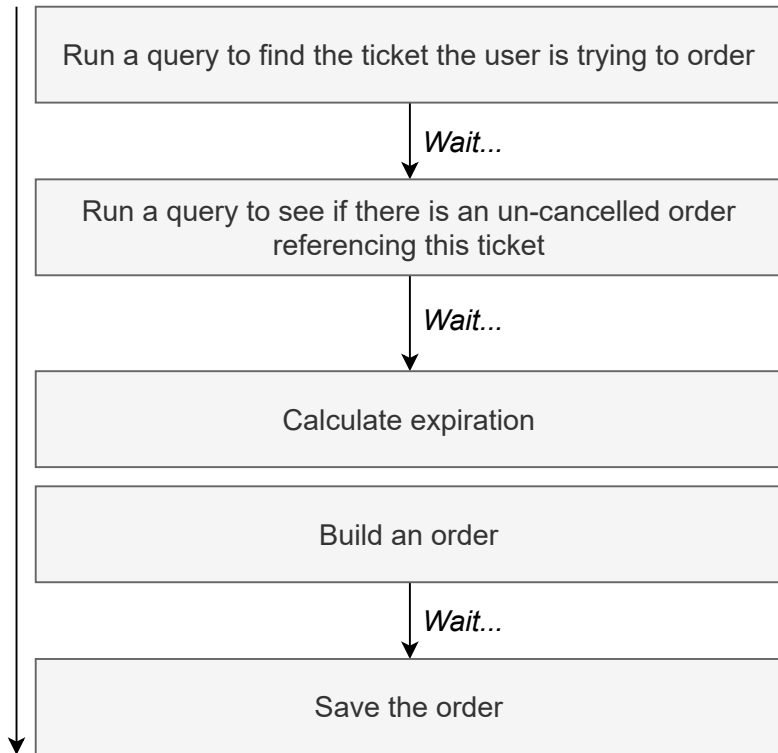Run a query to see if there is an un-cancelled order referencing this ticket

Calculate expiration

Build an order

Save the order

Create Order Route Handler

Run a query to find the ticket the user is trying to order

Wait...

Run a query to see if there is an un-cancelled order referencing this ticket

Wait...

Calculate expiration

Build an order

Wait...

Save the order

Ticket is now reserved

Request #1

Run a query to find the ticket the user is trying to order

Wait...

Run a query to see if there is an un-cancelled order referencing this ticket

Wait...

Calculate expiration

Build an order

Wait...

Save the order

Request #2

Run a query to find the ticket the user is trying to order

Wait...

Run a query to see if there is an un-cancelled order referencing this ticket
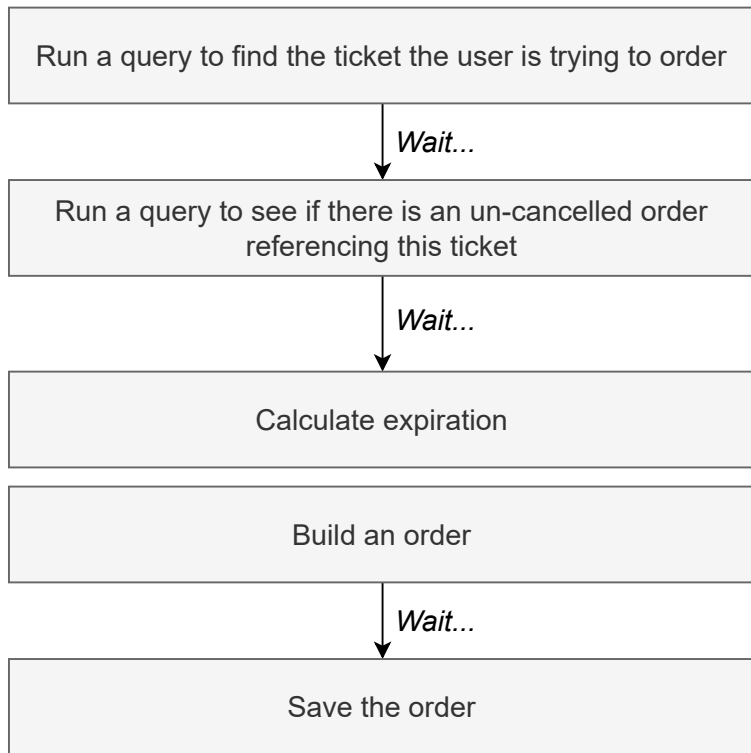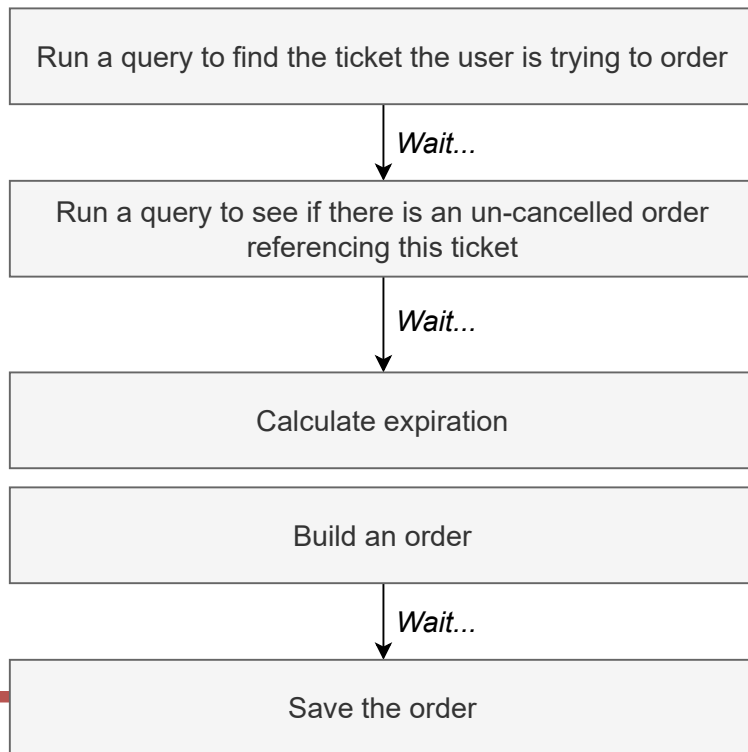
Wait...

Calculate expiration

Build an order

Wait...

Save the order

Request #3

Run a query to find the ticket the user is trying to order

Wait...

Run a query to see if there is an un-cancelled order referencing this ticket

Wait...

Calculate expiration

Build an order

Wait...

Save the order

Ticket is now reserved

Tickets	
TicketId	locked
'CZQ'	false

Locking a Ticket to prevent editing

User who owns the ticket

Is someone buying my ticket?

Tickets

TicketId	**orderId**
'CZQ'	'ADS'

Yes, the order ID is ADS

What's the status of order ADS?

Orders

OrderId	status
ADS	AwaitingPayment
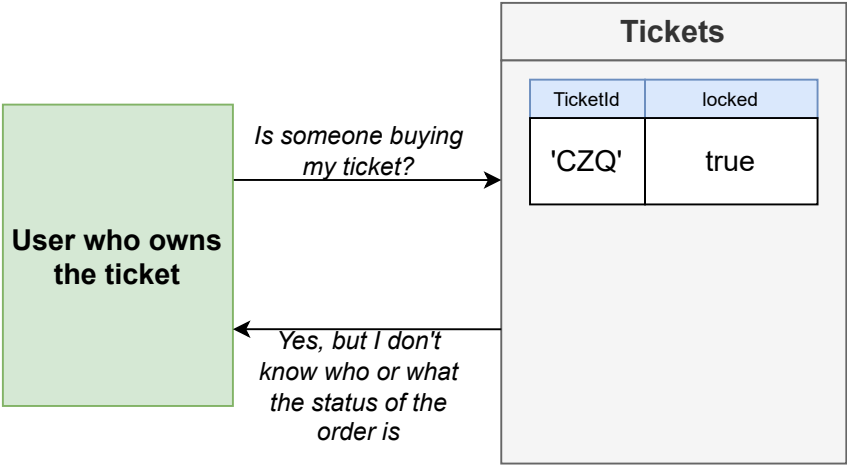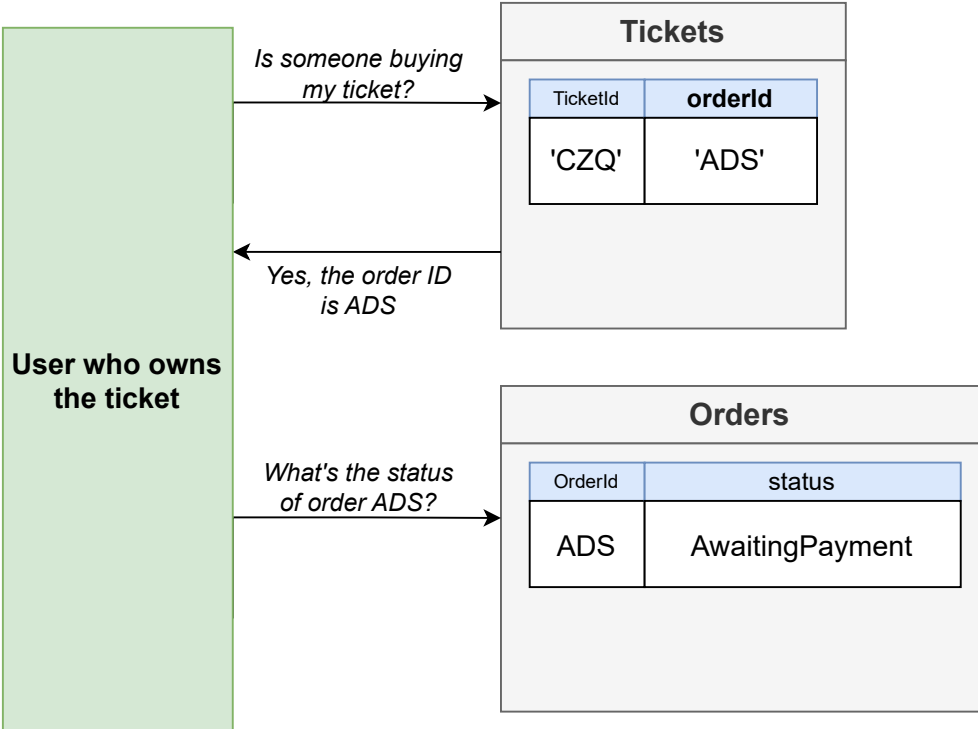
Orders Service

TicketId	title	price	version
'CZQ'	concert	20	0

order:created
id: 'ADS', ticketId: 'CZQ'
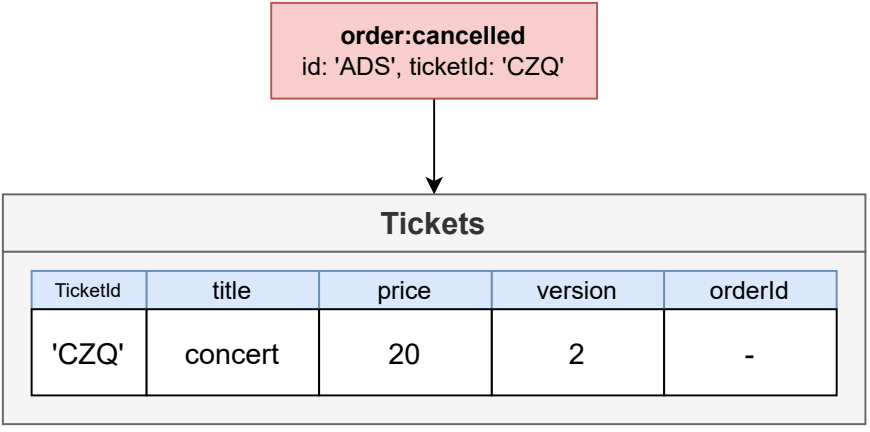
Tickets

TicketId	title	price	version	orderId
'CZQ'	concert	20	1	ADS

order:cancelled
id: 'ADS', ticketId: 'CZQ'

Tickets

TicketId	title	price	version	orderId
'CZQ'	concert	20	2	-

Request to Edit Ticket
id: 'CZQ', price: 30

Tickets

TicketId	title	price	version	orderId
'CZQ'	concert	30	3	-

Request to Edit Ticket
id: 'CZQ', price: 30

Tickets

TicketId	title	price	version	orderId
'CZQ'	concert	30	3	-

ticket:updated
id: CZQ, price: 30, version 3

Request to Edit Ticket
id: 'CZQ', price: 30

Tickets

TicketId	title	price	version	orderId
'CZQ'	concert	30	3	-

ticket:updated
id: CZQ, price: 30, version 3

Orders Service

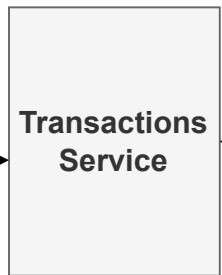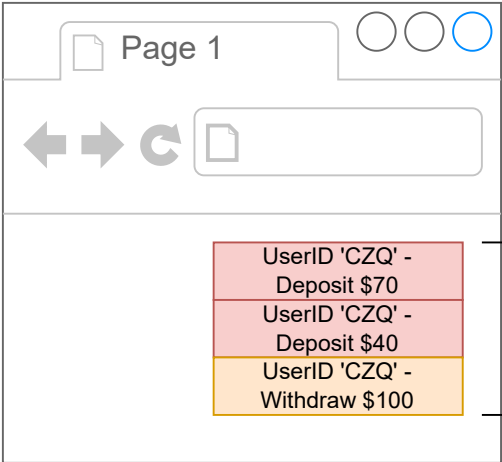| TicketId	title	price	version
'CZQ'	concert	20	0

Listener Base Class

protected client: NatsClient

OrderCreatedListener

TicketUpdatedPublisher

Page 1

UserID 'CZQ' - Deposit $70

UserID 'CZQ' - Deposit $40

UserID 'CZQ' - Withdraw $100

Transactions Service

Transactions DB

UserId	Transactions
CZQ	Deposit 70, ID: 'ksjf'
	Deposit 40, ID: '5j25'
	Withdraw 100, ID: '1ko1'

ticket:created
Deposit 70, id: 'ksjf'
userId: 'CZQ', number: 1

NATS Streaming

List of Channels

transaction:created

Accounts Database

UserId	Balance	Last Txn Number
CZQ	10	1
JP4		
KAN		

Account Srv (Listener) A

Account Srv (Listener) B

transaction:created
withdraw 100, id: '1ko1'
userId: 'CZQ', number: 3

User CZQ

Deposit $40

Withdraw $100

Members of the same account

User PWY

Deposit $70

Account 3CD